

# **Learn how to Create a Secure News Website**



**Together, we can and will  
build a bottom up movement  
to elect Common Sense Candidates!**

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# Create a Secure News Website

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## Welcome to our Course on Creating a Secure News Website

Welcome to our course on how to build a secure news website! Our goal is to help you create your own news website using free and secure web building tools.

**Welcome to our course on how to create a secure news website!**

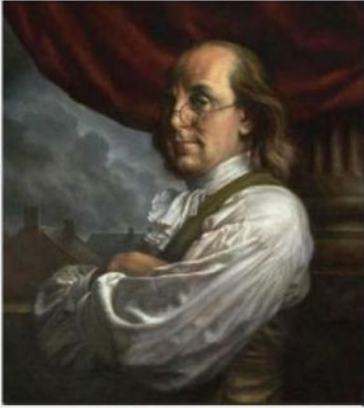


We not only offer you more secure web tools...

We teach you how to use them!

### Why Start Your Own Local News Website?

Throughout our nation's history, a free and independent press has been the key to overthrowing corrupt rulers. Our first revolution began with the courage of newspaper writers such as Ben Franklin who understood the power of the press to persuade people to rise up against an unjust King.

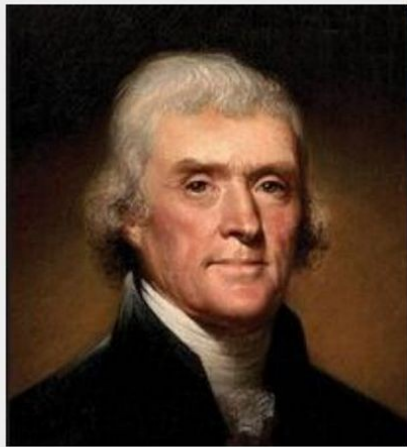


**Freedom of speech is the principal pillar of a free government. When this support is taken away, the Constitution of a free society is dissolved... and Tryanny is erected On its ruins.**

Ben Franklin  
1737

Never has there been a greater need for independent news sources than there is today. All of the traditional news sources from newspapers to radio to television have been taken over by wealthy multinational corporations.





**Our Liberty  
depends on  
the Freedom  
of the  
Press.**

Thomas Jefferson

1786

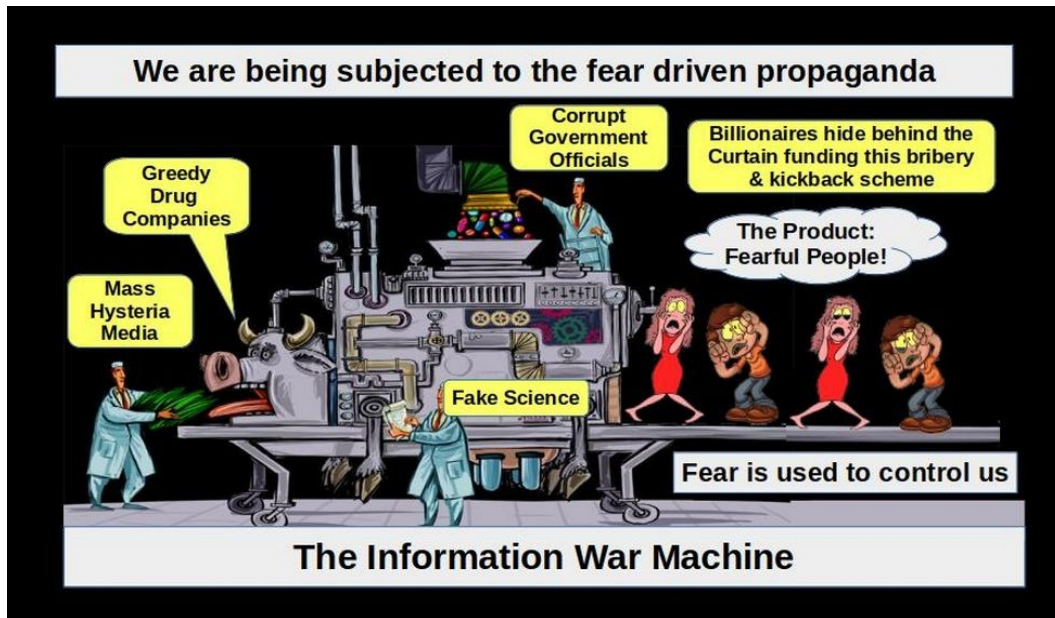
Our freedom of thought, our ability to communicate and our right to free and equal elections are all at risk due to the lack of honest, independent news sources.



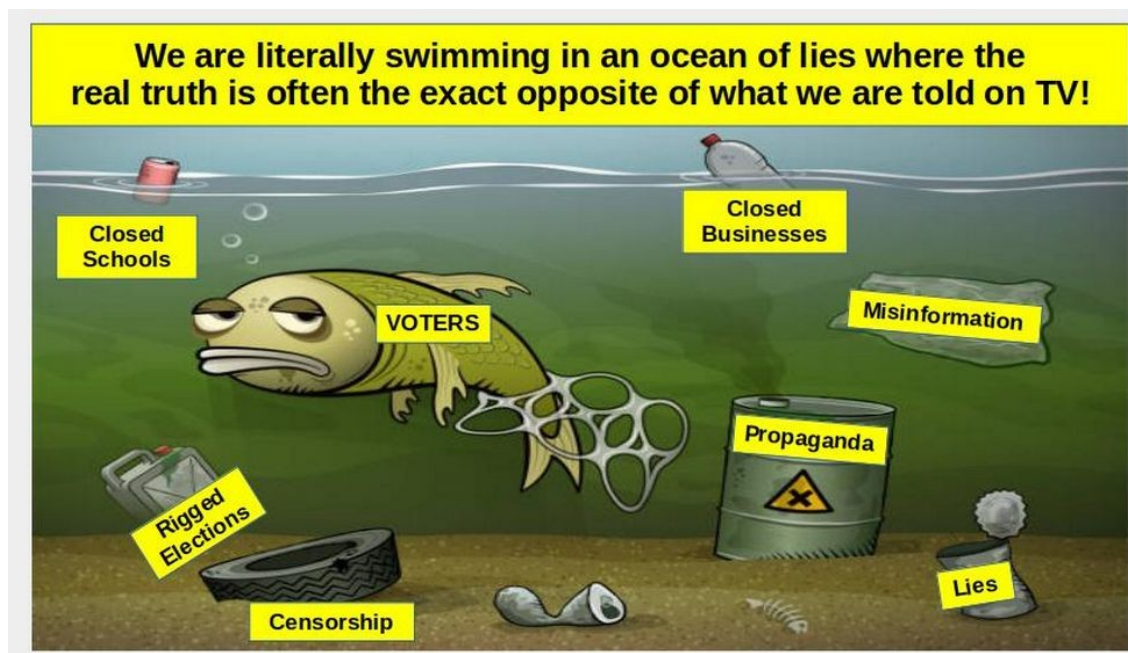
If the press is not free,  
If speech is not independent,  
and untrampled  
If the mind is shackled,  
or made impotent through fear,  
It makes no difference under  
what form of government you live.  
You are a subject –  
and not a citizen.

US Senator William Borah 1917

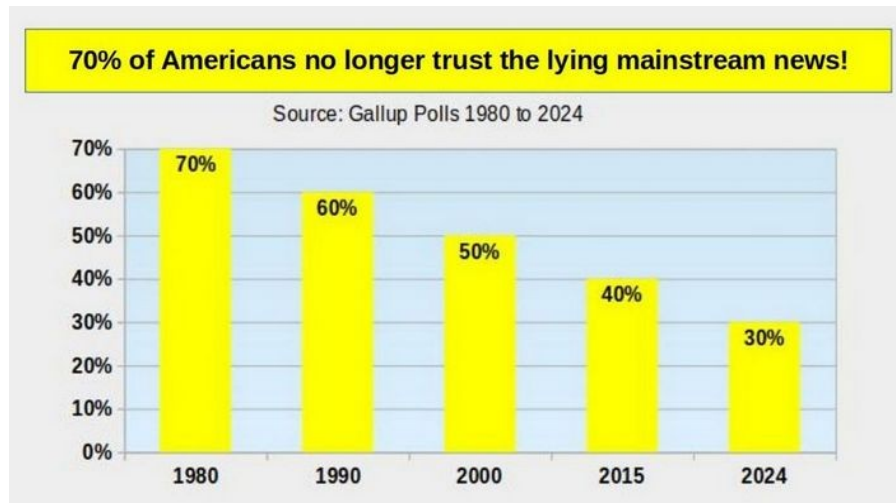
The corporate takeover of our news has also led to a dramatic decline in local news reporting – which in turn has led to a lack of community. It has also led to an inability to learn and share the truth about important issues affecting all of us. Instead, we are bombarded with fear-driven propaganda by the Information War Machine.



Nearly everything they see on TV News and nearly everything they read in corporate newspapers are carefully crafted lies. We are like fish swimming in increasingly polluted waters.



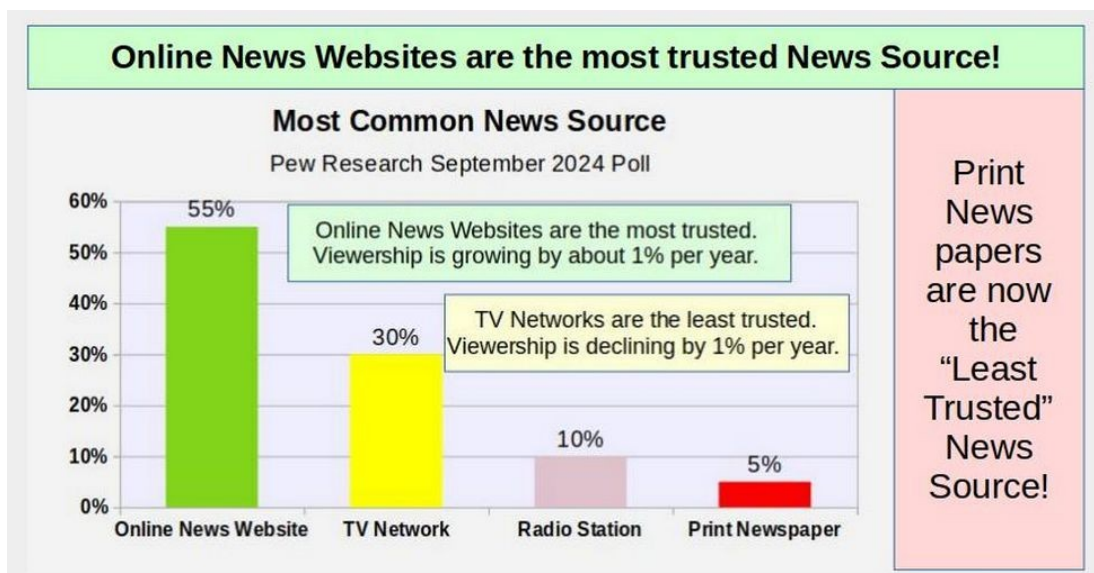
Thankfully, the American people are starting to catch on to this scam. Gallup Polls used to show that two out of three people trusted the corporate media to tell the truth. Now, after decades of lying to the public, the majority of the American people no longer trust the corporate media.



Two out of three Americans are seeking alternative sources of information. They are increasingly turning to independent online news websites.

### **Online News Websites are already the most trusted news source**

In the past 10 years, Internet news websites have passed TV, radio and newspapers as the Number One source of news. According to Pew Research, in 2024, 86% of U.S. adults say they at least sometimes get news online from a News website (from a smartphone, computer or tablet). Over half, 55% say they often get their news online from a news website. Only 30% say they often get their news from a TV network. Just 10% get their news from a radio station. And only 5% get their news from a traditional print newspaper. <https://www.pewresearch.org/journalism/fact-sheet/news-platform-fact-sheet/>





Every year, the shift to online news grows more apparent. It is time for a new kind of independent media – one run not for pursuit of profit but for the pursuit of truth and the sharing of wisdom. It is time that We the People reclaim control over our own local news!

Here are nine more reasons to make the effort to start your own community news website:

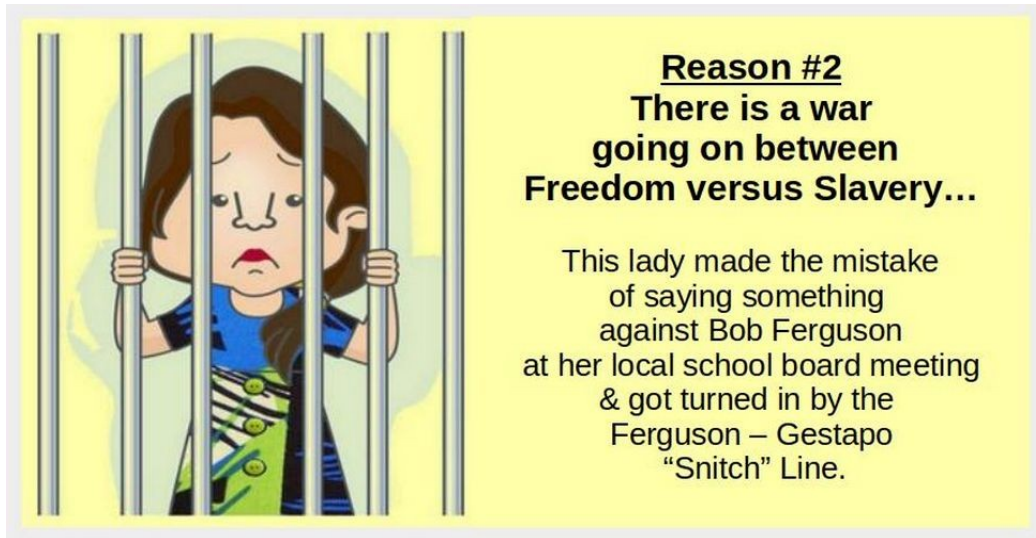


**Reason #1** There is a war going on between Good versus Evil... and currently Evil is winning!

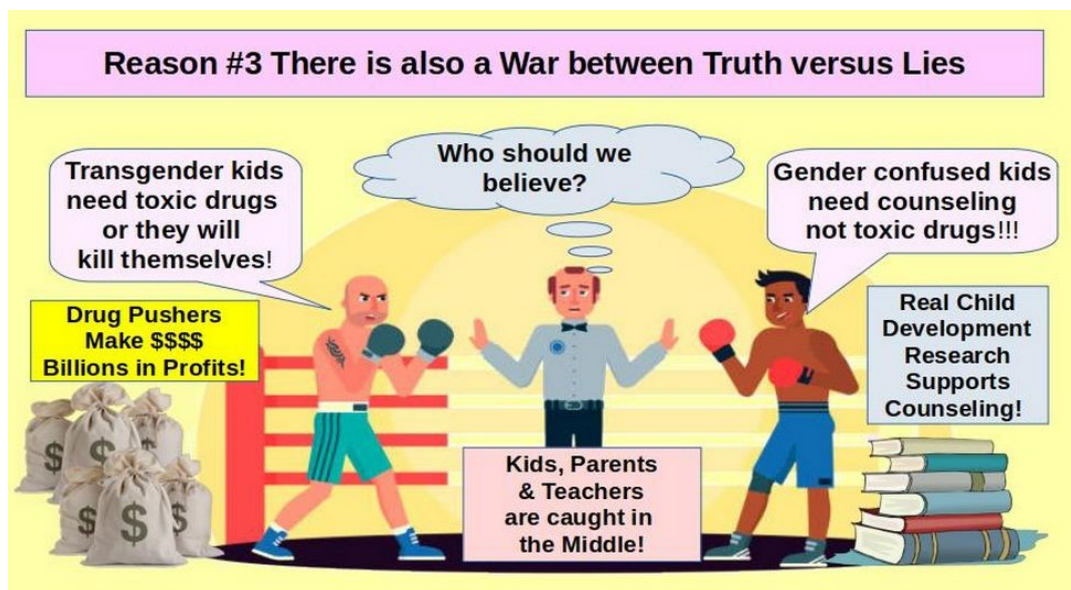


**Reason #2** There is also a war going on between Freedom versus Slavery. We should not take our freedom for granted:

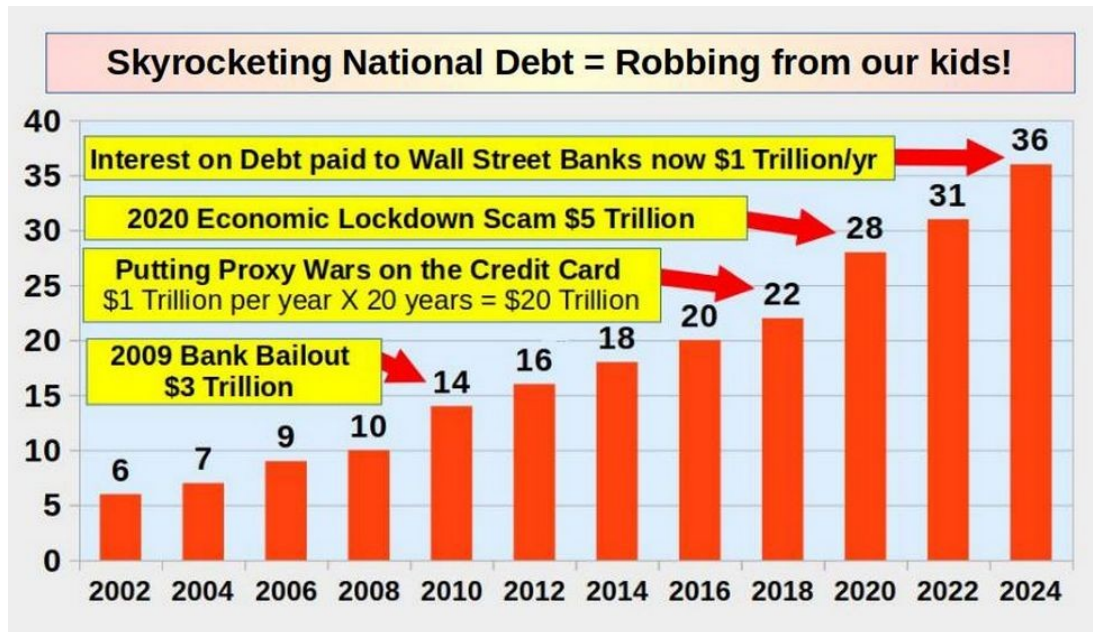




**Reason #3** There is also a war going on between Truth versus Lies. One of the main reasons to start your own community news website is to help members of your community learn the truth!



**Reason #4** There is also a war going on over the future of our nation and the future of our currency. The National Debt is now so high that we are paying more than a trillion dollars a year just in interest payments to corrupt Wall Street bankers.



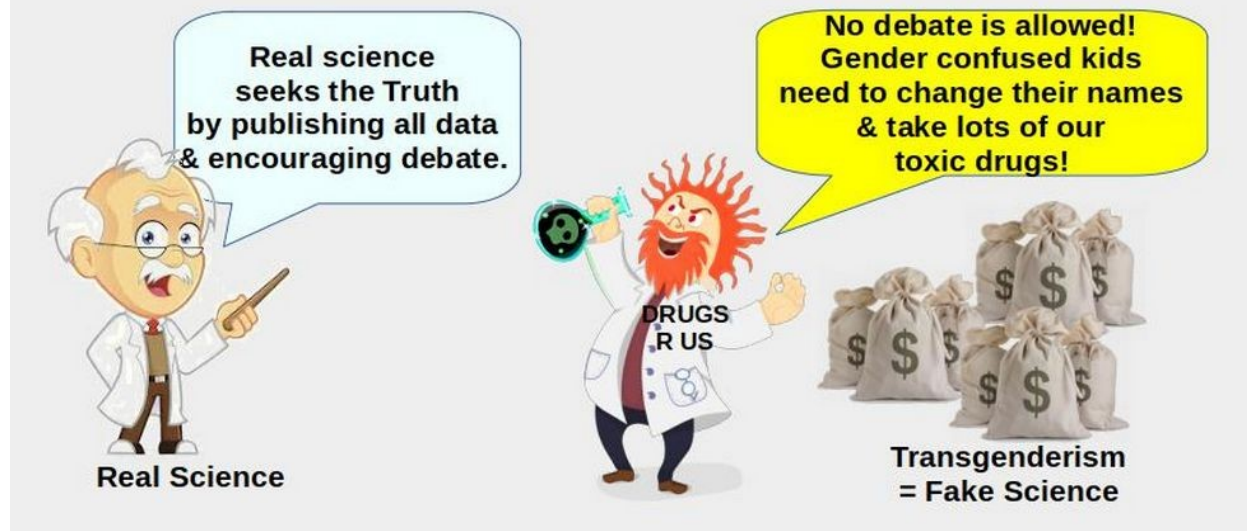
**Reason #5** There is also a war going on over the security of our elections:



**Reason #6** There is also a war going on between real science and fake science. An independent community news website can help readers learn the difference!



## Reason #6 There is a war between Real Science and Fake Science



**Reason #7** There is definitely a war going on against parents right now. You can help parents by promoting meetings of local parents that are independent from the insane policies of the Washington State PTA.

### Reason #7 The PTA War against Parents

These are just a few of the harmful PTA supported policies

<b><u>Unfair High Stakes Tests</u></b> So difficult most Politicians can't pass them!	<b><u>Common Core Curriculum</u></b> Written by Billionaires & Consultants	<b><u>Closing Schools</u></b> Despite no Child or teacher being sick!	<b><u>Mask &amp; Shot Mandates</u></b> Despite lack of research that either helps kids.
<b><u>Opposing Parental Rights</u></b> To be involved In decisions affecting their kids	<b><u>Encouraging Kids to take Toxic Trans Drugs</u></b> Which cause Lifelong harm.	<b><u>Allowing Boys In Girls Bathrooms</u></b> violating Girls rights To privacy	<b><u>Allowing Boys To take over Girls Sports</u></b> violating Girls rights To fair competition

**Reason #8** The drug corporation controlled media is waging a war against our children by promoting the Toxic Trans agenda.



**Reason #9** There is also a war against our girls and fairness in girls sports. Just last year, a biological male won the Washington Girls State Track Championship:

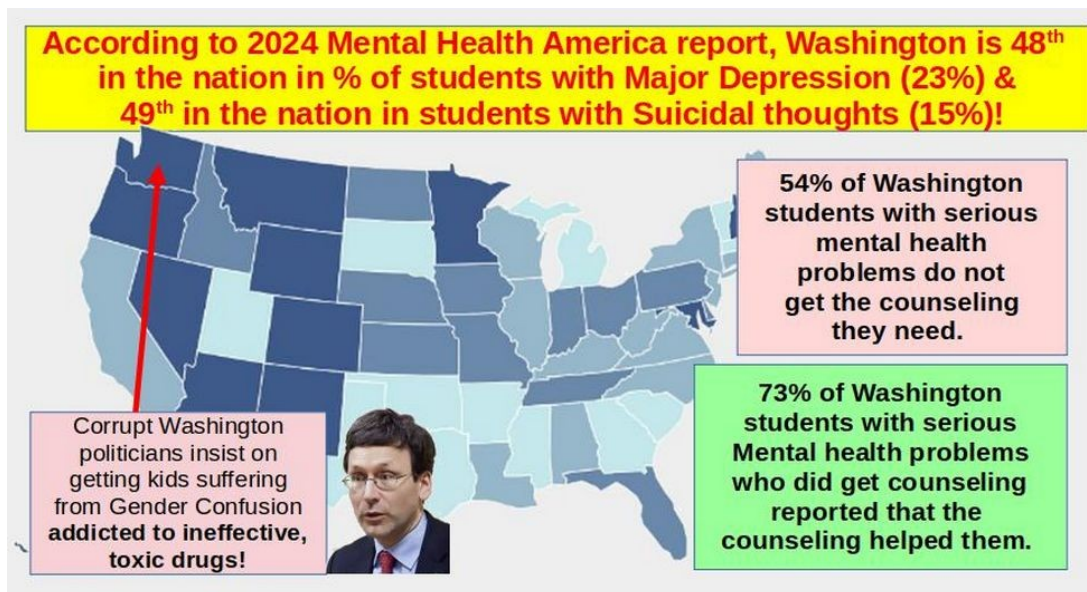


There is also a war going on in our state prohibiting gender confused kids and requiring that their only option is to take toxic Trans Drugs:





As a result of these insane policies, Washington kids now suffer from among the worst mental health problems of any kids in America:



## The Rise of Lies

The billionaire plan to take over our government and our economy began with the consolidation of the media and **the elimination of the Fairness Doctrine in the 1980s**. The Fairness Doctrine required major media sources to provide both sides of the debate on important public issues as a condition of getting their license to use the public airwaves.

With the loss of the Fairness Doctrine, the American people were no longer allowed to hear or read debate from both sides on major issues. Instead, we are only allowed to hear one side, the billionaire side of the debate, filled with lies exactly as predicted by George Orwell in the book 1984.

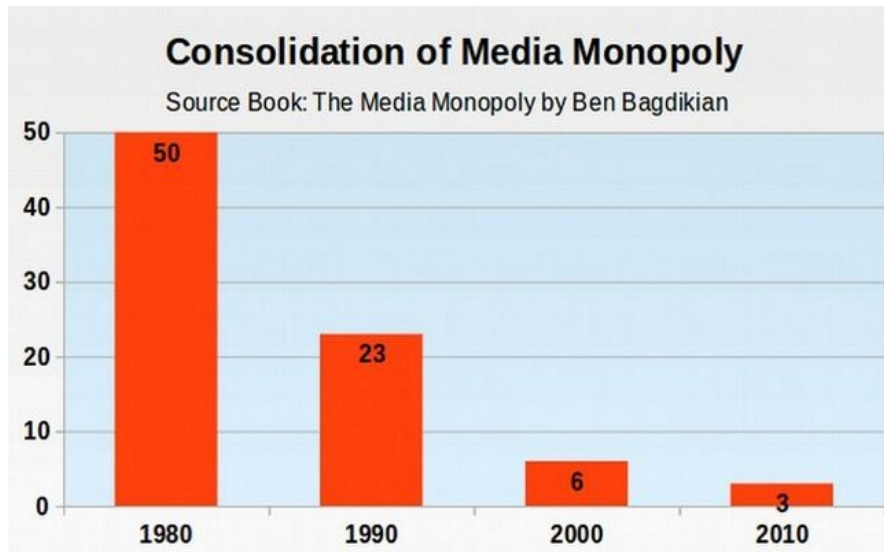


Today, we are witnessing the results of decades of media domination by the billionaires. Our elections have turned into a corrupt bribery and kickback scheme with fake billionaire sponsored politicians who claim to be on the side of the people but then write new laws to allow billionaires to take over our public airwaves and get billions in illegal tax breaks.

We are forced to pay for an out of control war machine that costs ten times more than the military spending by all the other nations of the world combined. This is trillions of dollars that could have and should have been invested in our young adults to provide them with the education they need to compete in the global marketplace of ideas.

At the bottom of this entire corrupt rigged system is the billionaire controlled media – which has managed to keep the people of the world in the dark by diverting their attention away from this robbery and onto fake meaningless topics like the million dollar divorces of Hollywood movie stars. Never in our history has there been such a concentration of the media in the hands of a few corporations controlled by a few billionaires.

Today, the majority of the public media is controlled by just 3 corporations: Comcast (NBC & CNN), Disney (ABC & ESPN) and News Corp (FOX NEWS). Together these three mega corporations account for \$150 billion in annual revenue. Media researcher Ben Bagdikian, has written several editions of a book called **The Media Monopoly** about the danger of the media monopoly for the past three decades. Below is a graph of his analysis of the consolidation of the number of corporations controlling the majority of the media in the US.



Instead of having lots of choices, what people really wind up watching and reading are the same phony marketing slogans repeated over and over again. Consolidation of the media in the hands of a few billionaires makes it impossible for the public to learn the truth about the corruption that destroys our economy and our political system.



Not only has the quantity of sources plunged, but the accuracy of reporting also dropped as experienced reporters were fired and replaced by “talking heads” that do little more than repeat the press releases issued by their corporate masters.





**"We have no obligation to make history.  
We have no obligation to make art.  
We have no obligation to make a statement.  
To make money is our only objective."**

Michael Eisner, CEO, Disney Corporation,  
Internal Memo quoted in "Mickey Mouse Monopoly,  
Disney, Childhood & Corporate Power."

The same powerful people who sit in the boards of the corporations of the military/industrial complex, the large banks, drug companies and oil companies also sit in the boards of the large media corporations. They have the power to hire editors and reporters who mislead the public and fire editors and reporters who tell the truth. Over time, this has led to the current culture of lies in the corporate news media.

This concentration of of the news media is so complete than people who get their information from the billionaire controlled media become brainwashed into believing that the unemployment rate is only 5% and economic recovery is just around the corner – when in fact, the debt level in the US is at the highest level in history. When the fake economy crashes, what will really be around the corner is the Second Great Depression.

### **How to Solve the Information War Problem**

The only way to solve this Information War problem is to start winning elections. But this will not happen until voters are better informed!

<p align="center"><b>Problem Solving 101...</b>  <b>To win elections, we need to determine and fix the underlying cause of the "Losing Elections" problem!</b></p>	
A black and white photograph showing several people in a small, overcrowded boat that is sinking. Some people are using buckets to bail water out of the boat, while others are struggling in the water.	<p>Bailing out a sinking boat won't win elections if no one is fixing the leaking holes in the bottom of the boat!</p> <p><b>To win elections, we need to help voters become better informed!</b></p>

Our plan is to help voters become better informed by helping concerned citizens learn how to start their own Community News websites all across Washington state.



Our plan is to help concerned citizens build Community News websites all across Washington State!



**Let's build a bottom up movement  
to elect Common Sense Candidates!**

Our goal  
is to  
help voters  
become  
better  
inform  
about  
Common  
Sense  
issues

### **How We the People Can Reclaim the Media**

It used to be that to create a fully functioning online news website required a team of computer programmers to hand code the website on a daily basis. However, thanks to recent improvements in a web building content management system called Joomla, it is now possible for each of us to create and maintain our own online news website without any knowledge of computer programming – at a cost of only a few dollars per month! Each of us can offer the public an alternative to corporate controlled news.

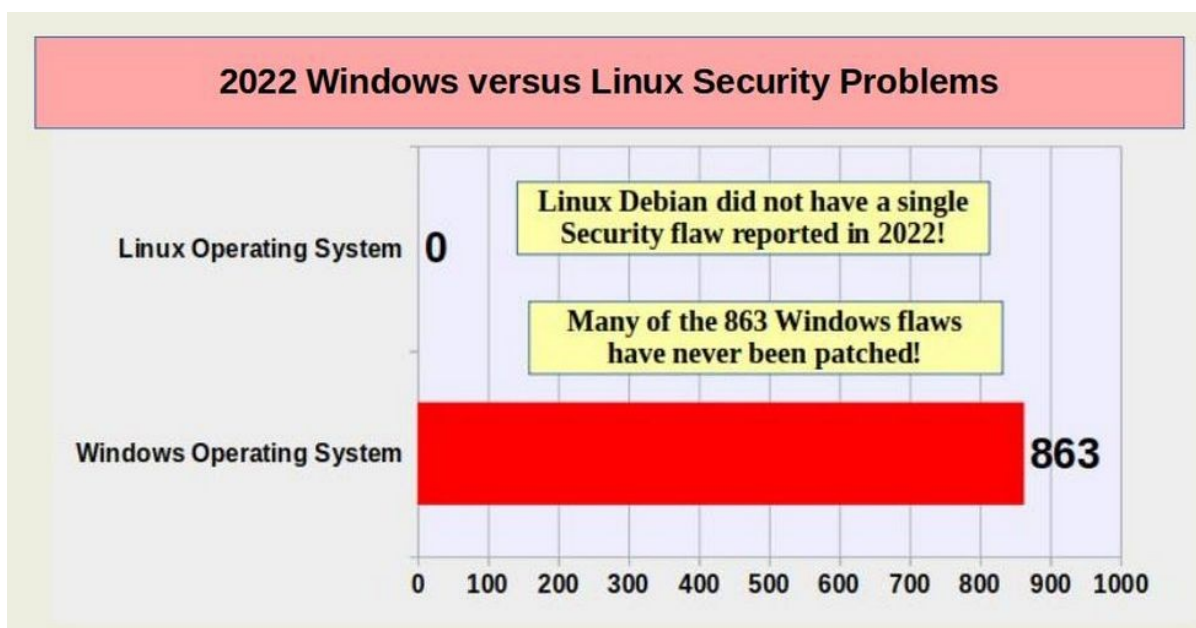
### **Why does online news website security matter?**

Unfortunately, there is also a Technology War being waged against us. It is certain your News website will be attacked within minutes of going online. This is because the Internet is currently a Hacker Heaven – where hackers make millions of dollars by hacking websites, stealing and selling data and/or turning your News website into a Bitcoin mining machine!

**There is also a Technology War being waged against us.  
It is certain your News website will be attacked!**




The most common way hackers take over websites is by gaining access to your Windows computer and downloading your website administrator passwords. Every year, Windows computers suffer from hundreds of “remote access” (online) backdoors:



To prevent these Windows hacker attacks, we show you how to create and use a secure **Linux** computer for posting articles to your news website.

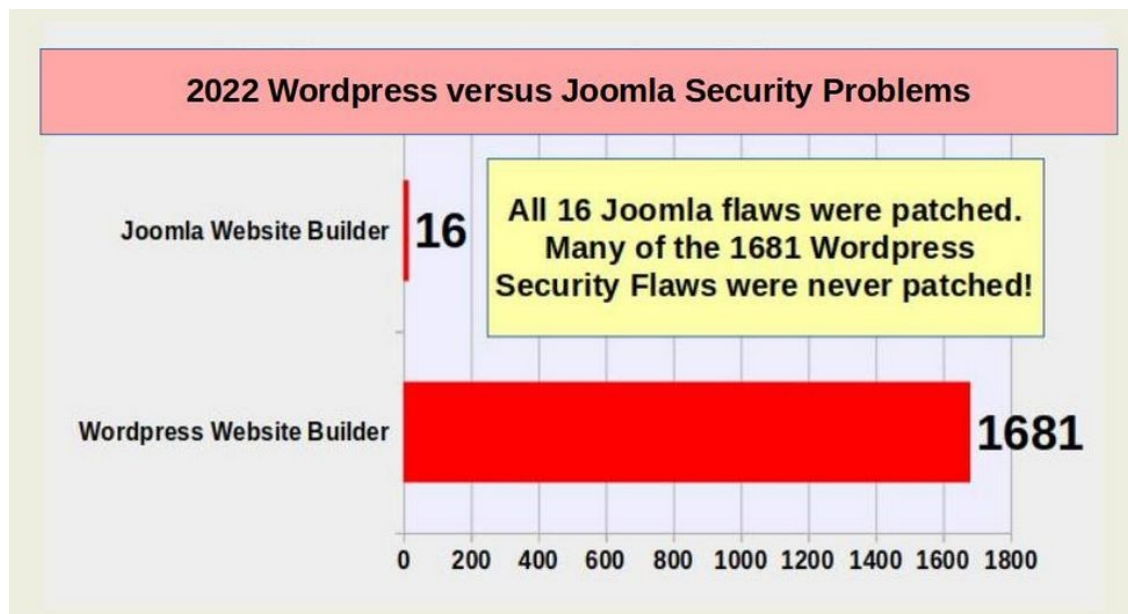
**What is a Linux Computer?**



A Linux computer looks like a Windows or Apple computer only it uses the Linux operating system making it much safer & able to access thousands of free secure Linux programs.

**Almost any existing computer can be converted into a Linux computer!**

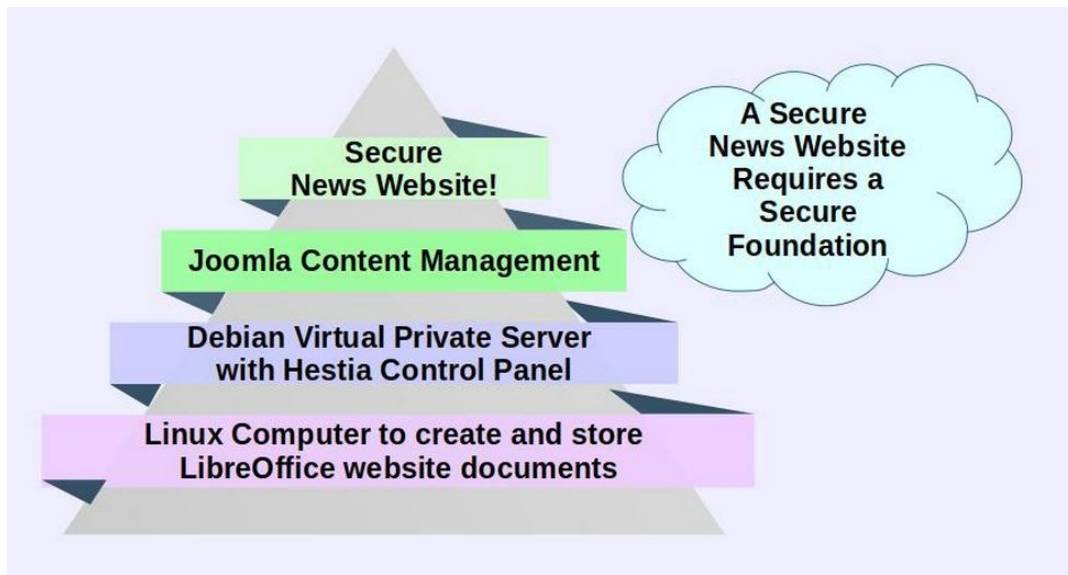
The second most common way hackers gain access to your news website is by exploiting vulnerabilities in whatever tools you are using to build your news website. The most common of these “Content Management Systems” is called Wordpress. Unfortunately, Wordpress, like Windows suffers from hundreds of vulnerabilities every year:



To prevent Wordpress hacker attacks, we show you how to use a more secure and powerful Content Management System called **Joomla**. We teach you how to build a secure news website where you have full control over the appearance, content and function of your website without computer programming – simply by clicking on a series of buttons!



A secure news website requires a secure foundation:



Use a Linux computer to create secure LibreOffice documents. Then use a Debian VPS and the Hestia Control Panel to create a Joomla website with a Helix template. Then use the LibreOffice Image compression tool to create secure web images. Then use Joomla to transfer your Libre Writer article to your news website:

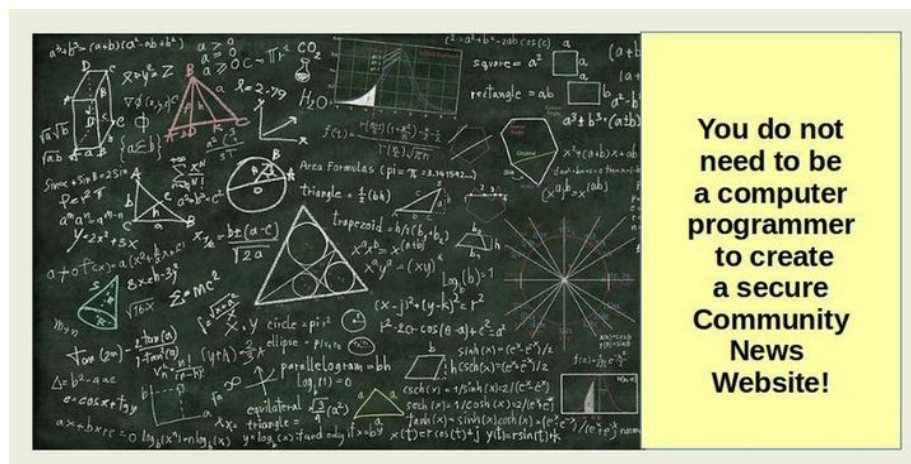


In this course, we will show you how to create your own Community News website the right way – using a series of online security tools.





You do not need to be a computer programmer. We show you how to use each of these security tools with **clear step-by-step instructions**.

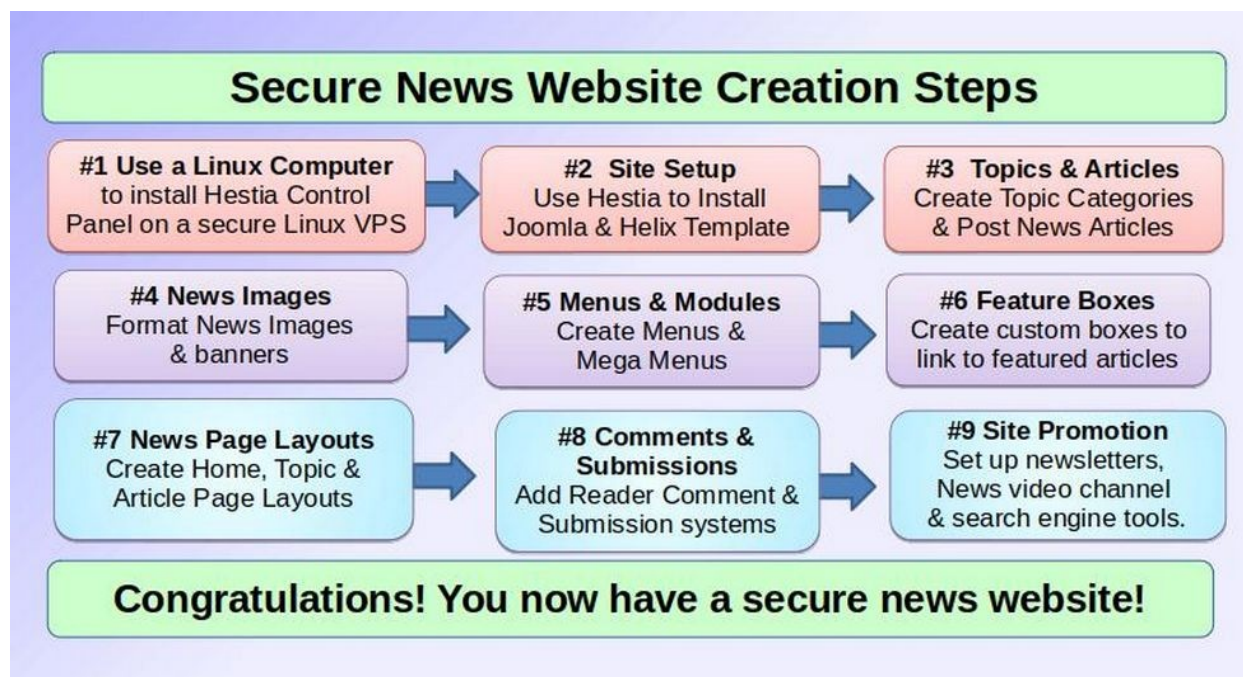


If you can bake a cake, you can run a secure Community News website.

### Our Recipe for Making a Secure News Website

1. A Secure Linux Laptop used to Create a
2. Secure Debian VPS Used to create a
3. Secure Hestia Control Panel Used to create a
4. A Secure Domain Name with a Secure Email & Security Certificate And then create a
5. Secure Joomla Website Builder Used to add
- 6 Free Joomla Security Extensions

During our online course sessions, we cover every step needed to create and run a secure News website:



We also cover how to enlist community groups to help you run and expand your Community News website:



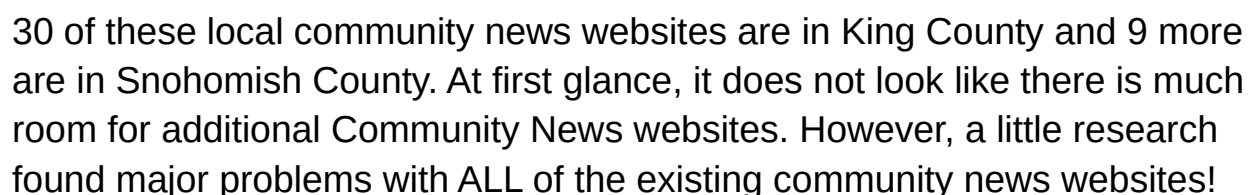
A key component in growing your Community News website is promoting and reporting on local community events:



The diagram consists of six light blue rectangular boxes with rounded corners and a drop shadow, arranged in a 2x3 grid. Each box contains text centered within it. The top row contains three boxes, and the bottom row contains three boxes.

<b>Local School Board Meetings</b>	<b>Local City &amp; County Council Meetings</b>	<b>Local School Sports Teams</b>
<b>Local Church Events</b>	<b>Local Parks &amp; Library Events</b>	<b>Local Business Events</b>

We recently completed a study of every community news site in every county here in Washington state. There are currently a total of **118 community news websites**.

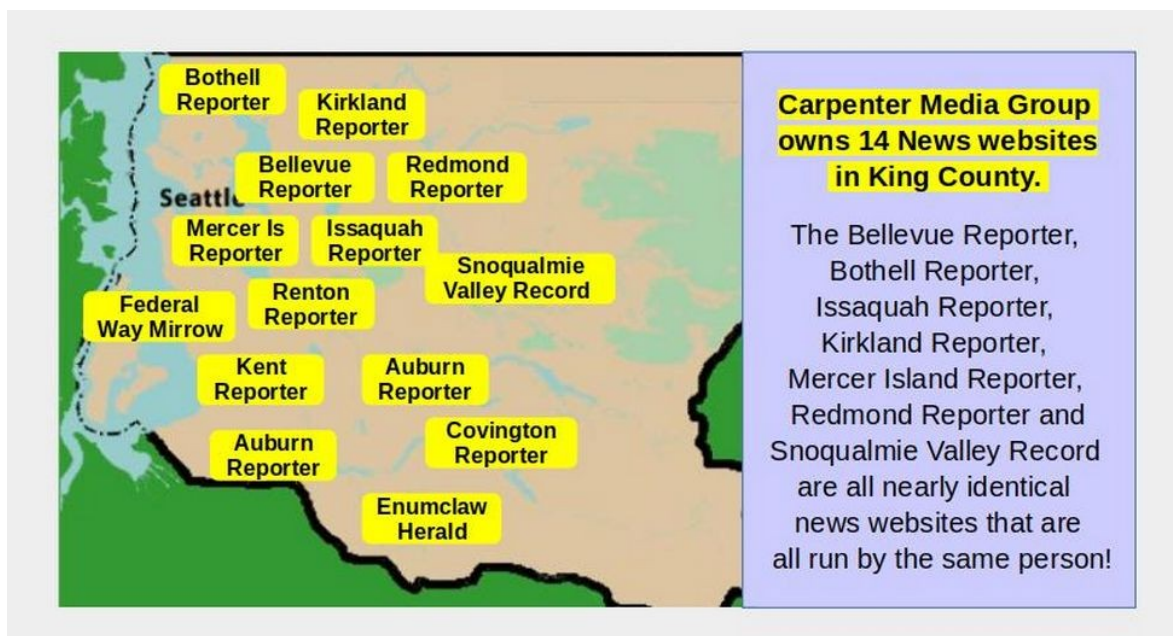






Another problem with the 30 Carpenter News sites is that they all use Wordpress which is easy for hackers to take over. In January 2024, they suffered a hacker attack which cost them \$500,000 to fix. More attacks are likely in the future.

To make matters even worse, their business model does not make use of community volunteers. Instead, they use one person who often runs up to 7 news websites all at the same time and thus has no time available for anything other than selling ads. For example, the Carpenter Media Group owns 14 news websites in King County. Of these, the Bellevue Reporter, Bothell Reporter, Issaquah Reporter, Kirkland Reporter, Mercer Island Reporter, Redmond Reporter and Snoqualmie Valley Record are all nearly identical websites that are all run by the same person!



These are not really Community News websites. Instead, they are merely marketing gimmicks pretending to be community news websites.

Finally, many of these “advertising based” news websites also attempt to publish weekly print versions of their news websites. The print versions are huge money losers – especially given that only 10% of people still read print newspapers.

Of the remaining 88 news websites here in Washington, about half use Wordpress – which as we have already pointed out has more than 1000 security problems. It is only a matter of time before these 44 Wordpress sites are hacked and taken offline- leaving only 44 news sites left.

About half of the 88 News Websites use Wordpress – which suffers from more than 1000 security problems. Wordpress news sites also suffer from Search Engine problems. Subtracting these leaves only 44 News sites.

Sadly, 29 of these websites use very outdated version of website building tools called **Bootstrap and JQuery**. Both of these suffer from major security problems, which while not as bad as Wordpress, still leave websites that use these tools wide open to hacking attacks. Subtracting these 29 insecure Bootstrap and JQuery sites leaves only 15 local news websites left here in Washington state.

[illegible]

About 29 of the 44 News Websites use old and insecure versions of Bootstrap or JQuery – both of which suffer from serious security problems. Subtracting these 29 sites leaves only 15 News sites.

All 15 of these remaining news websites use a very expensive site building tool called **Blox** – **which can cost over \$12,000 per year**. This huge annual expense can quickly drive your Community News website into bankruptcy and leave no money left from ad revenue to pay for reporters and editors!



## **ZERO News Websites left after subtracting 15 expensive Blox sites**



All 15 of the remaining News Websites use A very expensive site building tool called **Blox** - **which can cost over \$12,000 per year.** This can quickly drive your News website into bankruptcy and leave no money left to pay reporters and editors!

In summary, there are currently ZERO secure community news websites here in Washington state. Instead, there are merely a bunch of insecure and nearly bankrupt News websites many of which will be gone in the next couple of years. By starting your own Community News website now, you will be able to fill the void left as these other news websites shut down.

### **Join us and help inform your local community!**

If you are feed up with corruption and want to help voters become better informed, then take our course and start your own community news website.



Creating your own news website requires a commitment of time and effort – not only to research the content for your news website but also to learn how to transfer that content to the Internet and display it in a well organized manner on a secure news website.

Join us & learn how to create a secure Community News website in your community!



**Together, we can and will build a bottom up movement to elect Common Sense Candidates!**

If you are willing to put in this time and effort, we will show you how it is done!

For more information, visit our website:  
**Create a Secure News Website dot com**



Questions? Email us: **David@Create a Secure News Website.com**  
We look forward to meeting you!

If you have any questions, feel free to email us: David(at) Create a Secure News Website.com

We look forward to meeting you!

# 1 Start with a Secure Foundation

If you want to start and run a secure news website, you need at least one secure Linux computer you can use to go online and make changes and additions to your news website and to hold your news website data and documents. You also need a secure Linux Virtual Private Server (commonly called a VPS) to host your news website. In this chapter, we will review how to create a secure Linux computer and use it to set up a secure Linux VPS.

1.1 Create a Secure Linux Computer

1.2 First Steps after installing Linux

1.3 Create your own Secure VPS

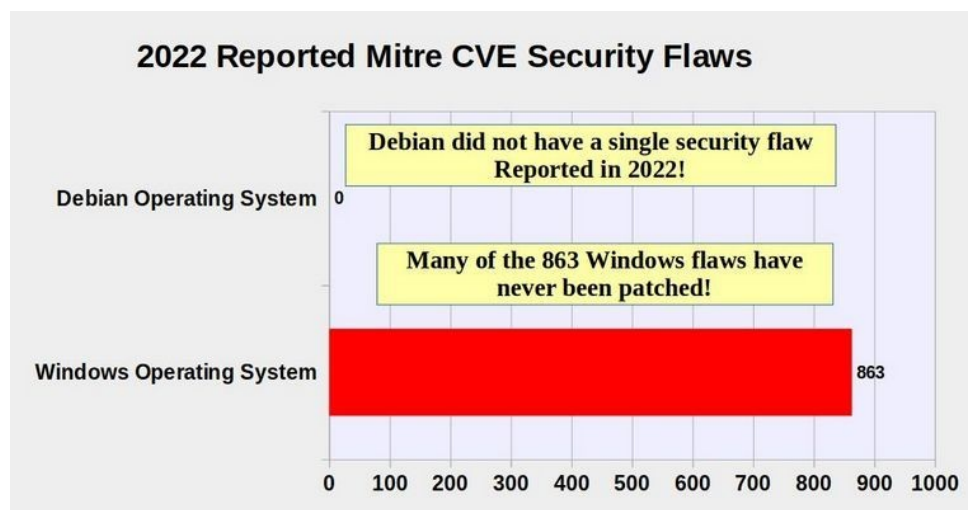
1.4 Use Midnight Commander to change VPS settings



## 1.1 Create a Secure Linux Computer

If you want to start a secure news website, you need at least one secure computer you can use to go online and make changes and additions to your website and to hold your website data and documents. Sadly, all most people were taught to use when they went to school were Windows computers. Microsoft created an open back door to its operating system way back in 1998. Using a Windows computer can therefore leave your news website wide open to hacking. In this article, we will explain why and how to switch from a Windows computer to a secure Linux computer.

The most important reason to replace Windows with Linux BEFORE you build your news website is **Windows Ransomware**. Every Windows computer that goes online is subject to hacker attacks and Windows Ransomware. There is no way to protect a Windows computer. Every year, Ransomware attacks become more common – costing businesses billions of dollars. In 2022 alone, Windows computers suffered from 863 security flaws compared to ZERO security flaws for the Linux Debian operating system:



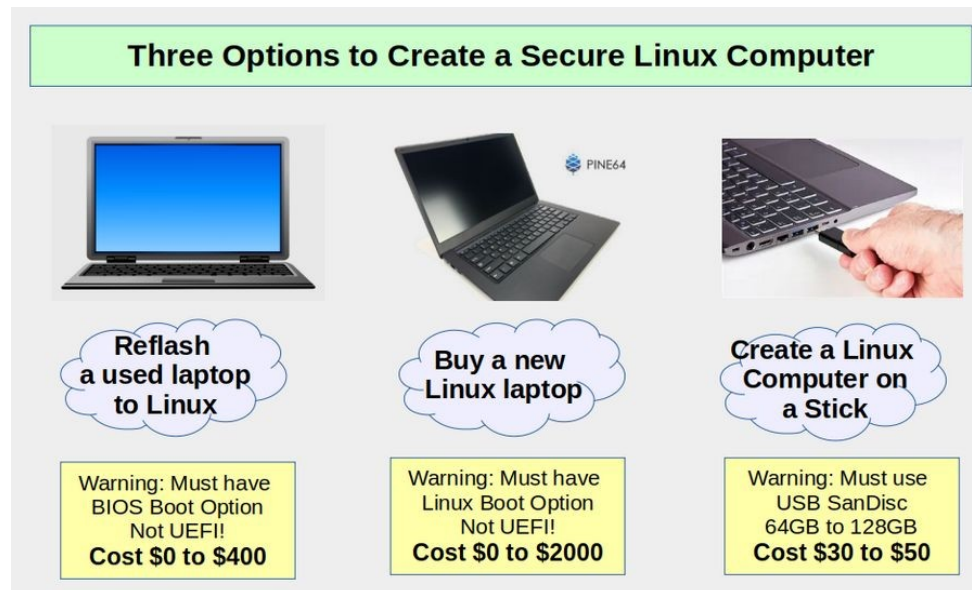
### Why Linux Debian is the best choice for Windows Converts

Linux Debian is not owned by any corporation. Instead, it is a non-profit foundation controlled by a community of computer users who want to help develop and improve their own operating system.

If you eventually want to host your own websites on your own virtual private server, you will want to use Debian for that VPS and Debian for your Desktop or Laptop computer you will use to create your VPS and your news website.

## Three Options to Create a Secure Linux Computer

The first and most common option to create a secure Linux computer is to reflash an old Windows computer to turn it into a Linux computer. The second option is to buy a new Linux computer and the third option is to place Linux on an external SSD drive (also known as a computer on a stick) and insert the USB for the SSD drive into a Windows computer after setting the computer to boot from a USB drive. This third option will not harm or change any documents, data or programs on your Windows computer.



Since Microsoft Windows 11 will not work with most current computers, many people will have an older computer that they can no longer use with Windows and which can be converted to Linux. We will therefore begin with a review of how to reflash a used computer to Linux and then discuss the other two options.

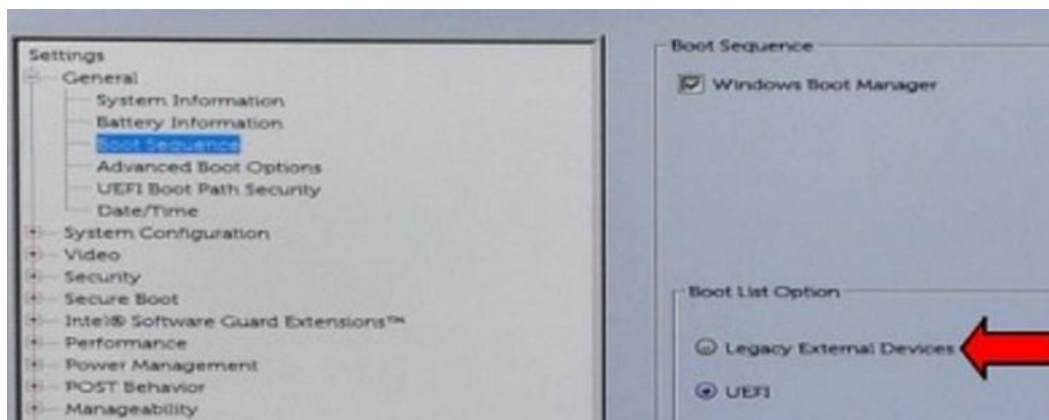
### What to Look for in a Used Laptop

The most important feature of a used laptop, whether you have it in your closet or buy it online, is to make sure it has the **option to change from UEFI boot to BIOS boot (also called Legacy boot)**. Here is a link to my detailed article on the drawbacks of UEFI boot:

<https://learnlinuxandlibreoffice.org/news/the-fight-for-a-secure-linux-bios>

Sadly, looking for a used computer that has the BIOS option eliminates any computer purchased after 2020 and any Microsoft 11 computer because Microsoft dictated that all new Windows 11 computers must use only UEFI!

Below is an example of a Dell Latitude E6540 laptop after pressing the Power On button and then pressing F2 and then clicking on Boot Sequence. It is checked for UEFI but has the **option to change to Legacy boot**:



The third thing to look for is a 15 inch screen such as the Dell E6540 - which is the make and model we have had the best luck in switching to Linux. Dell laptops may have some difficulty is getting the WIFI and other drivers working. But we cover solutions to this problem below. Here is a link to several E6540 Dells for under \$300.

[https://www.ebay.com/sch/i.html?\\_from=R40&\\_trksid=p2499334.m570.l1311&\\_nkw=dell+e6540+laptop&\\_sacat=177](https://www.ebay.com/sch/i.html?_from=R40&_trksid=p2499334.m570.l1311&_nkw=dell+e6540+laptop&_sacat=177)

We will next review the process for reflashing any computer to **install Linux Debian 12 with the Cinnamon Desktop**.

### **Create a Debian 12 Cinnamon Live USB**

The first step in this process of creating a Live USB is to get two empty USB 3 drives. Use the first drive to make a copy of all of your documents on the computer you will be reflashing. Depending on how many documents, images and videos you have on your computer hard drive, this USB 3 drive may need to be 64 GB to 128 GB.

**Note: Reflashing a computer will delete all documents and programs on the computer. Please copy all documents and make a list of all programs that you want to re-install after reflashing your computer.**

The second USB drive will be converted into a Linux Debian 12 Live USB. It only needs to be 8 GB. I recommend Sandisk USB drives.



## Download the Linux Debian 12 LIVE ISO File

Go to this page to download the 64 bit version of Linux Debian Cinnamon ISO file with non-free software (the non-free software may be needed to install WIFI and Printer drivers on your computer). The exact link changes as new versions of Debian are released. Therefore, we will start at this page:

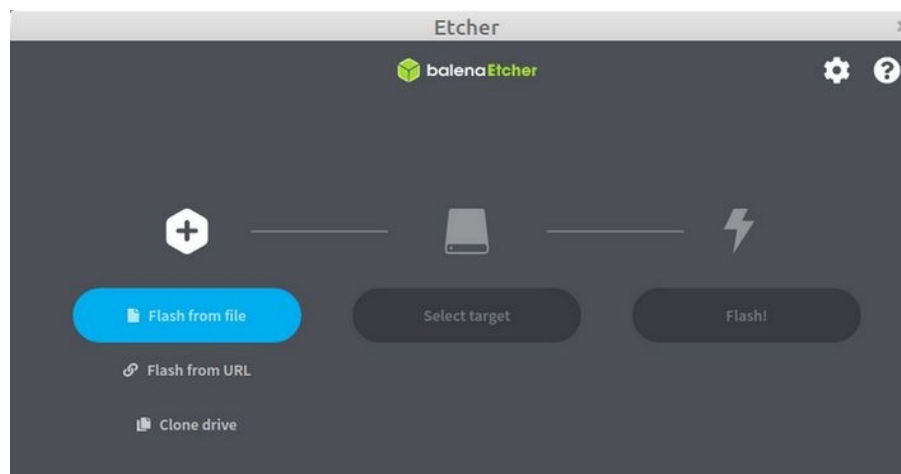
<https://cdimage.debian.org/debian-cd/current-live/amd64/iso-hybrid/>

and click on the cinnamon.iso option. Then click on it to download it. Save this file to your home computer. It will be about 3.4 GB.

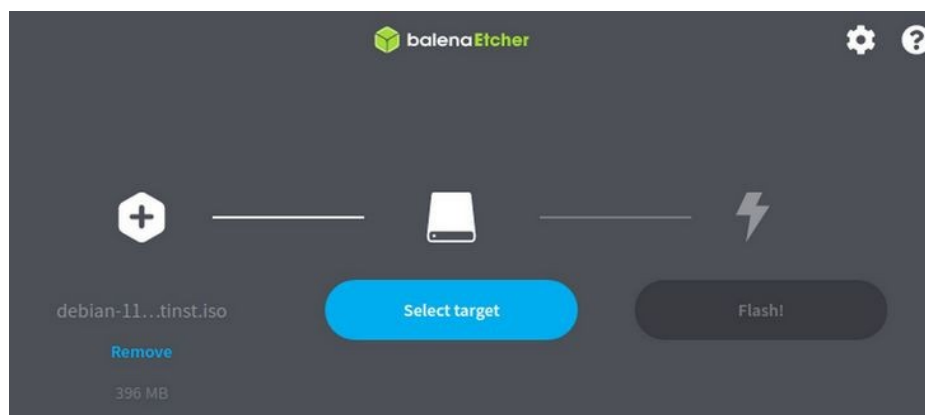
## Download Etcher

We will use a free program called Etcher to create our live USB. Go to this page to download Etcher. <https://www.balena.io/etcher/>

Extract the zipped file to reveal the App Image. Then click on Etcher to bring up this screen:



Click Flash from File. Then navigate to the Debian 11 Cinnamon iso file to select it.



First insert a USB drive into a USB port. Then click **Select Target and navigate to your USB drive. Note that whatever is on the USB drive will be erased during the installation of Debian.** Then click Flash to flash the USB drive with Debian. When done, you will have a Linux Debian Live USB. You can use this USB to reflash as many computers as you want.

### **Reflash a computer using a Linux Debian Live USB**

Once you have created a copy of all of your documents and placed them on a separate USB drive and made a list of all of the programs you want to replace, you are ready to start the reflashing process.

First, it is best to have your laptop connected to your router **with an Ethernet cable** (it is also possible to use WIFI but it is not as secure or as faster as using an Ethernet connection).

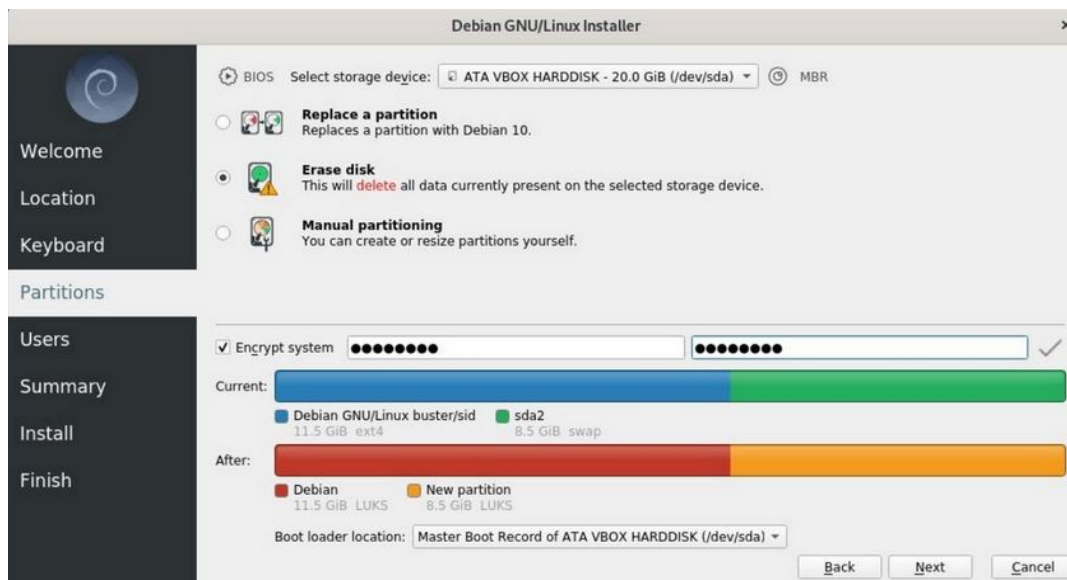
Then place your Linux Debian Live USB into a USB 3 port on your computer. Generally USB 3 ports are on the left side of your laptop as you are facing your open laptop screen. Then turn on the computer and immediately press whatever keys are needed to enter your BIOS settings. On a Dell computer, it is usually F2. On a Lenovo, it may be the Function key plus the F2 key. On an HP laptop, it might be the Escape key.

Once you enter your BIOS, go to the Boot Settings to make sure that the laptop is set to boot from a USB drive before booting from the internal hard drive. **If your laptop has the option to boot from Legacy or UEFI, choose the Legacy Mode.** If your laptop has the option to turn off secure boot, then turn off secure boot. You may need to do an online search to determine the best options for your particular computer. Here we will review the process for a Dell E6540.

Once the BIOS has been set to boot from a USB in Legacy mode, click Save and Close. In a few seconds, you should see the GRUB2 screen with Linux Debian as the first option. Wait a few seconds and the **Debian Calamares Installer Welcome** screen will appear.

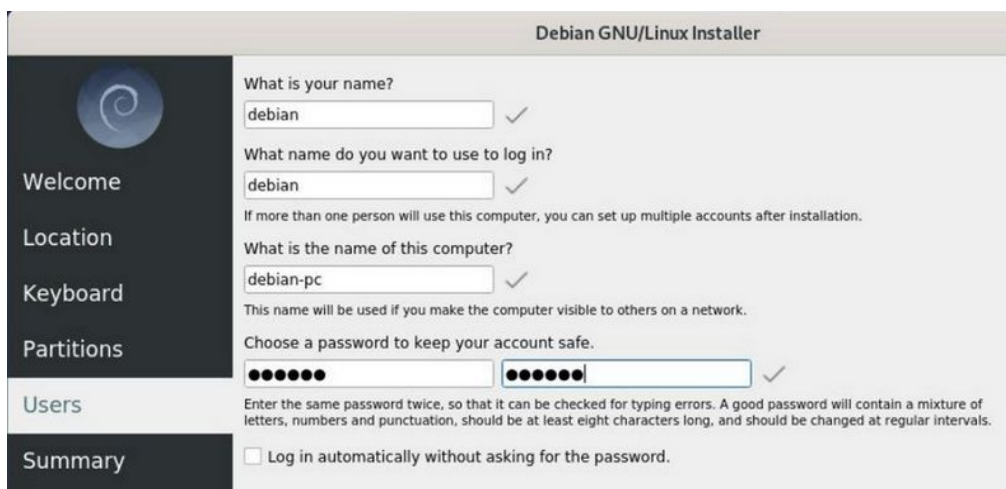


At the Debian installer first screen, leave the Language at American English. Then click Next. For Location, click on your time zone. Then click Next. For keyboard, click US and click Next. For Partitions, click on your hard drive at the top of the screen to select it. Then click **Use the Entire Drive**.



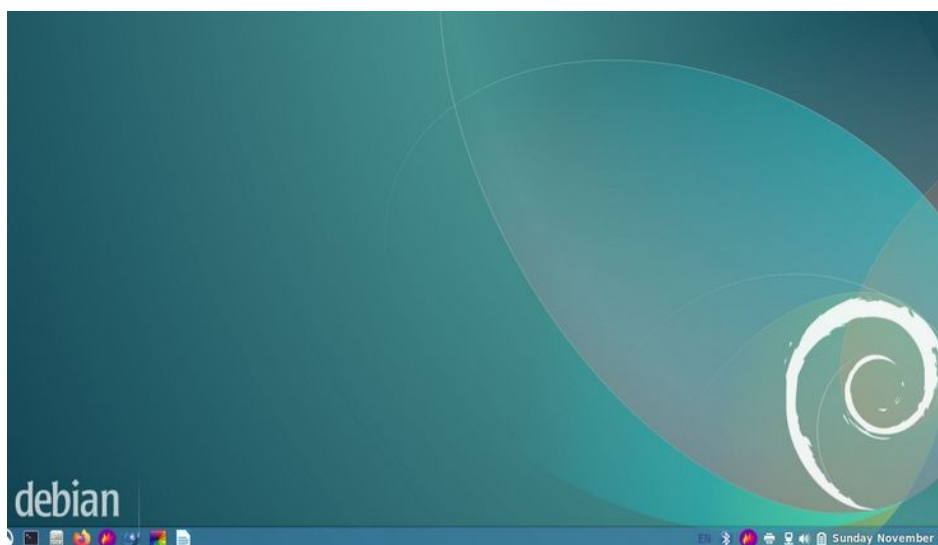
Note that I recommend **leaving Encrypt System unchecked**. Then click Next. On the Users screen, enter your username and password. **You can also check the box to automatically log in.**





Click Next. The Summary screen will show the Installation summary. Click Install. The Install screen will show the Installation progress. The Finish screen will state All done and ask if you want to restart now. When you restart, quickly remove the USB Live stick!

When you restart, your laptop should boot into the Debian Cinnamon Desktop screen with the Start programs button in the lower left corner.



## Options for buying a New Linux Laptop

While there are more than a dozen companies that sell new Linux Laptops, the sad truth is that nearly all of them use the extremely insecure UEFI start up program. There is no point in buying a Linux computer if it has UEFI as hackers can take remote control of your Linux computer via the UEFI program. Currently, there are only two Linux Laptops that use a secure Linux boot program instead of UEFI. These are the Pinebook Pro 14 which costs under \$300 and the Purism Librem 14 which costs about \$2000.

## Pinebook Pro 14 Laptop



The Pinebook Pro is not available at the moment. If you manage to get a used or new Pinebook Pro, be aware that it does not use an X86 processor. Instead, it uses an ARM processor. Therefore Debian 11 will not work on the Pinebook Pro. I have written a detailed article on how to configure the Pinebook Pro. Here is the link:

<https://learnlinuxandlibreoffice.org/4-pinebook-pro-tips>

Here is a link to the Pinebook Pro website:

<https://www.pine64.org/pinebook-pro/>

Here is a link to their forum where you can get the latest information on when it might be available again:

<https://forum.pine64.org/forumdisplay.php?fid=112>

## Purism Librem 14 Laptop



The Purism Librem 14 is the world's most secure laptop. This is because it replaces UEFI with the Coreboot SeaBios startup program. It also comes with a series of special hardware kill switches at the top of the keyboard.



The Purism Librem 14 is typically not available. However, as of March 2022, there is a limited supply available at this link:

<https://shop.puri.sm/shop/librem-14/>

The base model is \$1370. If you order one of these, I recommend replacing the 8 GB of Memory with 16 GB. This adds \$80. I also recommend replacing the SATA Storage with 500 GB NVME storage which adds \$170. I recommend keeping the Pure OS operating system which is a slightly modified version of the Debian 11 operating system. For most people, there is no need to pay for the Interdiction program. The total cost with these two upgrades is \$1650. You can also upgrade the warranty from one year to three years for \$170.

When you get the laptop, connect it to the charger and turn it on. There are a series of steps on the install screen. One thing I do not like is that there is no option to turn off encryption of the hard drive.

Because you will need to enter the hard drive encryption password every time you log into your laptop, I recommend keeping that password short and easy to remember. Also keep your log in username and password short and easy to remember.

Once you complete all of the configuration screens, you will log into the Pure OS start screen. Sadly, Pure OS uses the Gnome 3 desktop which can be difficult for Windows converts to learn and use.

I therefore recommend adding the Cinnamon Desktop to the Pure Operating system. To add the Cinnamon Desktop, open a terminal and type the following commands one at a time:

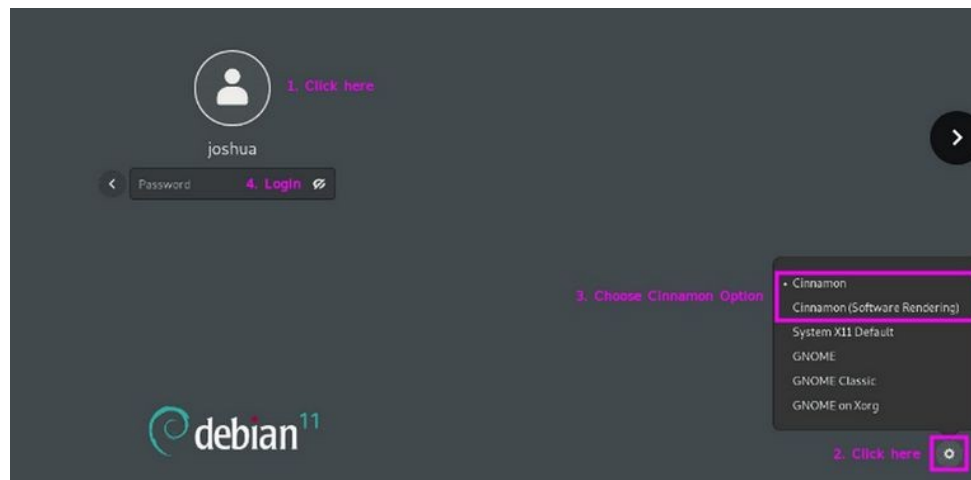


**sudo apt-get update**

**sudo apt-get dist-upgrade**

**sudo apt install task-cinnamon-desktop**

Then power off and restart your laptop. Enter your encryption password. At the log in screen, click on the person icon which will bring up a desktop selection screen in the lower right corner. Change the Desktop to Cinnamon. This only needs to be done once. On future logins, the Cinnamon Desktop will automatically be selected.



Then log in with your normal username and password. This will bring up the Cinnamon Desktop. There are a few more needed changes, but we will cover those in a later article.

### **Benefits of a Computer on a stick**

A USB External SSD Drive with Persistent storage is also called a Computer on a Stick – because it works exactly like a computer with an internal hard drive. The only difference is that a computer on a stick does not have a keyboard and monitor. It therefore borrows the monitor and keyboard of the “host” computer which it is plugged into. When you work with programs and save documents, instead of using the host computer internal hard drive, you use the USB external drive to run programs and save documents.



If you do not have a computer you want to reflash, and you do not want to buy a laptop - and you want to try Linux on your existing Windows computer before making the move to switch to Linux, then your best option is to **use a USB computer on a stick**.

A computer on a stick plugs into your current computer and uses your current computer keyboard and screen and processor and RAM. It basically temporarily replaces your computer hard drive without affecting your hard drive. It takes about one hour to create a computer on a stick.

The benefit of having a computer on a stick is that you do not have to actually change anything other than a couple of BIOS settings on your host computer to allow it to boot from an external USB drive rather than its internal drive. This means you can keep your Windows computer just the way it is and still use a Linux “computer-on-a-stick” to learn how to use Linux and/or to set up a Linux web development test environment.

Linux USB without persistent storage is called a **Live USB** and is normally used to replace the prior operating system on the hard drive (either Windows or Linux) with a newer version of a Linux operating system. You can start a computer with a Live USB and do things like installing programs, saving files, and changing settings. But, as soon as you turn off and turn on your computer, all your changes you made with the Live USB will be gone.

If you want a USB drive that retains the changes you make, you need to create a USB with **persistent storage** – a computer on a stick. With persistence, whenever you boot the USB drive on any computer, your files, settings, and installed programs will be there. This allows you to take your work with you and work on almost any computer anywhere anytime. A Persistent USB also allows folks to learn about Linux on their existing

computer without the need to create virtual machines or dual boots.

This method of creating a Linux computer on a stick is ideal for teachers and students because it allows them to use a school's computer lab without altering in any way any of the computers in the lab. Students can save their work and bring their Linux Persistent sticks home and continue to practice using Linux on any computer they may have at their home.

But the most important reason to create a persistent USB drive is that you can test Linux based business website development programs without ever having to worry about borking your normal computer. This is why creating a computer on a stick is called setting up a TEST environment. If things go bad, you simply reflash the USB drive and start over.



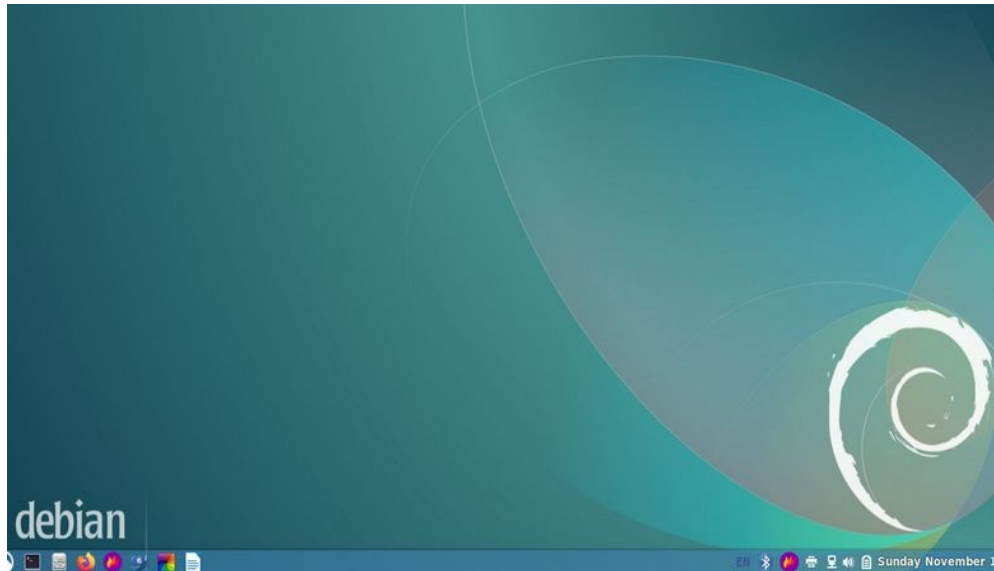
### **What's Next?**

Whether you reflash an existing computer or buy a new computer or create a computer on a stick, the goal is to create a secure Linux computer with the Cinnamon Desktop. In the next article, we will review important First Steps for completing the initial configuration of Linux Debian laptop.

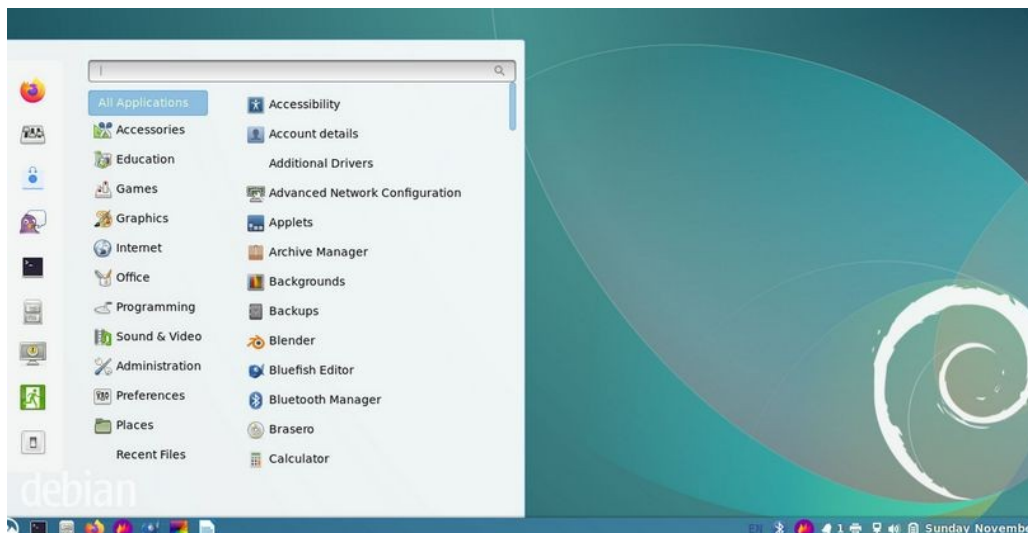


## 1.2 First Steps after reflashing to Linux

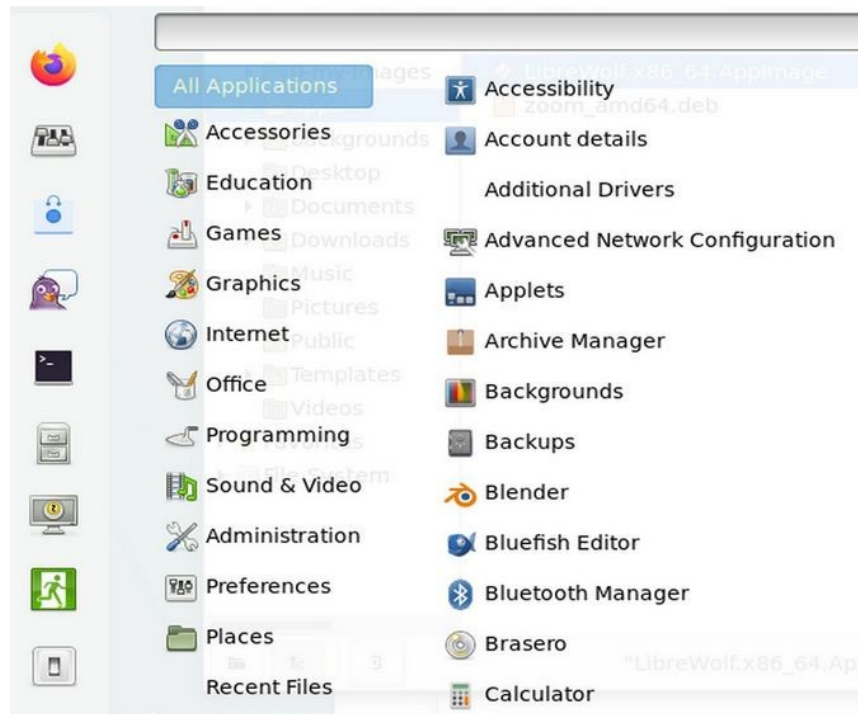
In our last article, we reflashed our laptop and ended with the Linux Debian Start screen. In this article, we will review some important first steps to take after reflashing to Linux Debian. Here is the Debian Start screen:



Click on the Debian Menu in the lower left corner to bring up the Programs Launcher:



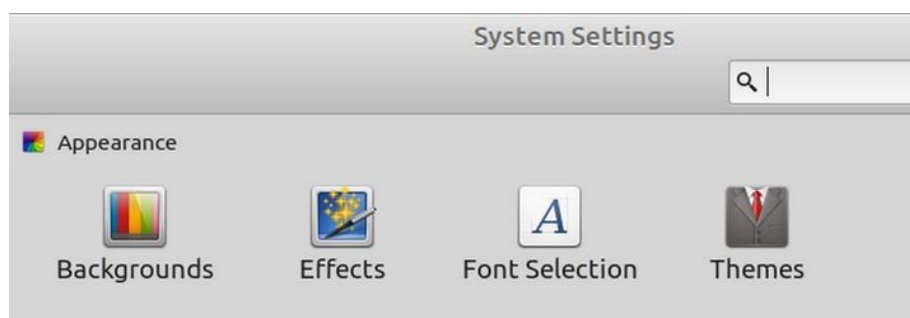
Here is a closer view of the Programs Launcher reached by clicking on the Debian Start button in the lower left corner of the screen:



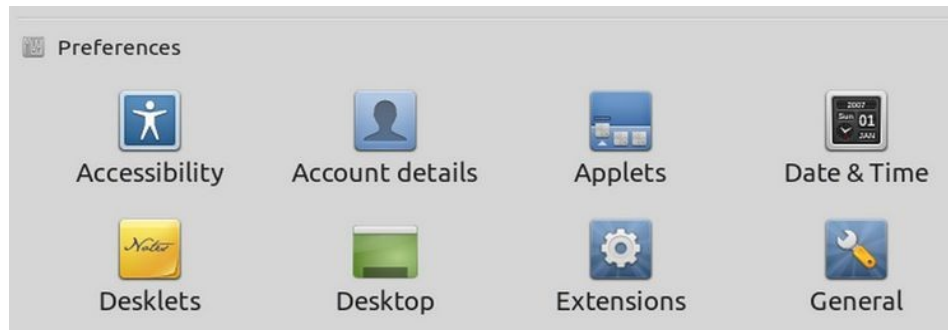
Debian 12 now comes with the Debian Software Manager. It is the blue and white shopping bag near the top of the left column. How it got added to the Favorites column was by clicking on Administration, then click Software. Then right click and click “**Add to Favorites.**”

### Step 1: Change Debian Settings

Go the Debian Start menu and click on **System Settings** which is the **second icon in the first column**. Below is the first row in System Settings. It is called **Appearance**.



Click **Backgrounds** where you can change your background image, add your own custom images and even set up a slideshow to play on your Desktop. Then click **Effects**. Turn off all of the Effects. Then click Font Selection to increase the font size. Then click Themes to change themes for your panels and windows to whatever you want.



The second set of rows in System Settings is called Preferences. Click Date and Time. Turn off the 24 hour clock and turn on the date. Then click Desktop. **Check Mounted Drives to make sure they appear on the Desktop when you insert a USB stick.** Scroll down to the Screen Saver icon and open it. Change the Delay time to Never and turn off both Lock settings.



The third set of rows is called Hardware.

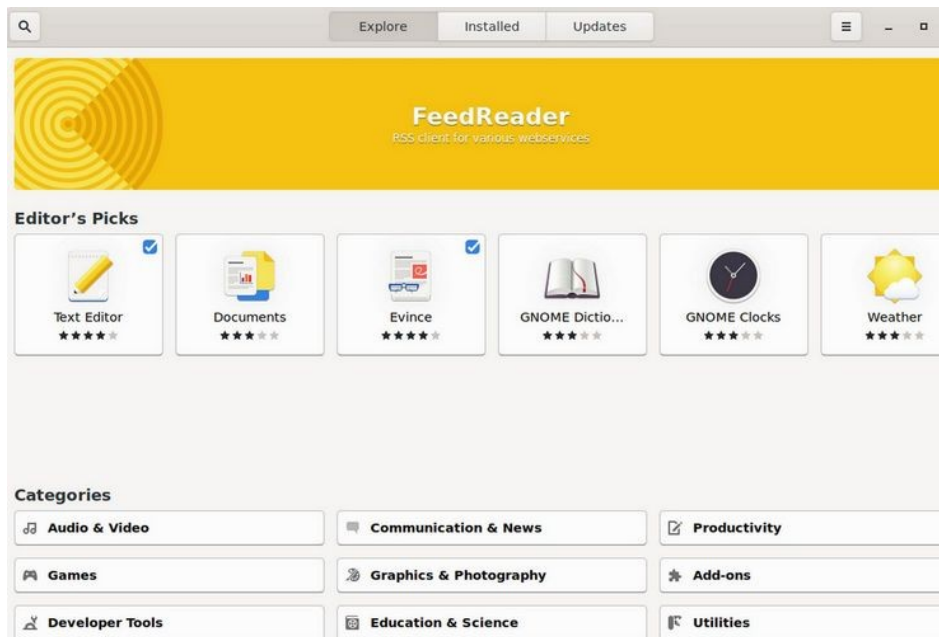


Click Power Management. Change the settings to Never and Shut down immediately. Then click Sound. Click Settings to increase the maximum sound to 150%. Then close the Settings screen.



## Step 2 Add Software

Click on the Start button. Then click on the Shopping Bag icon to go to the new Debian Software Manager:

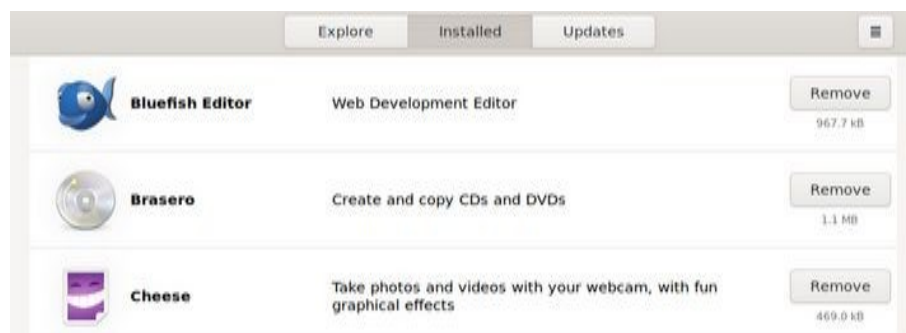


Click on the Search icon in the upper left corner to bring up a Search box. Then type **Flameshot** in the search box. Then click on Flameshot to bring up the Install page.



Then click on Install to install Flameshot screen capture tool. Then look for it in the Applications list and right click, then click Add to Panel to add it to the program quick launch icons in the bottom panel.

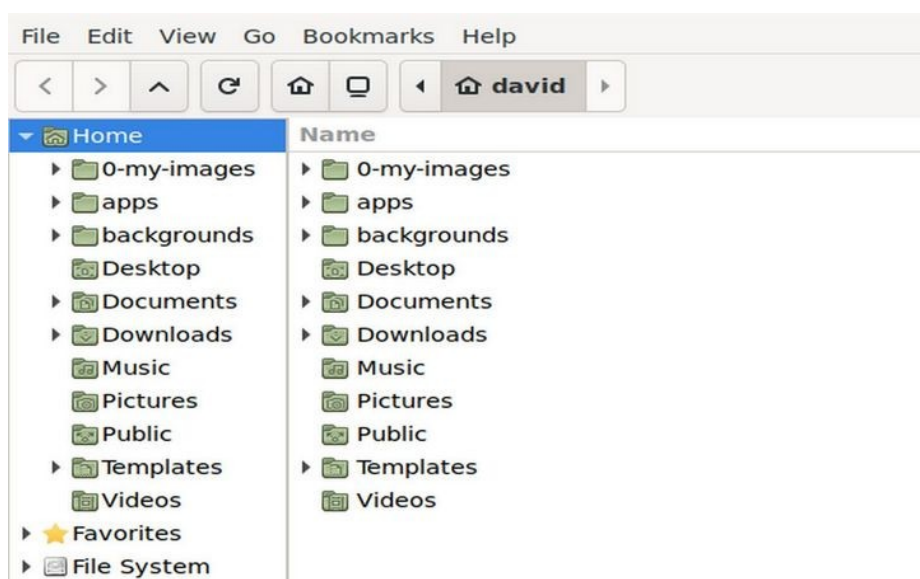
Then go back to the Debian Software Manager and install the **Bluefish** HTML editor. Also install **Krita**, **Gthumb**, **Gpick** and **Gparted**. Then click on Installed to see a list of all programs and an easy way to uninstall any programs that you do not want or need.



Then close the Software Manager.

### Step 3 Improve the Appearance of the Debian File Manager

Click on the Filing Cabinet icon in the bottom task bar to bring up the File Manager. Right click on the screen and click Create New Folder. Then create a folder called **0-my-images**. Then right click on the screen again and create a folder called apps. Then click Edit Preferences. Change the Default View to List View. Click List Columns and uncheck Type. Then click Toolbar and click Computer, New Folder, Refresh and Home. Then close Preferences. Then click on the Refresh button. Then in the lower left corner, click **Show Tree View**. Your file manager should now look like this.

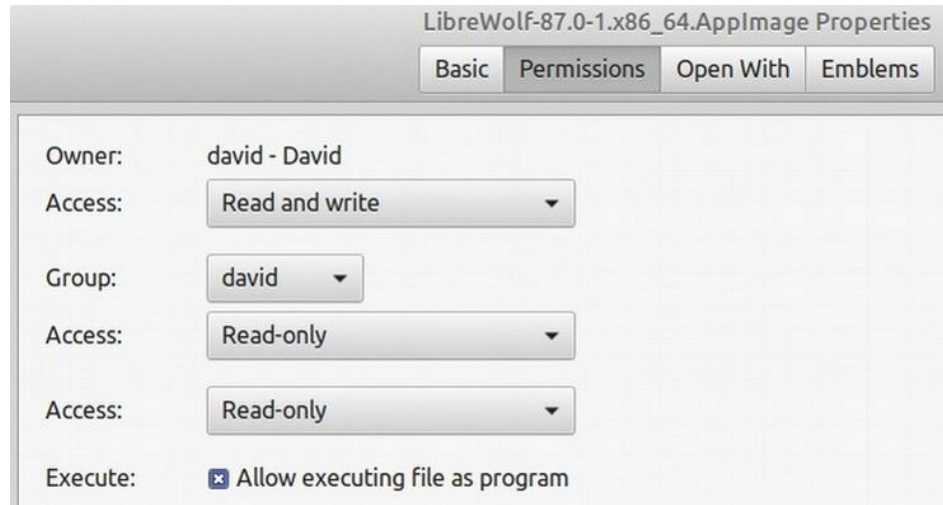


#### Step 4 Install a More Secure Web Browser called Libre Wolf

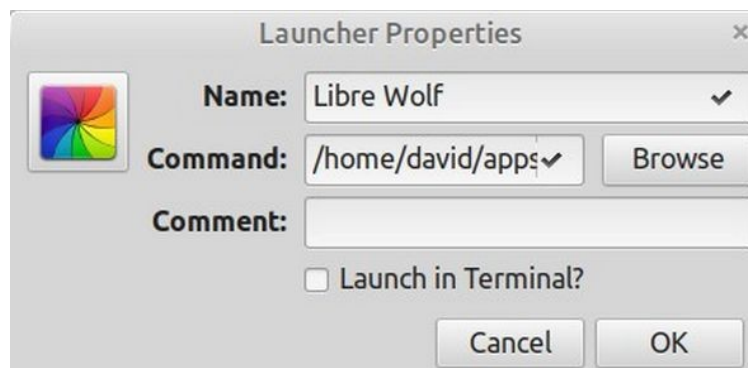
Next, we will install an apt image called the Libre Wolf Browser. Go to this web page:

<https://gitlab.com/librewolf-community/browser/appimage/-/releases>

Download the app image to your Downloads folder. Then create an apps folder and transfer the app image to your apps folder. Then right click on the file and click Properties. Then click the Permissions tab and check Allow executing file as a program.



Then close the Properties screen. Left click on the Mint Menu and click Configure. Then click Menu. Then click Open the Menu Editor. Then click Internet . Then click New Item.

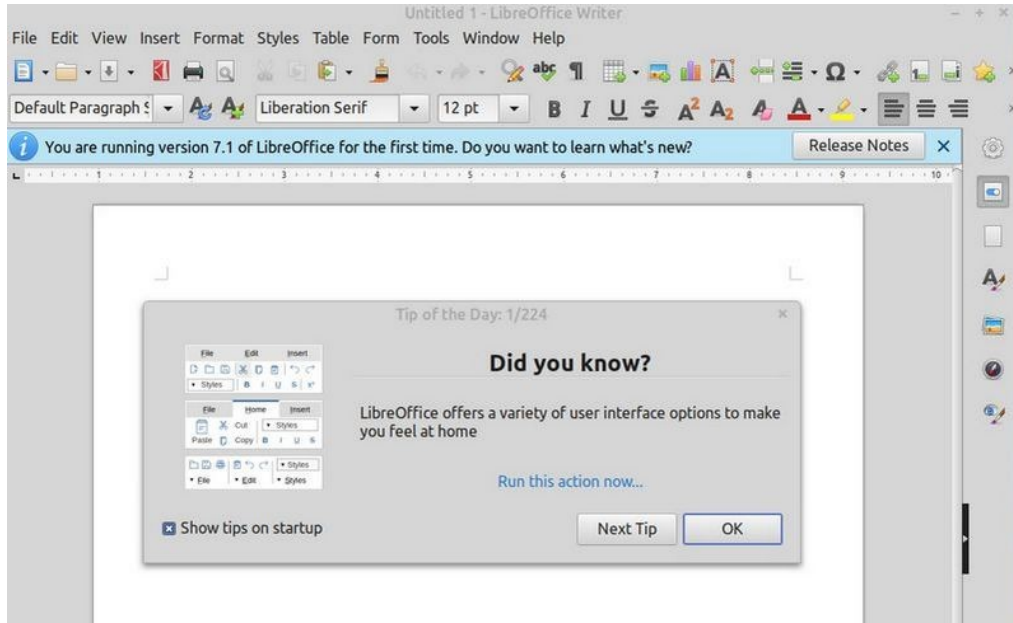


Call it Libre Wolf. Browse to the app to select it. Then click on the icon to select an icon. Then click OK. Then add the app to the panel.

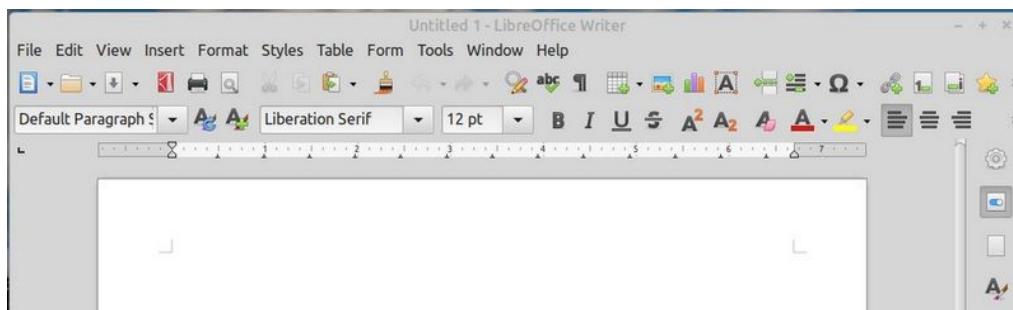


## Simplify Libre Writer

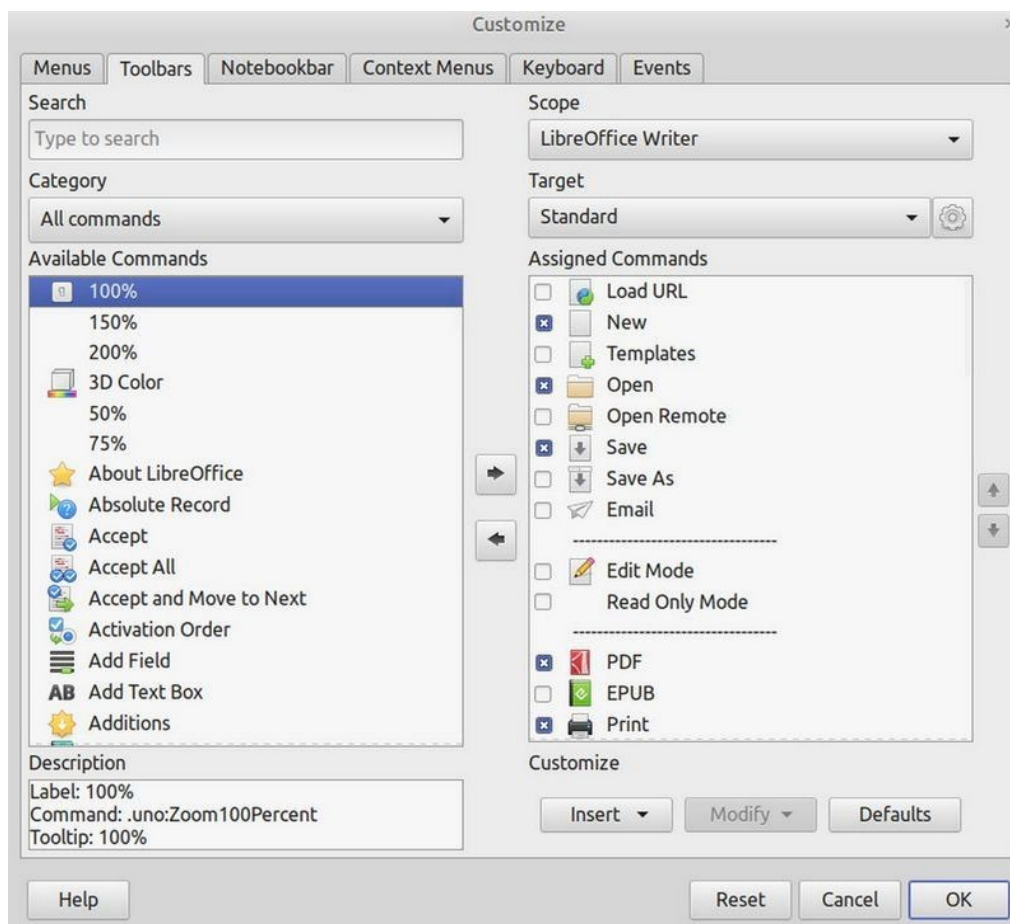
Our next goal is to simplify the LibreOffice screen. Open your first Writer document. When you open your first Libre Writer document, you are confronted with a bewildering nightmare of functions spread out in a full screen from one side of your desktop to the other.



Clearly the authors of Libre Office did not consult with a teacher in their choice of a Start screen. Uncheck Show tips on startup. Then close the Tips window. Then close the Release Notes bar. We still have the following mess:



Click View and uncheck the Status Bar. Then click View again and uncheck the Ruler. Click Tools, Customize and click the Toolbars tab:



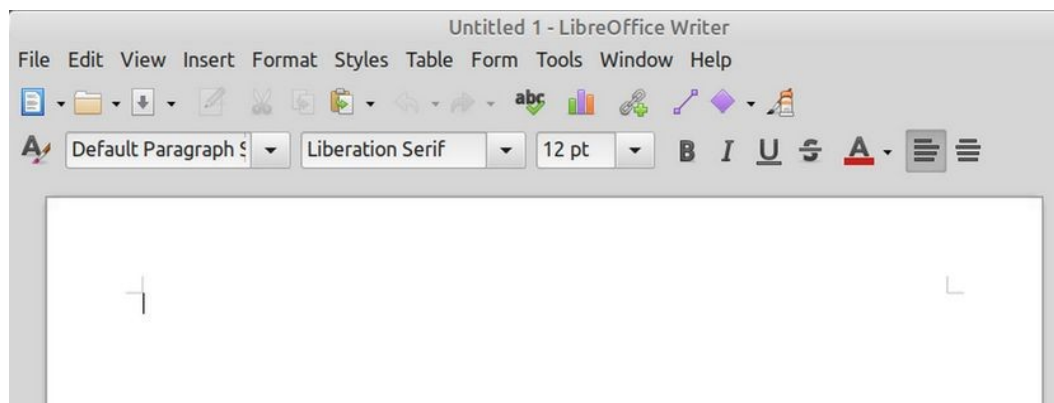
By default, the screen opens at the Standard Toolbar – which is the tool bar just below the main menu. The reason we need to uncheck most of these options is that we never want Libre Writer to take up more than half the width of our desktop. This is important so we can have a two documents side by side or one document and a web browser side by side. We will therefore uncheck the following Standard Toolbar functions which are checked by default:

PDF, Print Directly, Print, Clone, Find and Replace, Formatting Marks, Table, Image, Text Box, Page Break, Field, Symbol, Footnote, Endnote, Bookmark, Cross Reference, Comment, Track Changes Function. Then click OK.

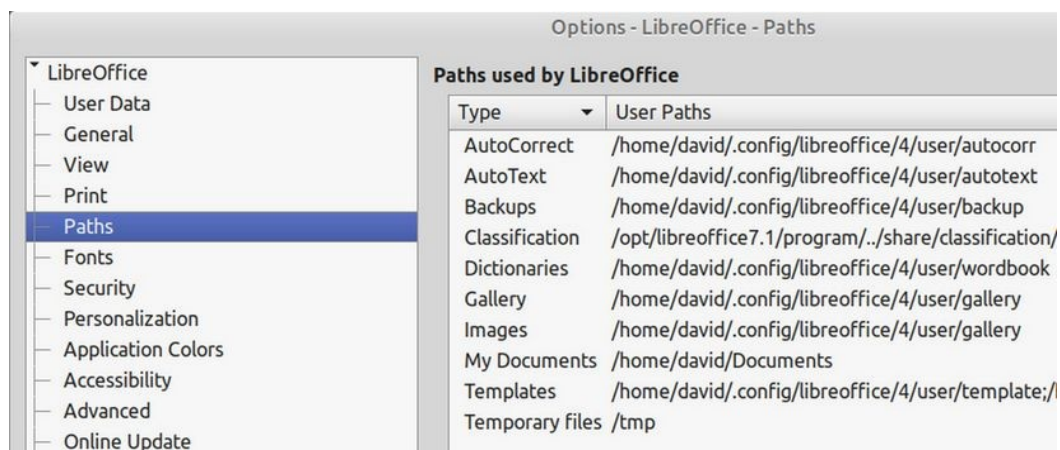
Then click **Tools, Customize** again and change the Target from the Standard toolbar to the Formatting Toolbar (which is the second row below the main menu).



It is shocking that the most important of all Libre Write functions, called **Styles** - is not checked by default. So check the Styles function. Then uncheck the following functions which are checked by default: Update, New, Strikethrough, Superscript, Subscript, Clear, Highlight Color, Right, Justified, Bullets, Numbering, Increase, Decrease, Line Spacing, Increase, Decrease, Left to Right, Right to Left. Then click OK. Here is our simplified screen:



Next click **Tools, Options, Paths:**



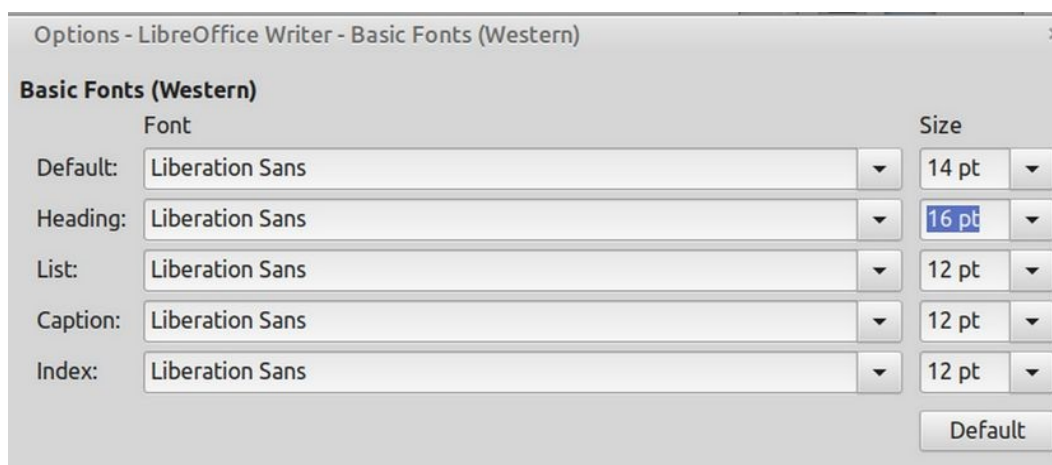


In the right column, click on the Images path. Then click Edit. Then click on your Home folder and click 0-my-images. This will give you better control over the location of your saved images.

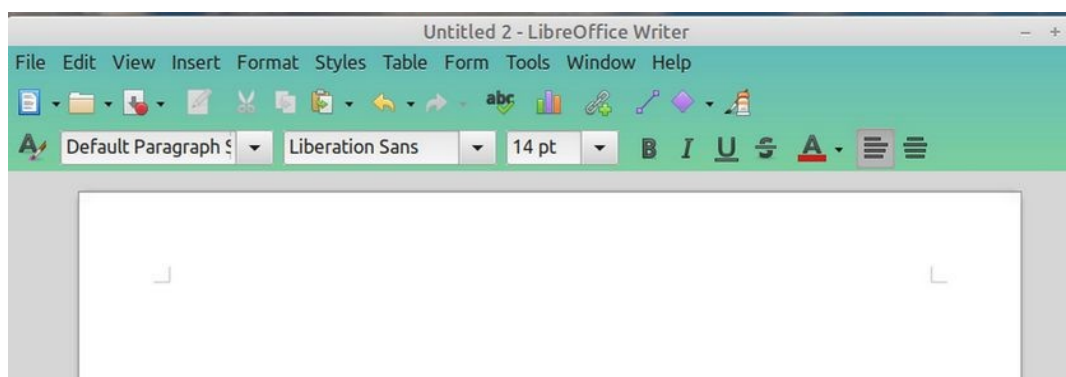
Then click on the Templates path and click Edit. Select the top path and click Delete. This will leave the templates path as /home/yourname/Templates.

Then click OK. Then click Personalization and select a color. Then click Apply. Then click Online Updates and uncheck Check for updates automatically.

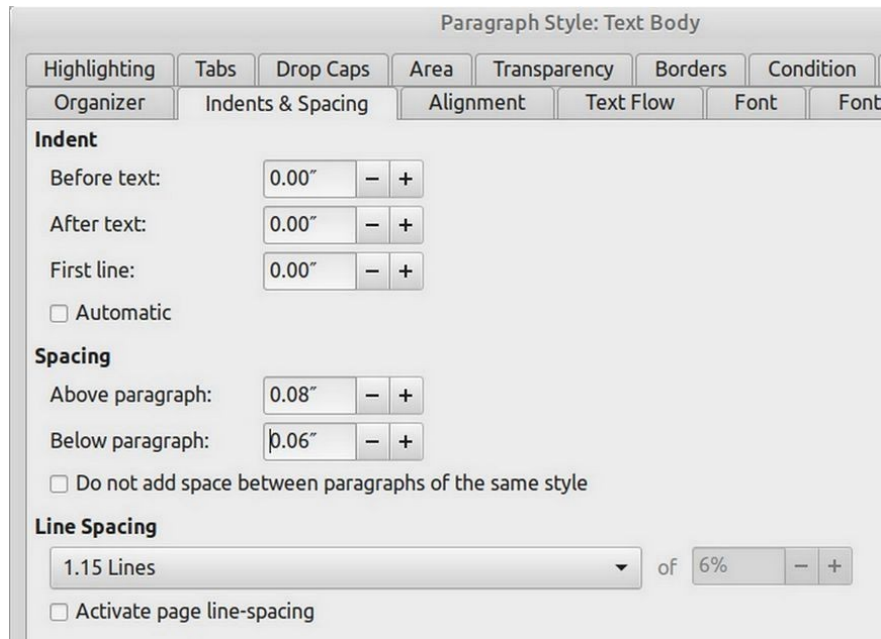
Then click Libre Writer and click Basic Fonts (Western). Change the default from Liberation Serif to Liberation Sans. Then change the size for Default from 12 to 14 and change the size for Heading from 14 to 16:



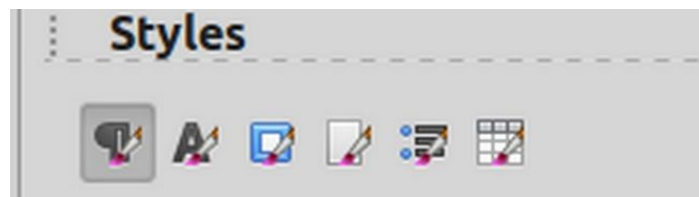
Then click Formatting Aids and change the image anchor from Character to Paragraph. Then click Apply and OK



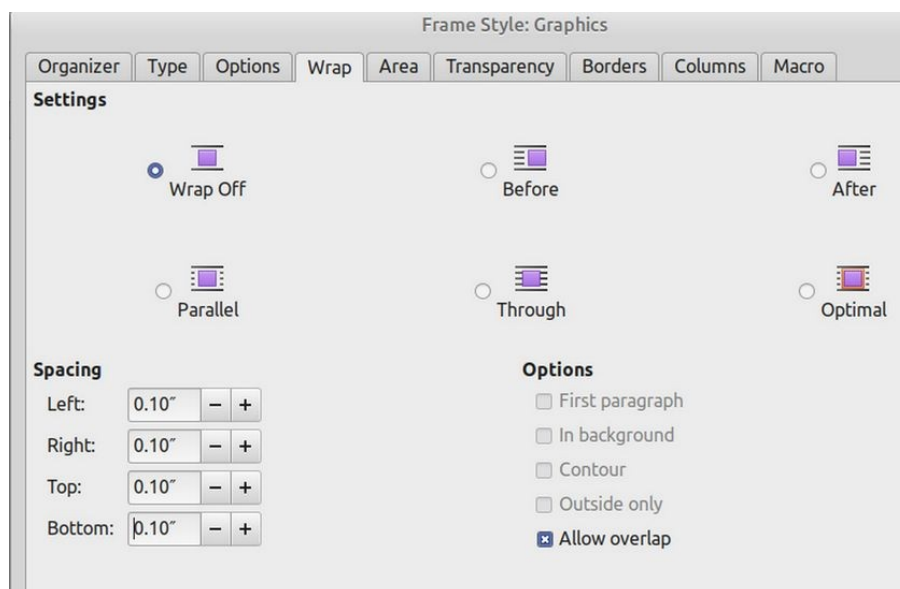
Next change the Paragraph style in the box from Default to Text Body. Then click on Styles to open the Styles panel. Right click on the Text Body style and click **Modify**.



Click on the Indents and Spacing tab. Then increase the Above spacing to 0.08 and decrease the below spacing to 0.06. Then at the top of the Styles Panel, click on the Frame Styles icon which is the third icon from the left.

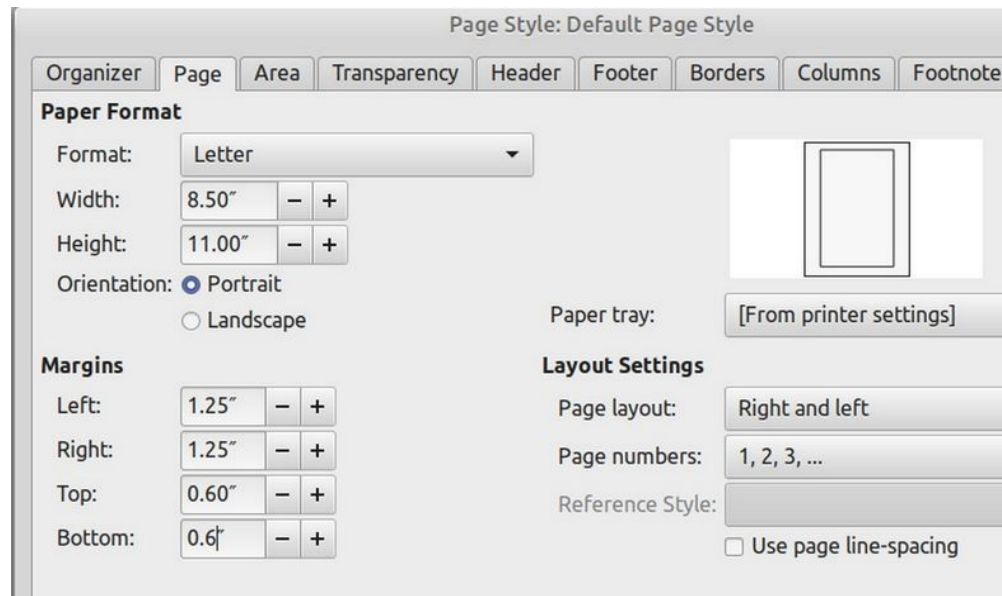


Then select Graphics, right click and click Modify.



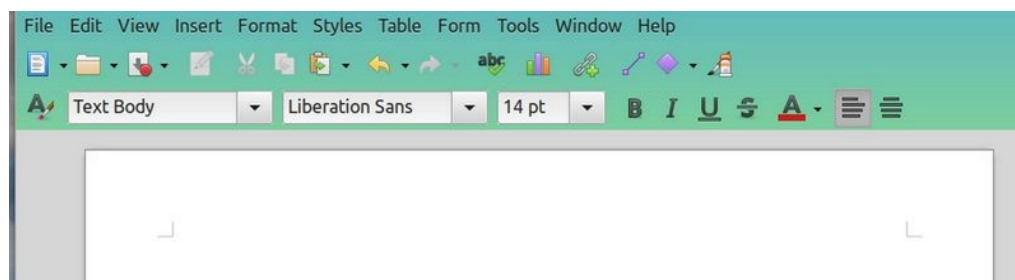
Click the Wrap tab and change the Wrap to Off. Then add 0.10 inches of spacing to Left, Right, Top and Bottom. Then click Apply and OK.

Then at the top of the Styles panel, click on Page Styles which is the fourth icon from the left. Then right click on Default Page Styles and click Modify. Then click on the Page tab.



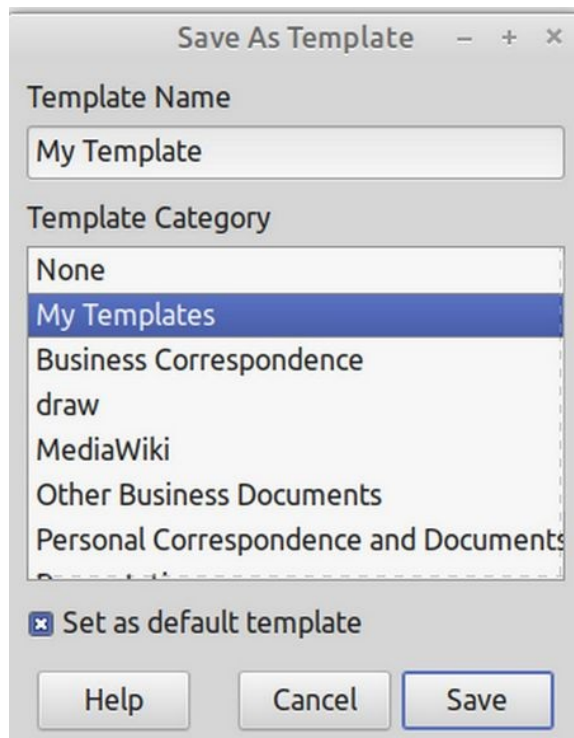
Change the Format from A4 to Letter. Then change the Left and Right margins to 1.25 inches and the Top and Bottom margins to 0.60 inches. Then click Apply and OK.

Then click View, and uncheck the Side Bar to hide the Styles panel. Here is our final simplified configuration:



## Create Your Default Template Style

Click File, Templates, Save as Template. Name the template My Template. Then click the My Templates category. Then check Set as the default template. Then click Save.



Then close your empty write document. Do not save it. Then open a new Writer document to check that the new document appearance is controlled by your new default template.

### **Increase the number of documents in File, Recent Documents**

Open a Libre Writer document and click on File, Recent Documents to see a panel of 25 most recent documents. If you work with a lot of documents at the same time, it is useful to increase the number of Recent Documents displayed to 99. To do this, click on Tools, Options, LibreOffice and select the Advanced menu item. In the right panel of the Options window in the bottom right, press the button called Open Expert Configuration. A new window will open and at the top is a search bar. Enter **picklistsize** and press enter.



The default value of the value box is 25. Click on it to bring up a popup and increase the number to 99. Then click OK, OK, Apply, OK.



## How to change your log in password

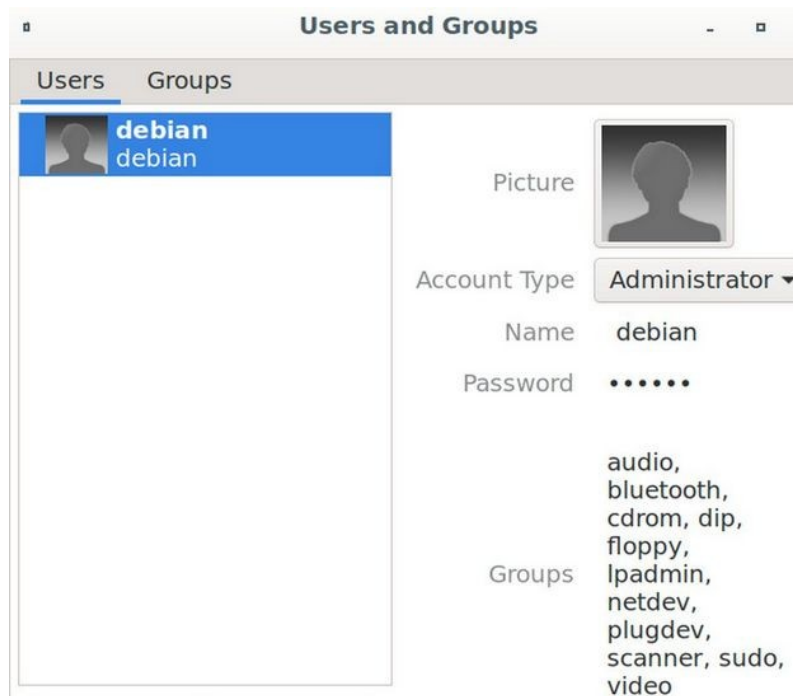
In Linux, there are users, user groups and the super user or root user. While a normal user may only change the password for their own account, the super user (or root user) can change the password for any account. In this article, we will explain how to change your Linux User password in two different ways. First, we will change your User password using the Desktop Graphical Interface. Then we will change your password using the Linux terminal. If you want to change your User password on a Linux Server, you must use the terminal method as servers do not have a Graphical Interface.

### Change your Password using the Desktop Graphical Interface

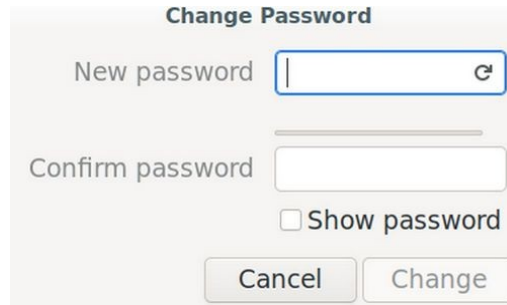
Click on the Start Menu, then click on Settings. Then scroll down to the bottom of the Settings screen and click **Users and Groups**.



Click on the user and enter your password to bring up this screen:



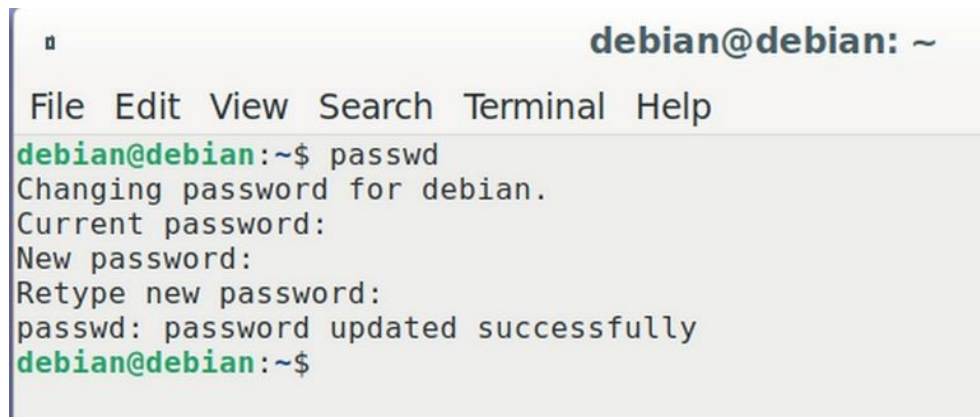
Click on the six dots to the right of the word Password.

A dialog box titled "Change Password" with a light gray background. It contains two text input fields: "New password" and "Confirm password". The "New password" field has a blue border and a small circular icon with a right-pointing arrow. Below the "Confirm password" field is a checkbox labeled "Show password". At the bottom are two buttons: "Cancel" and "Change".

Enter your new password. But be sure to make a record of your new password and or use a password you know you will remember. Then click Change. Then close the User screen. Then close the System Settings screen. Then open Settings again and click on Users and Groups. Enter your new password to confirm that it works.

### Change your User Password with the Linux Terminal

From the Start menu, click on the terminal to open it (or on your keyboard, press the Control, Alt and T keys). Type **passwd**. Then press Enter.

A screenshot of a Linux terminal window. The title bar shows a window icon and the text "debian@debian: ~". The menu bar includes "File", "Edit", "View", "Search", "Terminal", and "Help". The terminal content shows the command "passwd" being executed, followed by prompts for "Current password:", "New password:", and "Retype new password:". The output shows "passwd: password updated successfully" and the prompt "debian@debian:~\$".

```
debian@debian: ~
File Edit View Search Terminal Help
debian@debian:~$ passwd
Changing password for debian.
Current password:
New password:
Retype new password:
passwd: password updated successfully
debian@debian:~$
```

You will need to type your current password in. But it will not be shown on the terminal screen. You then need to type your new password into the terminal. It will also not be shown. Then retype your new password. The terminal will state password updated successfully. Close the terminal. Then test your new password by going to Settings, Users and Groups and typing your new password to open the Users screen.

Congratulations! You now know two ways to change your password!

### What's Next?

In the next article, we will set up a VPS account at Canhost and use it to install the Hestia Control Panel.

## 1.3 Create a Secure VPS

In our previous two articles, we explained how to create and configure a Linux computer. In this article, we will summarize how to use your secure Linux computer to create your own secure Debian VPS and then install the Hestia Control Panel on it.



### Why Canhost is the Best Option for Hosting your Social Network

I have written a detailed article explaining why I recommend Canhost to host your VPS. Here is a link to this article:

<https://createasecurewebsite.com/first-steps/2-create-a-secure-vps/2-1-choose-a-secure-vps-host>

In a nutshell, due to the Draconian Patriot Act, it is not secure to host your social network VPS on any server located in the US. It is also essential to use a VPS host with an easy graphical DNS Manager. Finally, it is important to use a VPS host that is not so small that they may go out of business but also not so large that they will have poor customer service. CanHost is located in Canada, has excellent customer service and uses an extremely easy DNS Manager.

### Step 1: Use a Secure Linux Computer

Do not use a Windows or Apple computer as using either will compromise your CanHost account security.

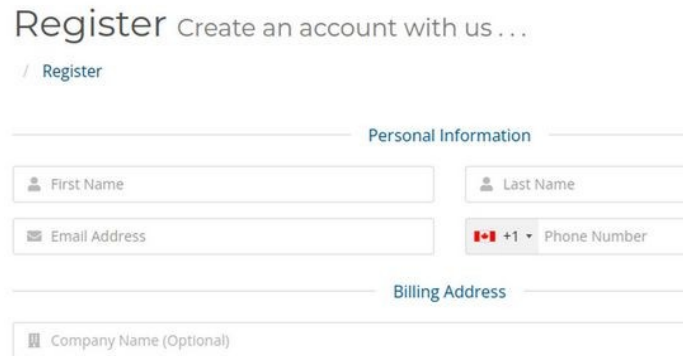
### Step 2 Use a Secure ProtonMail Email address

Do not use a Gmail address as it is not secure. You will be sent your initial password via email and it is therefore essential to use a secure **Proton Mail** email address. Also do not use a Windows computer to get your Proton Mail account as your Windows computer is simply not secure. Set up a Linux Laptop first. Then use your secure Linux laptop to get your secure Proton Mail account.

### Step 3 Create an Account at Canhost

To register for an account, use your secure Linux computer to open a web browser. Then go to the Canhost Home page: <https://www.canhost.ca/>

Click **Log In** in the top menu. Then click **Sign Up**.

The image shows the 'Register' page of the Canhost website. At the top, it says 'Register Create an account with us ...' with a link to '/ Register'. Below this, there are two main sections: 'Personal Information' and 'Billing Address'. The 'Personal Information' section contains four input fields: 'First Name', 'Last Name', 'Email Address', and 'Phone Number'. The 'Phone Number' field has a dropdown menu showing '+1' with a Canadian flag icon. The 'Billing Address' section contains one input field: 'Company Name (Optional)'.

Use your secure Protonmail email address to create your CanHost account. Do not use Gmail or any other insecure email address. Also use a password that is at least 10 digits long with at least one capital letter, one lower case letter, one digit and one special character.

### Step 4 Use your Canhost account to get a new domain name hosted by CanHost to use for your VPS name server

Alternately you can transfer a domain name to Canhost. However, because the domain name should be directed to CanHost servers, you will also need to transfer the files and database to CanHost if you want to use an existing domain name. While you can use any domain name, such as **communitynews.us** - or subdomain name, such as **washington.communitynews.us**, it is not possible to change the domain name later. Therefore give some thought to this question. In our example, we have obtained two primary domain names. The first is called **Better Future Network dot com**. The second is called **Better Network dot us**. Each domain name costs about \$12 per year or \$1 per month. However, you could use the same domain name for all three by using the subdomain **ns1.yourwebsite.com** for your server, **yourwebsite.com** for your Joomla website and a different sub-domain, for example, **friends.yourwebsite.com** for your social network. This will allow us to later create a number of sub-domains such **washington.betternetwork.us** in order to eventually set up a statewide or national network of Freedica websites to provide folks with an alternative to Facebook and Twitter.



Before you order your Virtual Private server, your domain name should initially point to the Canhost servers.

☒ Use default nameservers  
☐ Use custom nameservers (enter below)

Nameserver 1	ns1.managedns.ca
Nameserver 2	ns12.kookiejar.net
Nameserver 3	ns13.kookiejar.net
Nameserver 4	ns2.managedns.ca

Eventually, you should transfer all of your domain names to Canhost in order to use the Canhost DNS Manager to point these domain names to your Canhost VPS.

### **Step 5 Order a Debian 12 VPS with at least 4 GB of RAM**

Once you have your CanHost domain name, from the Canhost Home page, click **Hosting, Canadian VPS**. Then click **VPS EXPRESS 2**.

Change the Currency to US. **Change the Operating System from CentOS 8 to Debian 12**. Change Control Panel from cPanel to No Control Panel.

For Hostname, type **ns1.yourdomain.com** where yourdomain.com is a domain name pointing at the default Canhost servers.

For System Username, use a name with lowercase letters and no spaces. Use a password at least 10 digits long with at least one capital letter, one lower case letter, one digit and one special character. **Write down your VPS username and password as you will need both to log into your VPS server!**

The monthly fee for this VPS is about \$20 US Dollars. The DISC space is 40 GB.

Leave the remaining boxes including the SSH box empty and click Continue. Pay for the VPS and wait a couple of hours. You will get an email letting you know your two custom VPS IP addresses.

Once you have received your VPS confirmation email, log into your Canhost account and click on **Client Area, Services**.

Click on the word **Active** to view the VPS summary. The Server Hostname

should read **ns1.yourdomain.com**. This is your server Fully Qualified Domain Name (FQDN) we will use when installing the Hestia Control Panel. Below the FQDN is your **primary IP address** we will use to SSH into your VPS after we have changed the DNS records. Below this is the Reinstall Icon you can use if you make a mistake and need to start over.

### Step 6 Change your server domain name DNS Records

Once you know your VPS primary IP address, log into your Canhost account and click **Domains, My DNS**. Then click on the Edit button to the right of your server domain name to view your domain name DNS records. In our example, the server domain name is Better Future Network.com.

### Change the IP addresses of the first four A Records

At the top of the Records table, there are four A records which all point to the Canhost IP address. In the RDATA column, fully delete the Canhost IP addresses. Then copy paste your primary IP address in all four boxes. Then click Save and the bottom of the screen.

NAME	TYPE	TTL	RDATA
mail	A	3600	66.209.180.229
webmail	A	3600	66.209.180.229
www	A	3600	66.209.180.229
@	A	3600	66.209.180.229

### Create A records for ns1 and ns2

ns1 and ns2 are sub domains of our primary domain. For example, if your domain is example.com and you want to name your server ns1.example.com, then create the A record for ns1 in the example.com DNS zone pointing to your VPS primary IP address. To create an A Record, click Create Record. Then change the record type to an A record and type ns1 for the name.

Add New Record ✕

Name

ns1

Type

A

▼

TTL

14440

RDATA

66.209.180.229

Cancel

Add Record

Copy paste your VPS Primary IP address and put it in the RDATA box. Then save and close the file and repeat to create an A record for the sub domain ns2.

### Create two CAA records

Create CAA records by clicking on Add Record. Use the Type drop down arrow to choose CAA.

Add New Record ✕

Name

Name

Type

CAA

▼

TTL

14440

RDATA

Flag

Tag

Tag

Target

Target

Cancel

Add Record

Then type your domain name such as mywebsite.com into the Name box. Type the number 0 into the Flag box and the word **issue** into the Tag box. Then type the domain name letsencrypt.org into the Target box. Then click Add Record. Then click Add Record again and create a second CAA record with the Tag **issuewild**.

Here are my records for my domain name **collegeintheclouds dot com**. Note that there are A records for ns1 and ns2. that point to my primary IP address. Also there are two CAA records:

NAME	TYPE	TTL	RDATA
ns2	A	14440	66.209.180.229
ns1	A	14440	66.209.180.229
@	A	14440	66.209.180.229
webmail	A	14440	66.209.180.229
@	CAA	14440	0 issue "letsencrypt.org"
@	CAA	14440	0 issuewild "letsencrypt.org"

Leave the Canhost DNS records at the bottom of the DNS Records Table:

@	MX	3600	10 mail.collegeintheclou
@	NS	3600	ns2.managedns.ca
@	NS	3600	ns1.managedns.ca
@	NS	3600	ns13.kookiejar.net
@	NS	3600	ns12.kookiejar.net
@	TXT	3600	"v=spf1 a mx ip4:66.209.180.229 ~all"

Then click Save at the bottom of the DNS Zone Records table to save these changes.



I recommend that you use the 4 default Canhost Nameservers (aka ns1.managedns.ca).

- ☒ Use default nameservers  
☐ Use custom nameservers (enter below)

Nameserver 1	ns1.managedns.ca
Nameserver 2	ns12.kookiejar.net
Nameserver 3	ns13.kookiejar.net
Nameserver 4	ns2.managedns.ca

This means you should also not change the nameserver records at the bottom of your My DNS table:

@	NS	3600	ns2.managedns.ca
@	NS	3600	ns1.managedns.ca
@	NS	3600	ns13.kookiejar.net
@	NS	3600	ns12.kookiejar.net
@	TXT	3600	"v=spf1 a mx ip4:66.209.176.1

However, you should use Canhost **My DNS** to edit the first four A Records to point your domain names at your primary IP address instead of the default Canhost IP addresses.

NAME	TYPE	TTL	RDATA
mail	A	3600	66.209.180.229
webmail	A	3600	66.209.180.229
www	A	3600	66.209.180.229
@	A	3600	66.209.180.229

And you should create two CAA records for each of your domain names:

collegeintheclouds.oi	CAA	14440	0	issue	"letsencrypt.org"
collegeintheclouds.oi	CAA	14440	0	issuewild	"letsencrypt.org"

You should also create A records for each of your nameserver sub domains in the DNS records for the domain name you are using for your server (note that these two special A records are not needed for any other domain names you will be using):

NAME	TYPE	TTL	RDATA
ns2	A	14440	66.209.180.229
ns1	A	14440	66.209.180.229

Once you have completed these changes to your Canhost DNS settings, you are ready to log out of your Canhost account and add a Hestia Control Panel to your VPS.

### Step 7 SSH into your VPS from your home computer terminal

Open a terminal on your home computer. Use the Primary IP address given to you by Canhost in their email to SSH into your new server from our home computer terminal with this command:

ssh [yourusername@yourIPaddress](#)

Example: ssh [david@123.456.789.123](#)

Press Enter. Then type **yes** to accept the SSH connection. Then enter your VPS password and press Enter. Your terminal screen should then display the line that looks something like: [david@ns1](#):

This means you are logged into your Debian VPS and can begin to edit its settings.

### Step 8: Create a Root User and Password

We need to create a Root User in order to install the Hestia Control Panel.

However, we need to change the SSH configuration file before we can create a root user. Once logged into your user SSH session, copy paste: **sudo nano /etc/ssh/sshd\_config**

to open the ssh configuration file. Use the down arrow to scroll down to **PermitRootLogin**. Delete the hash at the beginning of the line PermitRootLogin and set the value to yes:

**PermitRootLogin yes**

Save this file by pressing the Control key and the lower case o key at the same time, followed by pressing the Enter key. Close the file by pressing Control plus the x key at the same time. To make the new setting take effect, restart the ssh service:

**sudo systemctl restart sshd.service**

While VPS is running, and still in your user ssh session, copy paste the following into the ssh terminal: **sudo passwd root**

Enter your sudo user password. Then add a root password typing it twice. Reply should be: **passwd: password updated successfully**

Log out of the user SSH with **exit**. Then close the home terminal.

### **Step 9 SSH into your VPS as the root user**

SSH into your VPS from your home computer terminal with this command: **ssh root@yourIPAddress**

For example, ssh root@123.456.789.123

When prompted for the password, use the root password you just created. Once logged in as the root user, uninstall the Canhost firewall called CSF with these commands: **cd /etc/csf**

Press enter, then copy paste: **sh uninstall.sh**

Then press Enter again. Go back to root with

**cd /**

Next, install the Midnight Commander graphical file manager with this command: **apt install mc**

Midnight Commander is a graphical file manager that makes it easier to edit and move files in our VPS. We will use Midnight Commander to change some settings after we install Hestia.

## Step 10 Install the Hestia Control Panel to your VPS

While logged in as root, copy and paste the following commands:

**apt-get update**

**apt-get upgrade**

Then open a browser and go to the Hestia Install page.

<https://hestiacp.com/install.html>

**Uncheck mutli-php and clamav.** Then click Submit. This screen will appear:

Installation instructions

Close

Log in to your server as root, either directly or via SSH: `ssh root@your.server` and download the installation script:

`wget https://raw.githubusercontent.com/hestiacp/hestiacp/release/install/hst-install.sh`

Copy

Then run the following command:

`sudo bash hst-install.sh --port '8083' --lang 'en' --apache yes --phpfpm yes --multiphp no --vsf  
yes --proftpd no --named yes --mariadb yes --mysql8 no --postgresql no --exim yes --dovecot yes --  
sieve no --clamav no --spamassassin yes --iptables yes --fail2ban yes --quota no --api yes --  
interactive yes --force no`

Copy

While logged into your server as root via SSH: `ssh root@your.server` and copy paste this installation script:

wget <https://raw.githubusercontent.com/hestiacp/hestiacp/release/install/hst-install.sh>

Then copy paste this into the ssh root terminal:

```
sudo bash hst-install.sh --port '8083' --lang 'en' --apache yes --phpfpm yes  
--multiphp no --vsftpd yes --proftpd no --named yes --mariadb yes --mysql8  
no --postgresql no --exim yes --dovecot yes --sieve no --clamav no --  
spamassassin yes --iptables yes --fail2ban yes --quota no --api yes --  
interactive yes --force no
```

Press Enter. Wait for the Thank you screen to appear.



```

Hestia Control Panel
1.8.2
www.hestiacp.com

=====

Thank you for downloading Hestia Control Panel! In a few moments,
we will begin installing the following components on your server:

- NGINX Web / Proxy Server
- Apache Web Server (as backend)
- PHP-FPM Application Server
- Bind DNS Server
- Exim Mail Server + SpamAssassin
- Dovecot POP3/IMAP Server
- MariaDB Database Server
- Vsftpd FTP Server
- Firewall (iptables) + Fail2Ban Access Monitor

=====

Would you like to continue with the installation? [Y/N]: █

```

Then type Y. Then type your email and FQDN. It is best to be connected to the Internet with a high speed and secure Ethernet cable. Then press Enter. After the installer finishes, it will end with Press any key to continue. **Do not press any key! First, scroll up the page and copy paste the Hestia URL and password!!!**

**Admin URL:** <https://76.28.214.202:8083>

**Username:** admin **Password:** ImQwmOHv1rg1Yi9g

Then scroll back down the page and press Enter. Then close the terminal.

Next start a new SSH root session with

**ssh root at yourIPaddress**

Then copy paste this command:

**v-add-letsencrypt-host**

wait for it to finish. Then type exit and enter to close the ssh session and close the terminal.

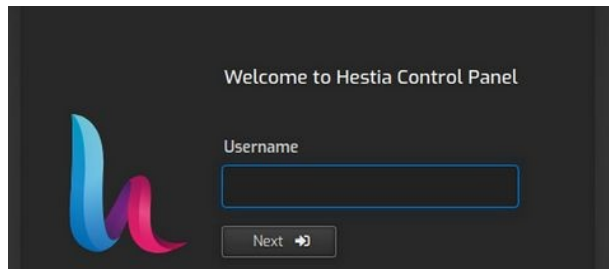
Open a browser and copy paste the Hestia URL:

<https://76.28.214.202:8083>

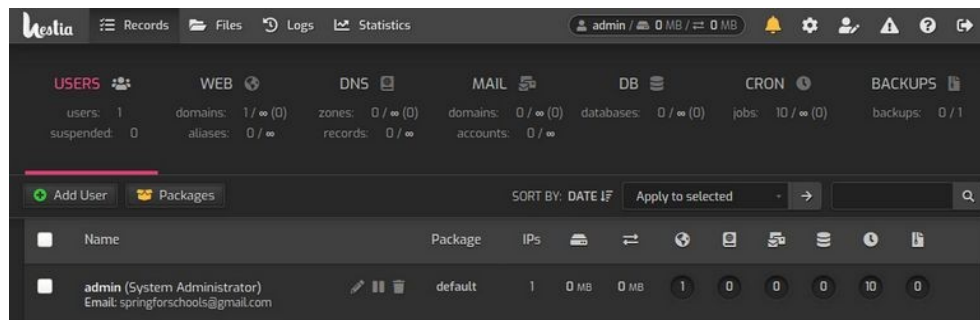
You can also log in with the domain name:port number

ns1.example.com:8083

The Hestia Control Panel Log in screen will appear:

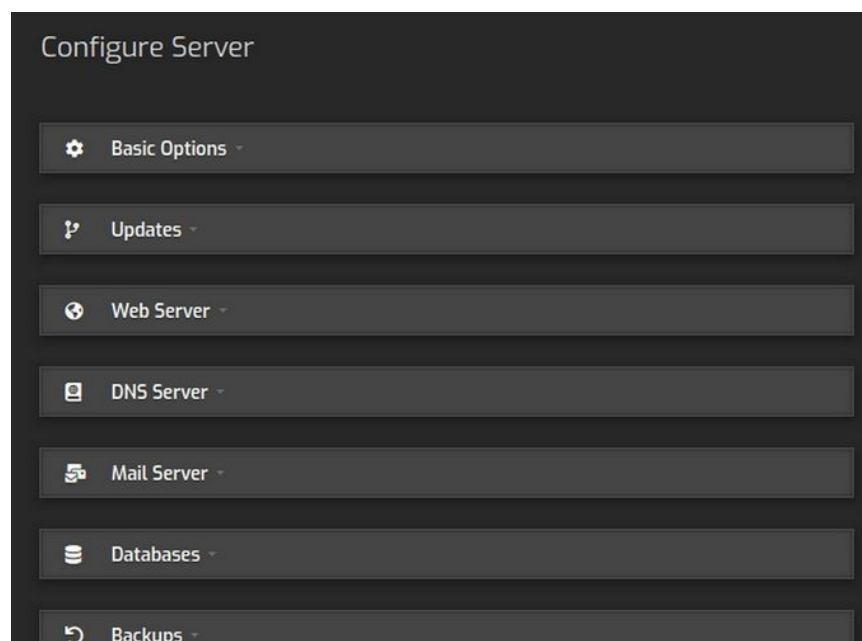


For username, type admin. Then click Next. For password, copy and paste the complex password: **ImQwmOHv1rg1Yi9g**



## Step 11 Change the Background Color of the Panel

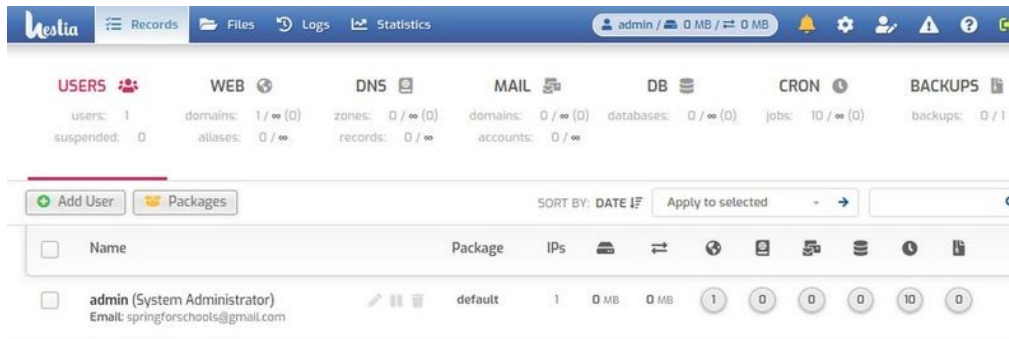
The dark panel is hard to read and hard to see on screenshots. Therefore, our first task is to change the background color of the panel to a lighter color. Click on the Settings wheel in the upper right corner. Then click Configure on the left side of the screen.



Then click **Basic Options**. Then use the Appearance drop down arrow to change from dark to default and click Save. Then click on the word **Back** to return to the main panel Settings screen.

## Step 12 Change the Admin Password

Click on Users in the top menu.



Then select the **Admin** user and click the **Edit pencil**. Type in an easier to remember password. Each Hestia password must be at least 8 characters long with 1 uppercase & 1 lowercase character and 1 number. Then click Save and Back to go back to the User screen.

### What's Next?

Now that we have installed the Hestia Control Panel on our Debian VPS, in the next article, we will learn how to use Midnight Commander to change some settings on our Hestia Control Panel.

## 1.4 Use Midnight Commander to Change VPS Settings

One of the biggest challenges of working with a virtual server is that it does not come with a desktop environment. Rather than clicking buttons, you need to enter commands in a terminal. The problem with the terminal is that, it can be very difficult for visual learners (who make up half the population) to be constantly entering a series of complex commands into an abstract tool like the terminal. Thankfully, the Linux community also provides a graphical user interface for a server File Manager called **Midnight Commander**. In this article, we will learn how to use Midnight Commander to change some important settings on our Debian VPS.

### Install Midnight Commander

In a previous article, we installed Midnight Commander on our server with this command: **sudo apt-get install mc**

Once Midnight Commander is installed, you can open it by starting and SSH session and then type **mc**. Then press Enter. Here is the initial interface when opening Midnight Commander on a server:

Left	File	Command	Options	Right	
< ~				.[^]> < ~	
.n	Name			.n	Name
/.cache		UP--DIR	May 7 02:48	/.cache	
/.config		4096	May 9 20:18	/.config	
/.gnupg		4096	May 7 01:35	/.gnupg	
/.local		4096	May 9 20:18	/.local	
.bash_history		2379	May 8 13:31	.bash_history	
.bash_logout		220	Apr 30 07:41	.bash_logout	
.bashrc		3526	Apr 30 07:41	.bashrc	
.profile		807	Apr 30 07:41	.profile	

On a server, you may need to navigate with the up and down arrows and select folders by pressing Enter on your keyboard. You can gain more function by using SSH to access the server from your home computer. Midnight Commander uses a double panel screen. The purpose of this double panel arrangement is to make it easy to copy files from one panel and paste them into the other panel. The panels are labeled Left and Right. Above the panels are a menu that applies to both panels with the menu items called **File**, **Command** and **Options**. Each menu item has a series of sub-menu items, some of which we will cover in this tutorial.

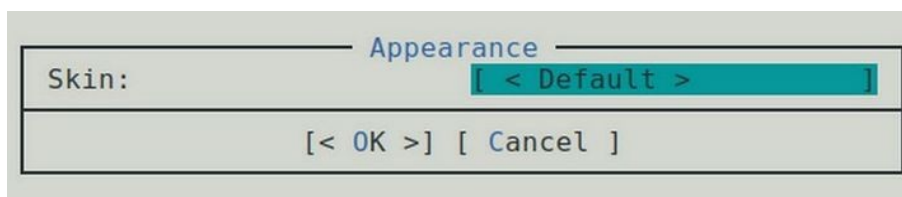
### Configure Midnight Commander

Most server tutorials use the initials MC to stand for Midnight Commander. We will do the same in this tutorial.



## Change the background to a lighter color

By default, MC comes with light letters on a dark background. However, using dark letters on a light background is both easier to read and easier to see on screen shots. Therefore the first thing you should do after installing MC is to change the background color. To do this, click **Options**, **Appearance**.



The default skin is called **Default**. Press Enter to see more options.

Click **Gray**, **Green Purple** (in a server, you would need to use the up or down arrows to select it). Then press Enter. Then press OK.

Left				Right			
File	Command	Options		File	Command	Options	
▼n	Name	Size	Modify time	▼n	Name	Size	Modify time
/..	UP--DIR	May 6 09:12		/..	UP--DIR	May 6 09:12	
/.cache	4096	May 11 21:36		/.cache	4096	May 11 21:36	
/.config	4096	May 11 21:36		/.config	4096	May 11 21:36	
/.local	4096	May 6 09:18		/.local	4096	May 6 09:18	
.bashrc	570	Jan 31 2010		.bashrc	570	Jan 31 2010	
.profile	148	Aug 17 2015		.profile	148	Aug 17 2015	

## Navigating between Folders

There are three hidden ways to navigate between folders. The first is to notice and click on the two dots at the top of the right panel. Then press Enter. This takes us to the Parent folder which in this case is called /debian. Then select the two dots again. Then press Enter.

Left	File	Command	Options	Right
Directory tree			← /	o[▼]
/		▼n	Name	Modify time
bin		/bin		Apr 25 20:25
boot		/boot		Apr 25 22:48
dev		/dev		May 11 18:30
etc		/etc		May 11 18:31
home		/home		Apr 25 20:15
lib		/lib		Apr 25 22:49
lib64		/lib64		Mar 13 2020
lost+found		/lost+found		Apr 25 20:12
media		/media		Apr 26 00:29
mnt		/mnt		Mar 13 2020
opt		/opt		Apr 25 21:17

When working on our server, we are mostly concerned about files in our etc folder. Click on it in the right column to select it. Then press Enter to open it.

Options		Right	
◀ /etc ▶		○[▼]▶	
▼n	Name	Modify time	
	/..	Apr 25 20:27	
	/ImageMagick-6	Apr 25 20:27	
	/NetworkManager	May 5 09:07	
	/ODBCDataSources	May 9 2018	
	/PackageKit	Mar 13 2020	
	/UPower	Mar 13 2020	
	/X11	Mar 13 2020	
	/acpi	Mar 13 2020	
	/alsa	Mar 13 2020	
	/alternatives	May 8 12:04	

A few folders appear at the top of the list and are not in alphabetical order. These include Network Manager. But most of the folders (and there are many in the etc folder) do appear in alphabetical order.

All folders have a slash in front of their name. There are two additional hidden ways to navigate between folders. First, click the small left pointing arrow in the upper left corner to return to the previous folder.

Right	
◀ / ▶	
▼n	Name
	~bin
	/boot
	/dev
	/etc

Second, click on the very small down pointing arrow in the upper right corner. This will bring up a history popup where you can click and select any recent previous folder.

Right	
◀ / ▶	
History	Name
	/etc
	/
	/root

Click on the /etc folder to open it again.

## How to Open and Edit Files

Use the down arrow to scroll down the list. Below the folders are a series of files all of which are in alphabetical order. The most important (and oldest)

file is called **etc/hosts**. Scroll down and select this file. If you press Enter, you will notice that files do not open in MC the way they do with the Debian File Manager. MC uses a different process to open files. If you simply want to view the file, then Press F3 on your keyboard.

```
/etc/hosts
127.0.0.1      localhost
127.0.1.1      debian
192.168.122.18 ns03.example.com  ns03
192.168.1.53   ns01.example.com  ns01
```

You can use etc/hosts to force your browser to display local websites that do not actually exist on the real public Internet. This is a very useful trick for local development. To close a file opened with F3, press F3 again on your keyboard. Recall that to edit the /etc/hosts file with our terminal, we use the command **sudo nano /etc/hosts** With MC, we edit a file by pressing F4 (or click File, Edit). The first time we edit a file, MC will ask us what editor we want to use.

```
Select an editor. To change later, run 'select-editor'.
 1. /bin/nano          <---- easiest
 2. /usr/bin/mcedit
 3. /usr/bin/vim.tiny

Choose 1-3 [1]:
```

Type 1, then press Enter to use the Nano editor. The etc/hosts file will appear. However, at the bottom it will say **"File is unwritable"** because this file is owned by root and we did not open the file as root. To edit files on our server, make sure our VPS has a root password. Then start an SSH session with **ssh root@vps-ip-address**

Then enter the root password and open Midnight Commander with **mc**. To close a file with MC, use the standard Nano command (press Control plus x). To close MC and return to the terminal, click **File Exit**. To close the terminal, type **exit**. Then press Enter.

## Use Midnight Commander to Configure PHP Settings

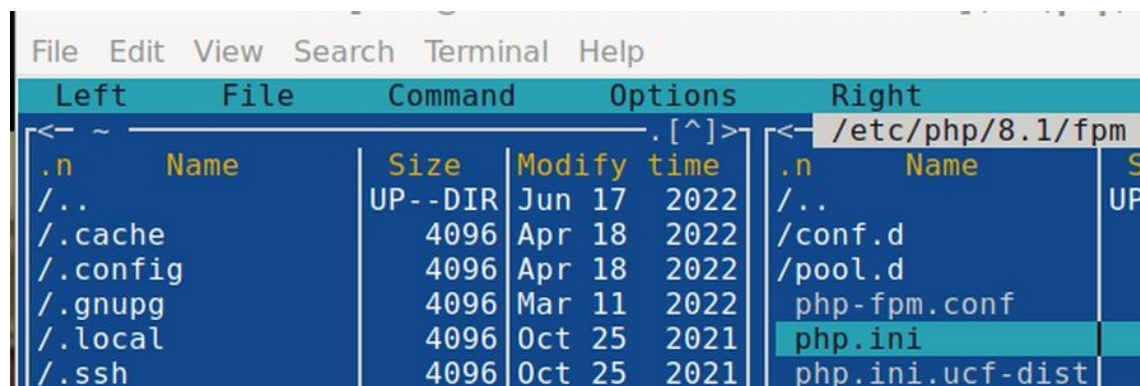
This step only needs to be done once on your server. However, it should be done before you install your first Joomla website.

We need to edit the PHP ini file which is in the following path:

**/etc/php/8.x/fpm/php.ini**

Note: The Line numbers in PHP 8.2 may be slightly different than the line numbers on PHP 8.1.

Click on **etc** to open your etc folder. Then click on the **php** folder to open it. Then click on the **8.x** folder (or the 8.x folder) to open it. Then click on the **fpm** folder to open it. Select the file called **php.ini**



After selecting php.ini, click **File, Edit** to open the php.ini file. Type 1 to select the Nano editor. Then press Enter. Note that there are nearly 2000 lines in this file. To add line numbers to the Midnight Commander edit screen, press **Alt plus c** to show the line numbers.

**Use the down arrow to scroll down to line 226 which does not have a semi-colon in front of it and is therefore active.** Change `output_buffering = 4096` to **`output_buffering = Off`**.

### **Fix other bad PHP INI default settings**

The PHP INI file also has several other truly ridiculous default settings that should have been updated years ago. Thankfully, these only need to be fixed once – when you are first setting up your VPS.

Here are three important settings to change:

#1 Use the down arrow to scroll down to **line 409**. Change the **`max_execution_time` from 60 to 600 (seconds)**.

#2 Scroll down to **line 419** and change the **`max_input_time` from 60 seconds to 600**.

#3 Scroll down to **line 435** and change the **`memory_limit` from 128M to 256M**.

#4 Scroll down to **line 703** and increase post max size from 100M to 128M: **`post_max_size = 128M`**



#5 At **line 858**. Increase **max file uploads from 20 to 40**. This will allow us to upload up to 40 images at a time instead of the current 20.

#6 Then scroll down to **line 878**. Change **default\_socket\_timeout from 60 to 600 (seconds)**.

Note that some values are related to other values. The order from biggest to smallest should be: `memory_limit 256 > post_max_size 128 > upload_max_filesize 100`

Then save the PHP INI file with **Control plus o** followed by Enter. Then close the file with Control plus x. Then click on the two dots a couple of times to go back to the etc folder.

**Next open the /etc/apache2/apache2.conf file and change:**

In the Global configuration section, **Timeout increase from 30 to 300**.

Then save the file with Control plus o followed by Enter. Then close the file with Control plus x.

**Open the /etc/nginx/nginx.conf file and change:**

`fastcgi_connect_timeout` from 30 to 300s

`proxy_connect_timeout` from 30 to 300s

Save the file with Control plus o followed by Enter. Then close the file with Control plus x. Then type the word **exit** and press Enter to close Midnight Commander without turning off your server. Then type **exit** and press Enter to close ssh session without turning off server. Then close the terminal.

**Restart several Hestia Services for changes to take effect**

Back at the Hestia Admin screen, click on Server settings, Configuration and restart apache, mariadb, nginx and php8.x-fpm. You are now ready to add as many Joomla websites as you want!

**What's Next?**

In the next article, we will use Hestia to install Joomla first on the primary domain name and then install our Freedica social network on a sub domain name.

## 2 News Site Setup

Now that we have a secure foundation, we will use the Hestia Control Panel to install Joomla. We will then make several important changes to the initial configuration of our Joomla website. We will then review how to research, install and configure Joomla extensions. Next, we will install and set up the Helix Ultimate template.

This chapter is divided into the following four sections:

2.1 Use Hestia to Install Joomla

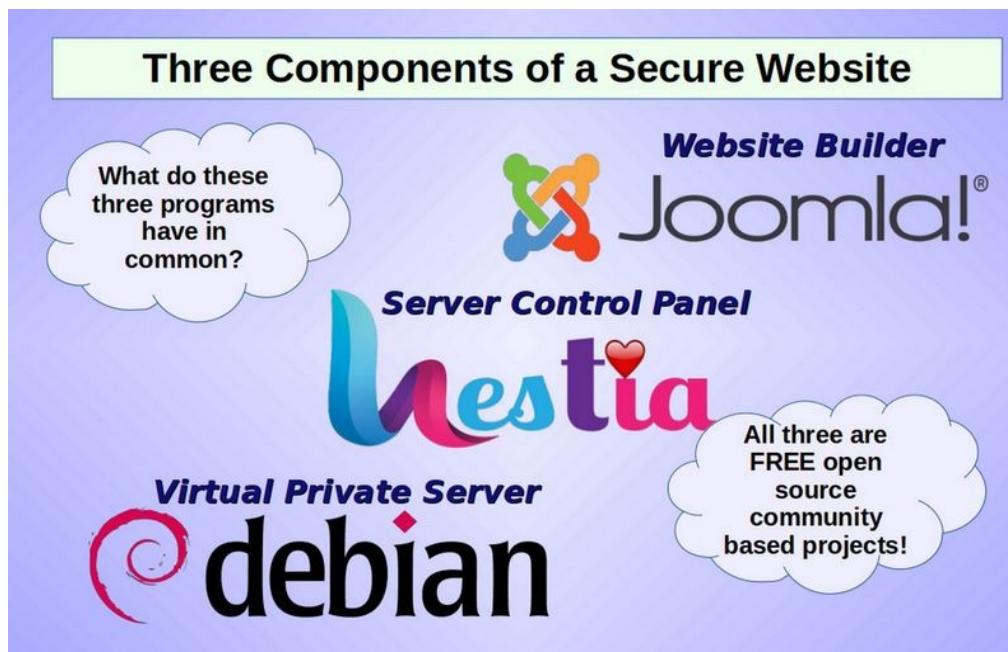
2.2 Joomla First Steps

2.3 Add Joomla Extensions and Welcome Article

2.4 Install and Configure the Helix Template

## 2.1 Use Hestia to Install Joomla

Previously, we have covered how to create a secure Linux computer and how to create a Debian VPS with the Hestia Control Panel. In this article, we will point our domain name from Canhost to our VPS IP address. We will then create a new Hestia User and install our domain name on the new user account. We will then use Hestia to create a database and use the Hestia File Manager to create a Joomla website.



### What exactly is Joomla, Who Runs It and Why are we using it instead of Wordpress?

The word **Joomla** is Swahili for "All Together". Joomla is an open source community project – meaning it is not controlled by any private company. Joomla gives regular people a simple way to control all of the functions of a PHP based website (a website with a database) without any knowledge of PHP programming. Joomla is an international program meaning that one can build a Joomla website in more than 60 languages. There are literally millions of Joomla websites worldwide with thousands of new Joomla websites being built every day. Joomla is developed entirely by volunteers - an active international community of thousands of computer programmers who give freely of their time to create and continuously improve Joomla making it the world's best open source web building platform.

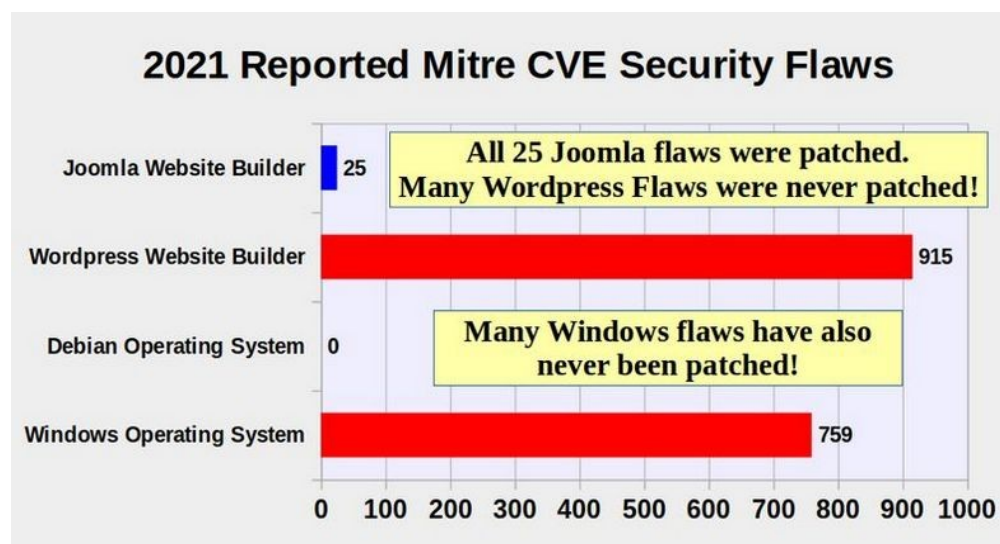
**Joomla offers five key benefits over Wordpress.**

#### **#1 Joomla helps you build a better organized website**

First, the Joomla web building process results in websites that are better organized than Wordpress website. As your website grows, and as you post more articles and images, all Wordpress websites eventually turn into a giant mess often with hundreds of posts – all on the Home page! This is because Wordpress organizes posts and images by date. This may be appropriate for a simple blog. But it is a disaster for an educational website, a news website or a business website. Joomla allows you and even encourages you to organize your content and images by categories or topics. This results in much better organized news, business or educational websites.

## #2 Joomla helps you build a more secure website

The second difference is equally important. Wordpress is a top down corporation that pays little attention to security. As a result, Wordpress websites are considered a Hacker Heaven. By contrast, Joomla is a bottom up community that cares very much about website security. This difference becomes obvious when looking at security vulnerabilities. Here is a graph comparing Wordpress to Joomla and Windows to Linux Debian:



## #3 Joomla offers better free extensions than Wordpress

There are two different kinds of website extension makers. Those that are concerned merely about short term profit will migrate to Wordpress because they currently have the most market share. Making money is not a bad thing. But it should not be the most important thing. There are a few website extension makers that are concerned about their long term reputation and **the security of the underlying code**. They develop tools for Joomla because their customers will be more secure in the long run. We



will review some of the best extensions in a coming article.

#### **#4 Joomla offers better free Templates than Wordpress**

Joomla templates are similar to Wordpress themes in that both are using to control the appearance of your website. The basic Joomla 5 template, called Cassiopeia, is not very flexible. However, there is a free Joomla template called **Helix Ultimate** that makes it very easy to control every aspect of the layout and appearance of your website. In addition, the Helix template comes with a Mega Menu creation system that is one of the easiest and most powerful in existence.

#### **#5 Joomla is a More Complete Website Building Tool**

It is slightly easier to build a website with Wordpress. However, this is because **Wordpress is missing dozens of important features**. One is Menu Item Types. When creating a Joomla Menu Item, the first thing you need to do is decide which menu item type you want to use. There are dozens of types – the most common of which we will describe in a later article. Wordpress is simply missing this feature.

Also if you have employees, staff, authors or club members that access your news website and you want assign different administration, editing or viewing rights to different groups, you can do that with **Joomla Access Control Levels**. Wordpress does not offer this feature. This is why Joomla is your best option if you want a complete website building tool.



#### **Step 1 Use your VPS Primary IP address to point your Domain Name to your VPS server.**

We will assume that you have already set up your Hestia VPS using a different domain name. Log into your Canhost account and click on Domains. Then click on **My DNS**. This opens the Canhost DNS Manager. By default, the Zone records point to the Canhost IP address.

Edit the first four A records, and replace the default IP addresses with the

IP address of your own VPS.

Name	Type	TTL	RDATA
@	A	3600	66.209.180.150
mail	A	3600	66.209.180.150
webmail	A	3600	66.209.180.150
www	A	3600	66.209.180.150

Then click Add Record to create a **CAA record**:

? Add Record ×

Type ?

CAA ▼

Name ?

communitynews.us

TTL ?

3600 ⬆ ⬇ ⬆

Flag

0

Tag

issue ▼

Target

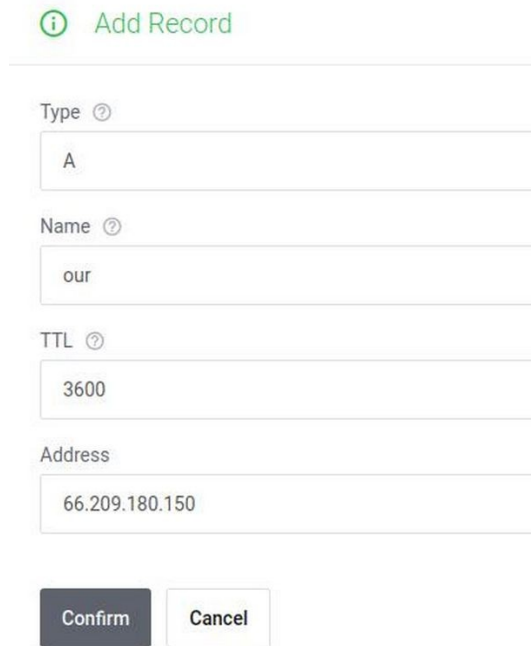
letsencrypt.org

Your domain name goes in the top box. Type is changed to CAA. Rdata is the number 0. The next box, type issue and the bottom box, type letsencrypt.org. Then click Confirm. The second CAA record is the same only replace the word issue with **issuewild**. Leave the remaining DNS records in place. They are needed to connect your domain name to the Canhost servers. Then click Save Changes.

### Add subdomain A Records

We need to add an A record for every subdomain to our main domain. To

add an A record for our subdomain washington (in washington.communitynews.us), click Add Record and select A record. Then add the subdomain name and the IP address for your primary domain name. Here is the A record for the sub-domain **our.communitynews.us**:



**Add Record**

Type <sup>?</sup>  
A

Name <sup>?</sup>  
our

TTL <sup>?</sup>  
3600

Address  
66.209.180.150

**Confirm** **Cancel**

Click Confirm. We will also create an A record for the subdomain **washington.communitynews.us**. We also need A records for the **mail** account and **webmail** account associated with each of our two sub-domains.

**mail.washington webmail.washington**

**mail.our webmail.our**

When done, the DNS Zone Records will look like this:

Name	Type	TTL	RDATA
@	A	3600	66.209.180.150
mail	A	3600	66.209.180.150
mail.our	A	3600	66.209.180.150
mail.washington	A	3600	66.209.180.150
our	A	3600	66.209.180.150
washington	A	3600	66.209.180.150
webmail	A	3600	66.209.180.150
webmail.our	A	3600	66.209.180.150
webmail.washington	A	3600	66.209.180.150

## Add Subdomain MX Records

Create MX records for each subdomain in order to set up subdomain email addresses like **david@our.communitynews.us**. Click **Add Record** and for type select **MX record**.

Type ?

MX

Name ?

our

TTL ?

3600

Preference

10

Exchange

mail.communitynews.us

Note that the Exchange domain for each subdomain is the same as the

Exchange domain for our primary domain. Click Confirm and repeat for any other subdomain MX records. Here is the result for our three MX records in the DNS table:

@	MX	3600	10 mail.communitynews.us
our	MX	3600	10 mail.communitynews.us
washington	MX	3600	10 mail.communitynews.us

Leave the remaining Records set to point to the Canhost server. Log out of Canhost and log into your Hestia admin panel.

## Step 2 Create a New Hestia User

It is very important to create a new user for each website domain name and subdomain name as this will create a wall for hackers preventing them from reaching the Admin Control Panel should they ever manage to break into an individual user account or website. Log into your VPS Hestia Admin Control Panel and click **Add User**.

### Add User

Username

Password / Generate

Your password must have at least

- 8 characters long
- 1 uppercase & 1 lowercase character
- 1 number

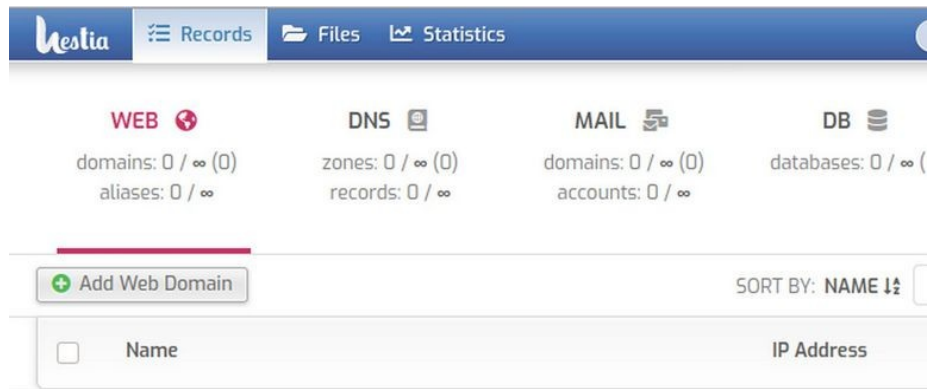
Name

Email

Type in an easy to remember username and easy to remember password. Then type in the User Name and email address. Click Save and Back to return to the Users screen. **Add another Hestia user account for each subdomain.**

Then click on the arrow to the right of the new primary user to go to the Hestia user account for your primary domain.





The Hestia User screen has fewer items than the Hestia Admin screen. The main areas we will use are **Add Web Address**, **Mail** to create custom email addresses, **DB** - to create databases for Joomla websites and **Files** - to add files for Joomla websites.

### Step 3 Add your Web Domain to your Hestia User account

Click Add Web Domain to add a new web domain. We will add the domain name **communitynews.us**. Also check Create a DNS zone and Enable Mail.

#### Add Web Domain

Domain

communitynews.us

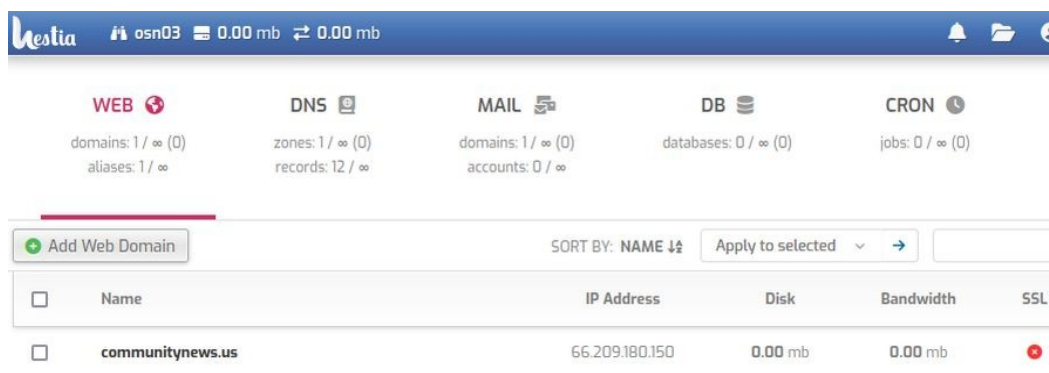
IP Address

66.209.180.150

☒ DNS Support

☒ Mail Support

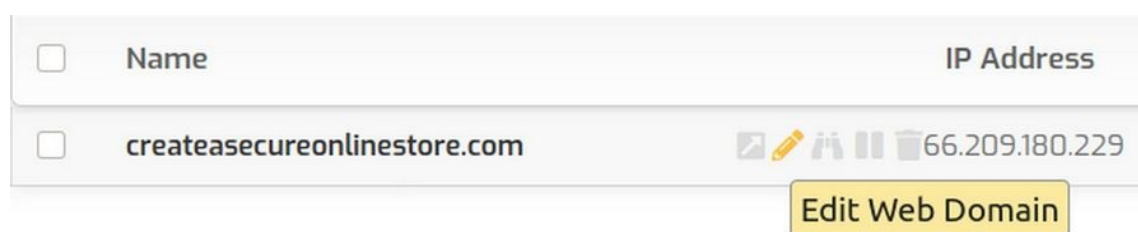
Type in your domain name and check **Create DNS Zone** and **Enable mail**. Then click Save and Back.



The red X means that initially your website does not have a Security Certificate. This is because the website needs to exist before we can add an SSL certificate.

#### Step 4 Get an SSL Certificate for your Domain Name

Now that your website exists, hover over the hidden Edit pencil to the right of the domain name and click Edit to edit our website.



Check **Enable SSL for this domain** which will bring up additional options:

- ☒ Enable SSL for this domain
  - ☒ Use Lets Encrypt to obtain SSL certificate
  - ☒ Enable automatic HTTPS redirection
  - ☐ Enable HTTP Strict Transport Security (HSTS) ⓘ

Then check **Use Lets Encrypt**. Also click **Enable automatic HTTPS redirection**. Also click **Advanced Options** and for Backend Template, choose PHP 8.2. Then click Save and wait to see if you will be granted an SSL Security Certificate. Hopefully, after a while, a message will appear that "Changes have been saved." Click Back. Note that SSL now has a green checkmark.

#### Step 4 Get an SSL certificate for your Mail Domain

Click on the MAIL icon in the top menu. Then click on the hidden Edit pencil. Then click Enable SSL and Use Lets Encrypt. Then click Save. Then

wait for the green notice "Changes have been saved." Then click on the Back arrow.

### **Step 5 Add a secure domain based email to use during Joomla installation**

Click on the hidden plus sign that is just to the right of the mail domain name. It is called **Add Mail Account**.

#### **Add Mail Account**

Domain

communitynews.us

Account

david

Enter an account name. For example, above I have added the account name david which will give me an email address of **david@communitynews.us**. We will use this in a minute to create our new Joomla website. Type in a secure password you will remember.

Next, click on **Advanced Options** and place your collector email address in the Forward To box. Then click Save and Back. Then click Back again. Then click on the hidden up arrow to open Webmail. Enter your new custom email address and your password. Then click Login. Click Compose and send a test email to your normal email address. Click Send. Then log out of your custom email account. Log into your normal email account to verify that the email was sent.

### **Step 6 Create a database to use during Joomla installation**

A major benefit of Hestia is that it makes it very easy to create a database. Just click on DB in the Hestia User top menu. Then click **Add Database**. Give the database a short name and username. Note that the full database and username includes the Hestia username and an underscore. Also add a password.

Then copy paste the db name, username and password into a Writer document and save the Writer document because we will need this information when we create our Joomla website. Click Save and Back.

### **Step 7 Download the latest version of Joomla 5 Installer**

Go to Joomla.org and download Joomla 5.x. Here is the direct link:

<https://downloads.joomla.org/cms>

This will download a zip file to your Downloads folder.

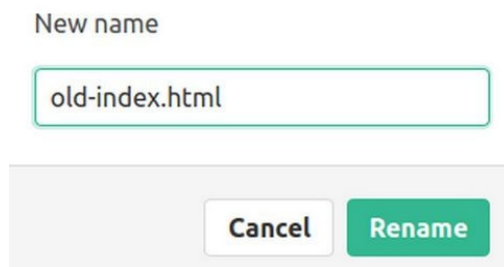
### Step 8 Upload the Joomla 5.x Zipped File to public\_html

In the Hestia User screen, click on Files in the top menu. Then click Web, your domain name and public\_html:



Click **Add files** and navigate to your Joomla zipped file and select it. Wait for it to upload. Then click on the three dots at the right end of the zip folder and click Unzip. When it is done, there will be lots of folders and files in the **public\_html** folder.

Find the Joomla zipped folder and click on the three dots. Then click Delete to delete the zipped folder. Then find the index.html file and click on the three dots and click Rename to rename it **old-index.html**.



Also find the file htaccess.txt and rename it .htaccess (aka dot htaccess). Also click on the images folder and delete all of the folders and images inside of the images folder. Then scroll up and click **Exit to Control Panel**.

### Step 10 Start the Joomla Installer

Click on the arrow to the right of the domain name to open a new browser tab and go to the Joomla installer first screen:

 Joomla!®
 Joomla Installer
 Joomla! 5.2.2

 **Select Installation Language**

Select Language
 

English (en-US) | English (United States)


 **Setup Site Name**

Enter the name of your Joomla site. \*
 

Community News

Setup Login Data >

Tip: If the prior default Hestia page comes up instead, rather than clearing the browser tab, which will log you out of the Hestia panel, just copy the website URL into a browser tab on a different browser. Change the language to US English and type in the name of your website. Then click **Setup Login Data**. Enter your name, username, password and the custom email address we just created. Then click **Setup Database**.

 **Database Configuration**


Select the database type. \*
 

MySQLi

Enter the host name, usually "localhost" or a name provided by your host. \*
 

localhost

Either a username you created or a username provided by your host. \*

Either a password you created or a password provided by your host.
 

Enter the database name. \*
 

joomla\_db

Type in your database username and password. Then delete the database name joomla\_db and replace it with your real database name we just



created. Then click Install Joomla.

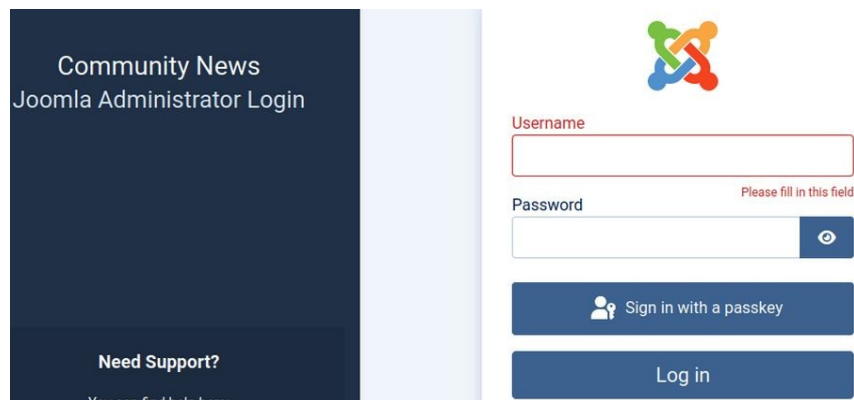
**Congratulations! Your Joomla site is ready.**

Install Additional Languages >

Open Site

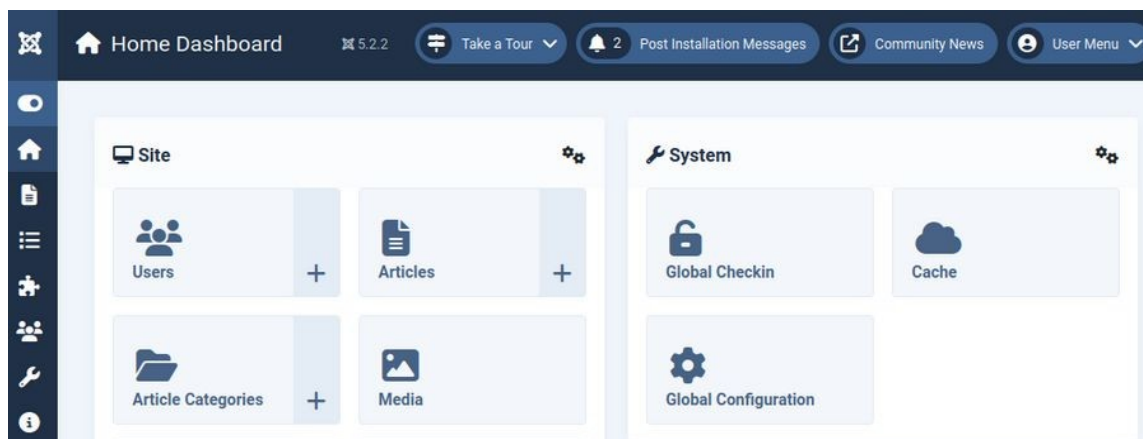
Open Administrator

Click Open Administrator



The image shows the Joomla Administrator Login interface. On the left, a dark blue sidebar contains the text "Community News Joomla Administrator Login" and a "Need Support?" link. The main area is white and features the Joomla logo at the top right. Below the logo, there are two input fields: "Username" and "Password". The "Password" field has a red error message "Please fill in this field" and a toggle icon. Below the fields are two buttons: "Sign in with a passkey" and "Log in".

Type in your Joomla username and password and click Log in. Then click Hide Forever to hide the Tour. Here is the Admin Dashboard with the left side menu collapsed:



Click on your website name in the top menu to visit the public side of your website:



Sadly, the Joomla Cassiopeia template does not even display our website name. Even worse, it also displays our Login form on the front end – which will quickly lead to spammer attacks trying to guess usernames and passwords.

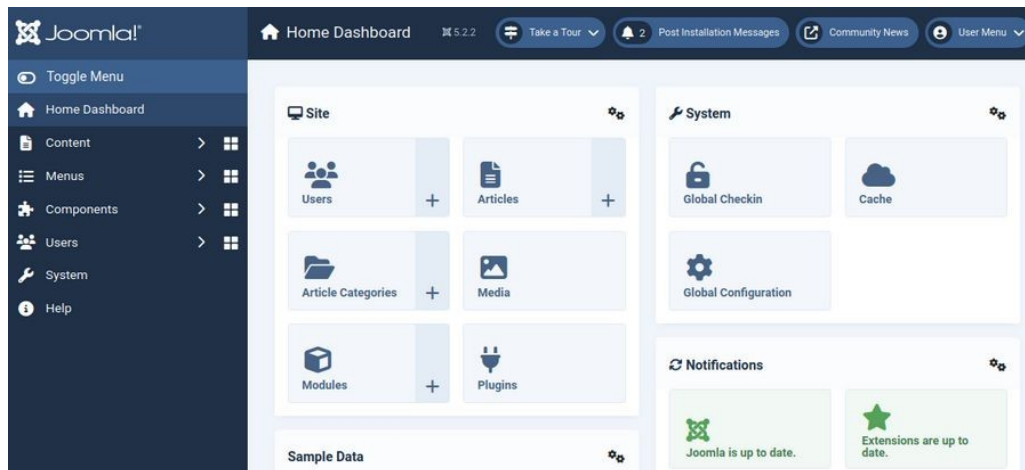
Go back to the Dashboard and click on Modules. Then select and unpublish the log in module. Also go to **System, Global Configuration, System Tab** and change Session Lifetime from 15 minutes to 150 minutes. Also change URL rewriting from No to Yes. Close log out of your Joomla control panel by clicking on the person icon in the upper right corner. Then log out of your Hestia user screen and admin screen.

### What's Next?

Now that you know how to use Hestia to create a Joomla website, in the next article, we will review some important first steps after installing Joomla.

## 2.2 Joomla First Steps

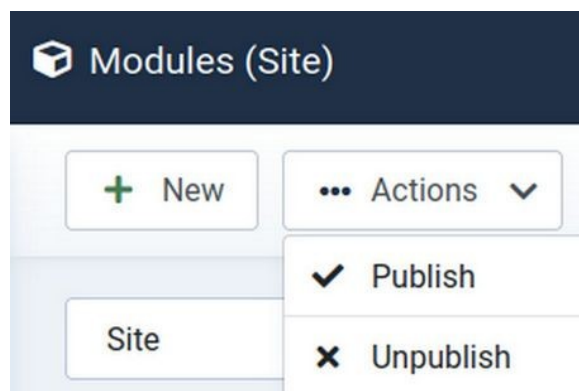
In our last article, we used Hestia to install Joomla. In this article, we will take a tour of the Joomla Admin Dashboard and then make some changes to the Dashboard to make it easier to use. Here is an image of the Joomla Admin Dashboard:



There are 9 modules displayed in the main area plus a Main Menu in the sidebar (with 30 hidden links) and 5 more links in the top bar. The System menu item has 31 more links. Many you will never use.

### High Priority Tasks

Before we take a tour of the Dashboard, we need to complete four high priority tasks. First, click on Modules. Then select the Login page. Then click Actions, Unpublish. Then go back to the Dashboard.



Second click on **Global Configurations**.

In the Site tab, scroll down to Meta Settings and add our Meta Description. This will help search engines properly categorize your website. Your site meta description should be no more than 160 characters – or about 20 words long.

## Site Meta Description

Learn how to build a secure news website with Debian VPS, Hestia Control Panel, Joomla Website Builder and the Helix Ultimate Template.

*Learn how to build a secure news website with Debian VPS, Hestia Control Panel, Joomla Website Builder and the Helix Ultimate Template.*

Note that there is a drawback in using a Global meta description in that it means that any page on your website which does not have its own unique meta description will be assigned the global description. This in turn means that many of the pages on your website will have a “duplicate” description which is something that search engines do not like. Therefore if you assign a global meta description, you should also add a free Joomla extension to automatically generate unique meta descriptions for each page on your website. We review how to do this later in our article in Search Engine Optimization Tools. Next, scroll down further on the Global Configurations, Site Tab screen and **change Use URL Rewriting from no to yes.**



If Use URL Rewriting is set to NO, the URL to this content article page will include “index.php” which is bad because this can confuse your readers.  
<http://mysite.com/index.php/getting-started>

When this parameter is set for YES, Joomla will use the rewrite function of Apache web servers to eliminate the index.php part of each URL. This will change the example URL above to a shorter and more understandable link such as <http://mywebsite.com/getting-started>

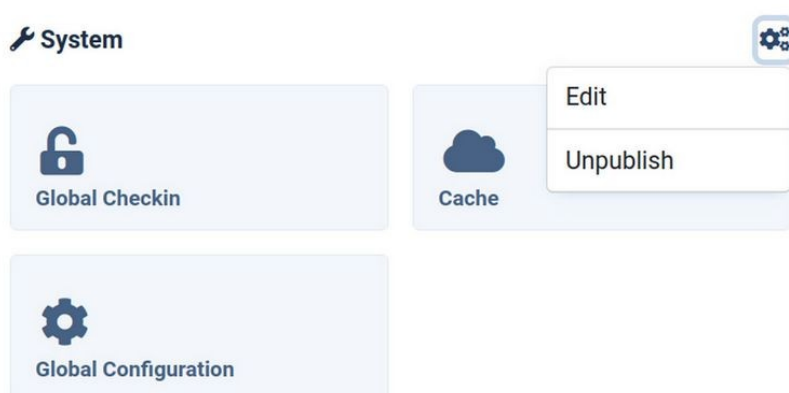
Note that for this to work, **the file htaccess.txt must have been renamed**

to **.htaccess**. There is a dot placed in front of the word htaccess. We did this before installing Joomla right after we renamed the index.html file.

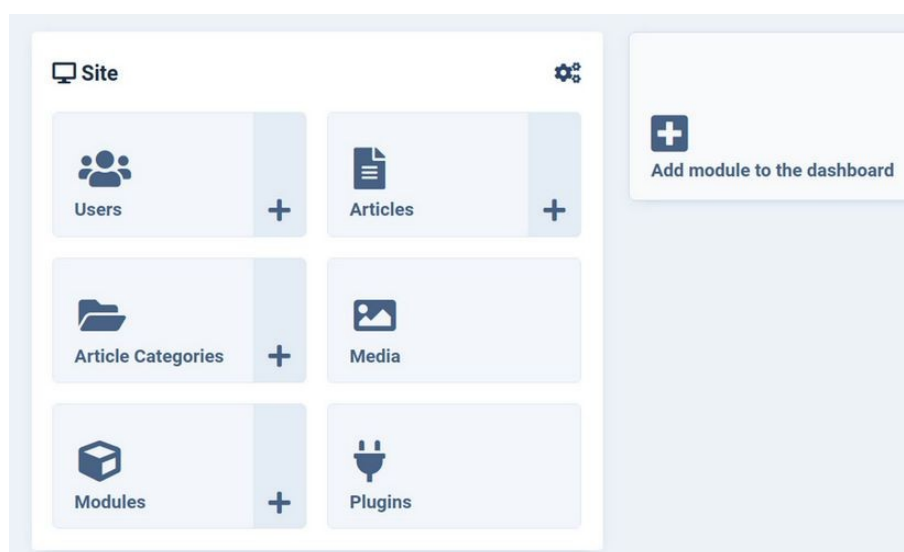
Fourth, click on the **System** tab and change Session Lifetime from 15 minutes to 150 minutes. This will reduce the chances of being logged out of your website while you are working on it.

### Hide Most of the Admin Modules

The Dashboard looks a lot less confusing if you hide some of the admin modules. We will therefore hide all of the Admin modules except the Site module. Click on the setting wheel icon in the upper right corner of the System module and click Unpublish:



Repeat to unpublish the Notifications, Sample Data, Latest Actions, Privacy Dashboard, Logged in Users, Popular Articles and Recently Added Articles:

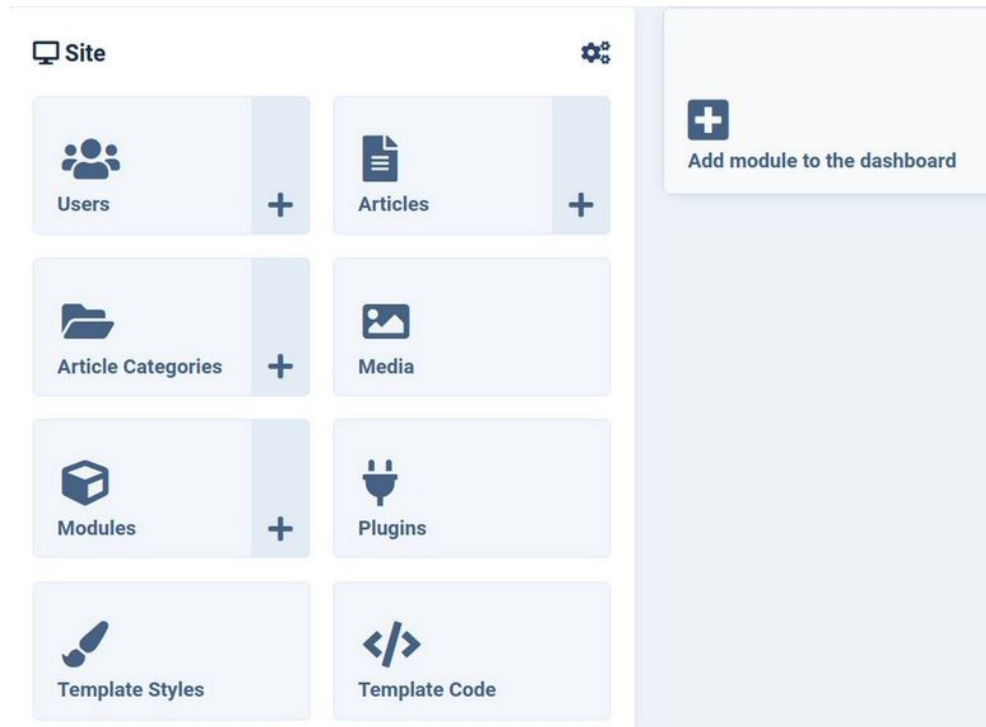


Then click on the Settings wheel for the Site module and click Edit.

Change **Media**, **Template Styles** and **Template Code** from Hide to Show.

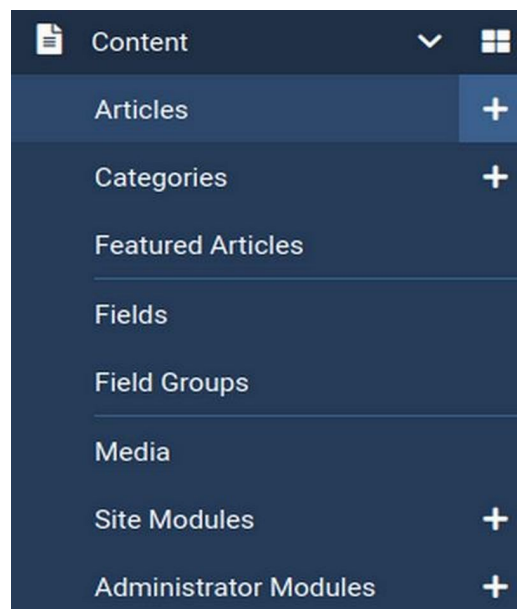
Here is the result:





## Side Menu Sub Menus

The Side Menu includes Content, Menus, Components, Users, System and Help. Click on Content in the left side menu to see this sub menu:



**Articles** is a Table displaying all of the articles each of which can be a separate web page.

**Categories** is a Table of categories that articles can be assigned to.

**Featured Articles** are articles assigned to appear on the Home page.

**Fields** are boxes of content that can be inserted into articles.

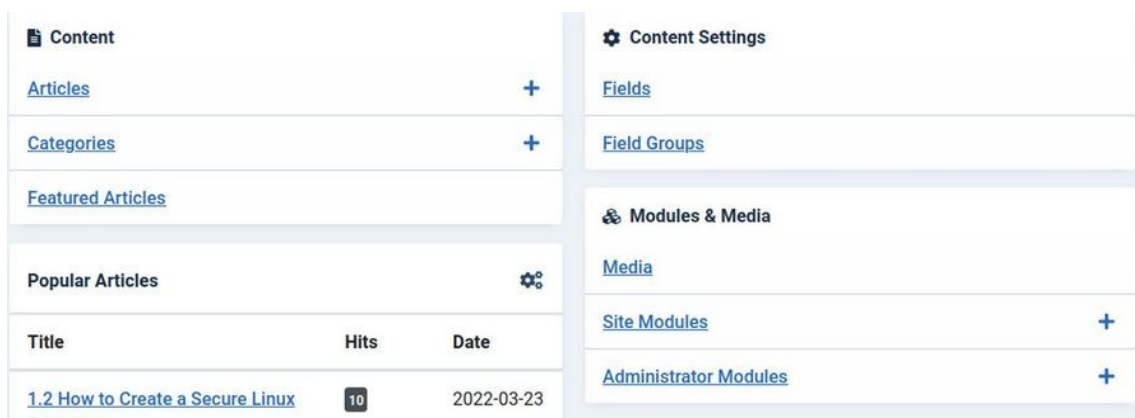
**Field Groups** are categories that fields can be assigned to.

**Media** is the Images Manager that holds all of your images. It includes a folder maker that allows you to put images into folders and even put folders in folders to keep your images organized.

**Site modules** are modules that appear on the front end of your site.

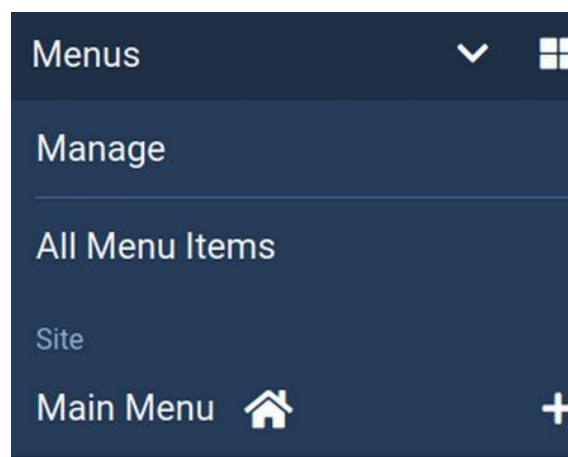
**Admin modules** are modules that appear on your Dashboard.

Click on the four boxes to the right of Content to bring up a Content page:



Even if we unpublish Popular Articles from the Dashboard, they still appear on the Content screen.

Click on Menus in the side menu to see this sub menu:

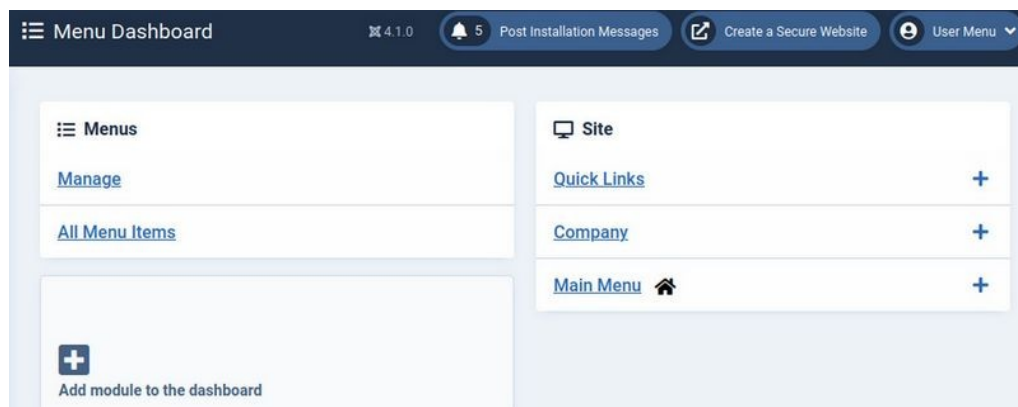


**Manage** is a Table of all of the Site Menus. Initially, there is only one Site Menu called Main Menu. But you can go to this screen to create another menu if you want.

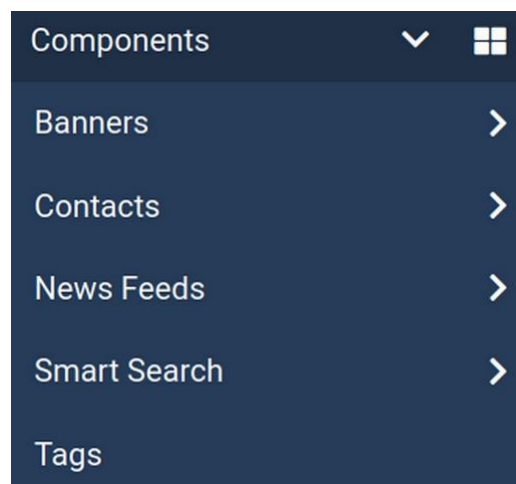
**All Menu Items** is a table of all of the menu items, regardless of what menu they are assigned to.

**Main Menu** is the main menu for our website. Currently, it only have one menu item called Home.

Here is the Menu Dashboard.



Click on Components in the Side Menu:

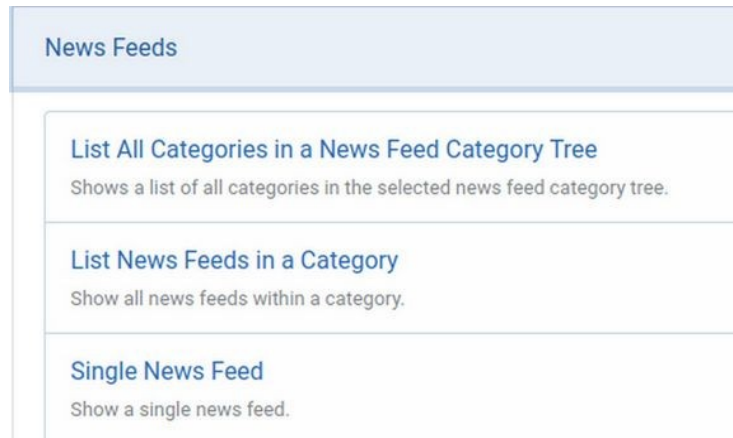


Initially, there are only five components.

**Banners** are a set of images used in the Joomla demo content.

**Contacts** are a set of users who can be sent messages. We will use different tools instead of contacts.

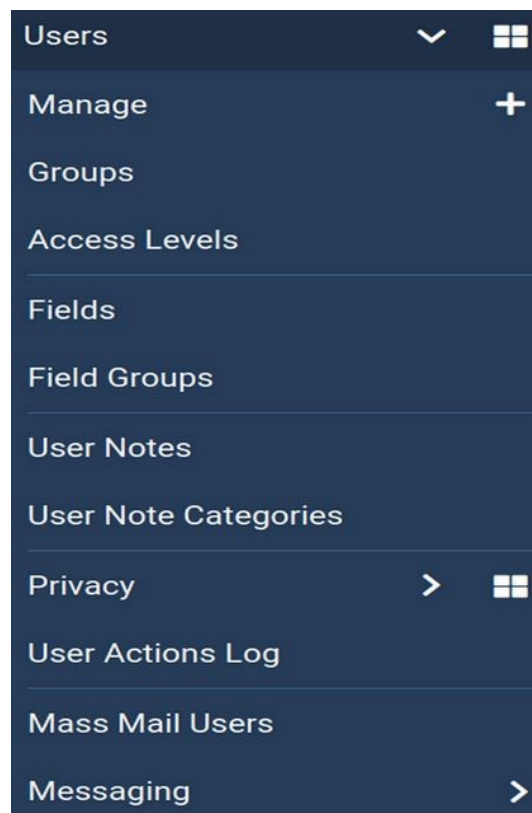
**News Feeds** allow you to add News Feeds from other websites to your website. You can add links to these feeds by first creating a News feed (add the link to the other page). Then create a News Feed page with Menu Item, New and click on Menu Item Type. Then click Single News Feed.



**Smart Search** is a search box you can place on your website and is mainly useful if you have a very large website with a lot of content.

**Tags** is similar to Wordpress tags. I do not recommend tags and they are not search engine friendly and tend to turn your website into a mess. You are much better off creating Categories and Sub Categories and placing your content in a category or sub category.

Click on **Users** to see this sub menu:

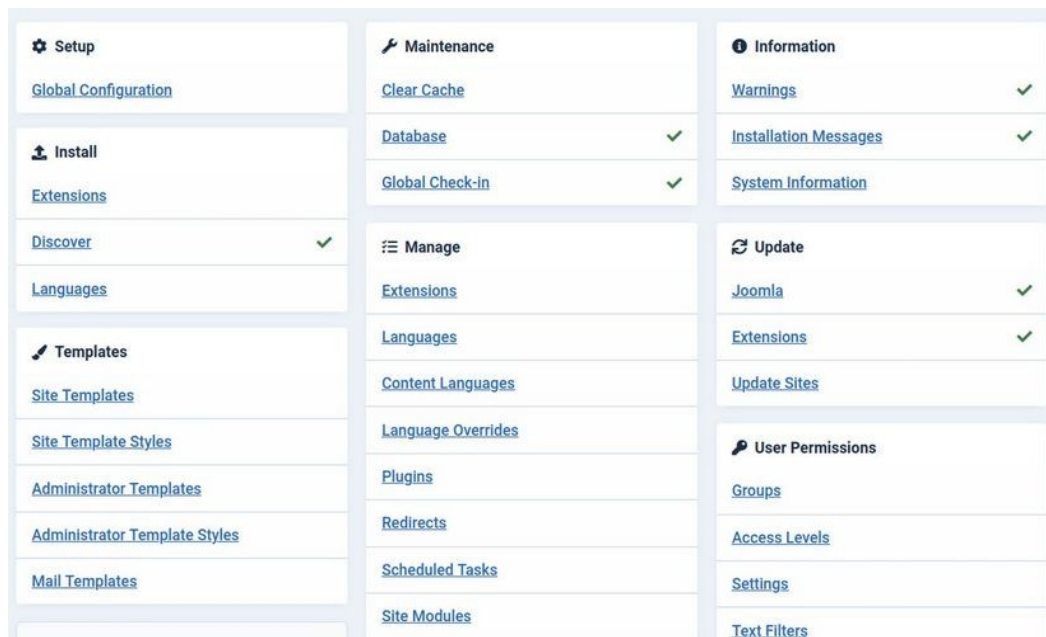


**Manage** is a Table of all of your users.

**Groups** is a table of 9 default groups. You can create as many groups as you want. Groups define who can take actions.

**Access levels** is a table of 5 default Access Levels which define what different groups are allowed to see. You can create as many access levels as you want and assign them to any groups.

Click on **System** to go to the System Dashboard:

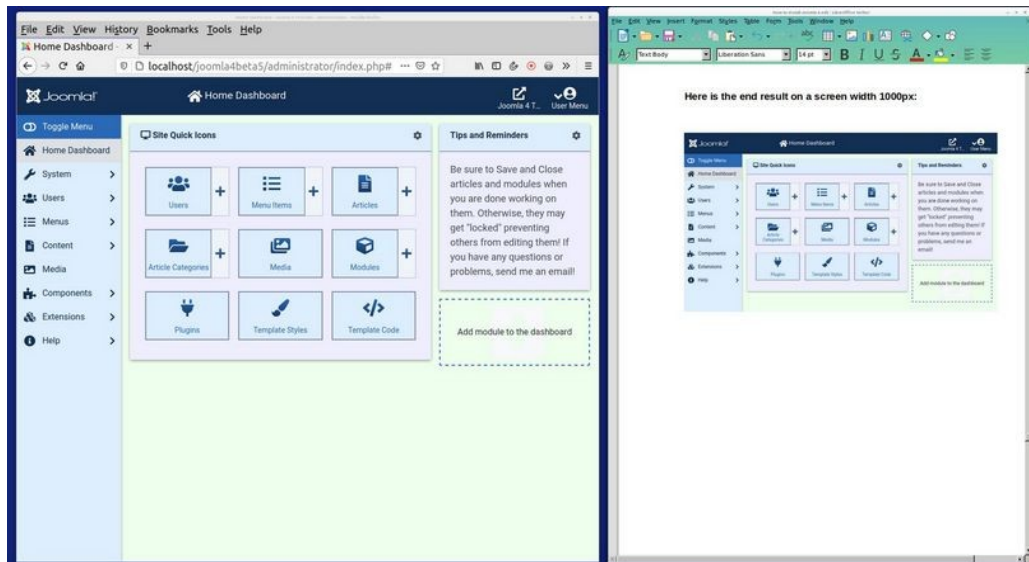


This currently is the only way to get to the **Install Extensions** page. A lot of the rest are duplicate links that would be easier to reach by using a different menu item. Also, since we have hidden the System module, it is currently the only way to get to Global Check-in. We will soon as a top menu to give us another easier option.

### **Add a Top Menu for easier Side by Side Editing**

One of the most important web building skills I teach my students is using Side by Side Editing. This process involves using a text and image editor like Libre Writer to create the content for your website. Then having a web browser open to your Joomla Dashboard next to the Libre Writer workspace to copy and paste content from your Writer document to your Joomla website dashboard. Here is what side by side editing looks like on a 15 inch laptop screen.

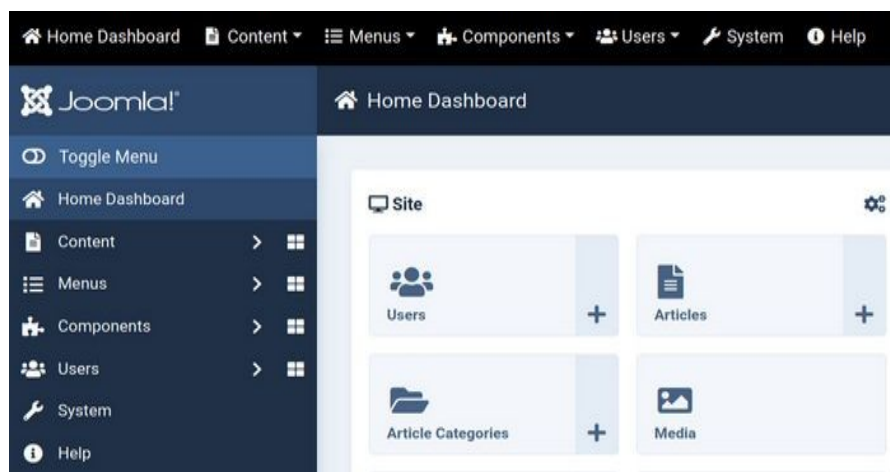




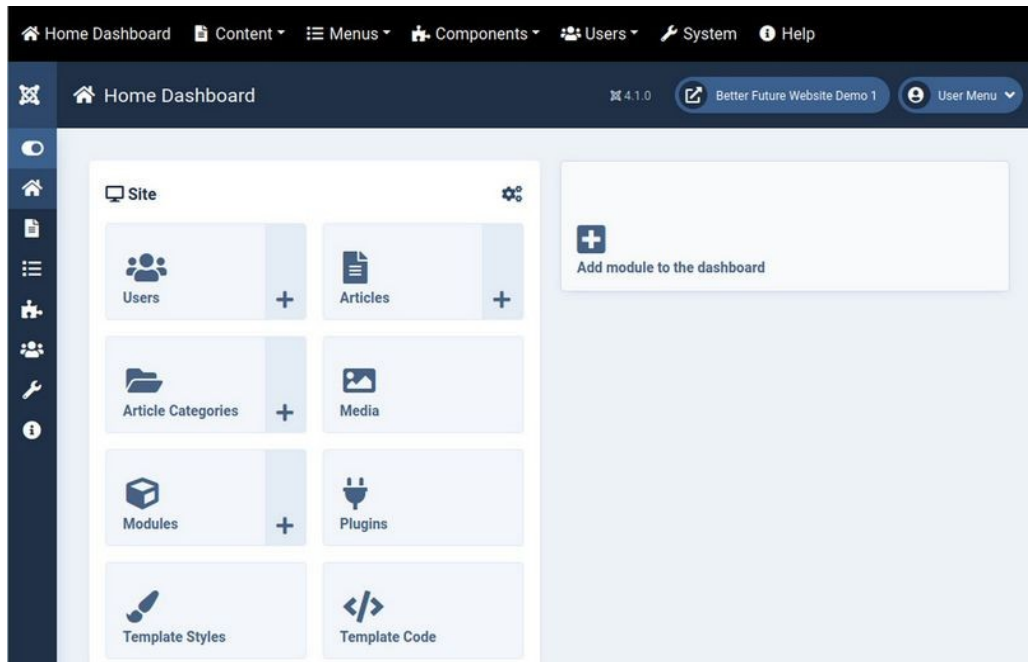
The Joomla 5 Dashboard is radically different from the Joomla 3 Dashboard in that the main menu was moved from the top of the screen to the left side. The problem with this move is that it makes it much harder to do side by side ending. Thankfully, there is an easy way to fix this problem. There is a free extension on the Joomla Extensions Directory that adds a top menu. Here is the download link:

<https://www.phoca.cz/download/category/123-phoca-top-menu-module>

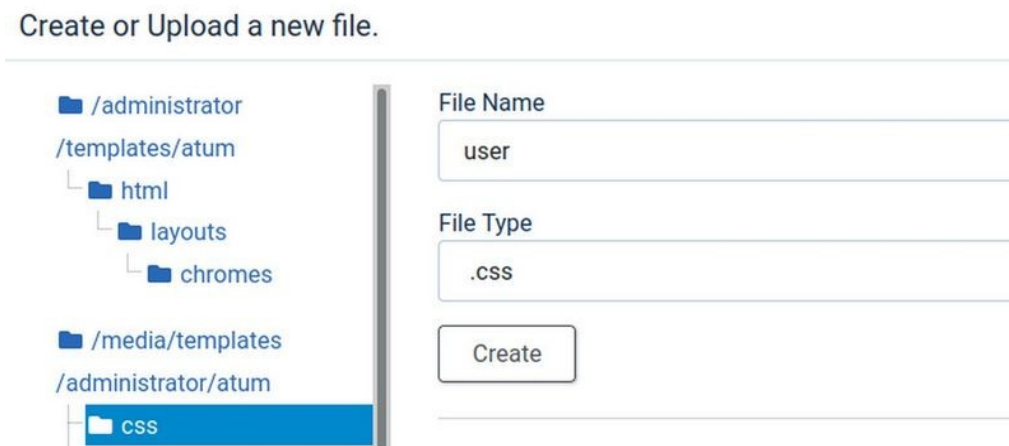
Click **Systems, Extensions, Install** to install this extension. Then go to the Module Manager and change the display from Site to Administrator. Then click on the **Phoca Top Menu Module** to edit it. Change the position to **Custom Top** and publish the module. Click Save and Close and return to the Dashboard. Here is the result:



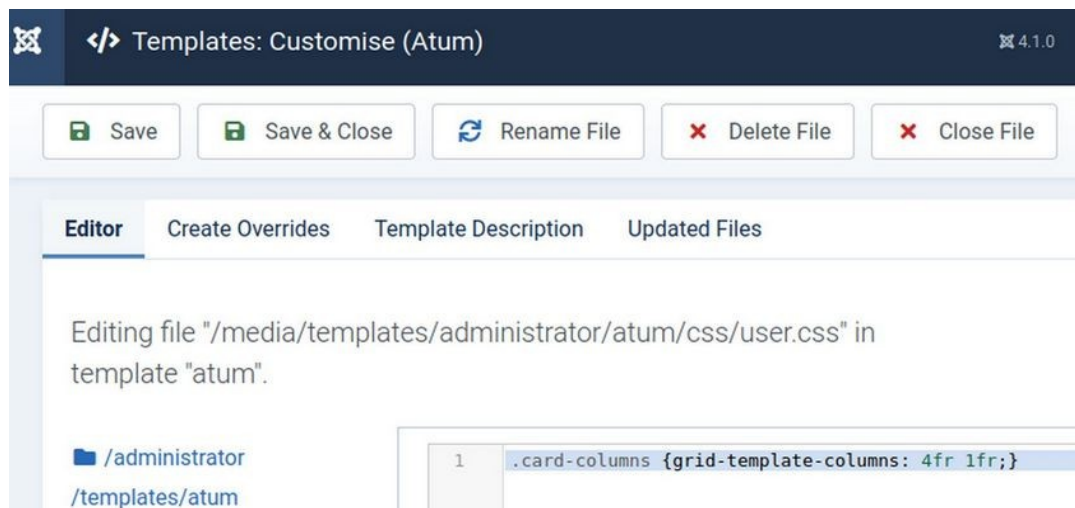
To hide the side menu, click on Toggle Menu at the top of the side menu.



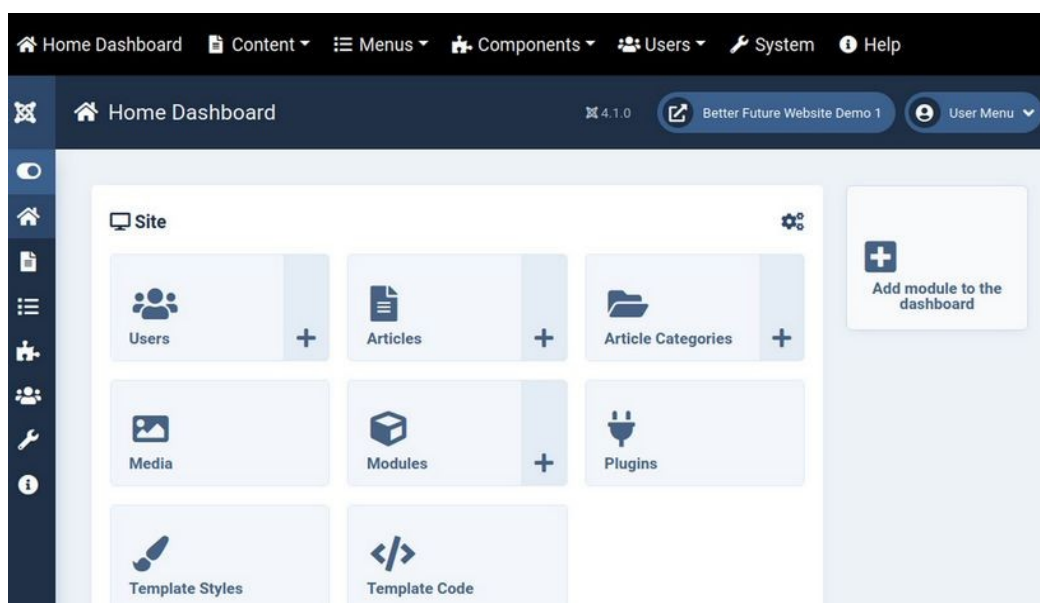
The Add Module box is still taking up way too much room. We need to add one line of CSS to the Admin template, called Atum to fix this problem. Go to **Templates, Code** and change the screen from Site to Administrator. Then click on **Atum Details and Files**. Then click New File. In the File Name box, type **user**. For File Type, select **.css**. Then click on the css file in the left column to select it.



Then click Create. Then copy paste the following into Line 1  
**.card-columns {grid-template-columns: 4fr 1fr;}**



Then click Save and Close. Then click Close. Then click Home Dashboard. Then clear the browser cache. Then log back in.



We now have a Joomla Dashboard that can be narrow enough to work with side by side editing.

## What's Next?

In our next article, we will explain how to research and add extensions. We will then add five important security extensions.

## 2.3 Add Joomla Extensions and Welcome Article

Another key ingredient in creating a secure website is adding some important Joomla security extensions. Extensions are additional tools for building Joomla websites. In this article, we will review how to evaluate extensions in the Joomla Extension directory and then how to add several important security extensions.



### How to Research Joomla Extensions

Let's begin by going to the home page of the Joomla Extension Directory:

<https://extensions.joomla.org/>

In the top menu, click **Browse Extensions, Compatible with Joomla 4**. Then in the side menu, scroll down to Type. There are about 2000 extensions compatible with Joomla 4. About 800 have a free version. Check the free box. Then scroll up to Category and check **Access and Security, Security Tools, Site Access and Site Security**. For tags, select Access and Security, Login Protection, Security Tools and Site Security. Five pages of extensions will appear. At 10 extensions per page, this means we have about 50 free security extensions to research.

### What is the difference between a Component, Module or Plugin?

Joomla offers three kinds of extensions. These are called Plugins, Modules and Components. Below is a description of each type.

**Plug Ins** are reached and configured via the Plug In Manager. These are very small bits of code typically inserted into articles.

**Modules** are Joomla boxes of content. After uploading a new module, it can be found in the Module Manager.

**Components** are large programs which often include plugins and modules. They may add several pages of options and parameters. After uploading a new component, all components are reached from the Top Menu Components Icon.

The final type of extension is a Combination of the Components, Modules and Plugins typically called **Packages**. These are Components which may also come with associated Modules and/or Plug Ins. It may require more than one download to make these work. While templates are also Extensions, **templates are not posted in the Extension Directory**.

### **Seven Factors in Selecting Extensions**

There are many websites which rate Joomla Extensions. However, because new extensions are released all the time, it is a wise practice to go directly to the Joomla Extension Directory and read about all of the available options. Some of important criteria to look for include:

#### **One: Written for the latest version of Joomla**

While some extensions written for older versions of Joomla might work, the best choice is to look for extensions that have been specifically tested for Joomla 4 as indicated by a J4 box in the Extension Summary

#### **Two: Number of Reviews and Review Ratings**

The extensions with the highest ratings and most reviews are listed first. These are usually, but not always, your best choice. It is important to read the actual reviews which are posted just below the extensions in their respective pages.

#### **Three: Free or Commercial?**

About half the extensions are free while the other half require a payment to download. Free options are often better than commercial options. All of the extensions we recommend below are free.

#### **Four: Highly Rated, Popular and Editors Pick**

Generally, the highest rated extensions are on the first page. It is worthwhile to look over all options however as occasionally there is a new



extension near the bottom of the list which is better than anything else on the list. It is only at the bottom because it has not been reviewed and rated yet. Also it is important to read the reviews as you will learn not only which extensions have the fewest problems, but also tips for using the extensions. To get to the Reader Reviews, click on the Extension to reach the page for that Extension.

#### **Five: Are the latest Reader Reviews still positive?**

Sometimes recent changes in an extension will make it better. But they can also render the extension unusable! It is important to read the latest comments submitted on several options before making your final choice as these comments may alert you to potential problems. It does not hurt to download an extension and try it out to see if it works. You can always delete an extension later if it doesn't work out.

#### **Six: Documentation and Support Forum**

Extensions which have extensive documentation and support forums available are much easier to work with than those who do not. Forums are also a good place to look for folks having trouble with a given extension. To reach the forum for a given extension, click on the extension website and then click on Support or Forum in the top menu.

#### **Seven: Demo Site**

Extensions which have a Demo site allow you to see what the extension is like in action. Be aware however, that the extension may still not work on your website for a variety of reasons including possibly not being compatible with your template, or other extensions on your website. So, you also need to download the extensions you are most interested in and actually try them on your website.

#### **Comments on Security Extensions by Page Number**

Page 1 Some extensions have a hidden drawback such as having to register your site with a third party that can then place a hidden back door on your site. Others have extremely limited free versions which are really intended to promote a paid version. What we want instead are extensions that are fully functioning and that we can install directly into our website with the Joomla Extensions Installer.

#### **Security Extension 1 Brute Force Stop**

One of the best security extensions is called **Brute Force Stop**. It is the

third option on the first page. Click on it to see this extension. Here is the direct link to this page: <https://extensions.joomla.org/extension/brute-force-stop/>

This plugin stops Brute-Force-Attacks on your Joomla website. One of the most common ways to attack a website is by using tools that keep entering passwords until they find yours. This free tool not only stops these attacks, but let's you know who is attacking you.



It includes both a component and a plugin. Click on **Download** and the extension downloads without requiring any registration. We will install this security tool later in this article. Then click on the back arrow on your browser to go back to page 1 of the free security extensions. Scroll down the page and click Page 2. Then click Page 3.

## Security Extension 2 Spam Protection Factory

The first option on page 3 is **Spam Protection Factory**. Click on it to go to this page:

<https://extensions.joomla.org/extensions/extension/access-a-security/site-security/spam-protect-factory>

While many security tools allow you to block individual IP addresses that are attacking you, major hackers have thousands of IP addresses. This free tool allows you to easily block entire countries from attacking you or even reaching your login page!

Spam Protection Factory allows you to block all IP addresses from particular countries based on their two digit country code. It includes a

component and a plugin. Click on Download which takes you to a page that requires registration of your name (not your website). You can then download the extension. We will install this security tool later in this article.

### Security Extension 3 Eyesite

The third security tool I recommend is not in the search box. But it is in the Joomla Extensions Directory. It is called **Eyesite**. Eyesite is a file monitor that will warn you about any changes to any of the files on your website.

Here is the direct link: <https://extensions.joomla.org/extension/eyesite/>

Download the User Guide and Component from this page:

<https://www.lesarbresdesign.info/extensions/eyesite>

Latest Eyesite Versions			
These versions require at least Joomla 3.4.8. We no longer have versions older versions of Joomla.			
	Eyesite User Guide	Version 6.06	<a href="#">Free Download</a>
	Eyesite Component	Version 6.07	<a href="#">Free Download</a>
	Eyesite Plugin	Version 6.01	<a href="#">Paid Download</a>

The automatic update plugin costs \$20 per year. But Eyesite works very well even without the automatic update plugin. We will install Eyesite later in this article.

### Security Extension 4 Remove Generator

A fourth simple security tool is called **Remove Generator**. The Joomla generator tag is added to the source code page of any Joomla website.

```
<!DOCTYPE html>
<html lang="en-gb" dir="ltr">
<head>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <meta name="generator" content="Joomla! - Open Source Content Management">
  <title>Home</title>
```

Hackers look for this tag to give them a clue as to how to best attack your website. Therefore hiding or renaming this tag can help protect your site. This extension allows us to change the generator tag for our website from Joomla to whatever we want – or remove the generator tag completely.

Here is the direct link: <https://extensions.joomla.org/extension/site-management/seo-a-metadata/remove-generator/>

Download this tool. We will install it later in this article.








## Security Extension 5 Add Phoca Commander

Installing a File Manager to your Joomla Dashboard allows you to work with files and inspect error logs without going to your Hestia Control Panel User File Manager. The error file is important because it can alert us to security problems in our website core files and extension files. Here is the direct link to download this file: <https://www.phoca.cz/download/category/96-phoca-commander-component>

Download this tool. We will install it later in this article.

## Move all of your Extensions to your Website Extensions Folder

When you are done downloading all six security extensions, transfer them from your downloads folder to your website extensions folder.

05 Create a Secure Website	extensions
Name	
	com_phocacommander_v4.0.0Alpha.zip
	Eyesite_com_eyesite_6.07.zip
	Eyesite_Eyesite User Guide v6.06.pdf
	pkg_bfstop-1.4.4.zip
	plg_system_removegenerator-1.4.0.zip
	plg_system_sqlinterceptor-1.0.zip
	Spam_Protect_Factory_1.2.3.zip

We are now ready to install and configure them.

## Install and Configure Brute Force Stop

Click on System, Install, Extensions to install this tool. Then click Dashboard, Plugins and scroll down to system plugins. Click on BF Stop to open it. Enable this plugin and lower threshold from 10 to 5. Then lower the duration from 1 day to 1 hour.

**System - Brute Force Stop**

**system / bfstop**

Brute Force Stop This plugin provides means to avert Brute-Force-Attacks on your Joomla-Installation. For this purpose, the plugin stores information on failed login attempts, so that when reaching a configurable number of such failed login...

[Show full description ...](#)

**Block threshold**  ▼  
How often a login can be tried until the IP will be blocked

**Use .htaccess**  ▼  
Use .htaccess-file in Joomla!-directory for blocking ip addresses. Might be faster than blocking through Joomla!, but will only work if php has permissions to write to the .htaccess-file. Only activate this function if you know what you're doing, and keep a look at your server logfiles.

**Block Duration**  ▼  
Determines how long an IP address is blocked before it is allowed to access the site

**Status**

**Access**

**Ordering**

**Plugin Type**

**Plugin File**

**Note**

Then click Notification and select the Admin. Then lower the blocked messages per day from 5 to 2. Then click Save and Close.

## Install and Configure Spam Protection Factory

Click on System, Install, Extensions to install this tool. Then click on Components, Spam Protection Factory Dashboard. Then click Link to enable the plugin. Then go back to the Component and click Options. Then click **Filters** tab and click the Country Filter. Here is a link to all country two digit codes. <https://country-code.cl/>

We will block users from Russia and Ukraine. RU and UA

**Country Filter**

Check country code against database.

**Country**

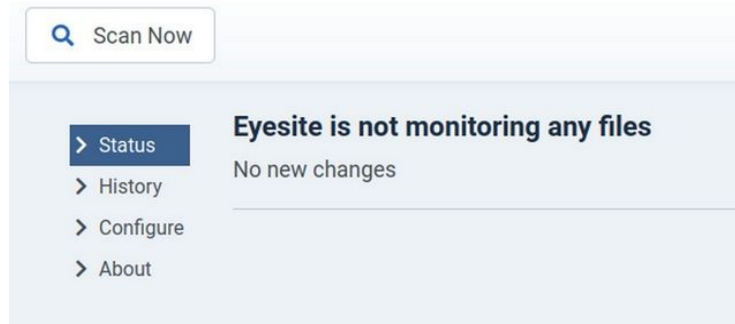
The user Country Code will be checked against this list. Use country codes, not full country names. Example: US, CN, RU

Then click Save and Close.

## Install and Configure Eyesite

Click System, Install, Extensions to install this tool. Click Components, Eyesite, Configuration. Add your email. Then click Status.





Click Scan Now. Wait a few minutes for the first scan to complete. It will eventually say Eyesite is monitoring 8901 files. All of them will be new files. Click Scan Now again. Wait a few more minutes. It will reply that there are no new changes. You can now check your files periodically to see if any of them have been changed and when they were changed.

### **Install and Configure Remove Generator**

Click on System, Install, Extensions to install this tool. Then click on Dashboard Plugins and scroll down to Systems. Click on Remove Generator to edit it. Change Disabled to Enabled and click Save and Close. Then click on the front end of your website, clear the browser cache. Then right click and click View Source. Check that the generator is now gone.

### **Install and Configure Phoca Commander**

Click on System, Install, Extensions to install this tool. After installing, click on **Configure Phoca Commander** which brings up a warning screen. Click OK to bring up the File Manager. On either column, scroll down and note that there is no error file. You should periodically check to see if an error file ever appears.

### **Rename the HT access file**

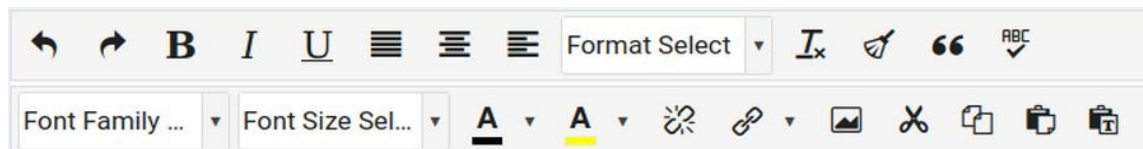
Also, if the htaccess file is still named htaccess.txt, rename it to .htaccess (note that there is a dot in front of the word htaccess). Select the file named htaccess dot txt. Then click F2 Rename. Name it dot htaccess(.htaccess). Then select it and click F4 Edit. **Scroll down to Line 83 and delete the hash sign to the left of the word RewriteBase.** Then click Save and Close. Next, click on Images. Check Sample Data and click Delete. Click headers folders and click Delete. Click the Info icon to exit the file manager.

### **Install and Configure the JCE Editor**

The JCE Editor makes it much easier to load and resize images compared to the standard Joomla editor. To download the JCE editor, go to this page:

<https://www.joomlacontenteditor.net/downloads/editor/core>

Then click on Download for the latest version. Then transfer the extension from your Downloads folder to your website Extensions folder. Then log into the Joomla Dashboard and click System, Install, Extensions. Then click Browse for File. Then select the JCE zipped folder. It will install automatically. To Configure the JCE Editor, go to Components, JCE Editor. Then go to **Editor Profiles, Default, Features & Layout** Tab and reduce the number of tools from four rows to two rows by dragging unused icons to the lower area. When we are done, this is what the Editor Tool Bar will look like:



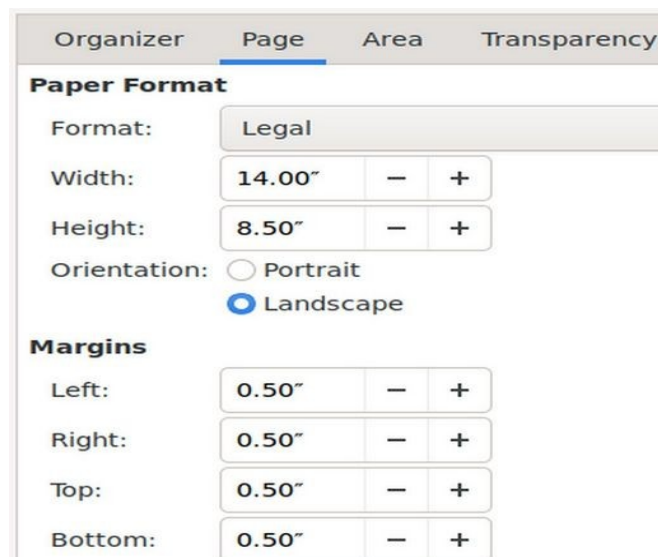
Click Save. Then click on the **Plugin Parameters** tab. Then click on the Image Manager tab and set alignment to Center. Then click Links, and set Target to **Open in a New Window**. Finally, click Media Support and change Allow Iframes to Yes. Then click Save and Close. We now have the JCE Editor set up. Then, go to **Users, Manager**. Then click on your name to open your profile. In the Basic settings tab, set the JCE Editor as your new default editor. To finish setting up, in **System, Global Configurations**, change the Default Editor to JCE Editor. Then click Save and Close.

### Use Libre Writer to Create a Header Image

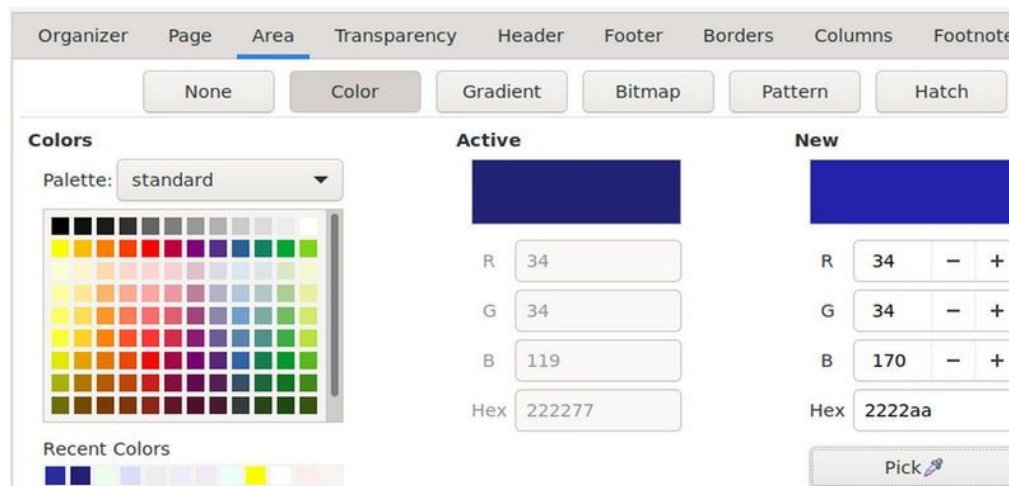
Before we create our Welcome Article, we should first create our own header image using Libre Draw and Flameshot. A header is a full width image at the top of your Home web page. It is like the cover of a book. It helps website visitors understand what your website is about in a matter of seconds. A website header typically consists of a background image with one line of text in the foreground with the name of your website and perhaps a second line of text below it that has a slogan. Here is an example:



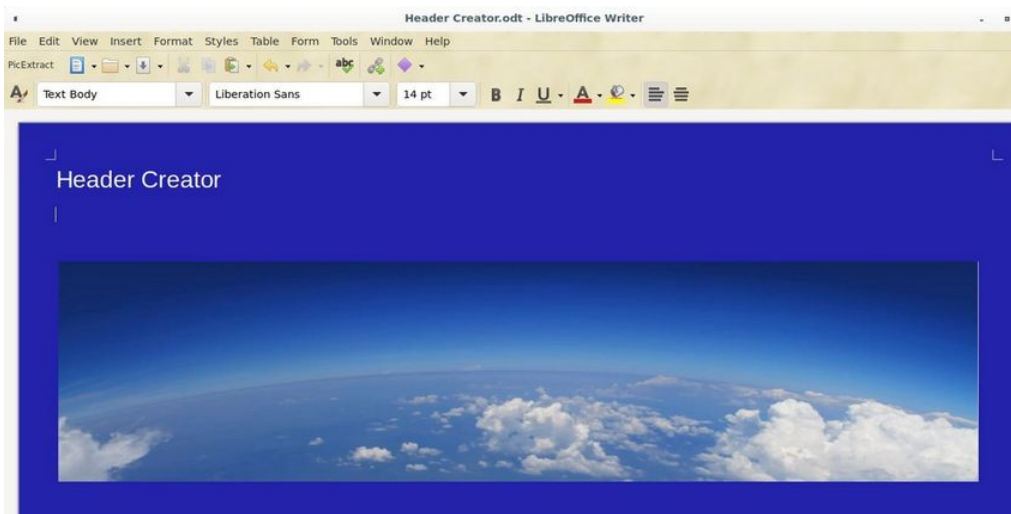
So that the header does not take up too much vertical space, seek out a background image that is much wider than it is tall. Then open a new Libre Writer document and save it in your website images folder as **Header Creator**. Click **Format, Page Style, Page** tab and change the format from Letter to Legal. Then change the Orientation from Portrait to Landscape. Then change all four margins to 0.5 inches.



Then click on the Area tab and click the Color option. Then use the Pick button to change the color to 2222aa Dark Blue



Then click OK. Then use Flameshot to capture an image and paste it into the Writer document:



To make things more interesting, you can add a second image:



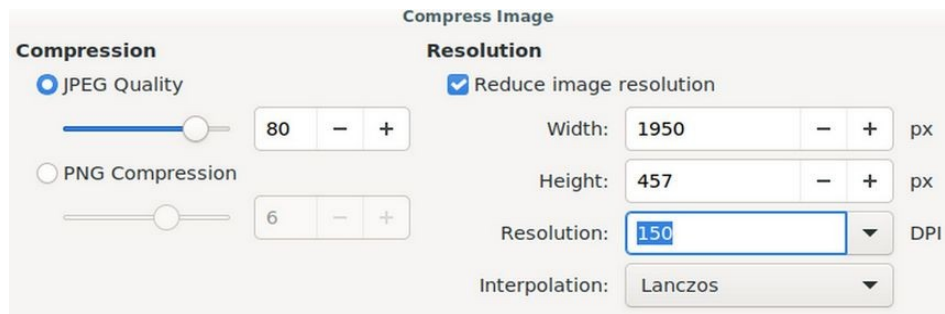
Then add a text box for the title line and another for the slogan line:



Use Flameshot to select an area including a border and copy it. Then on a second page of the Header Creator document, paste the image.

### **Compress and Save your Header Image**

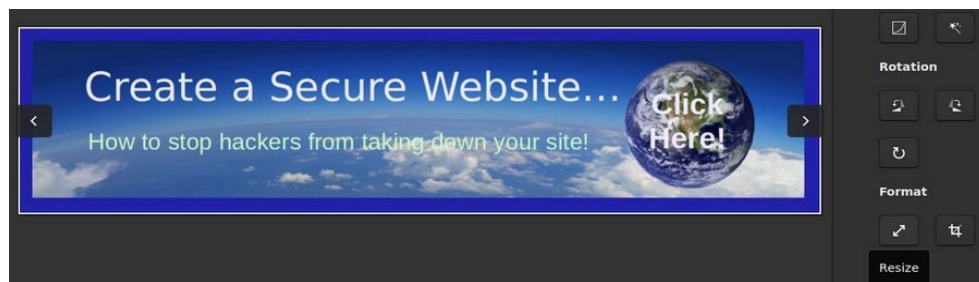
Right click on the image and click Compress to bring up this screen:



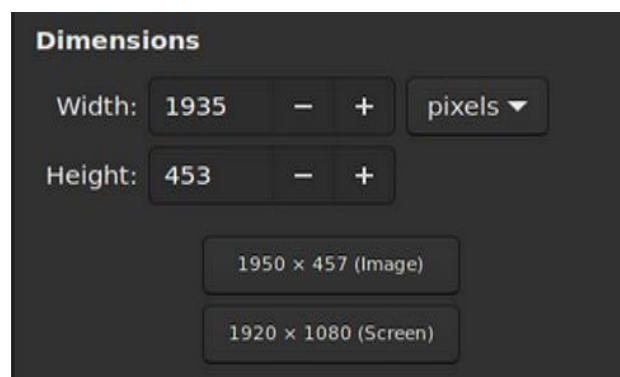
Change the resolution to 150 DPI. Then click OK. Right click on your image again. Then click Save. Navigate in your File Manager to your website images folder and save the image as **header.jpg**. Then save and close your Writer Header Creator document.

### Use Gthumb to Resize and Crop your Header Image

Click on the Debian Cinnamon Start button. Then in the Graphics category, click on Gthumb to open it. If you do not already have this program installed, you can download it from the Debian Software Manager. Navigate to and click on your header image to open it.



Then click the Format Resize button in the lower right corner.




Initially, the width is 1935 pixels. Click on the minus sign to reduce the width to 1800 pixels. Then click **Accept**. Then click on the Crop button which is just to the right of the Resize button. Click Maximize.





The height is 422 pixels. Click the minus sign to reduce the height to 400 pixels. Then click the Position Plus sign to add back 9 pixels (taking some of these 22 pixels off the top of the image). Then click Accept. Then click the Save As button and save the image as header-1800.jpg. Close Gthumb. Here is our File Manager Images folder:

05 Create a Secure Website		images	header	▶
Name			▼	Size
— header.jpg				92.2 kB
— header-1800.jpg				99.3 kB
 Header Creator.odt				1.3 MB

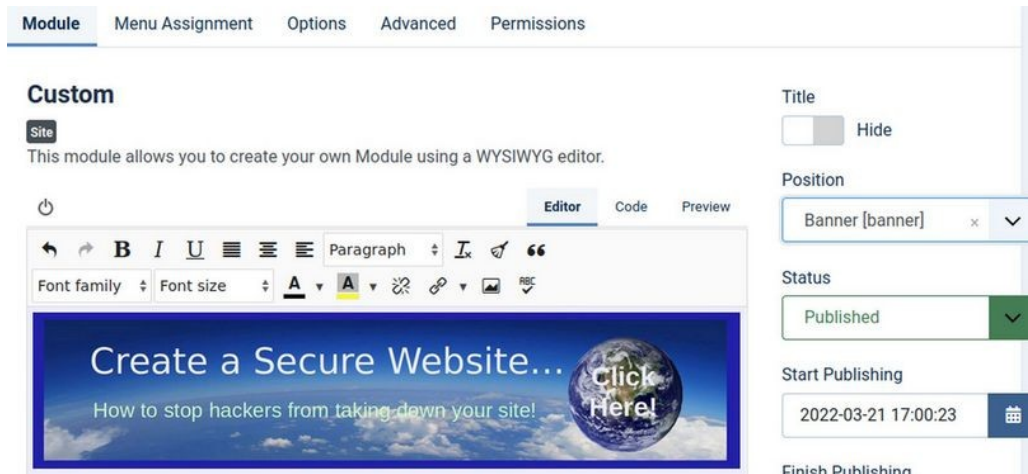
Note that the header image is under 100KB.

### Load your Header Image

Log into your Joomla Dashboard. Then go to **Content, Media. Upload, Browse**. Select the Header-1800 Image and click Upload.

### Create a Header Module

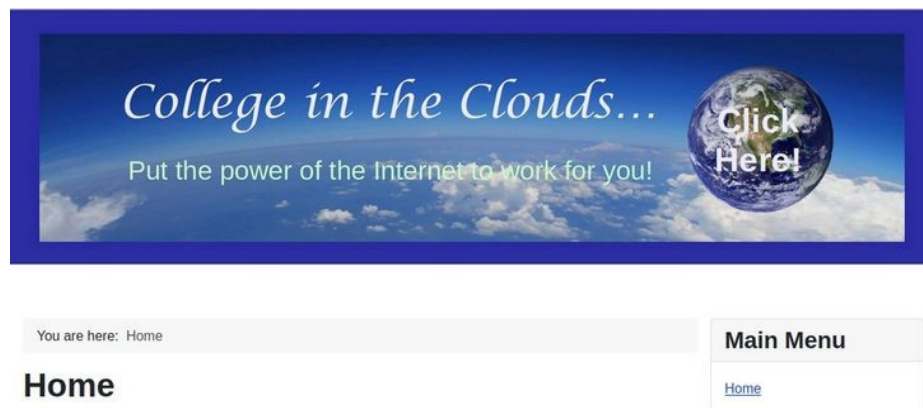
Go to **Content, Site Modules, New, Custom**. For Title, type Header. Then Hide the title and select the banner position. Then click on the JCE image icon to select and insert the header image.



Then click Save and Close. Click on the front end to view the result:



To get rid of the word Cassiopeia, click **Template, Styles** and click on the template to edit it. Click on the Advanced Tab and turn off Brand.



Hide the Main Menu for now as we will use a different template to configure it later. Click **Content, Site Modules** and select the main menu and click Unpublish. We will also hide the Home menu item by going to **Menus, Main Menu** and clicking on the Home menu item. Click the Page Display tab. Then change Show Page Heading to Hide and change the Browser Page Title to the name of your website.

Details	Blog Layout	Options	Integration	Link Type	<b>Page Display</b>
Module Assignment					
<b>Page Display</b>					
Browser Page Title		Create a Secure Website			
Show Page Heading		Hide			

## Use Libre Writer to Create a Welcome Article

Create a new Writer document and save it in your website articles folder as Welcome to My Website. Add text explaining the benefits of your website. Then use Libre Draw and Flameshot to add images for folks who get more from looking at images than reading text.

### Welcome to our course on creating a secure website!

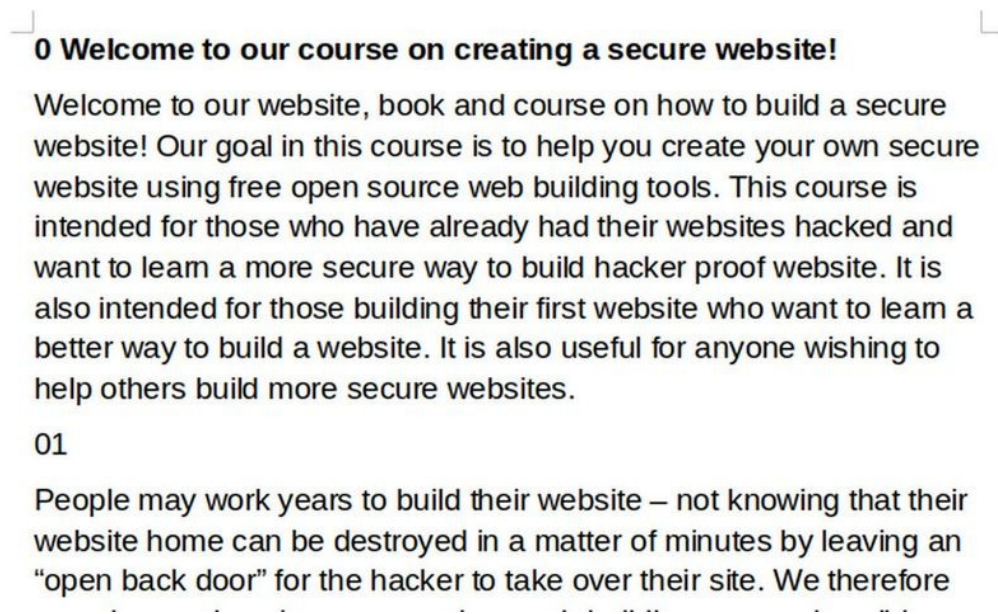
Welcome to our website, book and course on how to build a secure website! Our goal in this course is to help you create your own secure website using free open source web building tools. This course is intended for those who have already had their websites hacked and want to learn a more secure way to build hacker proof website. It is also intended for those building their first website who want to learn a better way to build a website. It is also useful for anyone wishing to help others build more secure websites.



When you are done creating your Welcome article, right click on each image and compress to 150 DPI. Then click Save As and save a copy of the Welcome article with a w (for web version) at the beginning of the file name.

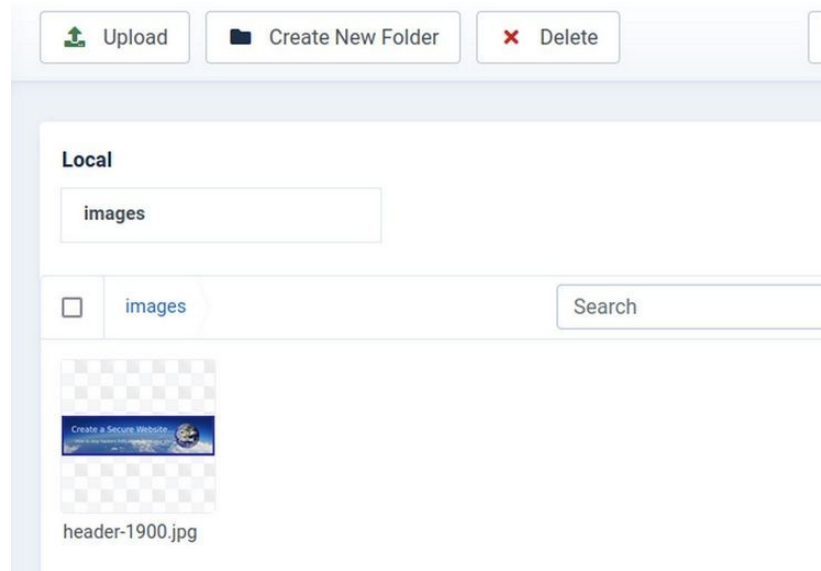


Next, create a 0-welcome folder in your file manager images folder. Then use the web version to create a text only document by typing a placeholder image number above each image. Then save each image to the 0-welcome images folder. Then delete each image leaving only the placeholder image numbers.

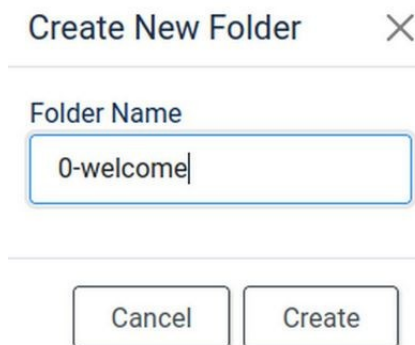


## Upload the 0-welcome images to your website media manager

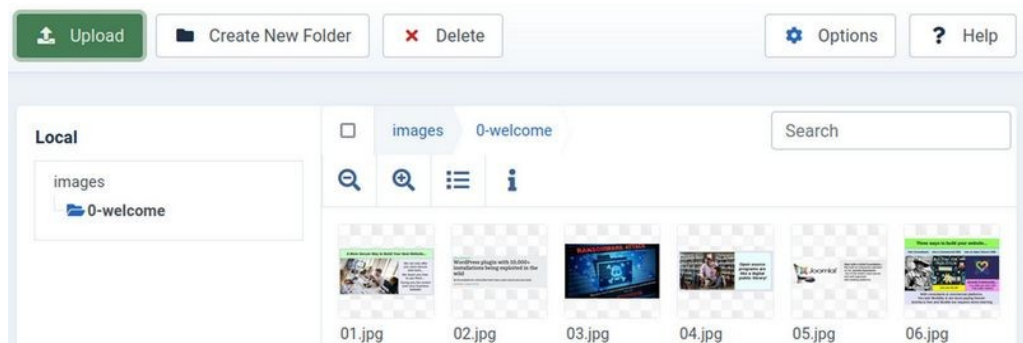
Log into your Joomla Dashboard and click Content Media to open the media manager:



Click Create New Folder.



Name the folder **0-welcome** and click Create. Then click on the 0-welcome folder to open it. Then click on **Upload** to upload all of the images from the 0-welcome images folder on your home computer. Hold down the Control key to select up to 20 images. Then click Open. Then click Upload again if needed to load any remaining images. Here is the result:

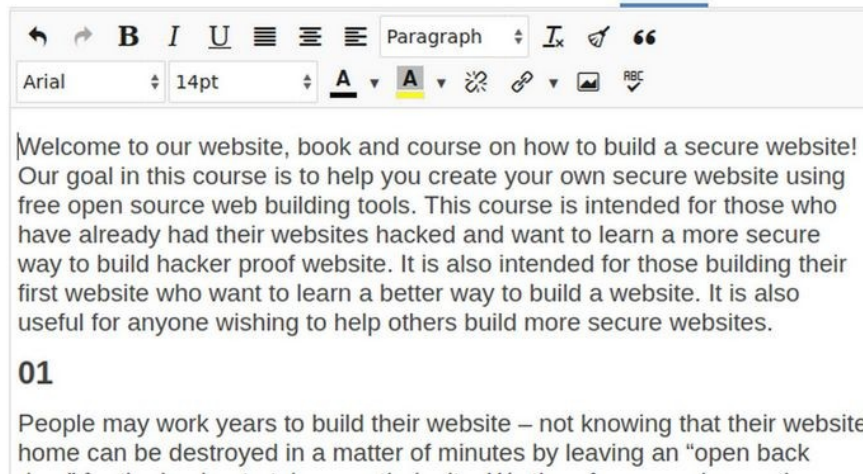


**Use the JCE Editor to Copy Paste the Text Only version of your**

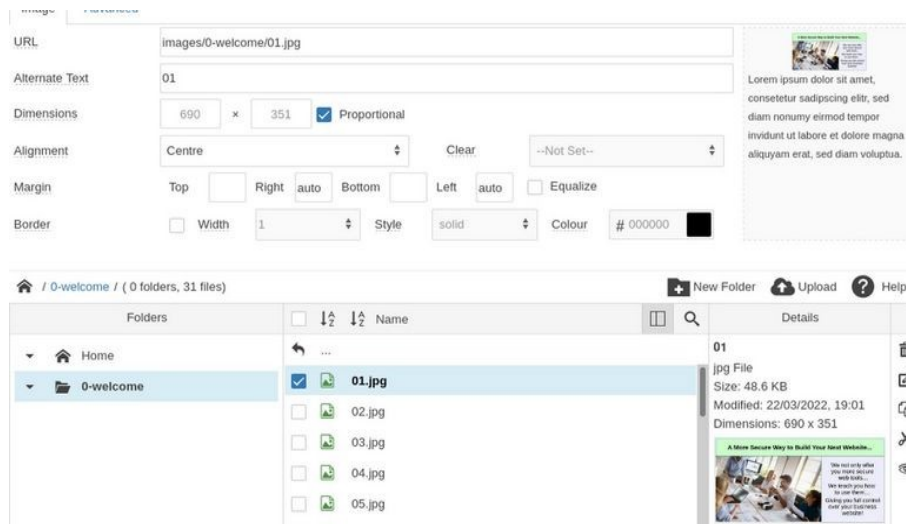


## Welcome into a new Joomla article

Go to Content, Articles, New and type in a title for your Welcome Article. Copy the text only version of your welcome article into your clipboard. Then place your cursor in the JCE workspace and click Paste. This will bring up a Paste popup. Press Control plus V on your keyboard to paste the text into the workspace:



Click Save. Then select all of the text and change the font family to Arial and the font size to 14. Then **change Featured from No to Yes**. This will put the article on your Home page. Click Save again. Delete the placeholder 01 and click the Picture Icon in the JCE editor to open the JCE Images Manager.



Select the first image in the 0-welcome images folder. Then increase or decrease the width if needed. The maximum width should be 800 and the

minimum width should be 300. Then click Insert. Then scroll down to placeholder 02 and delete the 02 and click on the images icon to repeat the process. After the first 10 images, click on Save at the top of the page. Then finish loading the images and click Featured, then click Save. Then click Save and Close. Then visit the front end of the site to view and check the Welcome article:

### **Welcome to our course on creating a secure website!**

Welcome to our website, book and course on how to build a secure website! Our goal in this course is to help you create your own secure website using free open source web building tools. This course is intended for those who have already had their websites hacked and want to learn a more secure way to build hacker proof website. It is also intended for those building their first website who want to learn a better way to build a website. It is also useful for anyone wishing to help others build more secure websites.



To hide the Details, which distracts from the article, go to **Content, Articles** and click on **Options** in the upper right corner. Set Show Category and Link Category to No. Set Show Author and Show Publish Date to Hide. Set Show Tags and Show Hits to Hide. Then click Save. While we are here, click the Category Tab and Hide the Subcategories, No Articles Message and Subcategories Descriptions and Tags. For categories, hide subcategories and # of articles. For the Blog tab, we can change the defaults to 9 leading articles, 9 intro articles, 1 columns and 9 links. For List Layouts, hide Hits and Author.

### **What's Next?**

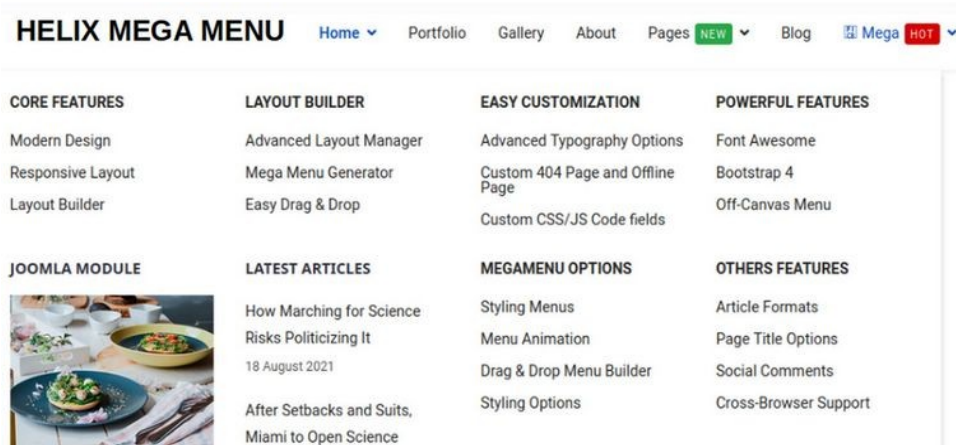
In the next article, we will install and configure the Helix template – which will give us much more control over the layout and appearance of our website than the default Cassiopeia template.

## 2.4 Helix Template First Steps

A template controls the appearance and structure of your website. The default Joomla 5 template, called Cassiopeia, has numerous limitations. First, it is difficult to create additional module positions. Second, it is not able to create a mega menu. Therefore, in this article, we will add a replacement template, called Helix Ultimate, that provides easy ways to create a mega menu and additional module positions.

The Helix Ultimate template is a free, open source template that allows you to easily customize the appearance of every aspect of your website. Helix Ultimate is the only free Joomla template which allows you to easily create your own custom module positions which are responsive rows and columns where you can put boxes of content called modules or feature boxes.

The Helix template also comes with a **customizable Mega Menu** allowing you to create an expandable main menu which allows website visitors to visually understand how your website is structured and quickly navigate to the area they are most interested in.



Helix Ultimate is completely free to download and use. You can sell your own template based on the Helix Ultimate framework. No license fee or credit is required.

### Step 1 Download the Helix Template and Plugin

To download the Helix Ultimate Template, go to the following page:

<https://www.joomshaper.com/helix>

Click Download Free. Then click Download.

## Helix Ultimate V2.0.9

Template	Size: 1.7 Mb	<a href="#">Download</a>
Quickstart Pack - Joomla 3	Size: 36.9 Mb	<a href="#">Download</a>
Quickstart Pack - Joomla 4	Size: 50.9 Mb	<a href="#">Download</a>
Plugin	Size: 758.2 Kb	<a href="#">Download</a>

Download the top option which is the **template** and the bottom option which is the **plugin**. The Quickstart Package suffers from numerous problems. So we will just install the Helix template and plugin.

### Step 2 Install the Helix Template and Plugin

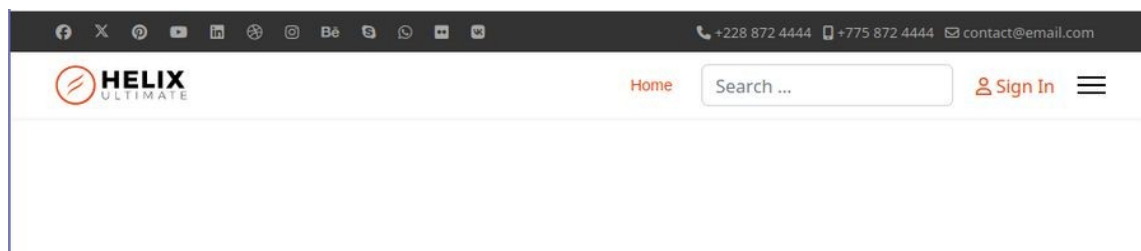
Log into your Joomla Dashboard. Then go to System, Install, Extensions to install the Helix template and plugin.

### Step 3 Configure the Helix Ultimate Template Basic Settings

Then go to **Dashboard, Templates, Styles** and check the Helix template. Then click **Default**.

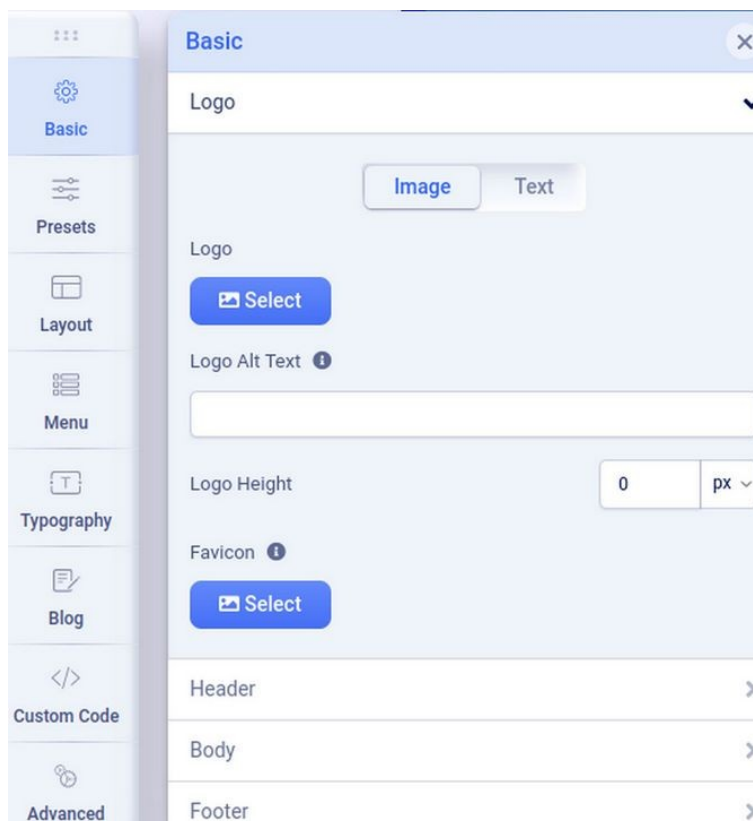
Style	Preview	Default	Pages
<a href="#">Cassiopeia - Default</a>		<input type="radio"/>	Not assigned
<a href="#">shaper_helixultimate - Default</a>		<input checked="" type="radio"/>	Default for all pages

Then view the front end of the website.

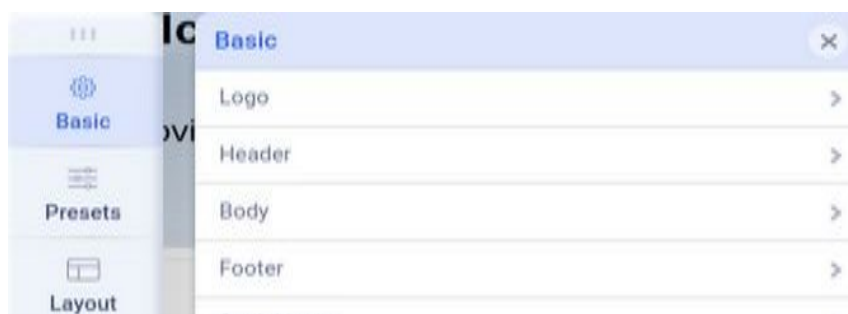


To edit the Helix Template, click on it to open it. Then click on **Template Options**. This will open the Helix Ultimate default settings sidebar along with your website homepage. To the left side of the screen, you get the Helix Ultimate default settings options categorized in group called **Basic**,

## Presets, Layout, Menu, Typography, Blog, Custom Code, and Advanced.

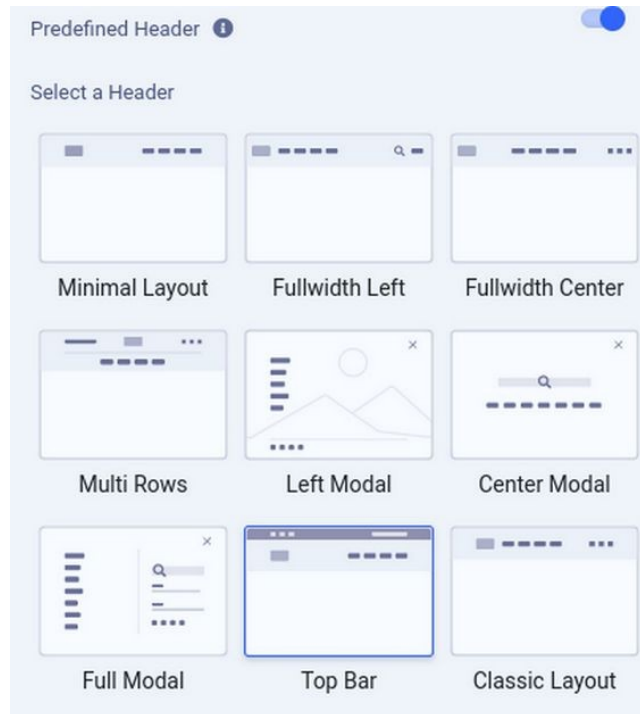


Note that you can press the six dots in the upper left corner to move the menu to a different part of the browser screen if you want.

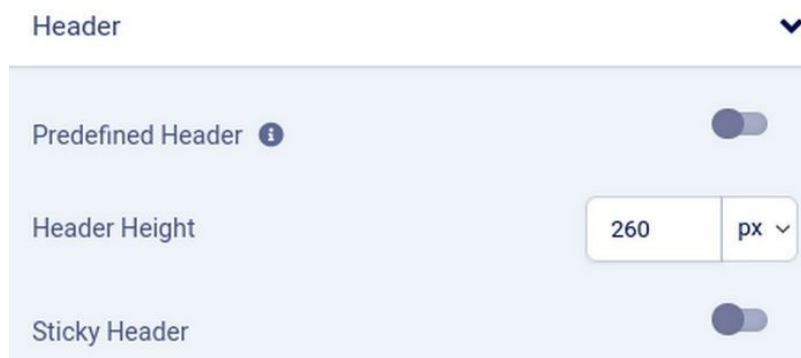


The Basic Tab is divided into categories called **Logo, Header, Body, Footer, Social Icons, Contact Info, Coming Soon and Error Page**. Click on the Logo option. In order to hide the Helix logo and use only our header image, **change the logo height to 0 for full screen, tablet and mobile views**. Then click on the Header options.





By default, the header is set for Top Bar. Turn off the Predefined Header and sticky header and **change the Header Height to 260 px for full screen, 260px for tablet and 100px for mobile view.**



Then click **Body** and turn on **Boxed Layout**. **Set the maximum width to 1200px.** Then click on the Footer. Turn off Copyright and Go to Top. Then click Social Icons and turn them off too. Also turn off Contact Info and Coming Soon. This completes the Basic tab options.

#### **Step 4 Choose and Configure a Preset Color Theme**

Next click **Preset**s and choose a color theme. For example, click Preset 1. Then click the Edit pencil.

**Edit Preset: preset1**

Topbar Background Color:

Topbar Text Color:

Header Background Color:

Logo Text Color:

Menu Text Color:

Menu Text Hover Color:

Menu Text Active Color:

Menu Dropdown Background Color:

Change any values you want. We will change the body background color from white to light blue #eeeeff..

Body Background Color:

Footer Background Color:

Then click Apply. Then click Layout.

## Step 5 Use Helix Layout Builder to Add Module Positions

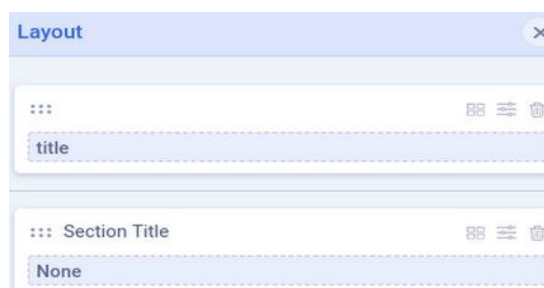
The Helix Layout Builder is one of the most important features of the Helix template. It allows us to precisely control our website layout. Click on the **Layout** Tab to see this popup:



The default Helix layout consists of a Main Body with the main Joomla Content in the Component position in the middle of the page. There are also module positions to left and right of the main Joomla content component.

Note! The Helix template has two additional module positions (Content Top & Content Bottom), although they are not visible in Layout Builder, they can be used to display any modules above and below the Joomla component area.

Helix has added a single row called **title** above the main content and also two rows, called Bottom and Footer, below the main content area. The first bottom row has 4 columns and the second bottom row has two columns. To make room for our custom header and mega menu, we will **add three more rows** for a total of four rows above the main content. We will use the first new row for our header, the second new row for our main menu, the third new row for a slideshow and the fourth new row for three feature boxes. To add a new row, hover your cursor over the layout. This will reveal a plus sign. **Click on the Plus sign above the Main Body to add a new row.**



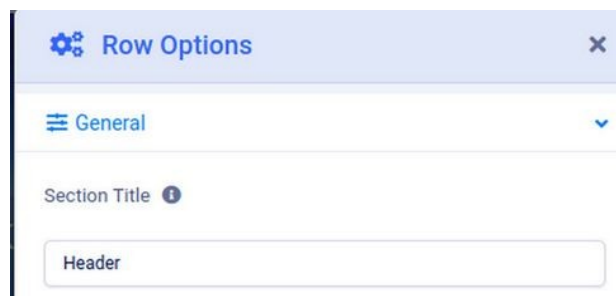
Then click on the plus sign two more times to add two more rows.



Each row has a Section title and a row name called None.

### Rename the Four Rows

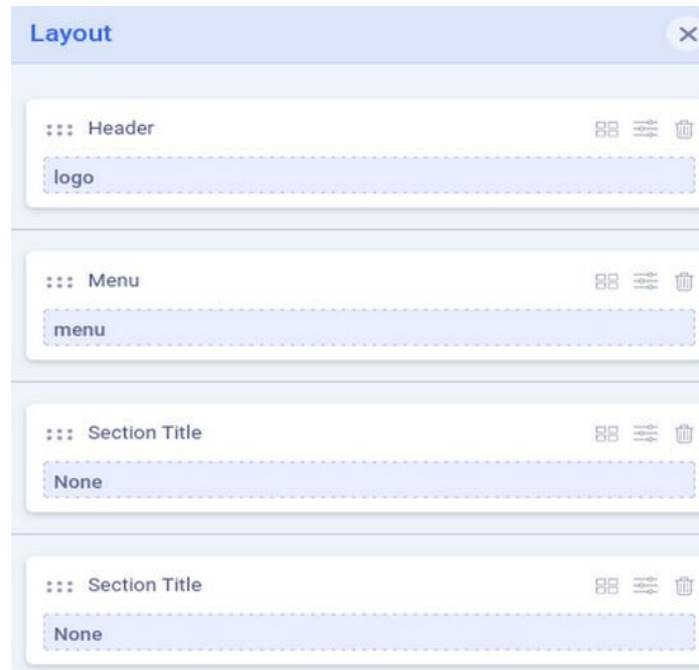
Click on the arrows in the upper right corner of the first row and rename the first row Section title **Header**:



Then click Apply. Click on the second row arrows and rename the second row **Menu**. Then click on the three dots on the right side of the first blue row and use the drop down arrow to rename the module position logo.



Repeat for the second blue row and rename its module position to be **menu**. Here is the result:



Click on the four squares to the right of the third row Section Title.



This popup allows us to divide the row into a combination of columns. Because we will use the first row for a full width header, leave it at the default value of 12. But give the fourth row three columns (4, 4, 4). Then click on the arrows to the right of the four boxes for the third Section Title Row.



General

Section Title

Fluid Width

Custom CSS Class

Style

Responsive

We will call this Section **Slideshow** and check Yes for Fluid Width. Then click on the Style button and change the background color to light blue #000000. Then click Apply. Repeat for Top Row 2 with Light Green for the fourth row called Top Row 1. Then click on the three hidden dots to the right of the word None in Slideshow.

Click on **Module Position, Select an Option**. This will bring up a list with more than 36 module positions that looks like this:

bottom1	slide	position1	content-bottom
logo	user1	position2	bottom2
position-2	user2	position3	bottom3
title	user3	position4	bottom4
top1	user4	position5	breadcrumb
top2	left	position6	footer1
top3	right	position7	footer2
menu	feature	position8	comingsoon
menu-modal	slider	content-top	offcanvas

The module positions that have already been taken are logo, menu, left, right, bottom 1,2, 3, 4 and footer 1,2. This still leaves us with 27 module positions to display our content. We will call our third row **slider** as that is the module position we will assign to our slideshow. Then click Apply. Top Row 4 has 3 dots to the right of each word None. Call the first box **top1**, the second box, **top2** and the third **top3**. Here is our new layout:



## Change Row Background Colors

Adding different colors to different rows helps our website visitors better understand the layout of our website.

We would like the background of our header row to match the color of our header border which is #2222aa. Click on the Header row arrows to bring up the row edit screen. Then click on Style and change the Background Color to #2222AA. Then click Apply. Then click Save.

Next click on the Menu row edit button. Click Style and change the background color to light green #DDFFDD. Click Apply. Then click Save.

Next click the Slideshow row edit button. Click Style and change the background color to black #000000. Click Apply. Then click Save.

Next click the Top Row 1 edit button. Click Style and change the background color to #FFDDFF. Click Apply. Then click Save.

Then click the X to close the Layout popup. Then click X to close the Helix Template Edit screen.

## Make the Header Module Visible Again

When we switched from the Cassiopeia template to the Helix template, the header module was no longer visible. To make it visible again, click

**Content, Site Modules.** Then click on the Header module to edit it. To see the module with the Cassiopeia template, we had placed the header module in the Banner module position. Change this to the **Helix Logo** Position. Then click Save and Close and View the Site:



Changing module positions solved the problem. But there is a problem with too much blank space below the header and an ugly red Featured icon above the article title. Click on the featured Welcome article **title** to go from the Home page to the article page.

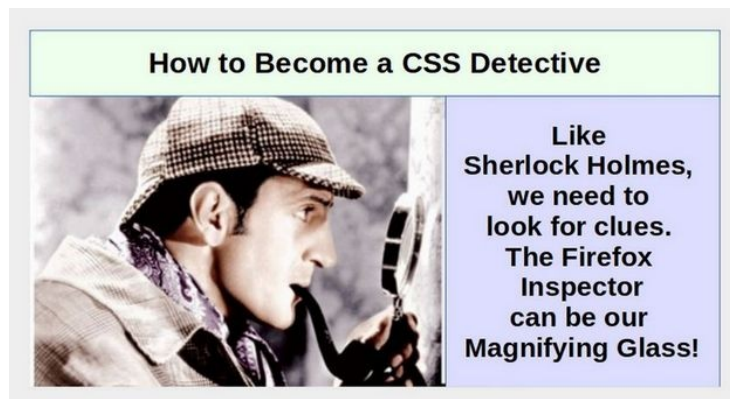


There are three social icons on the right between the article title and the

article text. These are Facebook, Twitter and Linked In. Given that these mega monopolies engage in extreme censorship that violate our rights, we should not promote any of them. To hide these social icons, go to **Templates, Styles** and edit the Helix template. Click **Blog**. Then click **Details**. Then turn off Social Share.

### **Add a Second Browser to Clear the Browser Cache**

We will make some changes in the CSS to get our web pages looking exactly the way we want.

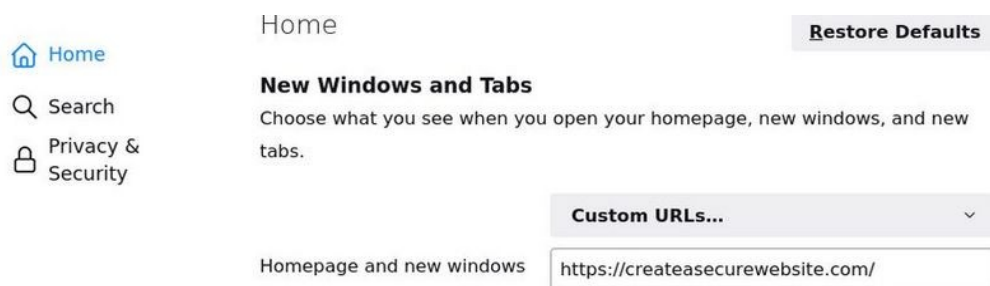


When building a website, we first make changes in the back end (the Joomla Dashboard). We then view those changes in the front end (what our website visitors see). In order to view the changes on the front end, we not only need to click SAVE on the back end for the changes to be applied to our server, but we also need to clear the browser memory – also called the browser cache – on the front end. Unfortunately, if we use the same browser on both the front end and the back end, when we clear the cache on the front end, Joomla will log us out of the back end of our website. This requires us to log back into the back end to make more changes.

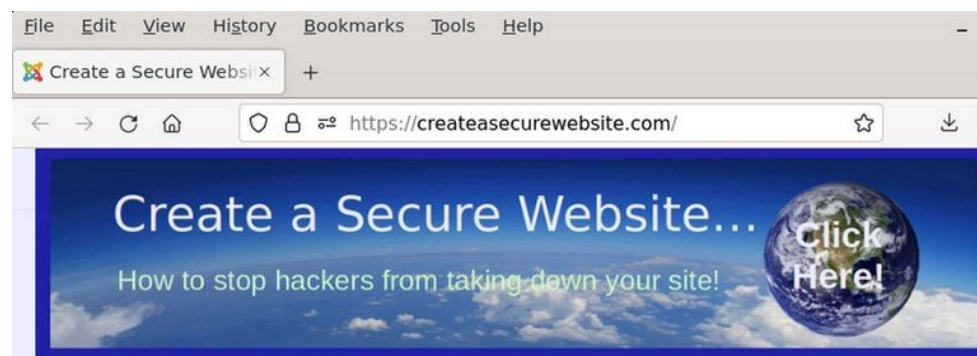
To avoid being logged out of the back end of our website, and still be able to clear the browser cache on the front end, you should **add a second browser** to view the front end of your website. This will allow you to clear the cache on the front end browser to see the changes while not clearing the browser on your back end browser to avoid being logged out of the back end.

This is why I use the Firefox browser to make changes in the back end of my website – but I use the Libre Wolf browser to clear the cache and view the changes on the front end of my website. To make this process easier, I set the Home page for my Libre Wolf browser to be the front end of the

Joomla website I am working on by going to Libre Wolf Preferences, clicking on Home, changing to Homepage to Custom URLs and copy pasting my website admin page URL .



I have also added a top menu to the Libre Wolf browser by clicking on **Customize, then Toolbars** and checking the Menu Bar. Here is the top of my Libre Wolf browser Start Page showing the top menu:

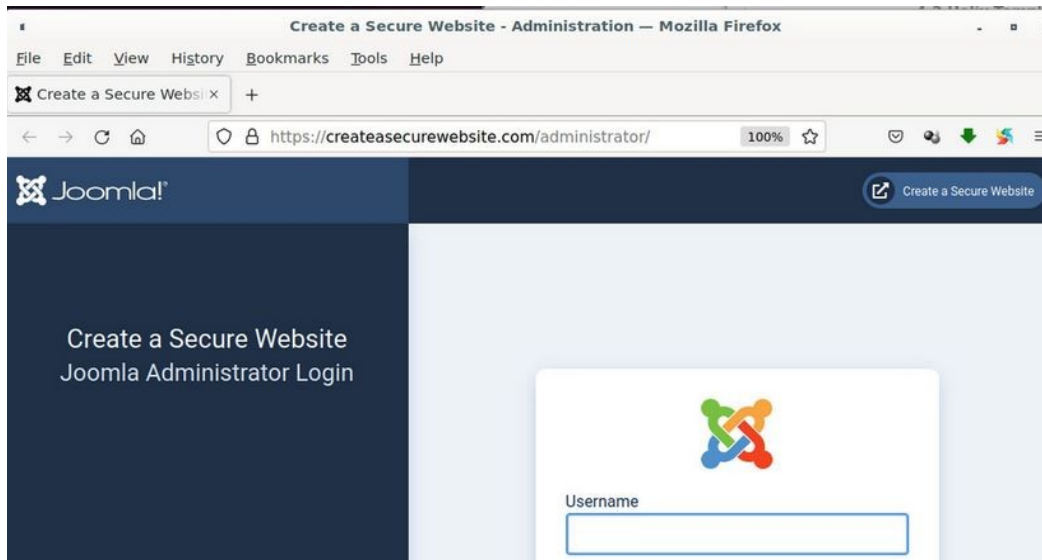


To clear the front end Libre Wolf browser cache, in the new top browser menu, click on **History, Clear Recent History**. Then set the Time Range to Everything. Then click OK. Then reload the page. Then see if the change you were trying to make actually occurred in the way you wanted. I also add the menu bar to the Firefox browser. But I only rarely use it to clear the cache. I then set the Joomla Administrator log in page for the website I am working on to be the start page for the Firefox browser:

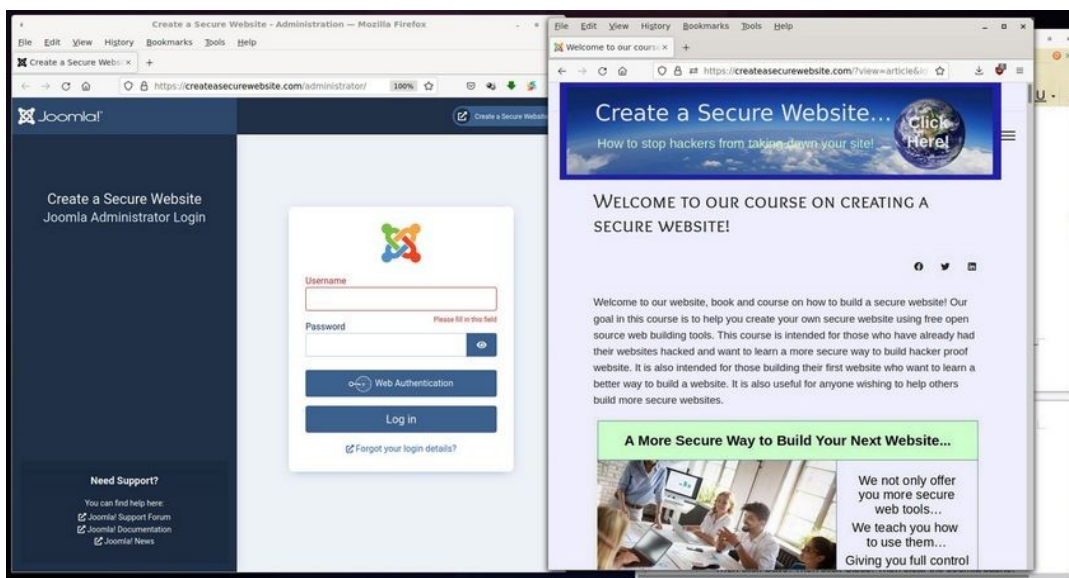


Here is what the Firefox Start Page looks like:





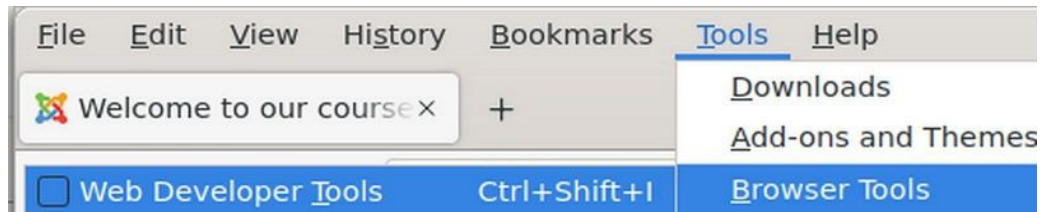
This is my entire Desktop showing both browsers as an example of Side by Side editing:



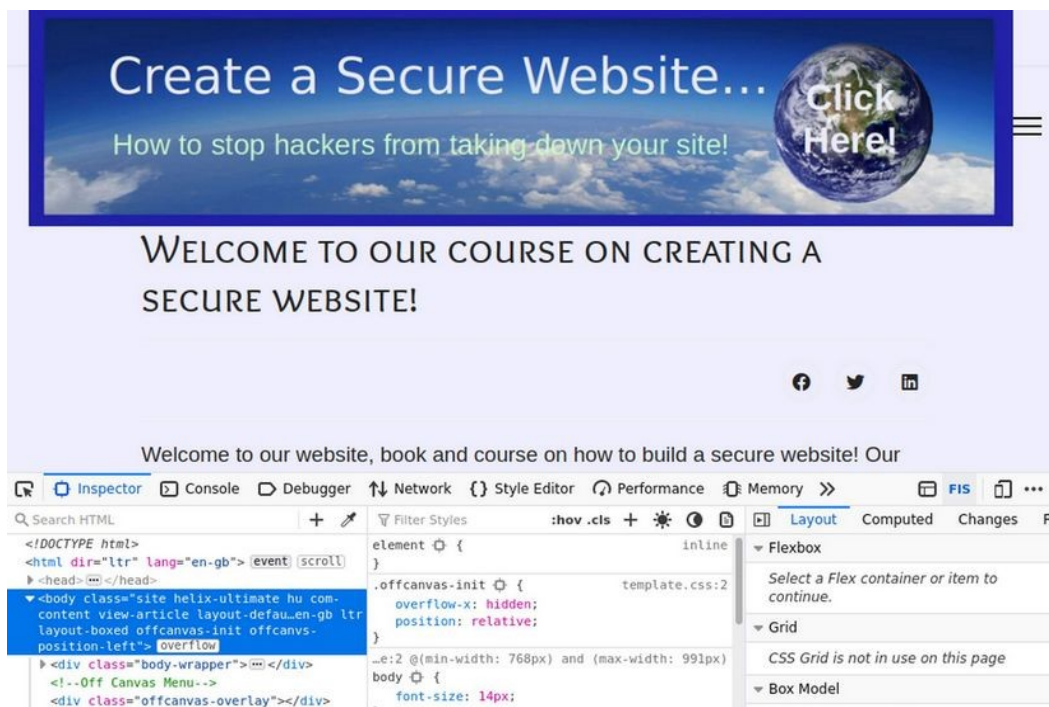
Note that each browser takes up less than half the desktop. On the far right side of the desktop is a Libre Writer document I use to take screen shots and record the changes I am making to the website and for copying CSS changes from the front end browser Inspector to the back end Template CSS box.

## Use the Front End Browser Inspector

In the Libre Wolf Front End browser top menu, click **Tools, Browser Tools, Web Developer Tools**:



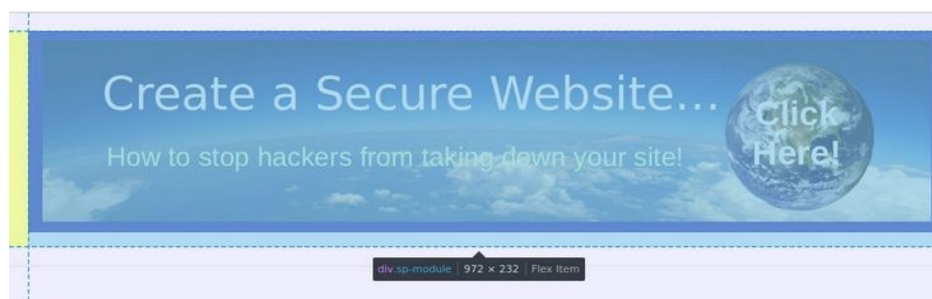
This will open a split screen with your website front end at the top of the browser and the HTML code in a lower left box and the CSS code in a lower right box. Below your website front end and above the HTML and CSS boxes is a menu with the Inspector icon on the far left side.



Click on the Inspector Icon which is to the left of the word Inspector.

## Use CSS to fix the header ghost margin

Hover the inspector over the header row and click on it:



There is a small ghost margin on the left side of the screen that is

preventing our header from taking up the entire space.

Add the following CSS to the Helix Custom CSS box:

**#sp-header .sp-module {margin-left: 0px;}**

Then click Save. Then click Close. Then clear the Joomla cache. Then clear the browser cache. This is why we have added this code to the bottom of the Helix Custom CSS box. Then click Save. Then in the front end browser, clear the cache and reload the page. Now the ghost margin is gone and our header is full width and centered.

### Reduce the margin between the header and the article

There is still a huge gap between the header and the article title:



In the front end browser, use the inspector to highlight and select this gap. Click on this to show the CSS properties for sp-main-body:



The main body padding vertical padding has been set for 100px. This is ridiculous. Add the following to the Helix Custom CSS box:

**#sp-main-body {padding: 20px 0;}**

Click Save. Then clear the cache on the front end browser, reload the page and view the result:



There is still some space between our header and the article title. But this will be taken up when we add a menu below our header.

### Hide the Featured Icon

Use the Librewolf Inspector to select the red Featured icon. Here is the CSS and a property to hide it:

```
.article-list .article .featured-article-badge {display: none;}
```

```
.article-details .featured-article-badge { display: none; visibility: hidden;}
```

Here is the result:



### Reduce the width of the article column:

On wider screens, the article column is too wide. Studies have shown that reading is faster and comprehension greater if the number of words per column is about 14. Below there are more than 18 words per column. This is despite the fact that we have set the body layout to be a Boxed Layout with a limit of 1200 px.



Welcome to our course on creating a secure website!

Welcome to our website, book and course on how to build a secure website! Our goal in this course is to help you create your own secure website using free open source web building tools. This course is intended for those who have already had their websites hacked and want to learn a more secure way to build hacker proof website. It is also intended for those building their first website who want to learn a better way to build a website. It is also useful for anyone wishing to help others build more secure websites.

What causes this is that Bootstrap sets the columns too wide on wide screens - and Helix does not offer us an easy way to make the boxed layout narrower. We will therefore have to use CSS to fix this problem. Add this to our Custom CSS box:

**.layout-boxed .body-innerwrapper {max-width: 960px;}**

Then clear the front end cache, reload the page and view the result:

Welcome to our website, book and course on how to build a secure website! Our goal in this course is to help you create your own secure website using free open source web building tools. This course is intended for those who have already had their websites hacked and want to learn a more secure way to build hacker proof website. It is also intended for those building their first website who want to learn a better way to build a website. It is also useful for anyone wishing to help others build more secure websites.

We have chosen a body width of 960 because it is divisible by 2, 3 and 4. So we can have 2, 3 or 4 columns. We do not want to reduce the body width any narrower than 960 pixels because we will need this width to place our Feature Box modules later in this course.

And add this to the main body element CSS:

**#sp-main-body {padding: 20px 40px; max-width: 960px;}**



This is still a little wide. But much easier to read than before!



## Prevent the Hamburger Menu from appearing too soon

A big problem that is currently hidden, because we have not set up our Main Menu items yet, is that the Main Menu is hidden too soon and the mobile menu displays too soon as we narrow the screen width. Make the screen narrower and watch where the mobile hamburger menu appears. This problem is also caused by the default Bootstrap layout. The solution to this problem is to add a custom media query to our custom CSS:

```
@media (min-width: 700px){
```

```
.sp-megamenu-parent { display: block !important; }
```

```
#offcanvas-toggler { display: none !important; }}
```

There are a few more lines we need to add to our Helix Custom CSS. Here is the complete list of CSS changes:

```
#sp-header .sp-module {margin-left: 0px;}
```

```
#sp-main-body {padding: 20px 40px; max-width: 960px;}
```

```
.layout-boxed .body-innerwrapper {max-width: 960px;}
```

```
.articleBody {max-width: 990px; padding-left: 20px;}
```

```
#sp-menu .sp-column {height: 30px;}
```

```
.sp-megamenu-parent > li > a, .sp-megamenu-parent > li > span {  
    line-height: 30px;}
```

```
.container-sm {padding-right: 0 !important; padding-left 0 !important;}
```

```
.article-list .article .featured-article-badge {display: none;}
```

```
.article-details .featured-article-badge { display: none; visibility: hidden;}
```

```
@media (min-width: 700px){
```

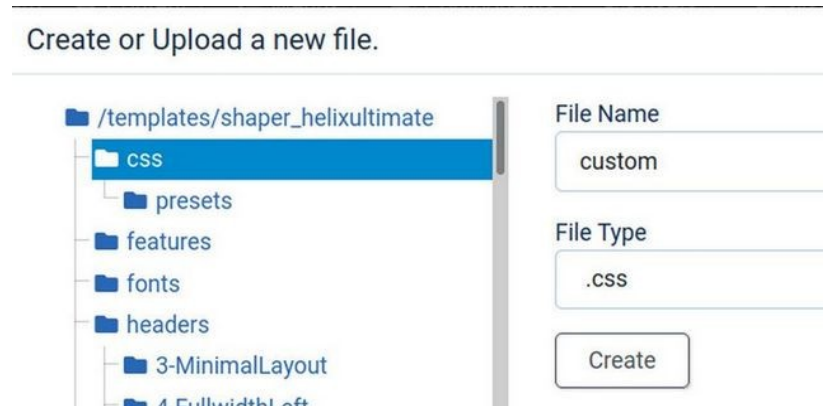
```
.sp-megamenu-parent { display: block !important; }
```

```
#offcanvas-toggler { display: none !important; }}
```

## Move the Custom CSS Lines to a Custom CSS File

The Helix Custom CSS box is convenient. But right click on your Home page and click **View Source**. You will see that all of these CSS lines are added to the head of the HTML file. It is much better to add them to a template **custom.css** file. Note: While the default Joomla template insists

on a file named user.css file, the Helix template insists on a file named custom.css. To create a custom.css file, go to **Templates, Code** and click on the Shaper\_Helix template to edit it. Then click New File. For File Name, type *custom*. For File Type, select **css**. Click on the css folder in the left column to select it.



Then click **Create**. This will open up a custom.css file on Line 1.

### Download our Rainbow Custom CSS file

We will later review how to create colorful Feature Boxes using special CSS classes – all of which are included in our Rainbow Custom CSS file. This file also includes more than a dozen additional CSS improvements to the Helix template CSS. To download this file, go to this page:

<https://createasecurewebsite.com/free-downloads/3-rainbow-modules-css-presets-package>

Right click on the file to unzip it. Then open the file with LibreOffice Writer and copy it all into your computer clipboard. Then paste it all into your blank custom.css file. Then click Save and Close.

Then delete the CSS from the Helix Code box and click Save. Then view the front end to verify the result is the same.

This completes our customization of the Helix template. If you would like to learn more about how to read and edit CSS, we have a complete course that will introduce you to both HTML and CSS. Here is the link:

<https://learnhtmlandcss.com/>

Here is what the top of our News website Home page looks like after adding our slogan to the header and the top level menu items below the header:



### **What's Next?**

In the next article, we will review how to create news topic categories and post news articles.

## **3 News Topics and Articles**

Now that our news site is set up, we are ready to cover how to create matching categories on your Home computer and Joomla website to organize and place your website articles and images in. We then explain how to write an article that includes both text and images. Next, we review how to efficiently transfer those images first from your source document to an image folder on your Home computer and then from this images folder to a matching images folder in the back end of your Joomla website. And we show you how to reinsert these images using the JCE Editor as you post your article with the Joomla Article Manager.

This chapter is divided into the following four sections:

3.1 Create Your News Website Topic Folders

3.2 How to Solve the Topic Categories versus Date Problem

3.3 Write and Post News Articles

3.4 Build your Community News Team

### 3.1 Create News Website Topic Categories and Folders

Topic categories describe the scope of topics covered by your news website. Here are a few examples of the Topic Categories of various local news websites. This one has 8 top level news categories:



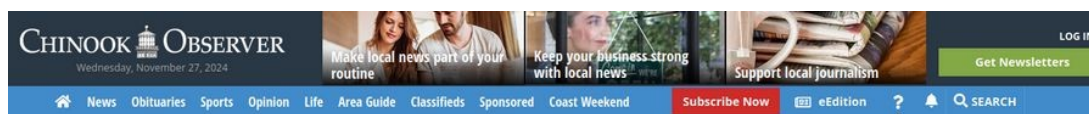
This one has 9 top level topic categories:



This one has 11 top level topic categories:



This one has 17 different top level topic options:



This one splits the top level topics into two menus totaling 18 options:



The problem with a lot of different topic categories in the top header of your news website is that new readers might get confused by all of the options.



It would be better to place some of the topics or categories in a drop down second level hidden menu or better still to move them to a bottom menu. This is particularly true of topics such as **About Us** that have nothing to do with the actual news. We will review Home Page Layout in a later article. For now, we want to focus on the scope of topics covered by your local news website.

Here are 6 common topics: **Schools, Sports, Opinion, Community (Local News), About, Send Us News**. Our goal is to give local citizens a reason to visit your local news website on a daily basis. Therefore offering a calendar of **Local Events** is a way to both encourage readers to visit your news website and also offering local community members a way to promote their local events. These events should include school board, city council and county council meetings. But they can also include **local parent meetings**, entertainment events, local club meetings, church events and events sponsored by local businesses. Not only do you encourage people to visit your website – you also help build your local community.

### **Whatever you decide – Your News Website Topic Categories should be clearly organized**

Setting up well organized news website topic categories to place articles, images and menu items in is important to avoid having your website turn into a mess over time. While categories can be added later, attempting to change the location of articles and images will likely result in broken links. This is why setting up your website topic categories should be done before writing articles and adding images.

### **Plan Ahead... Organize your News Website Topic Categories to allow for Future Growth**

The first step is to consider the entire scope of your news website – not merely what it will look like now, but what it might look like in the future. Building your news website is like building a home. You may want to start with a simple one one room house. But most folks add extra rooms onto their homes over time. Design a solid foundation so you will not need to tear down your entire just to add a new bedroom.

First create the structure or the plan for your new house. Then create the web pages and put them like building blocks in their proper place in the house.

Many websites are like a random pile of bricks...



A well organized website is like  
a nicely planned brick home



Your news website topic categories are also like the chapters of a book. Your news website should be more than just a random collection of pages and links to navigate between pages. It should be organized like the **Table of Contents** in a book, describing how the contents of the book are organized and the logical flow from one page to the next by organizing the topics or subjects into chapters (which Joomla called categories).

There are several reasons to organize your website main menu like the Table of Contents in a book. The first is that your website viewers have been reading books and magazines and newspapers all their life. They are used to seeing a Table of Contents and having the content organized into Chapters (or in the case of a Newspaper, Sections and Pages). The Main Menu should be a Table of Contents which your viewer can quickly scan through in order to understand the organization of your website and where they can find a particular article they are interested in reading. Another important reason is conservation of space. Unlike a book, the Main Menu will and should appear on every page to help the viewer with Site Navigation.

### **Translating Book Topic Categories to News Website Topics**

Imagine you are writing a 360 page book. Your 360 page book might have 9 chapters each with 40 pages. You can further divide these 40 pages into 4 sections each with 10 articles. Each article might have 1 to 10 pages of text and images which is read by scrolling down the web page. Using our

book analogy, the Joomla name for Articles in the book is Articles. The Joomla name for Chapters in the book is Top Level Categories and the Joomla name Sections in each Chapter is Second Level Categories. The Table of Contents for the book is called the Main Menu:

**Book Name     >>>   Joomla News Website Name**

**Book Pages     >>>   Joomla Articles**

**Book Chapters >>> Joomla Top Level Categories**

**Book Sub Chapters >>> Joomla Second Level Categories**

**Book Table of Contents >>> News Website Main Menu**

There is an unfortunate tendency to head straight to the Menu Manager to try to create your menu. But the first thing to know about Menus is that they are creating links to actual pages. You first need to write some articles before you use the Menu Manager to create your links to their associated web pages.

This leads to the second unfortunate tendency which is to start writing articles. This leads to a poorly organized website. To use the house building analogy, you should not start building a house by constructing a bunch of rooms and hoping they will fit together. Instead, you first need to design a PLAN for the House and write this plan down on paper. In Joomla, there are two levels to this plan. The first level is the CATEGORIES. And the second level includes the actual ARTICLES. So you begin your house plan (or your book) by defining some top level and second categories. We will do this next.

### **Create Your News Website Topic Category Structure**

One of the many purposes of a Joomla website is to help you organize the structure of your pages. This is why Joomla is called a Content Management System (CMS).

With all Joomla websites, all Articles are organized and placed into specific Categories. Here is an example of a Topic Category structure for a local news website:

### **Example of Topic Categories for a News Website**

11 Top Level Category	36 Sub Categories
-----------------------	-------------------

Latest News	A few articles that appear at the top of the Home page and not in the main menu. Includes all news categories – articles which are also placed in their actual categories and eventually removed from the Latest News category.
1 News	Community News, State News, National News, World News including elections, issues and politics
2 Sports	Local Sports, College Sports, Pro Sports
3 Schools	State Funding & Policies, School Board, Local Schools
4 Business	Local Business Services Directory, State Business News, National Business News
5 Events	School Events, Business Events, City Events, County Events, Church Services, Community Events
6 Opinion	Editorials, Reader Opinions, Local Leaders Opinions
7 Happenings	Awards, Births, Weddings, Anniversaries, Memorials, Legal
Submissions	Submit News, Submit Opinions, Submit Announcements
Subscribe	Subscribe to our Newsletter, Advertise with us
About	About Us, Contact Us, Ask Us a Question

## 8 Steps for Creating your Folder & File Structure

We will begin with a brief overview of the entire process of creating articles and web pages. Before we write articles, we need to set up the categories to put the articles in. This section describes 8 steps for creating the folder and file structure of our website on our secure news website work or home computer. In the next article, we will describe a similar process for creating an identical folder and file structure on our website. In other words, we actually **build our website on our secure Home or Work computer first**. And then copy this structure to our Joomla website later.

The process begins by creating a root folder to hold all of our other news website folders. But because each image in each article is actually a separate file, we need to create two separate file structures – one called Articles and the other called images (using lower case letters for our images folders).

Below are the 8 steps we will use:

## 8 Steps for Creating your Folder & File Structure On your Home Computer

#1 Create your Website Root Folder

#2 Create Article & Image Folders  
Inside your Root Folder

#3 Create Numbered Category Folders  
Inside your Articles Folder

#4 Write Articles as Libre Writer Documents  
& Place in Category Folders

#5 Compress Each Article Image to 150 DPI  
& Create a Web Copy of each Article.

#6 Create Matching Category Folders  
Inside your Images Folder

#7 Create an Images Folder for Each Article  
inside of the Category Images Folders

#8 Move Images to Article Images Folder  
to Create Text Only Web Articles

Let's take a closer look at each of these 8 steps.

### Step #1 Use your File Manager to create your News Website Root Folder

We begin by creating a “root” folder for our news website. Use your website domain name or sub domain name for this root folder. For example, we will call our root folder **Our Community News** for our news website with the domain name **our.communitynews.us**. If you are part of our network of local community news websites, your root folder might be named mytown.communitynews.us or mycounty.communitynews.us or myschooldistrict.communitynews.us.

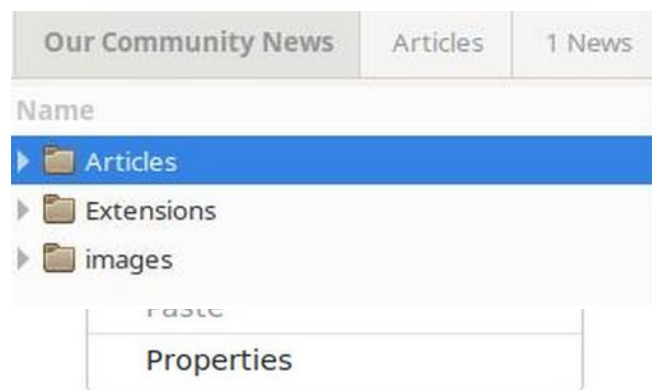
To create your news website root folder, open your secure computer file manager and right click on the screen.



Click **Create New Folder**. This will create a folder called Untitled Folder near the bottom of your list of folders. Right click on this folder and click **Rename** to rename it as the domain name of your website. We will name our Root Folder **Washington Community News**.

## Step #2 Create Article, Images and Extensions Folders

Click on your website root folder to open it. Then right click on the screen and click Create New Folder. Rename the first folder **Articles**. Then right click on the screen again and rename the second folder **images**. **Then create a third folder named Extensions**. This is the initial folder structure you should create on your news website:



The Articles folder name can include capital letters and spaces. But the images folder and sub folders and file names should all be lower case letters only with no spaces. Instead, use dashes to separate words in your images folder, images sub folders and image files.

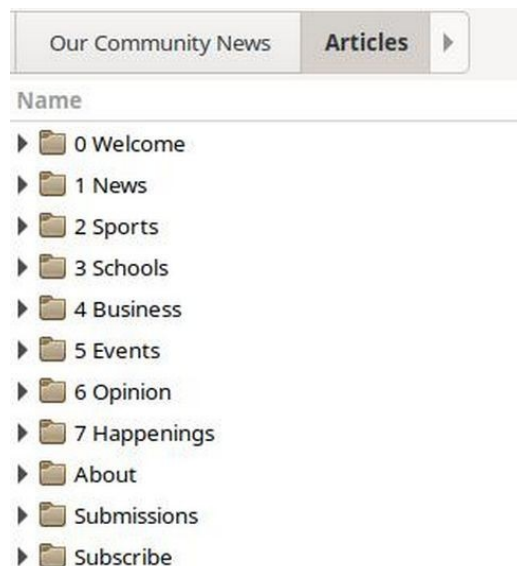
We will use the Extensions folder to keep all of our add on extensions. The other two folders, Articles and images will be used to organize our website content on our secure home or work computer.

The first folder is called **Articles** and should contain all of the articles which will eventually be posted in your news website article manager. These articles should be assigned to category folders just as articles on your website are assigned to categories.

## Step #3A Create Numbered Category Folders inside of your Articles Folder

Click on your Articles folder to open it. Then right click and create a new folder for each of your news website **top level topic categories**. Use your

topic categories to create top level folders for each of our top level topics on our secure home or work computer. Numbering your category folders will help keep the categories in the correct order in a manner similar to a Table of Contents. When you are done, the inside of your articles folder should look like this:



The articles folders do not need to be lower case. This is because the Joomla Category Manager allows for folder names to have capital letters and spaces. This is also a good way to tell your Articles folders from your images folders (which have the same names but are lower case with no spaces).

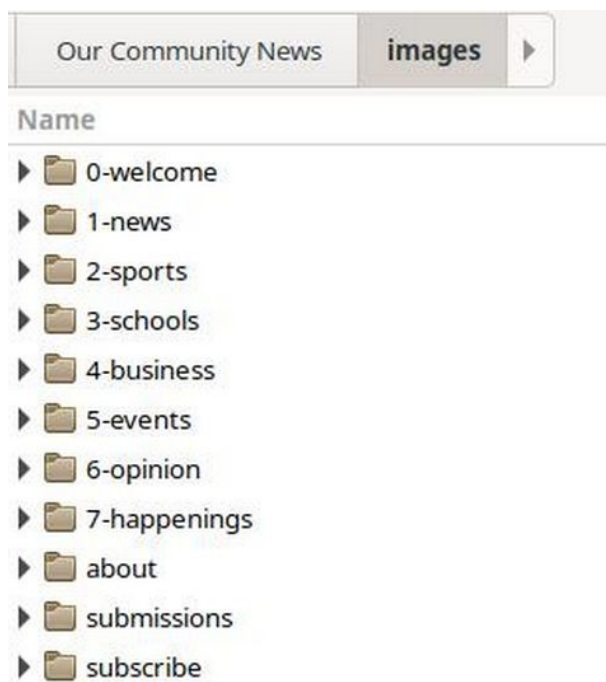
Inside of each top level topic folder will be our second level topic folders. In order to add a new folder each year, we will add the year at the beginning of each folder. This will allow us to keep 2026 Community News in a different folder from 2025 Community News. We will explain more about this issue in our next article. Here is what the second level topic folder looks like for our News category:



### Step 3B: Create Category folders for your images in your secure home or work computer file manager

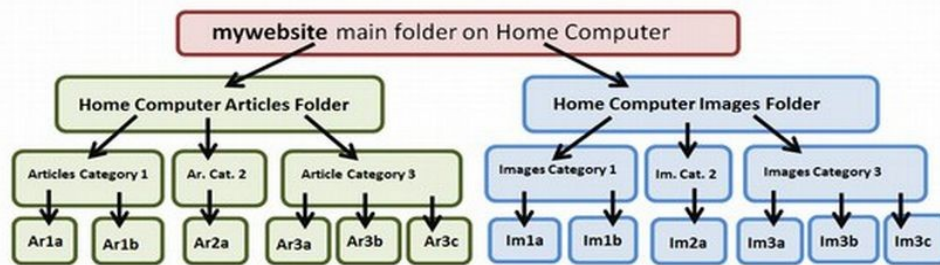
In addition to using our categories to create folders to place articles on our home computer, it is also important to create identical category folders for the images. You can imagine that if you have 36 articles (in other words 9 topic categories each with 4 articles) and 10 images per article, it is extremely important to keep these 360 images organized both on your home or work computer file manager and on your website back end.

Opening up the **images** folder reveals the same category folder structure used for articles. Note that all images folder names (and all images) use lower case letters with no spaces. Here is what they look like in my home computer images folder:

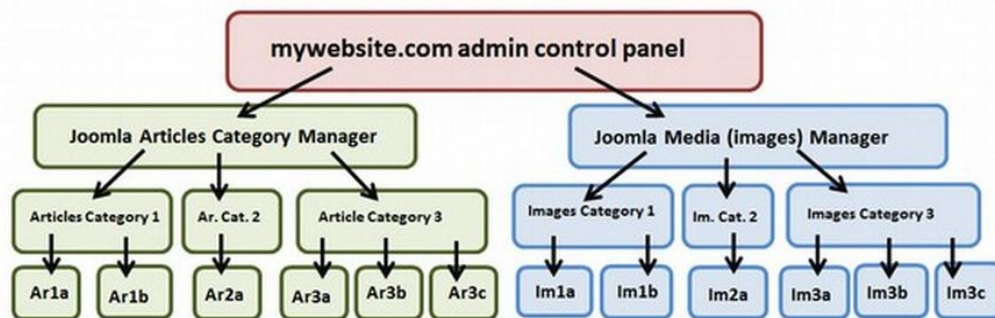


We will later use those same categories to create folders for our articles and images with our Joomla news website's Category Manager and Media Manager. Finally, we will use the same categories to create Menu items in our Main Menu.

Below is what the folder structure will look like on our secure Home or Work computer.

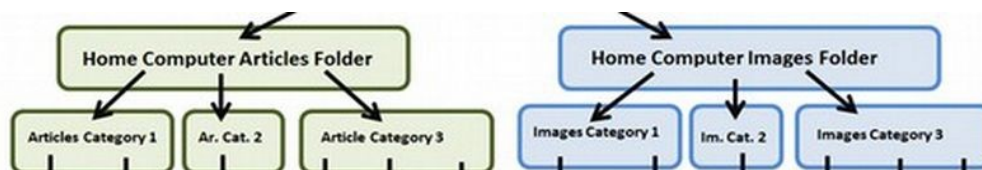


We will create an identical folder structure on for the articles and images on our website administrator control panel using the Joomla Category Manager and Joomla Media Manager. What your News Website Folder Structure will look like when you are done:



There will eventually be a series of articles inside each of these Category folders. But as we explain further below, there are always two versions of each article, the original version with images and a web or text only version in which the images have been removed. These articles are also numbered to keep them in the right order.

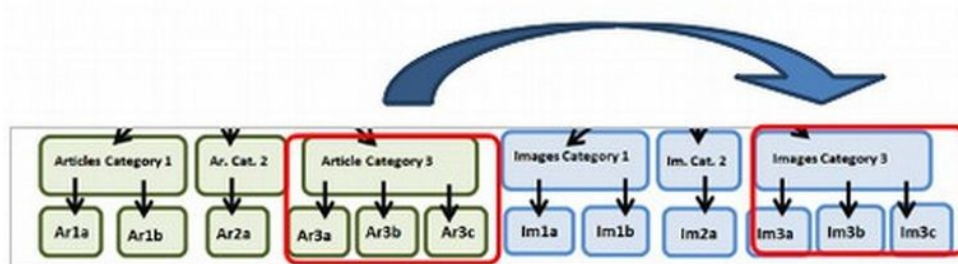
The images folder category names on our home computer are the same as the article category names on our home computer:



Then if you open up any of these image category folders, you will see four folders for each of the articles in that category. These images folders hold the images which will later be transferred to the images folder on your server.

The folder names are short as these will eventually be used as part of the file pathway for our images on the server and we do not want long names in the file pathways. We know they are images folders because their folder

names are lower case with no spaces. Each article gets its own images folder. If you have three articles in a given category, you should have three images folders for that same category:



When you open up any of the images folders, you will see all of the images that were removed from the WEB version of the article. These images are listed in numerical order to help re-insert them in the proper order AFTER the WEB or TEXT ONLY version of the article has been copied and pasted into the article by your text editor. Here are the first five images from our first article in our first category:

1-use-linux 1.1-replace-windows	
Name	Size
01.jpg	32.8 kB
02.jpg	28.5 kB
03.jpg	26.8 kB
04.jpg	49.3 kB
05.jpg	56.9 kB

We will soon set up this same image folder structure in the Joomla Media Manager.

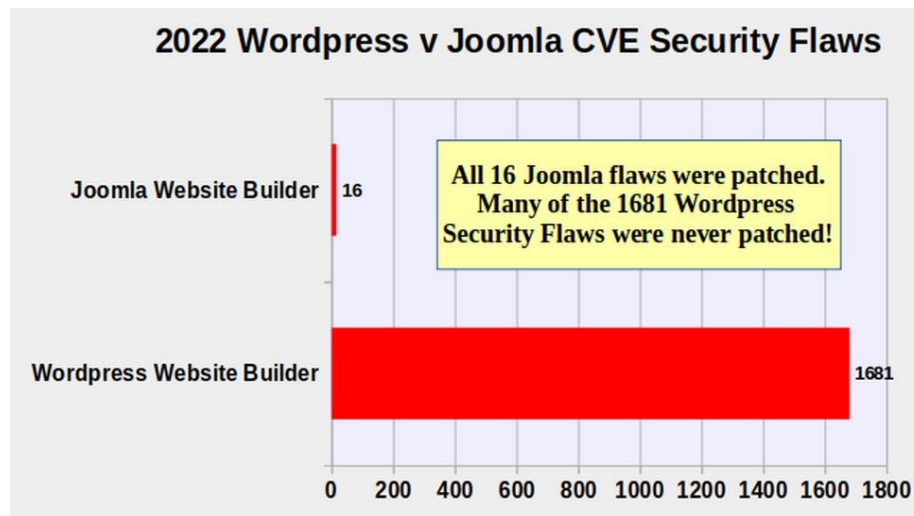
### What's Next?

Now that we have our folder structure on our home computer, we will next use Joomla to create an identical structure on our news website.



### 3.2 How to Solve the Subject Category versus Date Problem

The primary reason we use Joomla instead of Wordpress to organize our News website is that Joomla is much more secure than Wordpress. Joomla recognizes that the Internet is loaded with hackers and therefore makes security a top priority. Wordpress prioritizes simplicity above all else. But simplicity is one of the reasons why every year, Wordpress has nearly one thousand new security problems – many of which can not be patched – while Joomla has only a few security problems – all of which are patched immediately.



A second reason we use Joomla instead of Wordpress is functionality. Joomla has many features such as a customizable user access control system that does not exist in Wordpress.

But a third very important reason Joomla is a wiser choice than Wordpress is that **Joomla organizes articles by TOPIC categories** while Wordpress automatically organizes articles by YEAR AND MONTH. Wordpress handles topics by allowing the author to create and use “tags”. Organizing articles by year and month creates two major problems. First, the Wordpress tag system is poorly recognized by Search Engines. Search for an article posted on a Wordpress website that has been around for a few years and it becomes obvious that the site has turned into a structural mess. The Search Engine is likely to take you to a top level page that has 10 articles per page and includes more than 20 pages of articles. If you do not know the exact date the article was published, you will need to scroll through 200 articles to find the one you want. It is like looking for a needle in a haystack.

Do the same for a well organized Joomla website – which is first divided by topics – and the Search Engine is much more likely to take you directly to the article you are looking for. This is important because 90% of all new users will find your website by doing a Search Engine **search for a particular TOPIC. No one does a search for a particular DATE.**

A good example of the tendency of Wordpress News website to turn into a Search Engine mess over time is the Readers Digest. The website is divided into a few categories. But within each category, all articles appear on the same top level page automatically organized by year and month. Here is a link to the Readers Digest “Home” category page:

<https://www.rd.com/home/>

Scroll down the page and you will see a total of 30 articles, At the bottom of the page, you will see that there are a total of 25 pages in this category:



In short, this page actually has 30 times 25 or 750 articles! This problem will only get worse in the coming years as new articles are added to this poorly designed system.

Another example is Time Magazine. It is divided into sectional blogs, one of which is called Politics. Here is a link to the Politics page:

<https://time.com/section/politics/>

There is a “Featured” article at the top of the page followed by three secondary featured articles. Below these four articles are 16 more articles. But at the bottom of the page is this:



### Why Trump Actually Needs Mexico

There are many reasons for Mexico to worry about a President Trump. But it has considerable leverage and both countries need good ties.

By Alex González Ormerod November 21, 2024



### Man Convicted of Killing Laken Riley Sentenced to Life in Prison Without Parole

Jose Ibarra, convicted of killing Laken Riley, has been sentenced to life in prison in a case that was a flashpoint in the immigration debate.

By KATE BRUMBACK / AP November 20, 2024

1 2 3 ... 1094 >

Wow. This page includes 20 times 1094 or a total of nearly **22,000 articles all on the same page**. This lack of longterm organization makes this page a nightmare for Search Engines to categorize.

Click on any article and you will see a link that gives no clue to the internal organization of categories by subject or by year and date. Here is a link to an article now buried on Page 9 which was posted on October 29, 2024 about the Harris brilliant strategy to defeat Trump:

<https://time.com/7133129/kamala-harris-trump-ellipse-rally/>

Here is another article posted the same day calling Trump a racist:

<https://time.com/7134318/donald-trump-madison-square-garden-rally-insults-lovefest/>

Here is an article posted the same day about why Harris will win in Pennsylvania: <https://time.com/7113672/kamala-harris-ground-game-pennsylvania/>

Other than beginning with the number 71, the link numbers (likely automatically created by Wordpress) are essentially random.

Here is a link to one of the images:

<https://api.time.com/wp-content/uploads/2024/10/harris-Pennsylvania-democrats-election-01.jpg?quality=75&w=640>

This link is a security problem because the “wp” in the link immediately informs hackers that the Time website is a Wordpress website. But the organizational problem is that all images from all articles for the month of October 2024 are placed in a folder named 10 in a folder named 2024. A

much better practice is to include more images in each article and create an images folder associated with each article.

Variety is another news website that uses Wordpress. Here is a link to an article in their Politics section, posted on November 11, 2024, claiming that Trump will create a “dark world” for Transgenders:

<https://variety.com/2024/politics/news/jinkx-monsoon-bendelacreme-transgender-rights-trump-election-1236206479/>

The article was placed in a folder called news which is in a folder called politics which is in a folder called 2024. This means that all articles on political news in 2024 are in the same folder and are assigned a random number by Wordpress. Here is a link to an image associated with this article:

[https://variety.com/wp-content/uploads/2024/11/MG\\_8335.jpg?w=1000&h=667&crop=1&resize=681%2C454](https://variety.com/wp-content/uploads/2024/11/MG_8335.jpg?w=1000&h=667&crop=1&resize=681%2C454)

All Wordpress images are automatically assigned to a year and month folder independent of the article they are placed in. Good luck finding the image if you want to edit it.

Tech Crunch is another news website that uses Wordpress. Here is a link to an article posted on November 26, 2024:

<https://techcrunch.com/2024/11/26/perplexity-mulls-getting-into-hardware/>

The link shows that the article is filed in a folder called 26 which is in a folder called 11 which is in a folder called 2024. There is no reference to the fact that this article is posted in a Topic category called Startups. In short, all articles published on November 26, 2024 are in the same folder regardless of which Topic category they are in.

Microsoft News also uses Wordpress. They have a category called Diversity. Here is a link to an article about how Microsoft hired a girl from a small town India.

<https://news.microsoft.com/source/asia/features/how-cybershikshaa-is-ushering-in-gender-diversity-in-indias-cybersecurity-sector/>

The article was not placed in a folder called Diversity. Instead it was placed in a folder called Features which is in a Folder called Asia which is in a folder called source.

Here is a link to an image in this article:

<https://news.microsoft.com/wp-content/uploads/prod/sites/45/2022/12/HIL9721.jpg>

Again, there is no way to connect this image to the article. The image was automatically placed by Wordpress into a folder called uploads, prod, sites, 45 in a folder called 12 in a folder called 2022 with a random ID number at the end.

By comparison, here is a link to one of my articles in our course on how to create a secure news website:

<https://createasecurenewswebsite.com/2-news-website-setup/2-4-helix-template-first-steps>

The link includes the category that the article is in. Here is a link to the first image in this article:

<https://createasecurenewswebsite.com/images/2-site-setup/2.4-helix/01.jpg>

You can see that the image is numbered 01 and in an article folder called 2.4 helix which is in a category folder called 2 Site Setup which is in the images folder. Joomla makes this clear well-organized article and image structure easy to create. It does take some time and thought at the beginning of creating your news website to set up these categories. But the result is a well organized website with clear Topic-category links easily understood by Search Engines versus the Wordpress complete mess.

### **How to add Years to Joomla categories?**

The problem still remains: How can we use Joomla to organize potentially hundreds of articles posted over dozens of years by TOPIC categories and still allow for articles to be arranged by YEAR (and perhaps even month)?

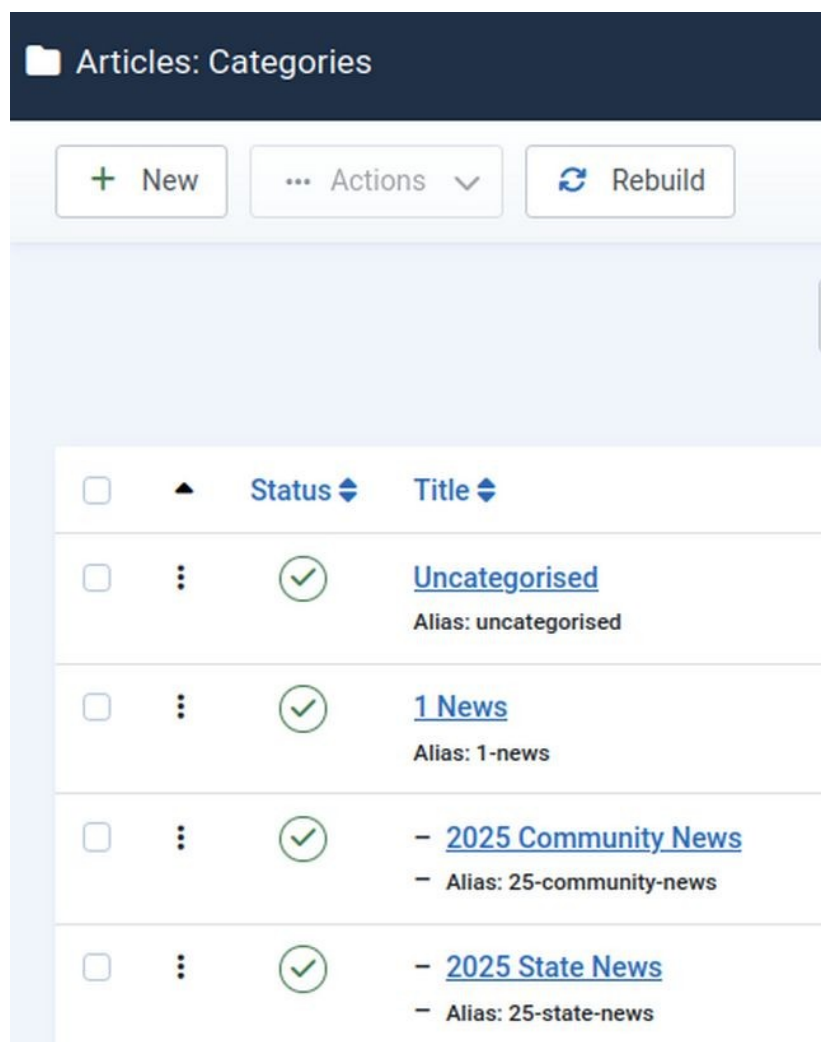
The answer is that Joomla is extremely flexible. You could do like Wordpress does and use a tag system to organize articles. But then you create problems for Search Engines. You could just create year and month categories for your articles. But that also creates a mess. It is much better in the long run and create Top Level Topic categories and place Second Level Topic categories in these Top Level Topic categories. It takes a few minutes more to set up. But the result is a better organized website which is easier for Search Engines to understand.



If you only have a few articles per year in a given category, you may only need to place a year folder in each category. Joomla will still automatically organize categories by date in this year folder.

On the other hand, if you have more than thirty articles per year in the same category, then you should take the time to also set up monthly topic folders for that category within the yearly topic folders. Again, it takes only a few minutes to set up monthly folders in yearly folders in any given topic category folder.

Here is an example of our community news website topic categories and sub categories. This article category and sub category structure is identical to the articles category and sub category folder structure on our secure home or work computer:



To create a new category, click on Content, Categories, New. Type in the

Title and if it is a sub category, assign it to its parent category. Then click Save and New to create the next category.

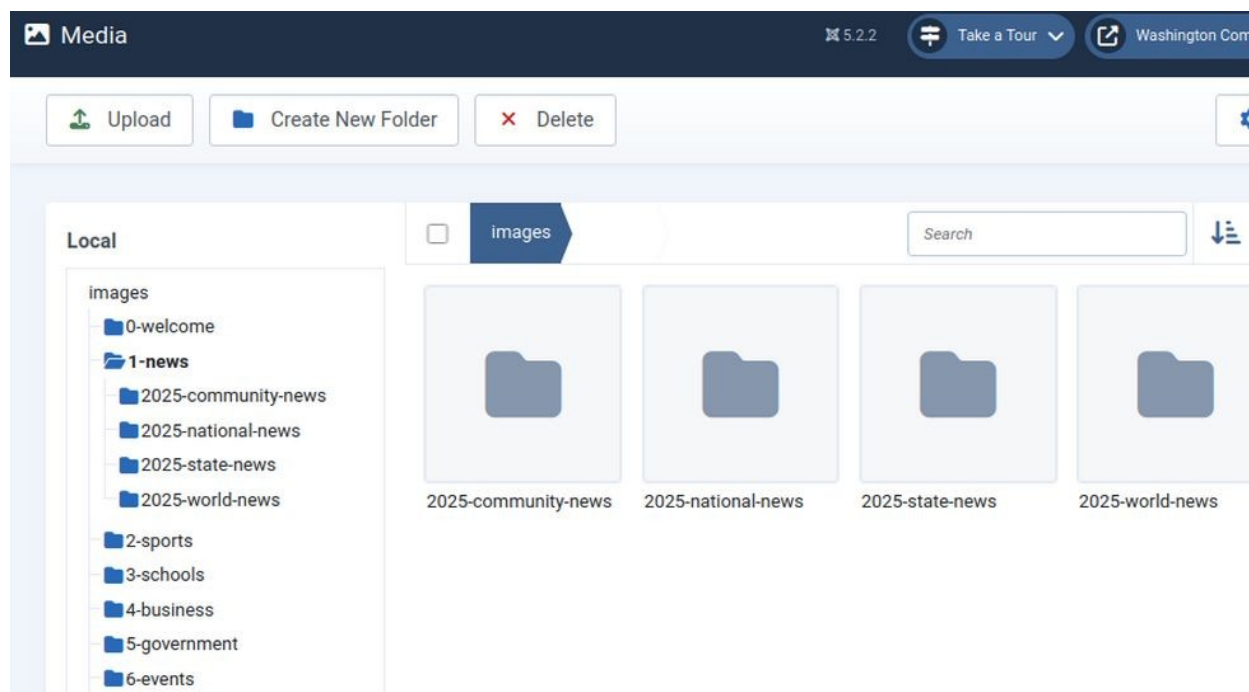
Each sub-category folder begins with the year 2025. This allows us to create 2026 Topic category folders for our 2026 articles. Each article is assigned to the 2025 sub-category folder when you select while creating the article. If you are posting a lot to a given subcategory folder, then add monthly folders and post new articles to monthly folders. On the other hand, if there are no articles in a given category, at some point, you should consider getting rid of that category.

Finally, in beginning of 2026, you can evaluate whether you need monthly folders for any given subcategory folder. The 2026 folder structure does not need to be the same as the 2025 folder structure. It is likely that at least initially, you will be working on your articles on your own and perhaps posting only one or two articles each month in a given sub category. So you may not need monthly folders.

However, by your second year, you may find others willing to post articles to your website on topics they are passionate about – like reporting on school board meetings. As your number of community reporters grow, you can add monthly folders at any point.

The same choices exist for organization of your article images. You could do like Wordpress does and ignore Topic categories for images all together and just create a 2025 year folder in your images folder. Then add numbered 01 to 12 folders in the 2025 folder. But then all images for all articles for a given month would be in the same folder. A much better option is to create topic category folders that match your article topic categories. If you have a lot of articles in a given topic category, then add monthly image topic folders in your yearly topic image folders.

Here is an example of our News Website images folder structure. This images category and sub category structure is identical to the images category and sub category folder structure on our secure home or work computer and identical to the category and sub category structure of our article categories and sub categories:



To create a new images folder, go to **Content, Media** and click **Create New Folder**. Type the title of the images folder (lower case, no spaces). Then click Create. To create image sub folders, click on the parent folder. Then click Create New Folder.

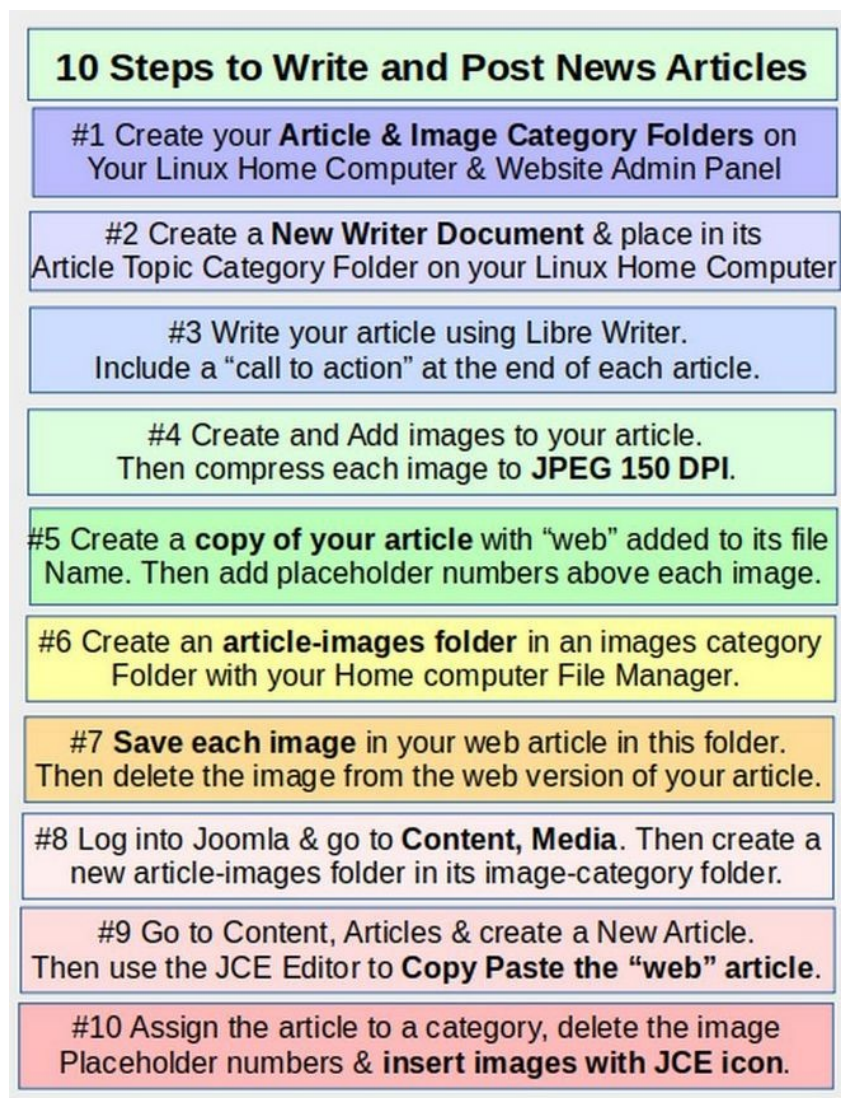
Regardless of whether you use yearly or monthly folders, you should get in the habit of creating an article images folder and place all images for each article in its own folder. In reviewing news articles posted on Wordpress websites, it was common to find only a single image associated with the article. This is because Wordpress images are always a mess to create and edit. A huge benefit of using Joomla is that it makes it extremely easy to add and organize images to your articles. The more images you add to your articles, the better your readers will be able to understand and remember the information you are conveying in your articles.

## What's Next?

In our next article, we will review how to use Libre Writer to write your web articles.

### 3.3 How to Write and Post News Articles

The article describes 10 steps to write and post a Community News website article. Other than the first step, creating your News Topic Category folders, which is done before writing news articles, these steps are done each time you add a new news article to your News website. While many of these tips apply to posting an article to any website, this article was mainly written to help authors post articles to a Joomla News website using a secure Linux computer. If some of your contributors do not yet have a secure Linux computer, they should email articles to someone who does so the **articles can be properly formatted and securely posted to your news website.**



Let's take a closer look at each of these 10 steps.

#### **#1 Create your Article & Image Category Folders on your Linux Home**

## Computer & Website Admin Panel

In our previous article, we explained why and how to create Topic categories to place your News website articles in. Hopefully, this step has already been done. But you still need to decide which Topic category your article belongs in.

### #2 Create a New Libre Writer Document & place in its Article Topic Category Folder on your Linux Home Computer

You should write your News articles with a web compatible Word Processing program – the best of which is called **Libre Writer**.

Unfortunately, the most common Word Processing program, MS Word, has a huge amount of hidden bloated code that is so badly written that it can harm your website if you attempt to copy and paste from MS Word to your web posts. You therefore want to use a free Word Processing program called Libre Writer to create your posts. Libre Writer comes pre-installed on Linux Laptops and does not use a bunch of hidden code. We explain briefly how to create Writer documents at the following link:

<https://learnlinuxandlibreoffice.org/5-benefits-of-libreoffice-writer>

In addition, we have an entire book and free self-paced course that goes into detail on how to create documents using Libre Write at this link:

<https://betterwordprocessing.com/>

However, the process is similar to writing documents with Microsoft Word or Google Docs. Simply open a new Writer document, then **type in the title of your document and save it to its Article Topic category folder**. Your article title should be short so it fits in your website menu. But it should also contain key words describing what the article is about to help Search Engines categorize it properly.

### #3 Write your article using Libre Writer

The first article you should write and post at the top of your Home page is called the Welcome Article. The title is typically titled **Welcome to Our Website!** The Welcome Article explains what your website is all about and why viewers should take the time to read it. Like all your other articles, your first article will consist primarily of a combination of text and images.

The first step to creating your Welcome article is to create a new Writer document. Save the document to your website **0 Welcome** folder which should be in your Articles folder. This Welcome article (and most other



articles) can be divided into the following 5 parts:

**Part 1 is the Title:** Welcome to our Website!

**Part 2 is the Introduction TEXT:**

Welcome to our website. Our mission is to help you!

**Part 3 is the Main Body Content** which may include several points:

Main Body First Idea TEXT:

We offer all kinds of tips to help you achieve your goals.

Main Body Second Idea TEXT:

We also provide a network to help you reach others.

**Part 4 is the Conclusion TEXT**

We are a great resource for helping you achieve your goals!

**Part 5 is the Call for Action TEXT:**

Feel free to contact us with any questions you may have. We look forward to hearing from you!

**#4A Add images to your article. Alternate each image with text.**

Once you have some text, it is time to add images for site visitors that are more visually oriented. Nearly every paragraph of written text should be followed by an image associated with that text. You can add these images as you write your articles or add them after you write the articles. But in either case, to make it clear where the break is between an image and a paragraph, try to alternate text with images by **setting the Wrap property for the image to None**. This will also make it much easier to add your images to your web posts.

Below we have the same article only now we have added an image to match each sentence or paragraph:

Welcome to our website. Our mission is to help you!



We offer all kinds of tips to help you achieve your goals.



We also provide a network to help you reach others.



We are a great resource for helping you achieve your goals! Feel free to contact us with any questions you may have!

### **Why we recommend a lot of images**

A common problem with websites is that they contain too much text and not enough images. As a rule of thumb, there should be at least as much space taken up with images as there is with text.

### **Getting Images to Add to your Articles**

In the above example, we wrote our first article, called Welcome to our

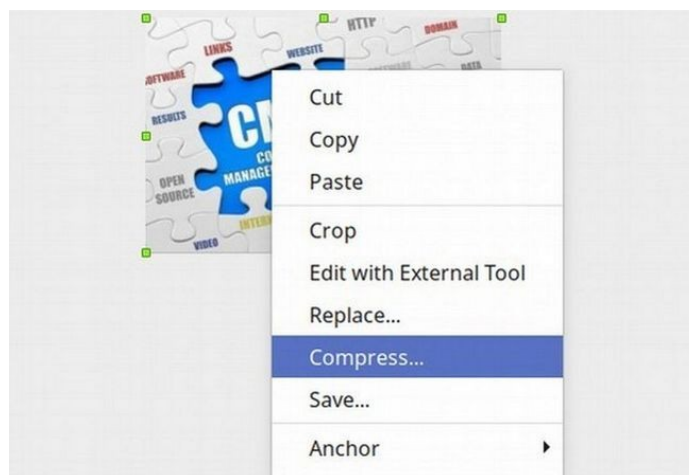
Website. We had 3 images in this article. But where did they come from? The Internet is very visual. Take your time to find images which support your ideas. Use as many images as possible which show people. Charts, graphs and tables can also be copied as images. Images often convey much more information than text and help readers, and especially visual learners, better understand the message you are trying to convey.

### Use a Screen Capture tool to Capture Images

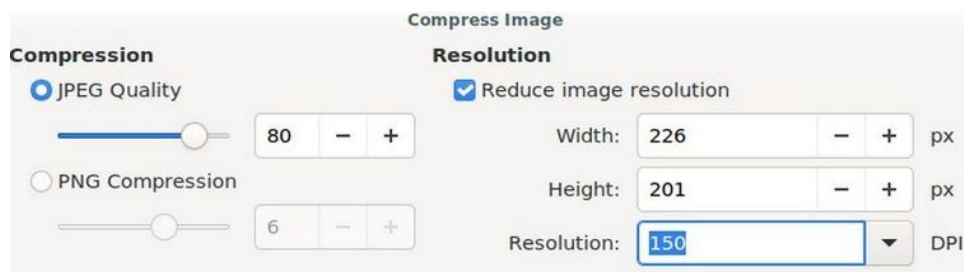
One way to get images for your articles and slide shows is to take them with a digital camera. Another is to capture images and screen shots from the Internet using a screen capture tool. In Linux, there is an excellent free screen capture tool called Flameshot.

### #4B Compress each image to JPEG 150 DPI.

As you add images to your articles in Libre Writer, **right click on each image and click Compress** to reduce the file size as well as to insure that the image has been converted to the JPEG file type.



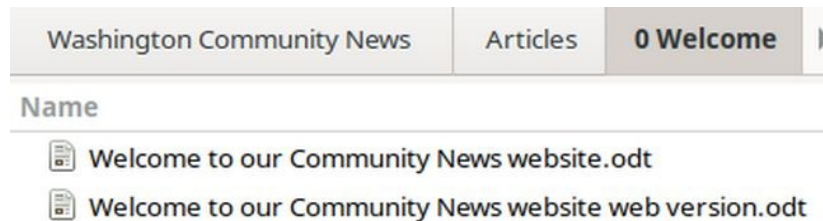
On the Compress Image screen, change the DPI from 300 to 150.



Then click OK. This will turn the image into a JPEG image and also reduce its file size to under 100 kB for the web.

## #5A Create a copy of your article with “web” added to the end of its file name.

When you have finished writing your article and adding all of your images, create a second copy of your article by clicking File, Save A and save your article with the word “web version” added to the end of its file name. You will now have two identical versions of your article, for example, Welcome to our News Website and Welcome to our News Website web version.



Next, close the first Document and continue working with the WEB version of your Welcome article.

## #5B Add placeholder numbers above each image.

Website images are handled differently from text in that text can be copy pasted directly into a website article. Images on the other hand must be transferred and posted one at a time as websites and the internet consider **every image to be an individual link**. Therefore, we need to create a text only version of our Libre Writer document before we can transfer the article to our website. This involves replacing each image with a placeholder number and then saving each image as a separate file. Here is a copy of our Welcome article with the placeholder numbers above each image:

Welcome to our website. Our mission is to help you!

01



We offer all kinds of tips to help you achieve your goals.

02



We also a network to help you reach others.

03



We are a great resource for helping you achieve your goals! Feel free to contact us with any questions you may have!

**#6 Create an article-images folder in an images category folder with your Home computer File Manager for your Welcome article images.**

Create a folder in your images folder with a short name and no spaces to hold your article images. Note that all images folder names should be lower case with no spaces.



**#7A Save each image in the web version of your article in this article-images folder**

Right click on the first image and click save it to your article images folder on your Home computer.





We are ready to place all of the welcome article images in our website images/0\_welcome/welcome folder. We will save our three welcome article images inside of this 0\_welcome images folder. This should be numbered 01, 02 and 03.

Because these image files will be transferred directly to your website, file names for these image files should be in lower case. No spaces or capital letters. It is best to save images as JPG files.

### **#7B Delete each image from the web version of your article.**

As each image is saved, delete it from the web version of your welcome document. This will turn the web version of your welcome document into a text only document that will have numbers as place holders for each image.

Here is our 0\_welcome images folder with our three images in it:

0-welcome	
Name	Size
01.jpg	8.7 kB
02.jpg	11.0 kB
03.jpg	11.8 kB

As you save each image, you should check to make sure none of these images is over 100 KB, but usually Libre Writer Compress Graphic does a good job of optimizing and compressing the images as they are captured and transferred. Note that all three of the images above are under 50 KB.

Below is what the Text Only (web) version of the Welcome article looks like after the 3 images have been copied to the images folder and the images

have then been deleted from the WEB version of your document and replaced by the placeholders, 01, 02 and 03:

**Welcome to our website. Our mission is to help you!**

**01**

**We offer all kinds of tips to help you achieve your goals.**

**02**

**We also provide a network to help you reach others.**

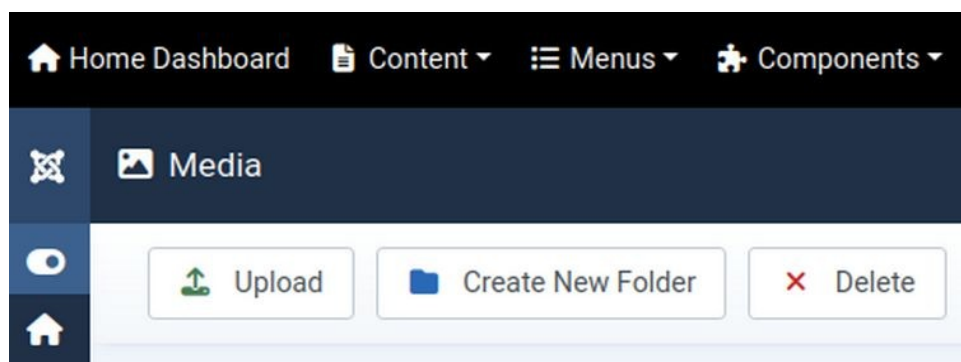
**03**

**We are a great resource for helping you achieve your goals! Feel free to contact us with any questions you may have!**

Note that the web version does not have any actual images. It now consists only of text – with 01, 02, etc indicating where the images should be inserted back in to the text once the text itself has been copied and pasted into the website article. Now that you have created a WEB or TEXT ONLY version of your Welcome Article and your 3 Welcome Article images are placed into their proper folder on your HOME computer, it is time to copy each of these 3 images into a similar folder on your website server.

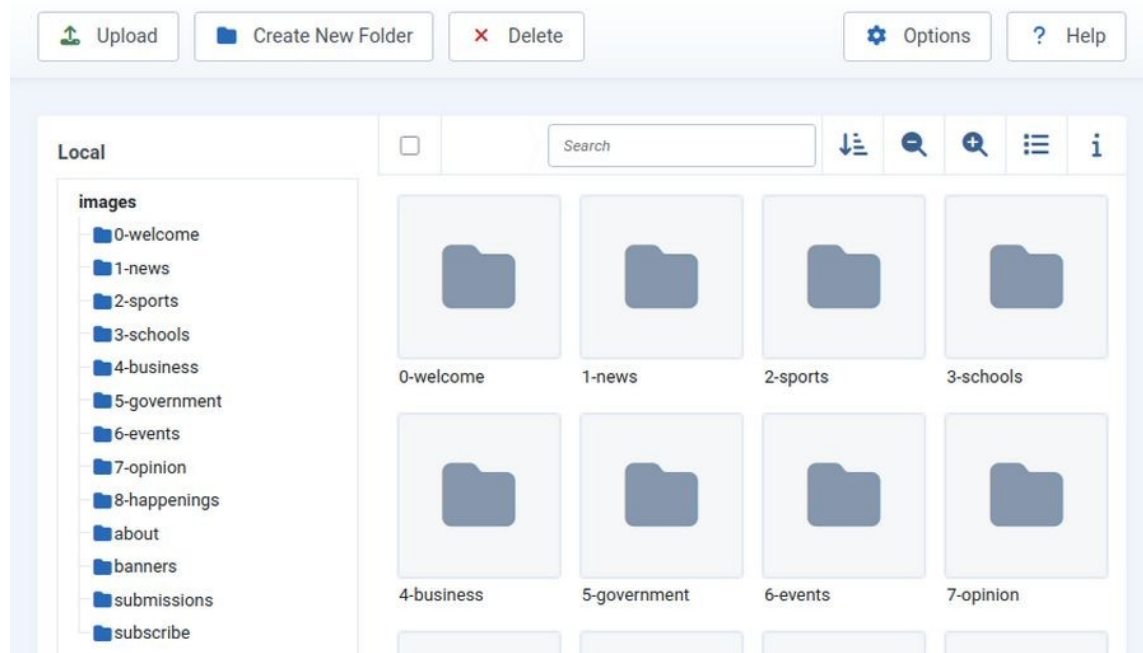
**#8A Log into Joomla dashboard and go to Content, Media. Then create an identical article-images folder in its image-category folder.**

Log into your Joomla Dashboard and click **Content, Media**. We will use the Joomla Media Manager to create a new images folder for our new article. The welcome article is special because it does not need an images category folder. Just create a folder called **0-welcome**. To create a new images folder, click **Create New Folder**:

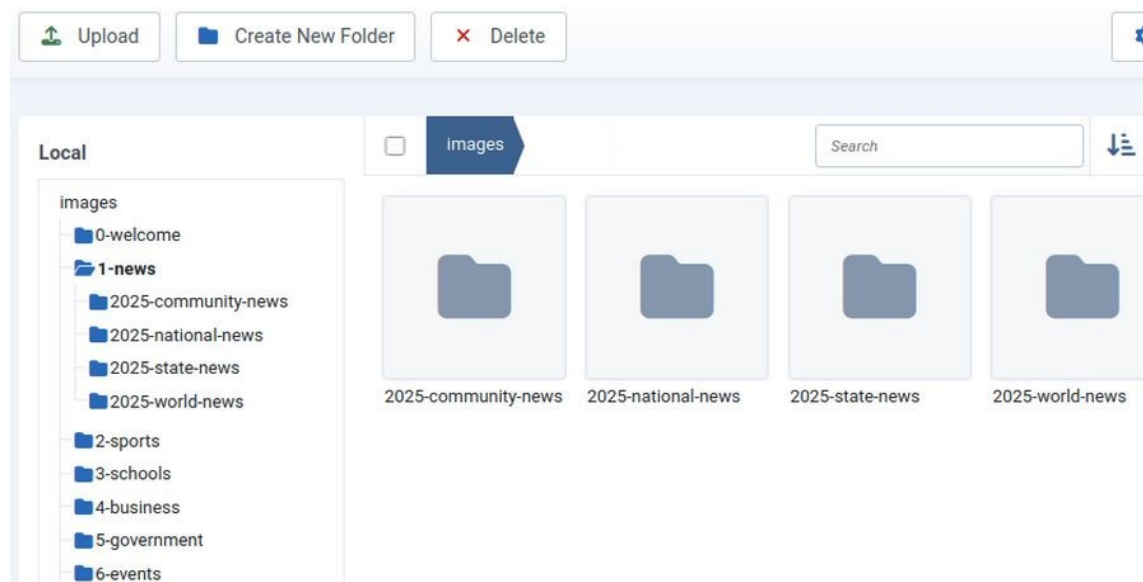


Type the name of the article (in lower case with no spaces) in the box. We

will type in 0-welcome for the name of this images folder. Then click Create. Here is my 0-welcome images folder and my image category folders.



Here are the four image article folders inside of the **1-news** image Topic category folder:

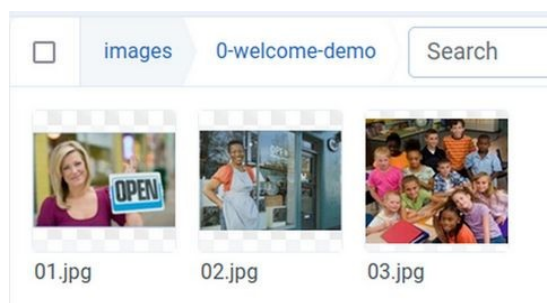


Each time you write a new article, you should first create a folder for the images in that new article in both your home computer's images Topic category folder and also your website's images Topic category folder. Now

that we have our website images folders made, we are ready to transfer our welcome article images from our home computer images welcome folder to our website welcome folder.

### #8B Add Images to their Folder in the Media Manager

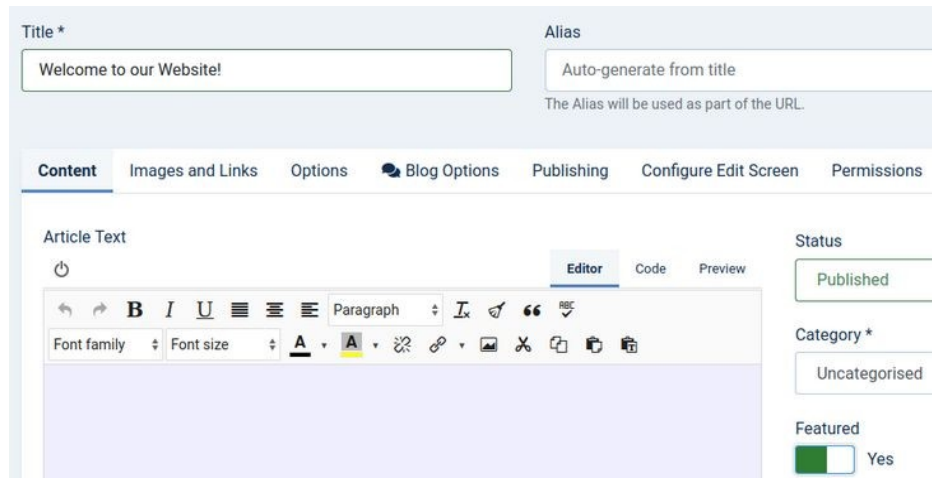
To upload images from your home computer to the 0-welcome folder, open the **0-welcome** folder. Then click the **Upload button in the upper left corner of the screen**. Then click on the Gray **Browse button** and navigate to and open your 0-welcome images folder on your home computer. Click on the first image file to select it. Then, **hold the control key down on your keyboard as you select all remaining images in this folder**. This will allow you to load up to 20 images at a time. Then click OK. The images will be loaded automatically. Here are the 3 images inside of my website 0-welcome images folder:



Once you have loaded your images for your Home page welcome article, you are ready to add the Welcome Article to your Joomla website.

### #9 Go to Content, Articles & click New to create a New Article. Then use the JCE Editor to Copy Paste the “web” article.

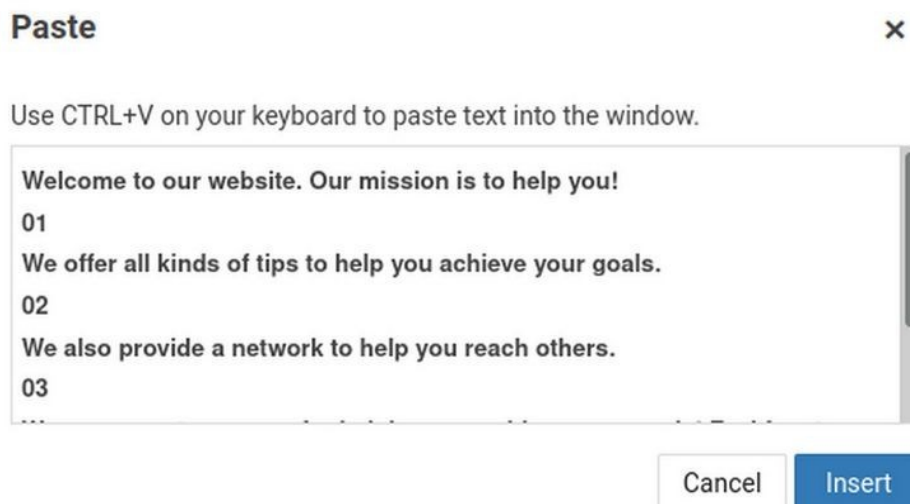
Create a New Article with the Joomla Article Manager & use JCE to Copy Paste the Text Only Article... Click on **Content, Articles, New (or plus sign)**. This will take you to the Add New Article page. Give your new article a title such as Welcome to our Website!. For most articles, we will assign them to a Topic category. But for the Welcome article we will set it as a **Featured Article** so it will display on our Home page – meaning visitors can see it without clicking on a Menu Item.



The screenshot shows the Joomla! Article Edit interface. At the top, there are fields for 'Title \*' (containing 'Welcome to our Website!') and 'Alias' (with an 'Auto-generate from title' button and a note 'The Alias will be used as part of the URL.'). Below these are tabs for 'Content', 'Images and Links', 'Options', 'Blog Options', 'Publishing', 'Configure Edit Screen', and 'Permissions'. The 'Content' tab is active, showing the 'Article Text' editor. The editor has a toolbar with various formatting options (bold, italic, underline, list, link, unlink, image, etc.) and a large text area. On the right side, there are fields for 'Status' (set to 'Published'), 'Category \*' (set to 'Uncategorised'), and 'Featured' (a checkbox labeled 'Yes' which is currently unchecked).

Then open the text only version of the Welcome article in your HOME computer. Copy this article into your clipboard. Then, put your cursor in this Joomla Article Window and right click on **Paste**.

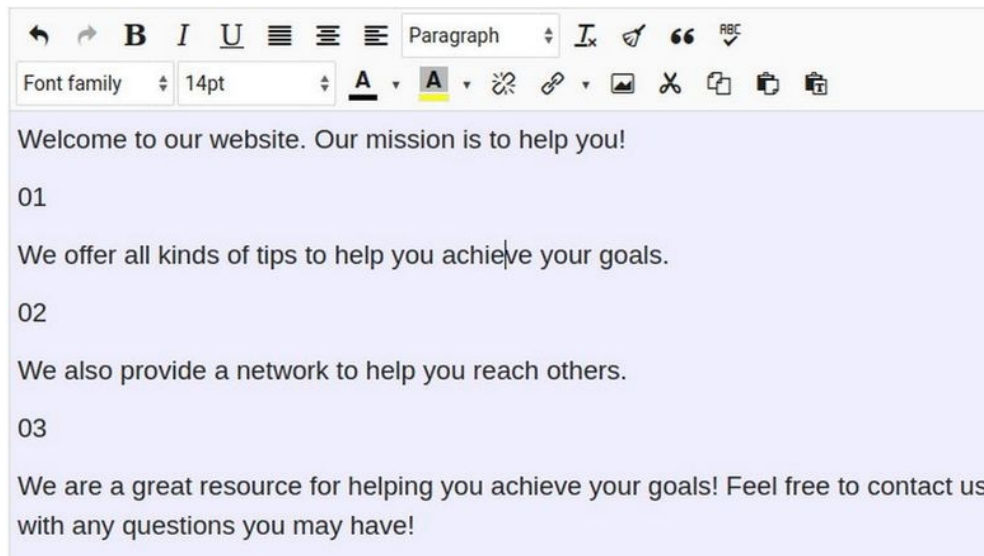
This brings up the JCE Editor Paste window. Put your cursor in this window and press the **Control +V** keys on your home computer keyboard. This will paste the text into the JCE Editor Popup Window.



The screenshot shows the 'Paste' dialog box in the Joomla! JCE Editor. The dialog has a title bar with 'Paste' and a close button. Inside, it says 'Use CTRL+V on your keyboard to paste text into the window.' Below this is a large text area containing the following text: 'Welcome to our website. Our mission is to help you!', '01', 'We offer all kinds of tips to help you achieve your goals.', '02', 'We also provide a network to help you reach others.', and '03'. At the bottom right, there are two buttons: 'Cancel' and 'Insert'.

Then click **INSERT** to paste the text into the Joomla New Article workspace. Then select the text and change the font size to 14. Here is what the text will now look like in the workspace:



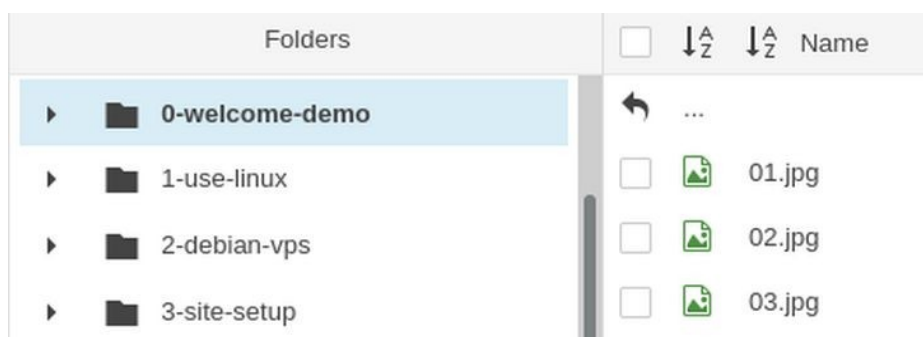


### Save the Text Only Version of your Article.

After the text is in, but before adding images, it is a good idea to click SAVE. This is because only a limited amount of information can be transmitted to the server with any given request. Now that we have posted the text only version of our article into the Article Manager, it is time to insert the images back in.

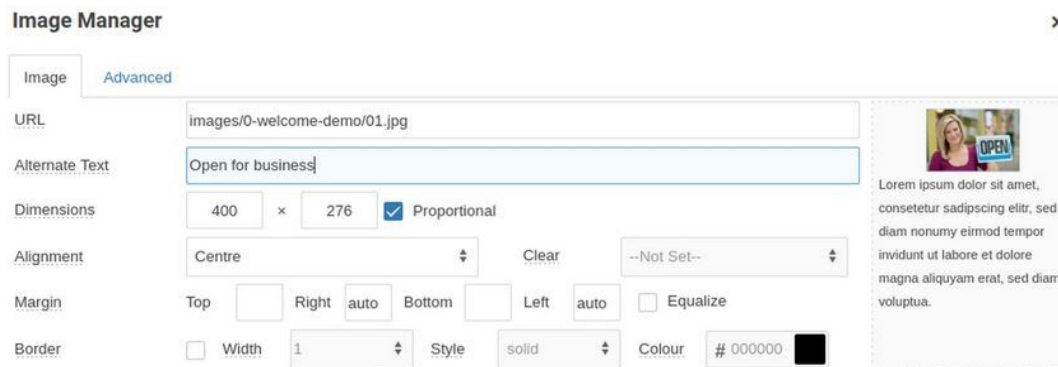
### #10 Assign the article to a category, delete placeholder numbers & insert images with the JCE Image icon

The Welcome article does not have a category. But we did assign it to **Featured Articles**. Before we transfer the 01 image back to our web article, we need to first delete the placeholder number 01, leaving our cursor where this image placeholder was. Then click on the JCE Images icon – which is the icon with the mountains in the right side of the second row above. This will bring up the JCE Images Manager. Click on the 0-welcome images folder to open it:



The JCE Images Manager will display all of the images folders from the Joomla Media Manager. First open the images folder for your article. Then

click on the Image you want to insert to select it. Our Welcome Article has 3 images. Select the first one (01). You can format the size and alignment of the image if you want to make it bigger or smaller. Increase the size of the image by entering 400 in the Dimensions box. Type Open for Business in the alternate text box.



**Image Manager**

Image Advanced

URL: images/0-welcome-demo/01.jpg


Alternate Text: Open for business

Dimensions: 400 x 276 ☒ Proportional

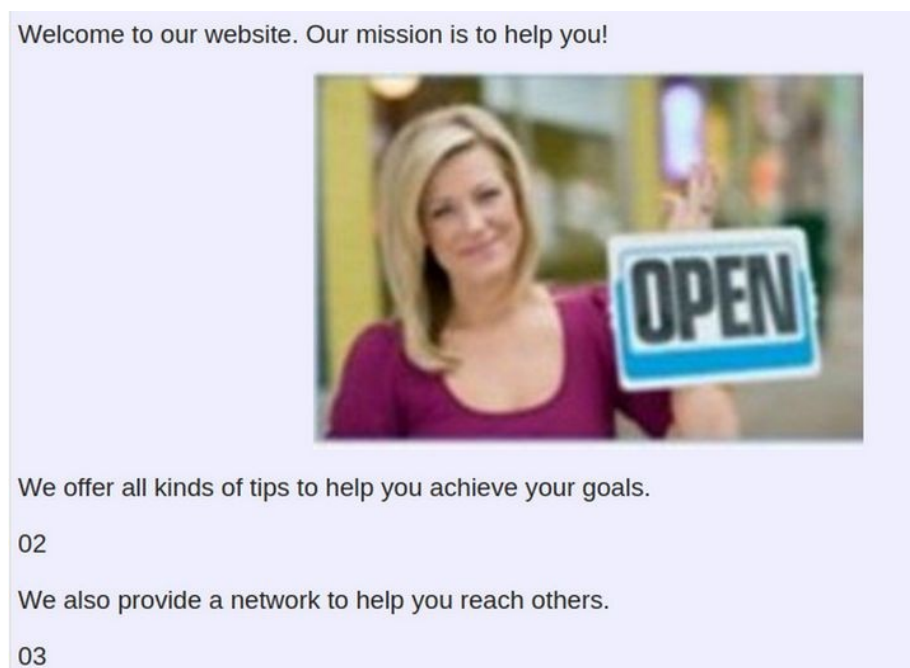
Alignment: Centre Clear --Not Set--

Margin: Top Right auto Bottom Left auto ☐ Equalize

Border: ☐ Width 1 Style solid Colour #000000

Preview:   
 Lorem ipsum dolor sit amet, consetetur sadipscing elitr, sed diam nonumy eirmod tempor invidunt ut labore et dolore magna aliquyam erat, sed diam voluptua.

Click on the INSERT button in the lower right corner of the JCE Image Manager screen. This will place the image in the correct place inside the article.



Delete the extra spaces between images and paragraphs. Then save your new article. Repeat the above steps for the remaining images in your article.

TIP: Only add 10 images at a time. If you have more than images, add 10 then click on the SAVE button, then add 10 more. Then click on VIEW SITE

to see how the Home page looks. Your new article will now appear at the top of your Home page.

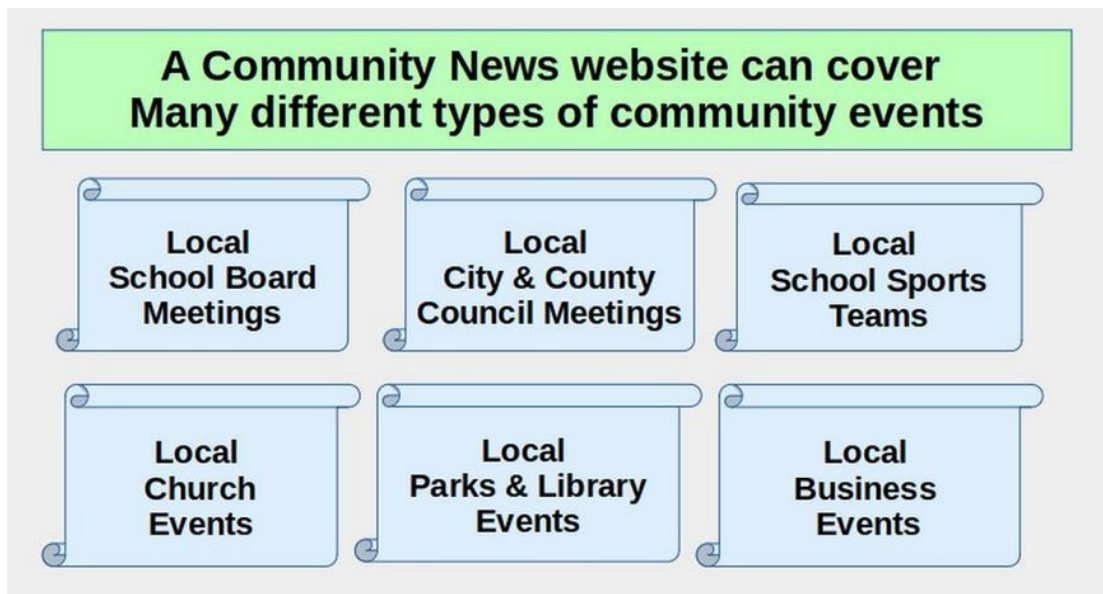
If we created an article that was not a Featured Article, we would need to create a menu item for our article in the main menu. That topic will be covered in the next chapter. In addition, we eventually want to only have news stories on our news website Home page meaning our welcome article needs to go somewhere else. We can solve this problem by adding a POPUP module and place our welcome article inside of that. We explain how to add a POPUP module in our next article.

### **What's Next?**

Now that we have posted our Welcome article, we will review how to build your Community News Team so that others besides you are helping to post articles to our community news website.

### 3.4 Build your Community News Team

A crucial difference between a “community” news website published by members of your own community and a news website owned by some international corporation is that the goal of a community news website should include building and promoting your local community. This includes reporting on local school board meetings, local city council and county council meetings. It also includes reporting on local school sports teams, local church events, local library events, local parks events – as well as promoting local businesses.



While it only takes a single caring person to start a community news website, it simply not possible to adequately cover all of the above community events. One option if you initially are on your own is to start with fewer topics covered and expand the topics covered as more community members join your team. You can report on school board meetings with the goal of finding a dedicated parent to volunteer to report on school board meetings for your Community News website. You can report on City and County Council meetings with the goal of finding a concerned citizen who already attends these meetings to write reports on what happened. You can visit local business owners to see if any of them are interested in helping write for and or promote your local news website. You can speak with local church leaders and local political leaders about joining your Community News website team to provide the community with ongoing information about church events or local political events.

A second option is to seek out an already existing team first and divide responsibilities among your already existing team members. Existing community teams might include any or all of the following community members: a group of concerned parents, a group of local business owners, members of a local church, a group of local political leaders, members of a local senior center or members of a local social club.



Whether you elect to start your news website on your own or seek out an existing community group to help you, it is important that all team members are willing and able to learn the ten steps on how to securely create and post news articles – a process that we covered in our last article. To be clear, it is not necessary that all team members understand all of the processes for administration of the backend of the news website. In fact, as we explain in a later article, the backend of your news website can be set up so that all Community News reporters see is their own version of the Article Editor screen and their own images folder.

Finally, it is not even necessary that your News Website administrator(s) understand all of the **News Website Initial Setup Steps** that we have covered up to this point. It is a relatively simple matter to “clone” the Community News Website that we have created up to this point. It is also an easy matter to clone several Community News websites and place all of them on the same Virtual Private Server – either as sub-domains of a primary domain (for example as **mytown.communitynews.us**) or as a unique primary domain (for example as **mytowncommunitynews.com**).

Our goal is not just to create a few local community news websites. Instead, we hope to create Community News websites in communities all across Washington state and eventually all across the United States.



## Beginning versus Long Term Community News Topics

Initially, your team might just be one or two people. If this is the case, to avoid “burnout”, consider starting your News website with fewer topics. While the actual topics will likely depend on the interests of your News Team members, below is a table of initial topics with a suggested goal of the minimum number of articles you might want to post each month:

Initial Topics	Topic Categories	Minimum Articles per Week (Hours)
1 News	Community News	1 (2 hrs)
2 Sports	Local Sports	1 (2 hrs)
3 Schools	School Board, Local Schools	1 (2 hrs)
4 Business	Local Business Services Directory	1 (2 hrs)
5 Government	Elections, Issues	1 (2 hrs)
6 Events	Community Events	1 (2 hrs)
7 Opinion	Editorials, Reader Opinions	1 (2 hrs)

Assuming about 1 hour to research each news article and 1 hour to write and post each news article, you might be able to start your Community News website with a time commitment of as little as 14 hours per week. This should be within the time available for a single retired person or a couple of concerned parents. It may take a year or more for more members of your community to appreciate the value of a Community News website and be willing to devote some of their own time to making it a success.

Initial Topics	Topic Categories (Articles per week)	Roles & Total Articles per Week (Hours)
News	Community News (2), State News (1), National News (1), World News (1)	News Reporter – 6 (12 hrs)
Sports	Local Sports (1), College Sports (1), Pro Sports (1)	Sports Reporter – 3 (6 hrs)
Schools	State Funding & Policies (1), School Board (1), Local Schools (1)	Schools Reporter – 3 (6 hrs)
Business	Local Business (1), State Business News (1), National Business News (1)	Business Reporter – 3 (6hrs)
Government	Elections (1), Issues (1), Elected Officials (1), Politics (1)	Government Reporter – 4 (8hrs)

Events	School Events (1), Business Events (1), City & County Events (1), Church Services (1), Community Events (1)	Events Reporter – 5 (10 hrs)
Opinion	Editorials (1), Reader Opinions (1), Local Leaders Opinions (1)	Editor – 3 (6 hrs)
Happenings	Awards, Births, Weddings, Anniversaries, Memorials, Legal	Happenings Reporter – 3 (6 hrs)

## Tips to build your Community News Team

There are several ways to build your local community news team. The first is creating a one-page **Community News flier** that you can take to local community groups. The flier should explain the benefits to the community of creating and promoting your Community News website. The flier should include a “call to action” at the end explaining how community members can join your Community News Team. You can also share this flier online by creating a Free Downloads page on your Community News website (we will review this process in a later article on News Website promotion).

Second, you should offer **free community banner ads** to any businesses, church groups or other community group who are willing to help promote or post articles to your Community News website.

Third, you should add a **“Call to Action” popup** that appears when readers first visit your News Website. Like the flier, the Popup article should explain the benefits to the community of creating and promoting your Community News website in addition to having a “call to action” at the end.

## Here are the steps for creating a Call to Action Popup

**Step 1: Write your Call to Action article using the same ten steps as any other News article.**

Here is our Call to Action/Welcome article:

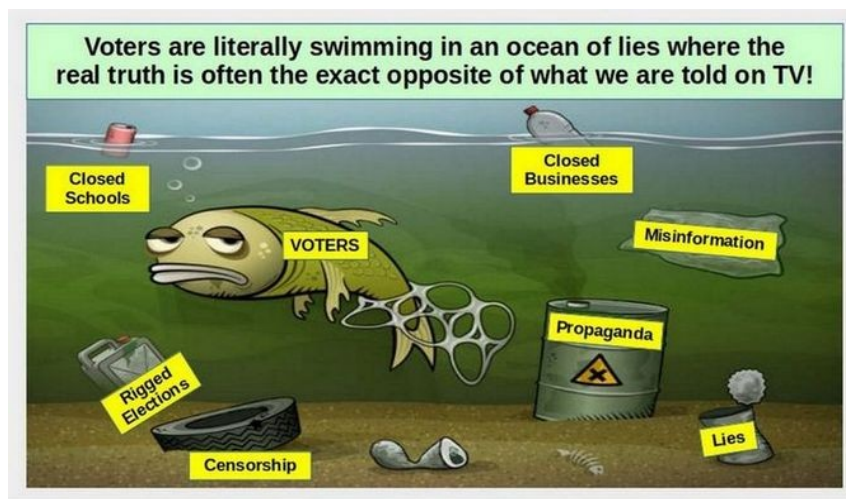
### **Welcome to our Washington Community News website!**

Our goal is to keep our community better informed about what is REALLY happening in our Community, State and Nation.

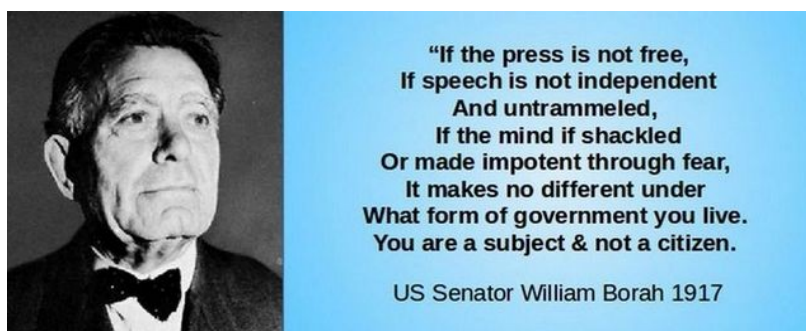
### **Why do we need a different kind of News Website?**

Never in our nation's history has there been a greater need for independent news sources than there is today. All of the traditional news sources from newspapers to radio to television have taken over by wealthy multinational

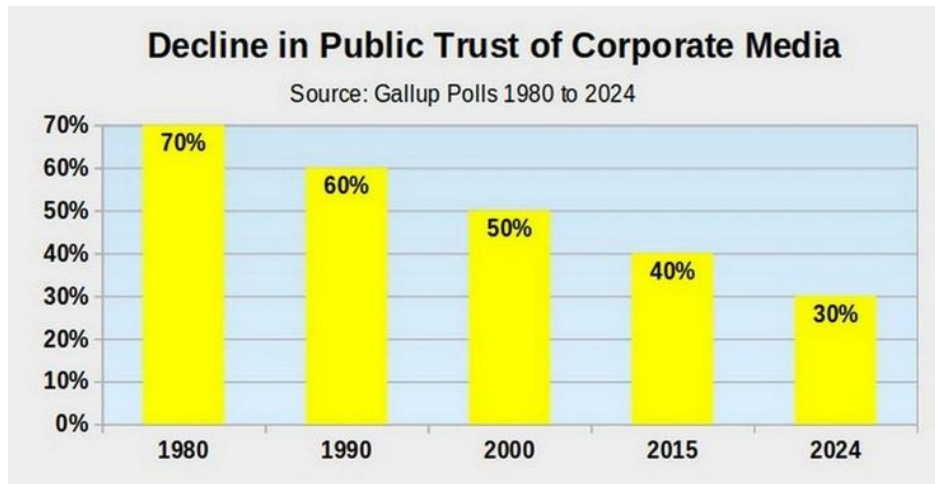
corporations. Our freedom of thought, our freedom of speech and our right to free and equal elections are all at risk due to the lack of honest, independent news. The corporate takeover of our news has also led to a dramatic decline in local news reporting – which in turn has led to a lack of community. It has also led to an inability to learn and share the truth about important issues affecting all of us. Nearly everything we see on TV News and read in corporate newspapers are carefully crafted lies. We are like fish swimming in increasingly polluted waters.



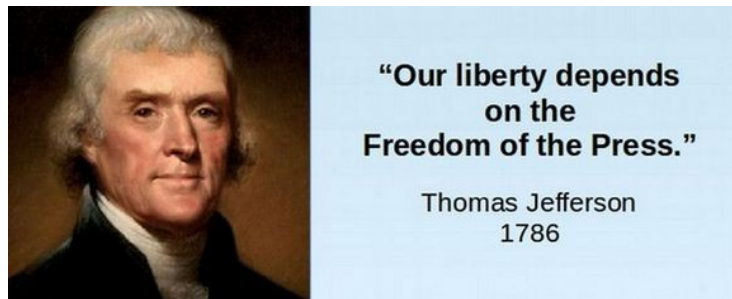
The ocean of lies spun by the corporate media affects not only our health but our ability to make good decisions and act for a better future for our children.



Thankfully, the American people are starting to catch on to this scam. Gallup Polls show that two out of three people used to trust the corporate media to tell the truth. Now, after decades of corporate news lying to the public, the majority of Americans no longer trust the corporate media.



It is time for a new kind of independent media – one run not for pursuit of profit but for the pursuit of truth and the sharing of wisdom.



**It is time that We the People reclaim control over our own local news**  
We have therefore created this special community -powered news website.  
If you are interested in joining our news team of Community News  
reporters, send me an email: **David (at) Community News dot us**. We  
look forward to meeting you!

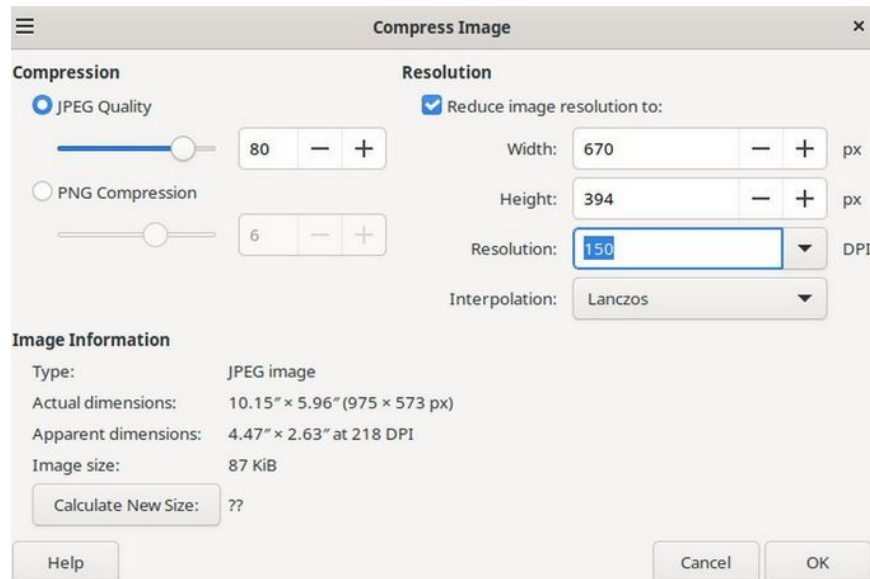
[CLICK HERE TO SUBSCRIBE TO OUR WEEKLY COMMUNITY  
NEWSLETTER](#)

[CLICK HERE TO JOIN OUR TEAM OF COMMUNITY REPORTERS](#)

[CLICK HERE TO LEARN HOW TO CREATE YOUR OWN COMMUNITY  
NEWS WEBSITE](#)

[CLICK ON THE X BUTTON AT THE TOP OF THIS PAGE TO CLOSE THIS  
POPUP & GO TO OUR COMMUNITY NEWS HOME PAGE](#)

**Step #2 Right click on each image and compress it to JPEG 150 DPI:**



**Step #3: Copy the Welcome article to create a web version of this same article (with images replaced by Placeholder numbers):**

**Welcome to our Washington Community News website!**

Our goal is to keep our community better informed about what is REALLY happening in our Community, State and Nation.

**Why do we need a different kind of News Website?**

Never in our nation's history has there been a greater need for independent news sources than there is today. All of the traditional news sources from newspapers to radio to television have taken over by wealthy multinational corporations. Our freedom of thought, our freedom of speech and our right to free and equal elections are all at risk due to the lack of honest, independent news. The corporate takeover of our news has also led to a dramatic decline in local news reporting – which in turn has led to a lack of community. It has also led to an inability to learn and share the truth about important issues affecting all of us. Nearly everything we see on TV News and read in corporate newspapers are carefully crafted lies. We are like fish swimming in increasingly polluted waters.

01

The ocean of lies spun by the corporate media affects not only our health but our ability to make good decisions and act for a better future for our children.



02

Thankfully, the American people are starting to catch on to this scam. Gallup Polls show that two out of three people used to trust the corporate media to tell the truth. Now, after decades of corporate news lying to the public, the majority of Americans no longer trust the corporate media.

03

It is time for a new kind of independent media – one run not for pursuit of profit but for the pursuit of truth and the sharing of wisdom.

04

**It is time that We the People reclaim control over our own local news**

We have therefore created this special community -powered news website. If you are interested in joining our news team of Community News reporters, send me an email: **David (at) Community News dot us**. We look forward to meeting you!

CLICK HERE TO SUBSCRIBE TO OUR WEEKLY COMMUNITY  
NEWSLETTER

CLICK HERE TO JOIN OUR TEAM OF COMMUNITY REPORTERS

CLICK HERE TO LEARN HOW TO CREATE YOUR OWN COMMUNITY  
NEWS WEBSITE

CLICK ON THE X BUTTON AT THE TOP OF THIS PAGE TO CLOSE THIS  
POPUP & GO TO OUR COMMUNITY NEWS HOME PAGE

**Step 4: Using a secure Linux computer, log into the backend of your news website and go to Content, Media and click Create New Folder to create a Welcome article images folder.**



Create New Folder X

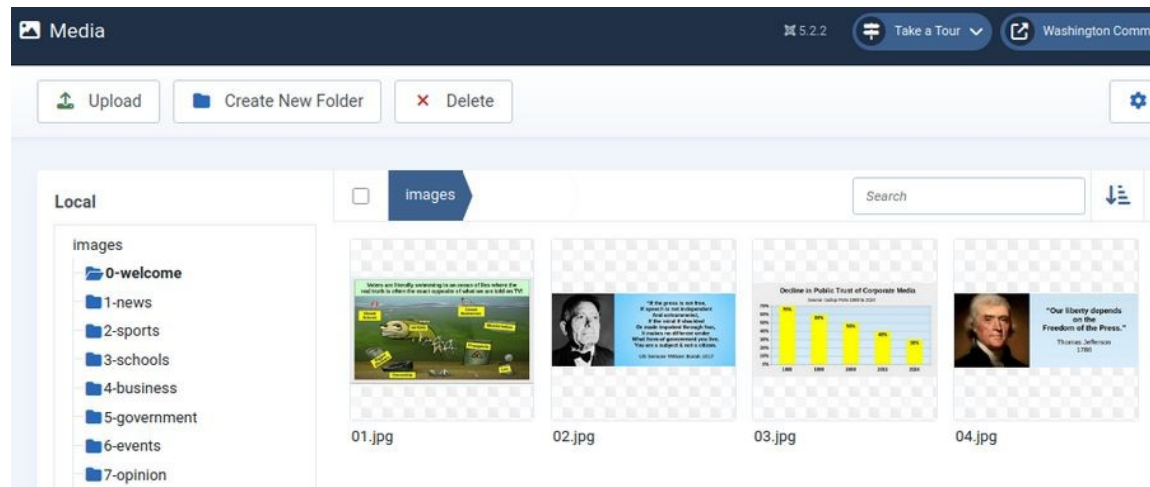
Folder Name

0-welcome-popup

Cancel Create

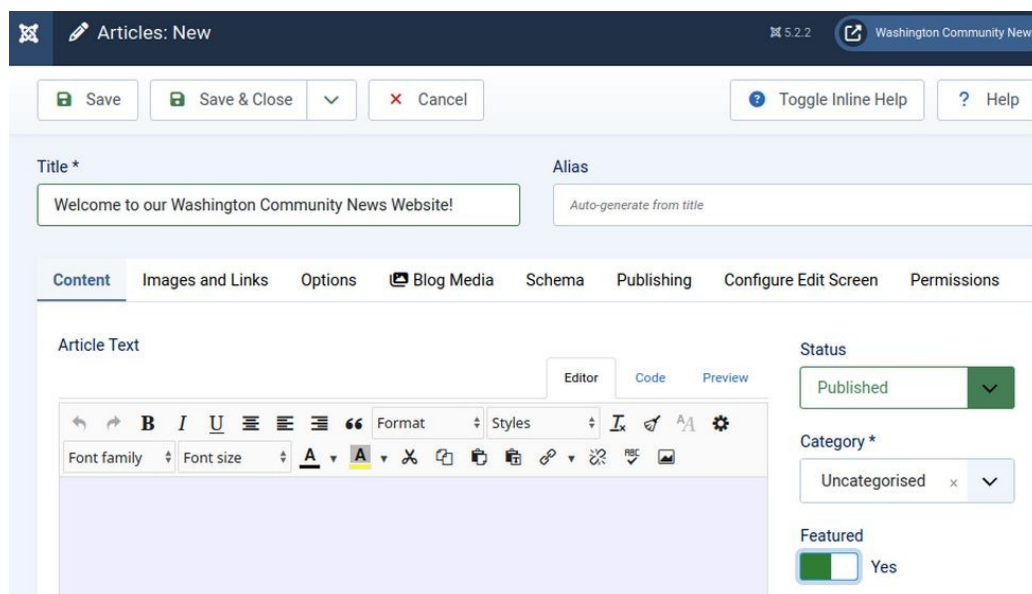
## Step 5: Copy the welcome article images from your home computer to your website images folder.

Here are our four welcome article images in the Joomla Media Manager:



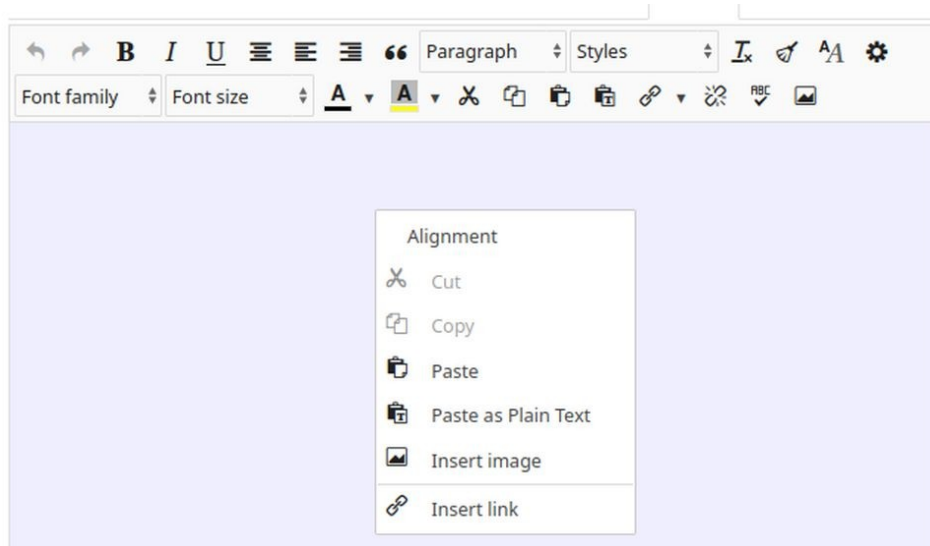
## Step #6 Go to Content, Articles & click New to create a New Article. Then use the JCE Editor to Copy Paste the “web” article.

Click on **Content, Articles, New (or plus sign)**. This will take you to the Add New Article page. Give your new article a title such as Welcome to our Website!. For most articles, we will assign them to a Topic category. But for the Welcome article we will set it as a **Featured Article** so it will display on our Home page – meaning visitors can see it without clicking on a Menu Item.

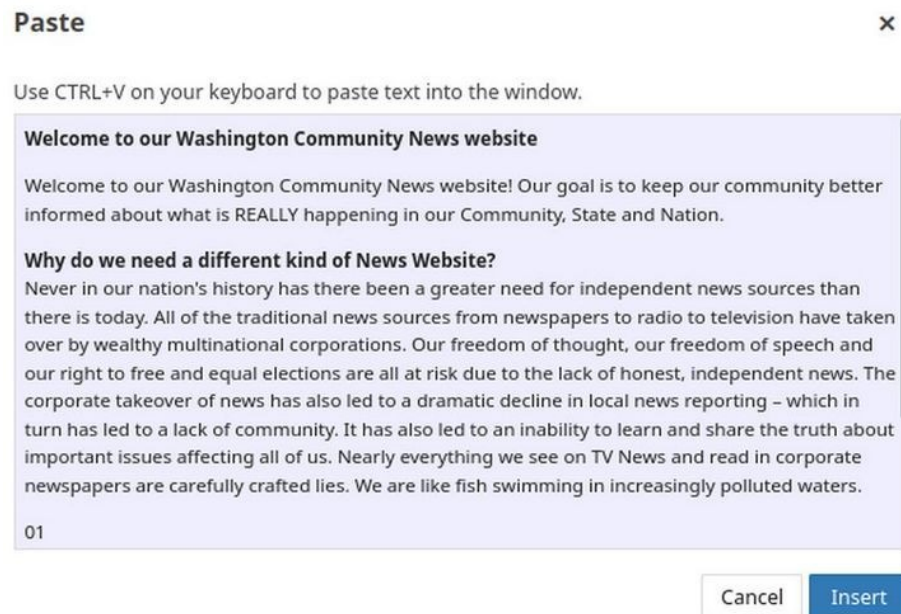


Then open the text only version of the Welcome article on your HOME

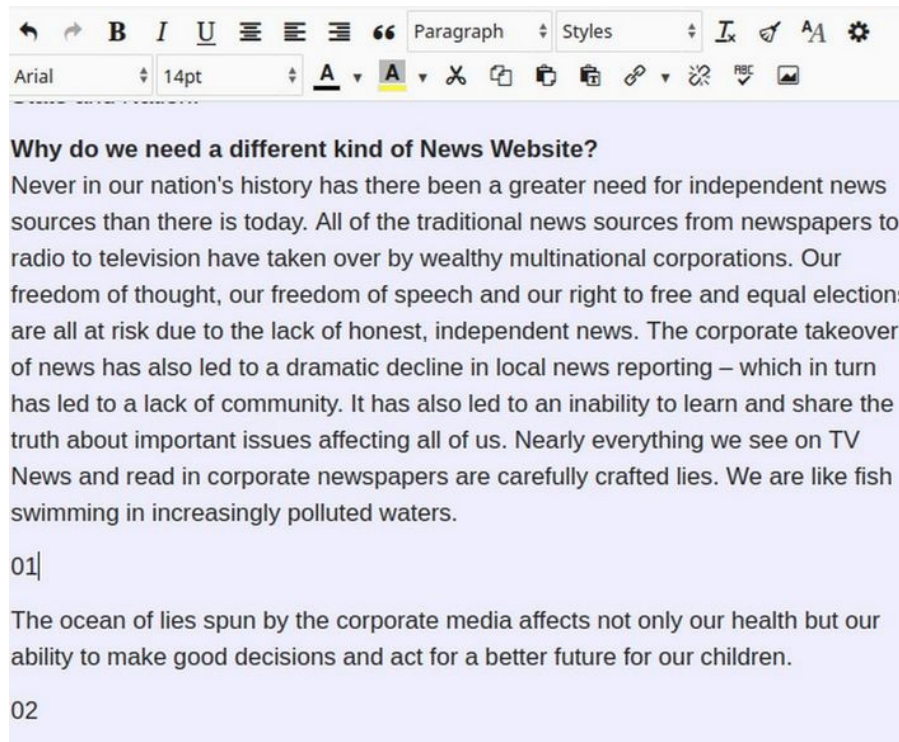
computer. Copy this article into your clipboard. Then, put your cursor in this Joomla Article Window and right click on **Paste**.



This brings up the JCE Editor Paste window. Put your cursor in this window and press the **Control +V** keys on your home computer keyboard. This will paste the text into the JCE Editor Popup Window.



Then click **INSERT** to paste the text into the Joomla New Article workspace. Then select the text and change the font size to 14. Here is what the text will now look like in the workspace:

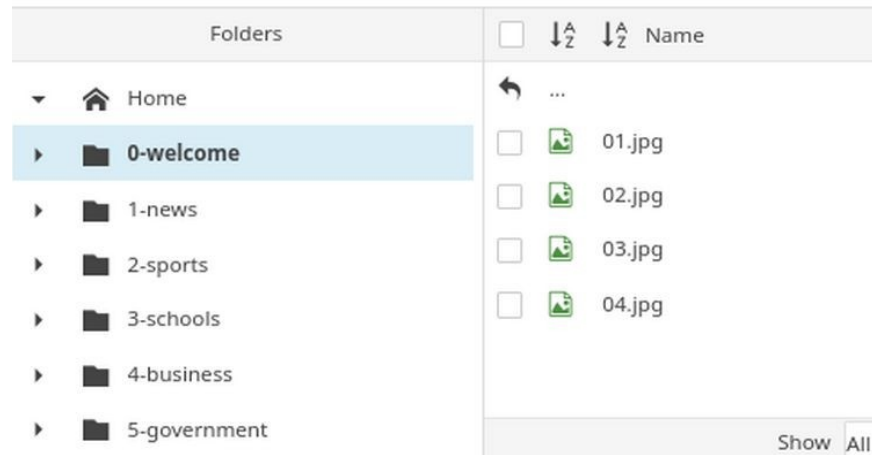


### **Save the Text Only Version of your Article.**

After the text is in, but before adding images, it is a good idea to click SAVE. This is because only a limited amount of information can be transmitted to the server with any given request. Now that we have posted the text only version of our article into the Article Manager, it is time to insert the images back in.

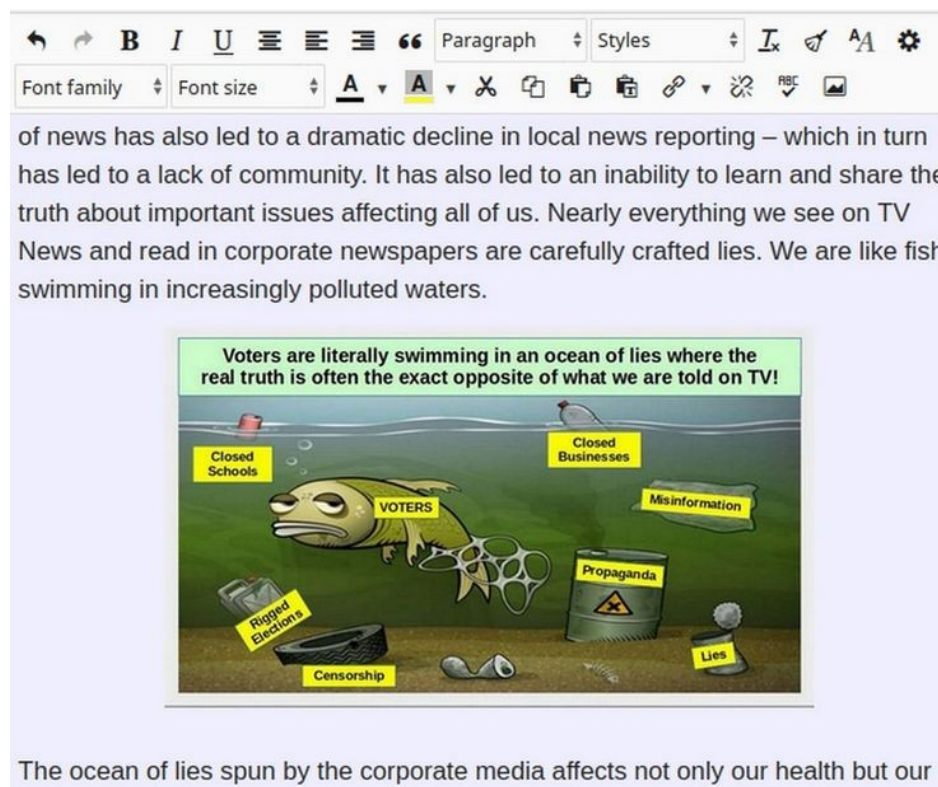
### **Step #8 Delete placeholder numbers & insert images with the JCE Image icon**

Before we transfer the 01 image back to our web article, we need to first delete the placeholder number 01, leaving our cursor where this image placeholder was. Then click on the JCE Images icon – which is the icon with the mountains in the right side of the second row above. This will bring up the JCE Images Manager. Click on the 0-welcome images folder to open it:



The JCE Images Manager will display all of the images folders from the Joomla Media Manager. First open the images folder for your article. Then click on the Image you want to insert to select it. Our Welcome Article has 3 images. Select the first one (01). You can format the size and alignment of the image if you want to make it bigger or smaller. Increase or reduce the size of the image by entering 400 to 700 in the Dimensions box.

Click on the **INSERT** button in the lower right corner of the JCE Image Manager screen. This will place the image in the correct place inside the article.



Delete the extra spaces between images and paragraphs. Then save your



new article. Repeat the above steps for the remaining three images in your Welcome-popup article. Then click **Save and Close**. Then click on your News website name in the top menu to see how your Welcome article looks on the Home page of your website.



## Steps to Move your Welcome article from your News Website Home Page to a separate Popup Page

We eventually want to only have news stories on our news website Home page meaning our welcome article needs to go move to a Popup Page. We can solve this problem by **adding a POPUP module** and place our welcome article inside of that.

### Step #1 Download a Free Popup Module

While Joomla offers several popup extensions, most do not have the settings we need. For example, we need a popup that displays on a new readers first visit but does not display on later visits to our news website. One popup extension that does have all the settings we need is in the Joomla Extensions Directory at this link:

<https://extensions.joomla.org/extension/popup4u/>

Click **Download**. Then move the zipped folder from your Downloads folder to your website Extensions Folder.

## Step #2 Install the Popup Module with your Joomla Installer

Log into your Joomla Dashboard and go to **System, Install, Extensions**. In the **Upload Package File** tab, click on the green **Browse for file** button. Then navigate to your website Extensions folder and select the zipped module file.

## Step #3 Go to Content, Articles and click the Welcome article we just created to open the Article Edit screen.

Change the workspace from the Editor tab to the Code tab:

Article Text

Editor Code Preview

```
<p><span style="font-size: 14pt; font-family: arial, helvetica, sans-serif;">Our goal is to keep our community better about what is REALLY happening in our Community, State and Nation.</span></p>
<p><span style="font-size: 14pt; font-family: arial, helvetica, sans-serif;"><strong>Why do we need </strong>
<strong>a different kind of</strong><strong> News Website?<br /> </strong>Never in our nation's history has there been a greater need for independent news sources than there is today. All of the traditional news sources from newspapers to radio to television have been bought out and taken over by wealthy multinational corporations. Our freedom of thought, our freedom of speech and our right to free and equal elections are all at risk due to the lack of honest, independent news. The corporate takeover of news has also led to a dramatic decline in local news reporting - which in turn has led to a lack of community. It has also led to an inability to learn and share the truth about important issues affecting all of us. Nearly everything we see on TV News and nearly everything we read in corporate newspapers are carefully crafted lies. We are like fish swimming in increasingly polluted waters.</span></p>
<p><span style="font-size: 14pt; font-family: arial, helvetica, sans-serif;"></span></p>
<p><span style="font-size: 14pt; font-family: arial, helvetica, sans-serif;">The ocean of lies spun by the corporate media affects not only our health but our very ability to think clearly, to make good decisions and to act for a better future for our children.</span></p>
<p><span style="font-size: 14pt; font-family: arial, helvetica, sans-serif;"></span></p>
<p><span style="font-size: 14pt; font-family: arial, helvetica, sans-serif;">Thankfully, the American people are
```

Carefully place your cursor at the beginning of the code and then select all of the code to the bottom. Right click and click Copy. This will place the HTML code for the Welcome article in your computer clipboard. Then close the Article Edit screen.

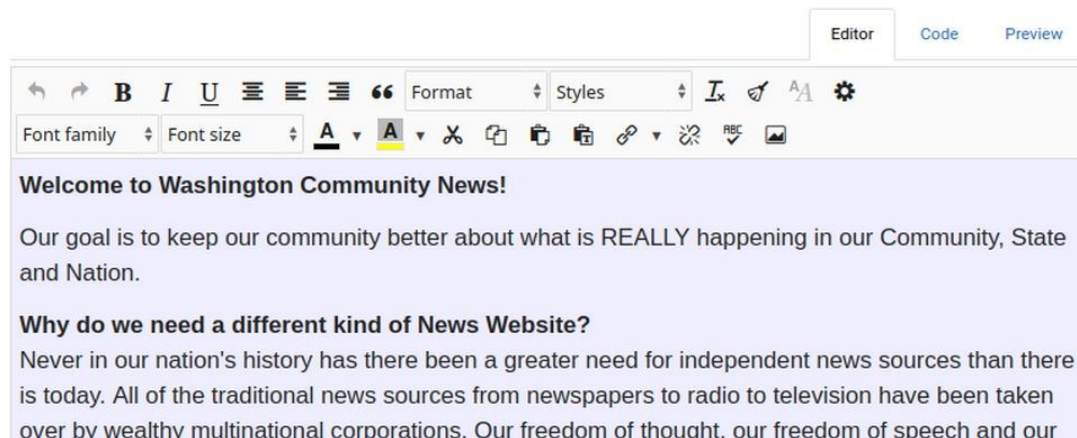
## Step #4 Go to Content, Site Modules and open your Popup Aholic Module.

Click on the Code tab at the top of the JCE editor. Then right click on the workspace and click Paste. Then save the module. Then click on the Editor tab to see the Welcome article in the module JCE editor workspace screen:

## PopUp Aholic

Site

PopUp Aholic is a full featured FREE Joomla popup model box module.



Hide the Title and set the Position for **Debug** and the Status to **Published**. Then scroll down the Module screen to the Module Settings.

Responsive or Static Box	Static Box
Set Width of Static Box	770
Set Height of Static Box	700
Set Box Timer in Seconds	100
Cookies expire in	Day(s)
Set Cookie Time	15
Delay Popup on Page Load	Yes
Delay Popup in Seconds	1

Leave the Box set to Static. Change the Maximum width of the box to 770. Change the height to 700. Set the box timer to 100 seconds before it closes. Change the Cookies to Days and set the cookie time to 15 days. This means that unless the visitor clears their browser cache, the popup will not appear again for 15 days. Change Delay Popup on Page Load to Yes and change the Delay Popup to 1 second.

Then click Save. Then click on the **Menu Assignment** Tab. Change Module Assignment to **“Only on the pages selected.”** and then click None, Then check the Home page:

Module **Menu Assignment** PopUp Box Styles Advanced Permissions

Menu Assignment

Module Assignment

Only on the pages selected

Menu Selection

Assign to Menu Items

All

None

Search

▼ Main Menu ▼

☒ Home

▼ ☐ News ▼

☐ Community News

☐ State News

☐ National News

Then click the **PopUp Box Styles** tab and change the Box Background color to light green (or whatever color you want). Then click Save and Close.

### **Step #5: Open a new browser tab in a different browser, clear the cache and visit your News website Home Page:**

Scroll to the bottom of the page to see how it looks. Then click on the X button to close the page. Or wait two minutes to see if the popup closes itself. Reload the page to confirm that the Popup does not appear again.

To see the Popup again, you will need to clear the browser cache.

### **Step #6: Unpublish the Welcome article from your News website Home page**

Go to Content, Articles and click on the Green Status checkmark to change it from Published to Unpublished. Now the Welcome article only is visible the first time new visitors visit your website. Returning visitors will see your normal news articles without the Welcome popup.

### **What's Next?**

In our next article, we will review how to use Libre Draw to create your own images and graphics. We will then review how to set up "Featured" News images both manually and automatically.

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## **4 Create & Format News Images**

In this chapter, we will review one of the most important differences between a news website and a normal Joomla website – namely setting up a system to manage, resize, process and format images used in your articles and page layouts. Here are the four sections of Chapter 4:

4.1 Use Libre Draw to Create Article Images

4.2 Manually Resize Featured Images

4.3 Add Featured Images to each News Article

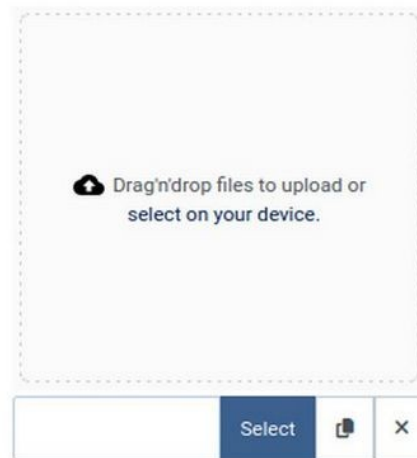
4.4 Automatically Process Featured Images



## 4.1 Use Libre Draw to Create Featured Images

In this article, we will review how to use Libre Draw to create “Featured images” for your Community News articles. Each article on your Community News website should include what Joomla called a “**Featured Image**”. The Featured Image is used not only at the top of the article page, but also on our Community News Home page as the **Leading Article Image** and/or as the **Intro Article image**. A Featured article image is assigned to each News article when you create your News Article by clicking on the **Images and Links** tab in the Article Edit screen. Here you will see buttons to assign an Intro Image and a Full Article Image:

Intro Image



We first need to go to **Content, Media** and load the Featured Images into one of our images topic folders. Then when creating our news article, we click on the **Images and Links** tab. Then click on the Blue Select button to select the image we want to use for our Intro Image for this article. Then scroll down and click on the second Blue Select button to select the image we want to use for our Full Article image. To maintain the consistency of our News Page Layout, it is important that all Intro Images have the same width and height and that all Full Article images have the same width and height.

### Featured Image Dimension Options

In the past, it has not really mattered what the exact Width to Height ratio was for our Featured images. However, with the rise of video channels as a common news source, it is essential that at some point, we add Community News videos that link to our Community News website. These videos are now almost always formatted to be **16 wide by 9 high** (commonly stated as 1920 wide by 1080 high) – which is the aspect ratio of most modern TV

screen and most modern laptop screens. In later articles, we explain how to make videos and slideshows using 16 x 9 images. So that we do not have to reformat our images later, we will here explain how to make 16 x 9 images for both our Intro Images and Full article images – which we will then also use as our Featured images.

We have previously explained that to make website pages more readable and to allow for side by side editing, we use a boxed fixed width layout for our News website with a maximum width of 960 pixels. Using this width also prevents sentences from being too wide on our screen – which would make articles much harder to read.

After subtracting for margins and padding on both sides, the actual single column width is about 900 pixels. This means that our full article featured images do not need to be more than **800 pixels wide**. A two-column width is about 450 pixels meaning the two -column featured image does not need to be more than **400 pixels wide**. A three column width is about 300 pixels meaning our three column featured image does not need to be more than **300 pixels wide**. However, a 400 pixel wide image tends to automatically work for a three column layout.

A four column width is about 225 pixels meaning our four column featured image does not need to be more than **200 pixels wide**. In general, we do not recommend a five column layout because it does not allow enough room for our News article descriptions and images.

Therefore, in addition to our full article 800 px wide image, we need “thumbnail” images that are 400 and 200 px, depending on the number of columns that are being used in any given layout.

Because we will be using a tool called Libre Draw to create many of these images, and to maintain the quality of the images, we will begin our images on a Libre Draw screen that is 1200 pixels by 675 pixels. Here is a table summarizing these image sizes – all of which are 16 by 9 ratio.

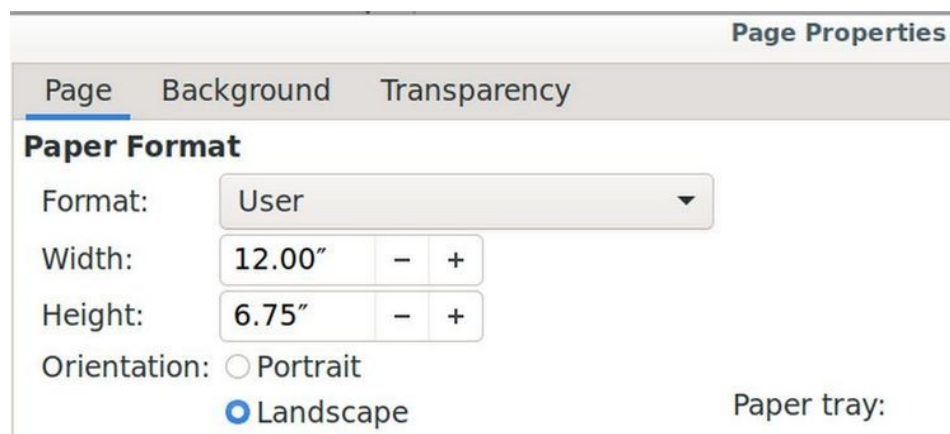
Purpose	Width - pixels	Height - pixels
Libre Draw Screen	1200	675
Slideshow presentations and video creation.	800	450

Full article image	800	450
Intro article image and 2 column featured image	400	225
3 column featured image	400	225
4 column featured image	200	113

We will first create our original image to be about 1200 x 627. We will then resize our original image to create images 800 wide, 400 wide and 200 wide.

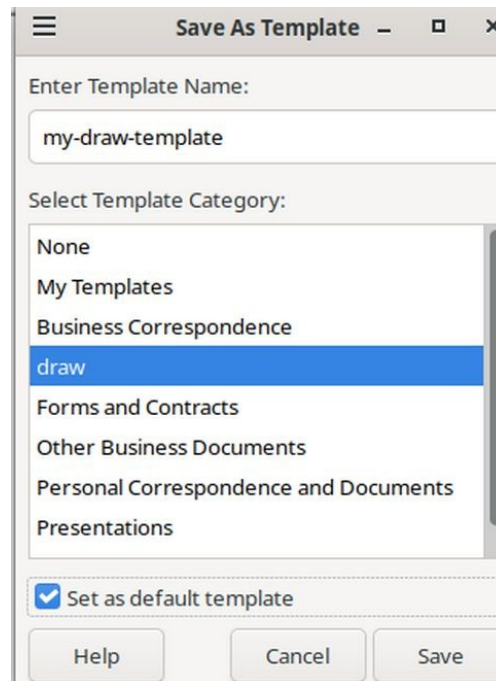
### Create Your Libre Draw Canvas

Assuming you have Libre Office installed on your secure Linux computer, from a Libre Write document, click **File, New, Drawing** to open a new Libre Draw document. Then click **Page Page Properties**. Assuming Libre Office is set to English US, the default page is set for Letter with a height of 11 inches and a width of 8.5 inches. We could change the Orientation to Landscape. Then increase the width to 12 inches and reduce the height to 6.75 inches for each image we make. However, it would be better to simply create a new Libre Draw template that it is already set for 12 by 6.75. Below is our Libre Draw Page properties screen:



Reduce the margins to 0, 0, 0, 0. Click on Background and give it a color of

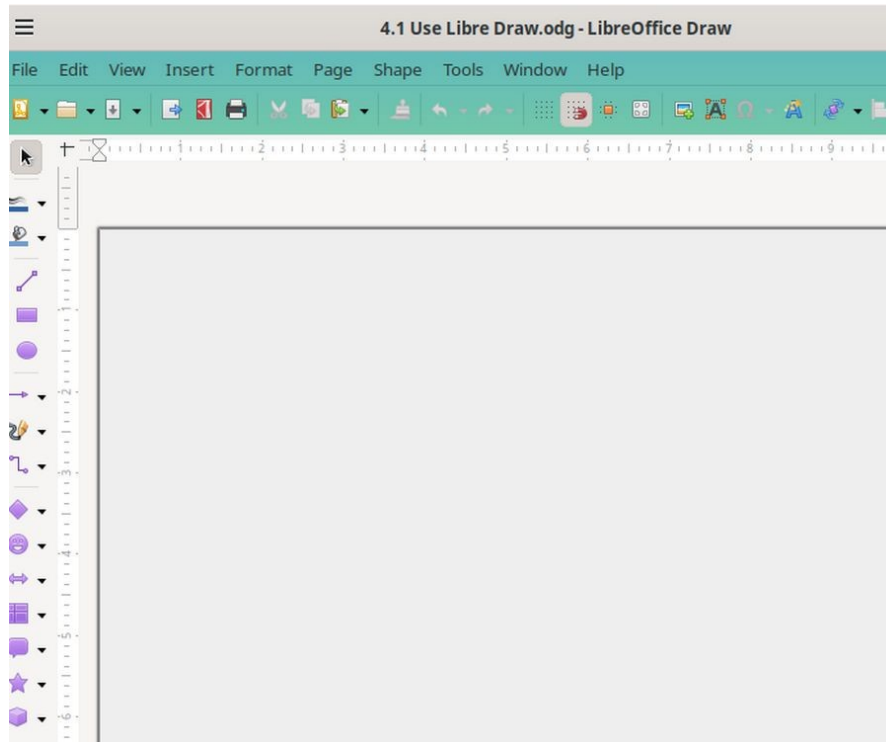
#eeeeee (which is Light Gray). Then click OK. Then click **File, Save as Template**. Name the template my-draw-template and place it in the **draw** folder. Then check **Set as Default Template** and click Save.



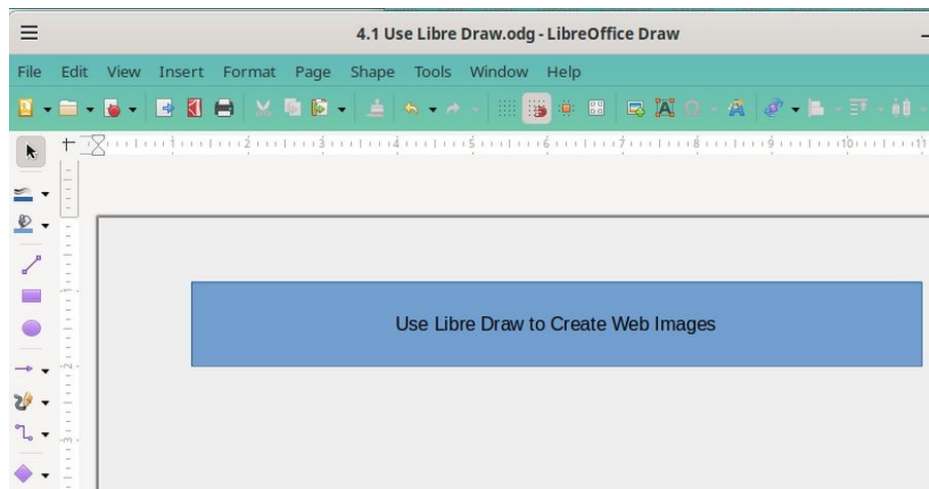
To see if it works, close the Libre Draw document without saving it and open a new one. Then go to Page, Page Properties. You can now create your Featured text and images and save the drawing as 01-welcome, 02-next-image to keep the images in order.

### Create our first Feature Image

We will begin by creating a Feature Image for this article, which is about using Libre Draw to create article images. Create a new folder in your website images folder called **featured-images**. Then open a new Libre Draw document and save it in the featured-images folder as **4.1 Use Libre Draw**:

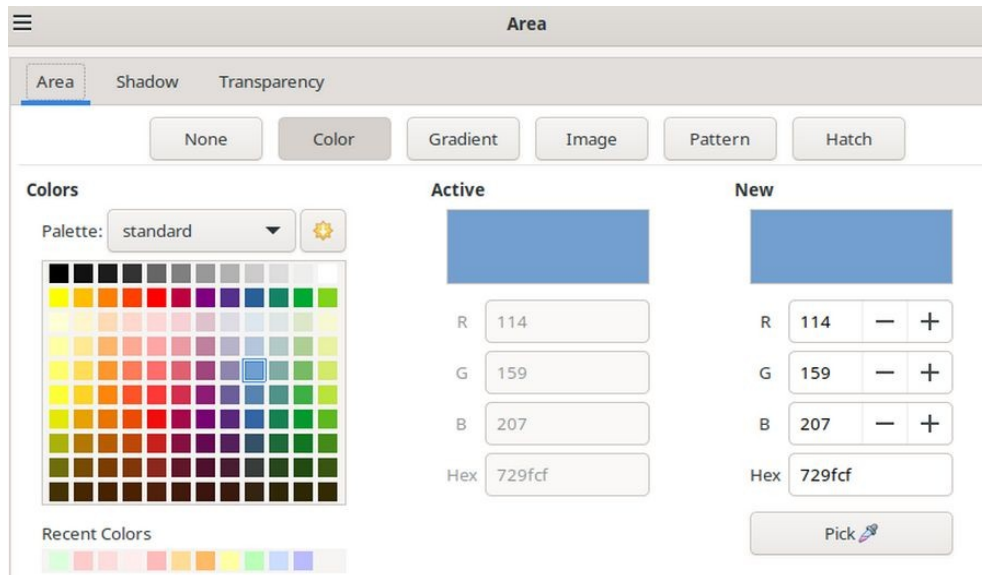


Then click on the rectangle on the right and drag it in the canvas to create a text box. Then type **Use Libre draw to Create Web Images:**

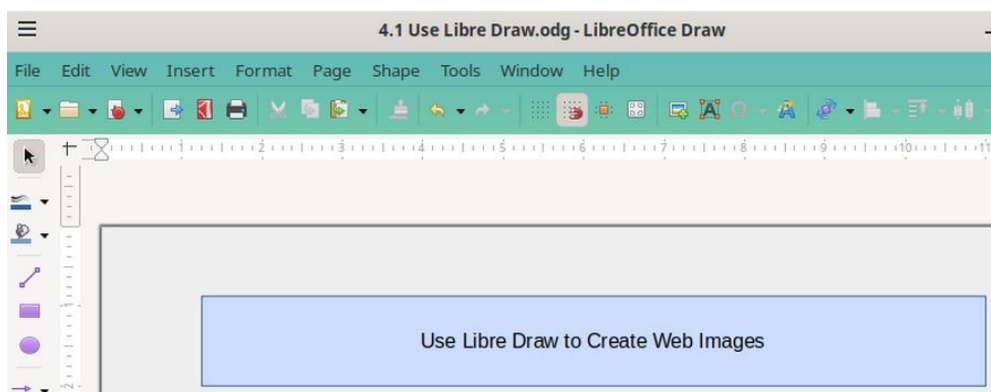


Select the Text Box. Then right click and click Area:

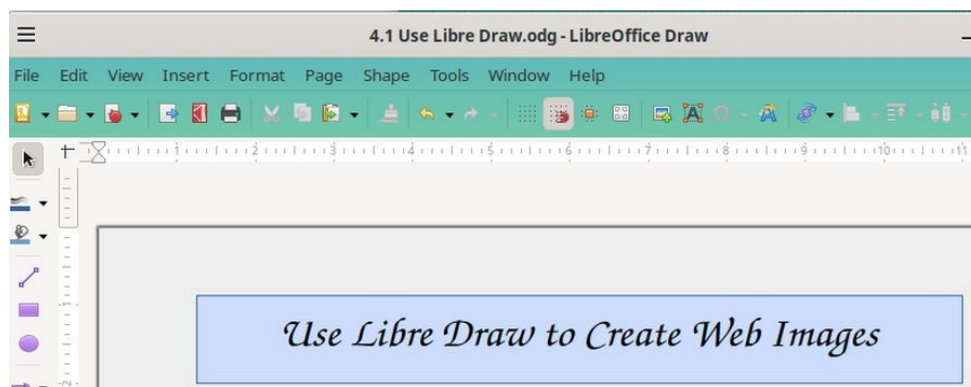




Click **Pick** and change the hex number to **ccddff**. Then click OK and OK.



Next, select the text. Then right click and click Character. This will open **Character Properties**. The default font family is Liberation Sans and the default font size is 18 pt. Change the font family to z003 which is the last option in the Libre Writer Font Family Drop down. Then increase the font size to 40 pt. Then click OK:



## Search for Images with one color backgrounds

Search for an image of an artist with paint brush and palette. The image should have a one color background so we can turn the color into a transparent PNG. Here is an image that will work:



Also search for an image of a white board with a single color background:

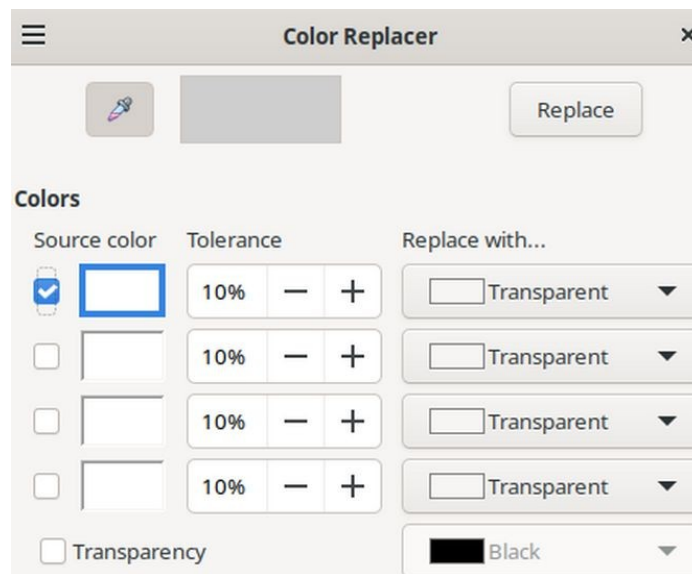


Copy paste both images into your Libre Draw document:



Libre Draw comes with a tool for converting the white background into a transparent background. Select the artist image. Then click Tools, Color

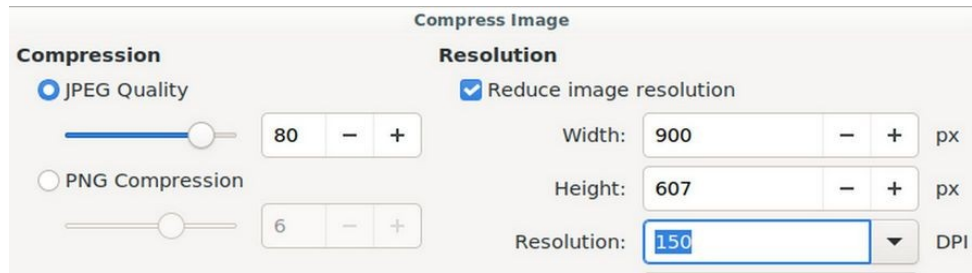
Replacer in the top menu:



Check the small box to the right of the first color. Then click Replace. Repeat to turn the tripod image from white to transparent. Add a cloud and text to put on the white board and add a **Call Out** and text to put near the artist:



Click on View in the top menu to uncheck the Status Bar and the Ruler. Then increase the width of the Libre Draw window to take up at least half of your Desktop. Then use Flameshot to copy the image – starting from near the upper left corner and dragging to the lower right corner of the Libre Draw work space. Then paste the image into a Writer document. Right click on the image and **compress it to 150 DPI**.



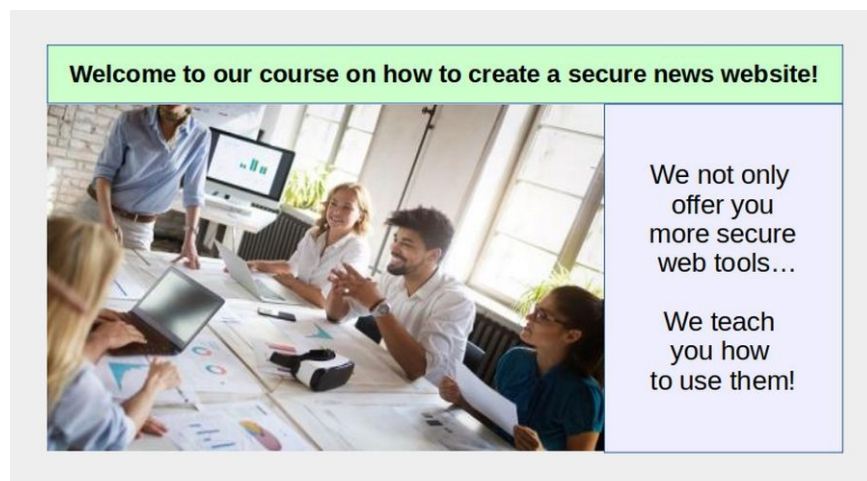
Then save the compressed image to your Featured images folder as **4.1-libre-draw-featured-image.jpg**. Then save and close the Libre Draw document.

### Text versus No Text Featured Images

It is most common to topuse Featured images without any text. The reason for this is that text can be hard to read when using 200 pixel wide images in a three column News Page Layout. On the other hand, adding text to images can be a powerful way to provide readers with a quick summary of your article. This is important because many readers are visual learners who first look at images before reading any text.

To see and test this difference, we will create two version of the 1.1 Featured Article. Article 1.1 is about the importance of creating a secure Linux computer.

Here is our Libre Draw graphic which includes an image plus a top text box and a right side text box:

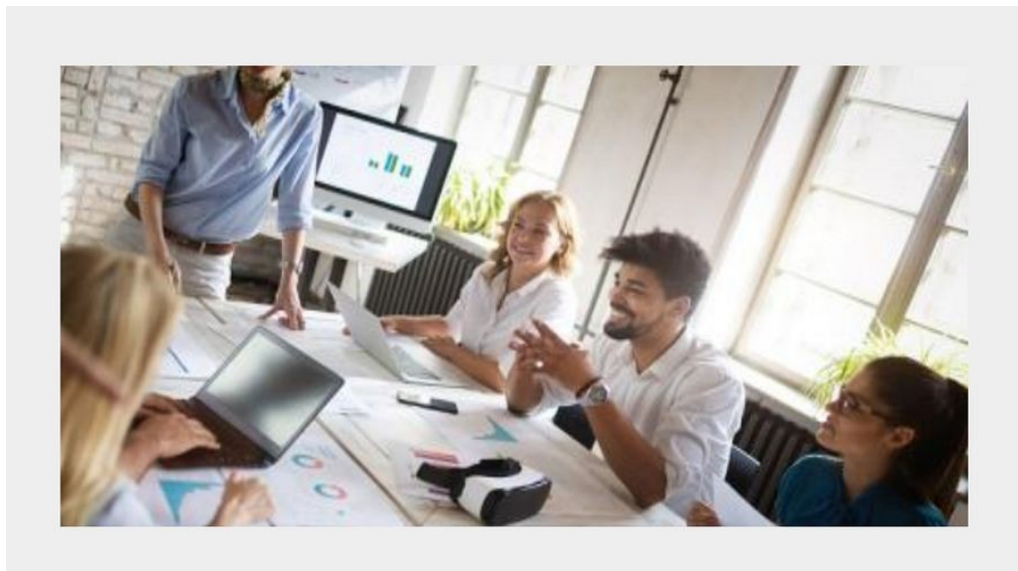


The file is saved in our Libre Draw Featured Image Files folder as **1.1 Secure News Website**. Capture the image with Flameshot and compress it by pasting it into a Writer document. Then save the image in our featured-images folder as **1.1-secure-news-website.jpg**.

To create the No Text version, click **File, Save As** and call the new Libre Draw document **1.1 Secure News Website Image Only**. Then delete the two text boxes and expand the image. You will see that the image is not the right dimensions! A major advantage of using one or more text boxes is to solve the problem of images constantly being the wrong dimension. To make the image fit in the 1200 wide by 675 high box, we need to crop the bottom off of the image. Right click on the image and click CROP to bring up the Libre Draw cropping tool:



Slide the middle bottom blue marker up a few pixels until the image is closer to 16 x 9. Here is what the result looks like:



Use Flameshot to capture this image. Then paste it in a Writer document to compress it to 150 DPI. Then save the image to your featured-images folder as **1.1-secure-news-website-image-only.jpg**

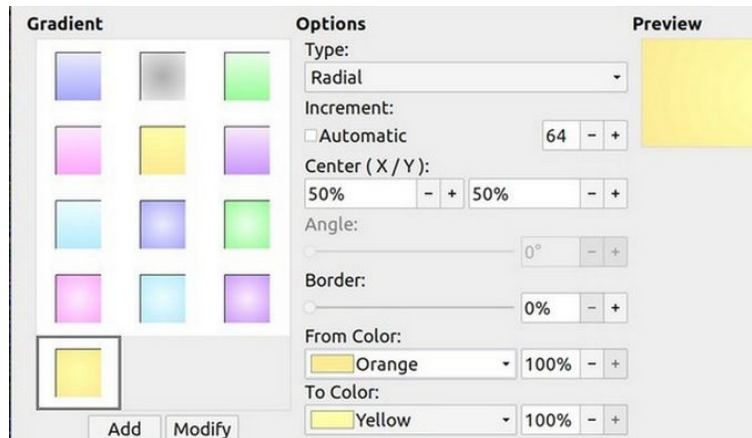


## More Tutorials on Creating Images, Charts and Graphs

Here are links to 4 more tutorial I have written explaining how to use Libre Draw, Libre Calc and Libre Impress to create charts and graphs:

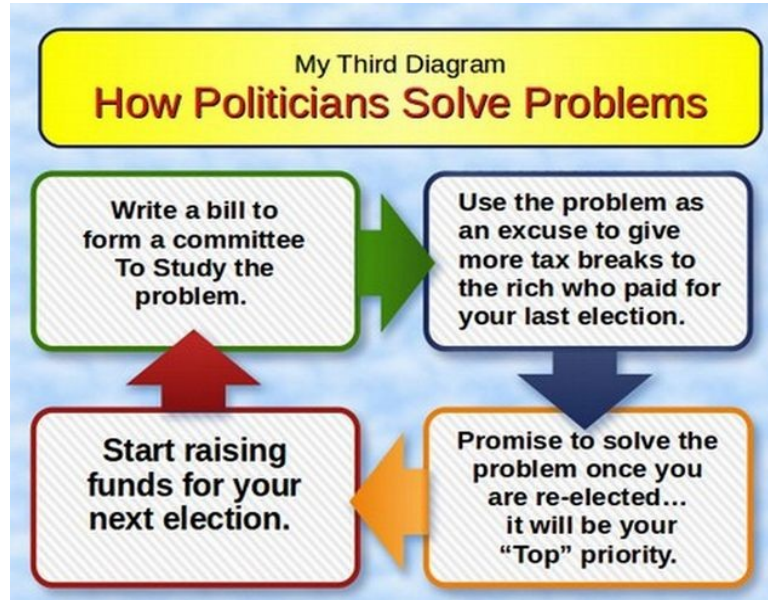
### Create Custom Colors and Gradients

<https://betterwordprocessing.com/part-3-formatting-complex-documents/11-how-to-create-charts-and-graphs/11-1-create-custom-colors-and-gradients>



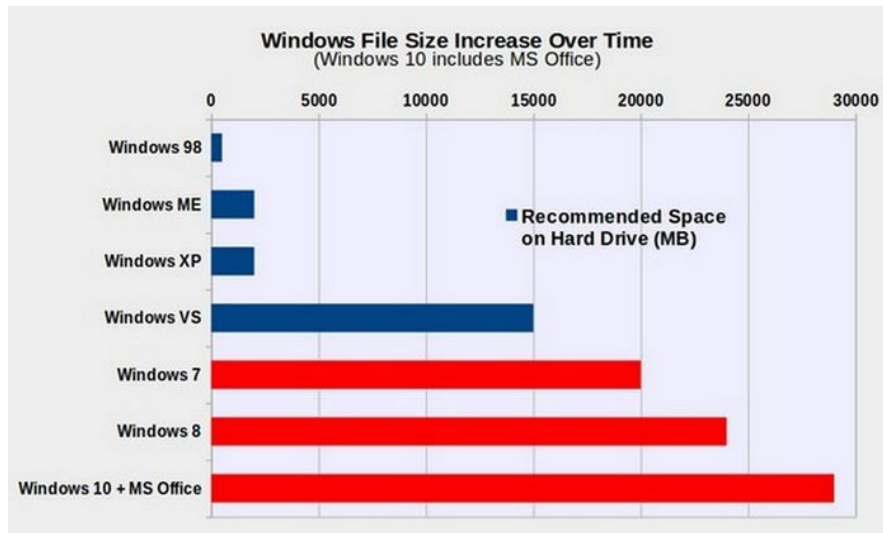
### Create a Diagram with Libre Draw

<https://betterwordprocessing.com/part-3-formatting-complex-documents/11-how-to-create-charts-and-graphs/11-2-create-a-diagram-with-libre-draw>



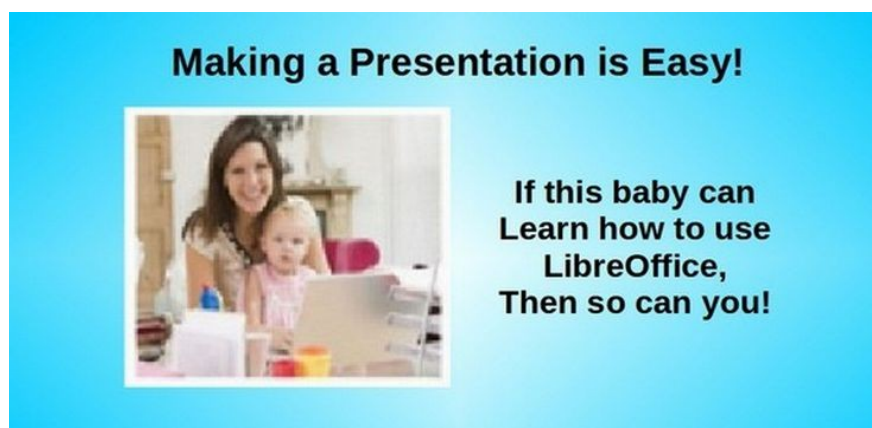
### Create a Chart with Libre Calc

<https://betterwordprocessing.com/part-3-formatting-complex-documents/11-how-to-create-charts-and-graphs/11-3-create-a-chart-with-libre-calc>



## Create a Presentation with Libre Impress

<https://betterwordprocessing.com/part-3-formatting-complex-documents/11-how-to-create-charts-and-graphs/11-4-create-a-presentation-with-libre-impress>



Once you finishing following these examples, you should be able to make whatever custom images you want for your News website!

## What's Next?

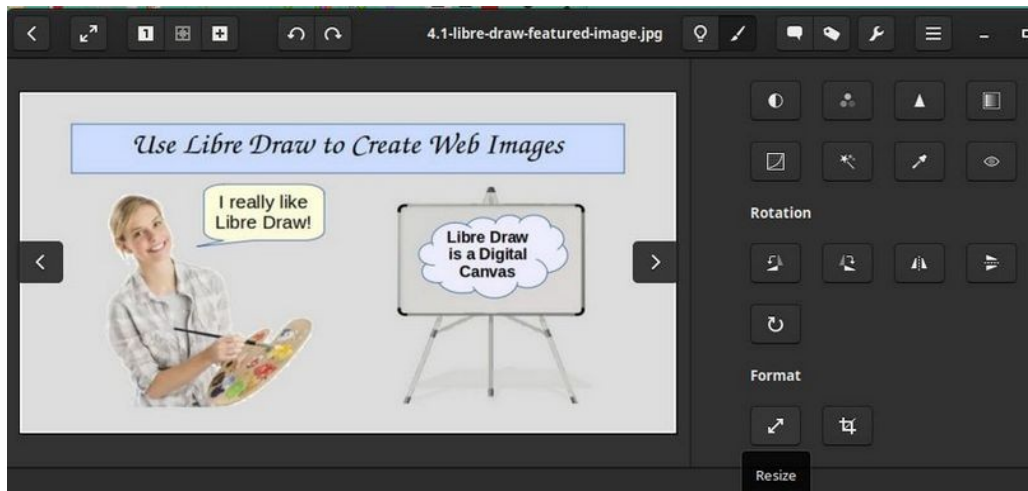
We now have three original images in our featured-images folder. In our next article, we will review how to use an image editor called Gthumb to manually resize your Featured Images before posting them to your Libre Writer articles.

## 4.2 Manually resize Featured Images

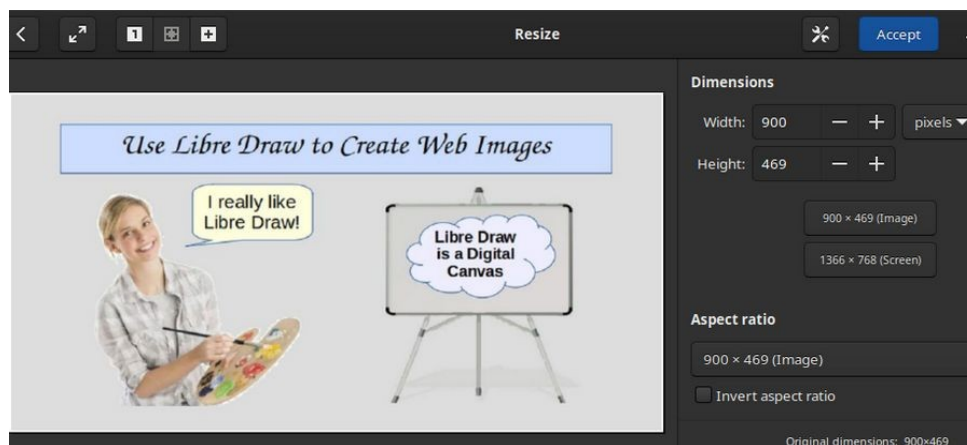
In our last article, we used Libre Draw to create a couple of Featured Images. In this article, we will use an image editor called Gthumb to quickly resize these images to create versions that are 800, 400 and 200 pixels wide.

### Use Gthumb to resize and then crop your Image

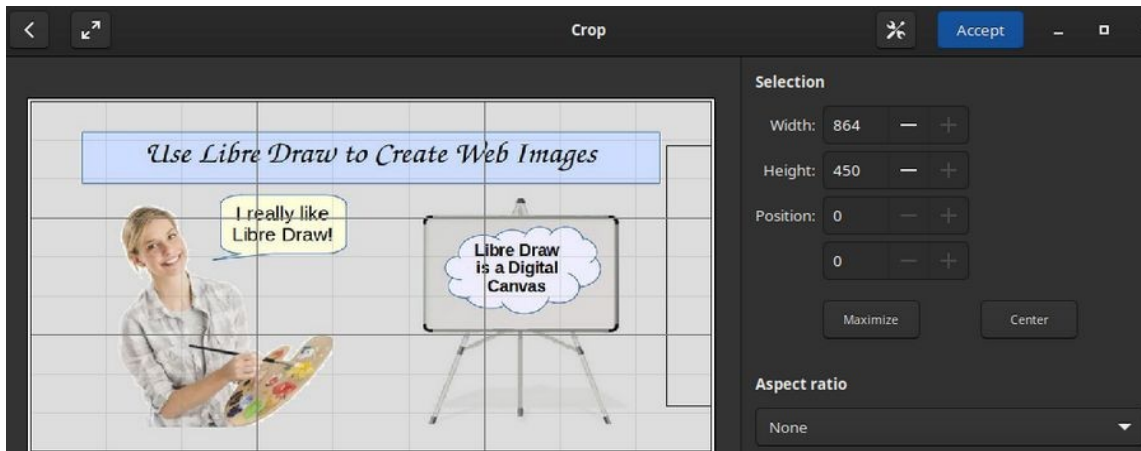
Open the Gthumb image editor (available from the Debian Software Center if it is not already installed) and then select and open your featured image file. Click on the Edit Icon (paint brush) in the upper right corner.



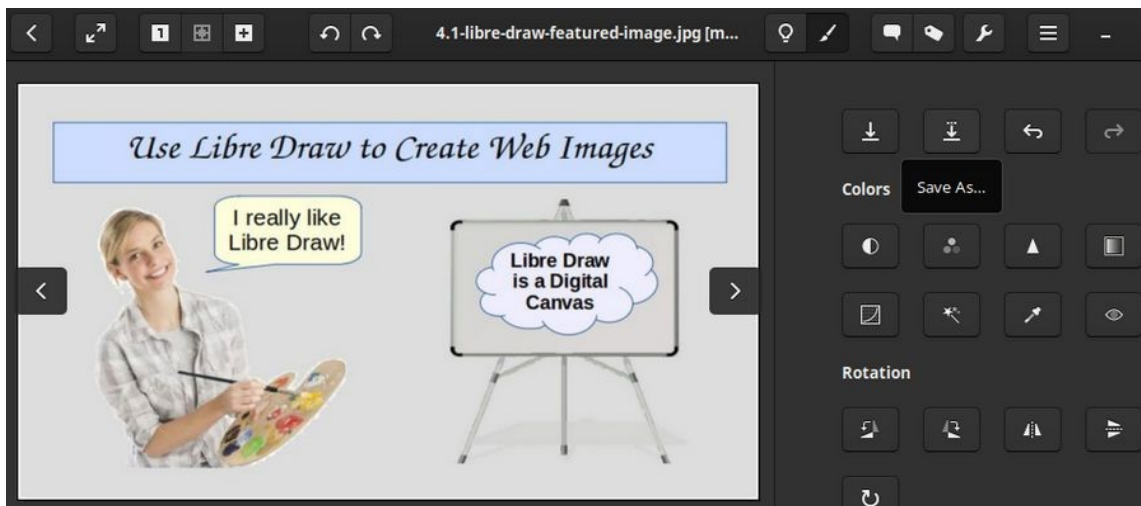
Then click on the **Resize** button in the lower right corner.



The original image is 900 wide by 469 high. We want the image to be exactly 800 wide by 450 high. Click on the **Height Minus** sign to bring the height down to 450 High. The width is still 864. Click **Accept**. Then click on the **Crop** button which is to the right of the Resize button and click **Maximize**:



Reduce the width to 800 pixels. Then click on the **Position Plus sign** and move the displayed image 30 px to the right to center the textbox. Then click Accept.



Then click the Save As button to save the edited image with a file name that includes its width, for example, as **4.1-libre-draw-featured-image-800.jpeg**. Then click Save.

### Create Two More Thumbnail Images

While we are here, we will use 4.1-libre-draw-featured-image-800 (which is already open) to create three more thumbnail images. Click on Resize. Reduce the width to 400 pixels. Then click Accept. Then click Save As and change the name to **4.1-libre-draw-featured-image-400**. Then click Save. Click Resize again and reduce the width to 200 pixels. Then click Accept. Then click Save As and change the name to **4.1-libre-draw-featured-image-200**. Then click Save. You can now close Gthumb. You have created three thumbnail images for your first Featured image. We will leave



resizing the Text versus No Text Featured Images as a homework exercise. Here is what all of these featured images look like in our Featured Images folder on our secure Linux computer:

images featured-images ▶	
me ▼	Size
1.1-secure-news-website.jpg	64.3 kB
1.1-secure-news-website-200.jpg	12.8 kB
1.1-secure-news-website-400.jpg	29.0 kB
1.1-secure-news-website-800.jpg	70.2 kB
1.1-secure-news-website-image-only.jpg	51.0 kB
1.1-secure-news-website-image-only-200.jpg	11.7 kB
1.1-secure-news-website-image-only-400.jpg	24.4 kB
1.1-secure-news-website-image-only-800.jpg	56.6 kB
4.1-libre-draw-featured-image.jpg	37.1 kB
4.1-libre-draw-featured-image-200.jpg	8.7 kB
4.1-libre-draw-featured-image-400.jpg	18.6 kB
4.1-libre-draw-featured-image-800.jpg	44.9 kB

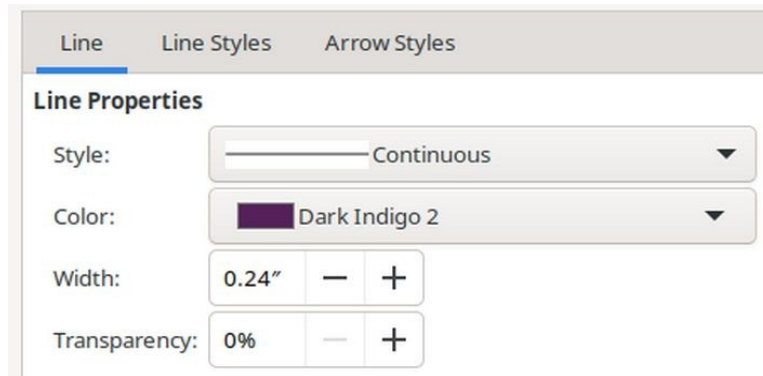
In addition to the option of manually creating thumbnail images with Gthumb, Joomla offers tools that allow us to put our biggest featured images in a folder and the tools will automatically create whatever smaller placeholder images we decide to use. So this is mainly a learning exercise.

Congratulations! You are now ready to add these to your News website article. We will cover this in our next article. But first, we need to create some Topic Placeholder images to use for our News Demo page layout and resize them also.

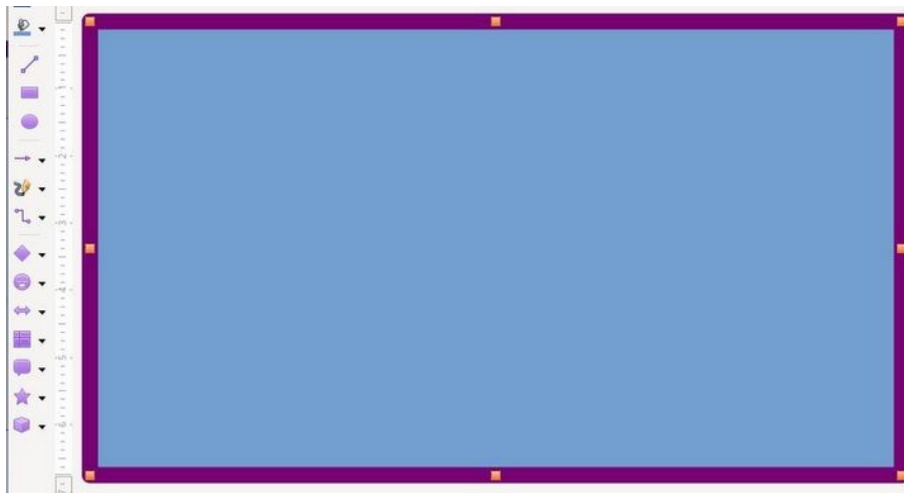
### Create four News Topic placeholder images

Placeholder images are images to use for articles and categories that do not yet have their own custom Feature Images. We will create placeholder images for the topics: **Community News, Local Sports, School News and Business News**. In your images folder, create a folder called placeholder-images. Then open a new Libre Draw document and save it as Sports News Placeholder. Add a rectangle that covers the entire workspace. Then right click on the rectangle and click Line. Change the color to purple and the thickness to .24.





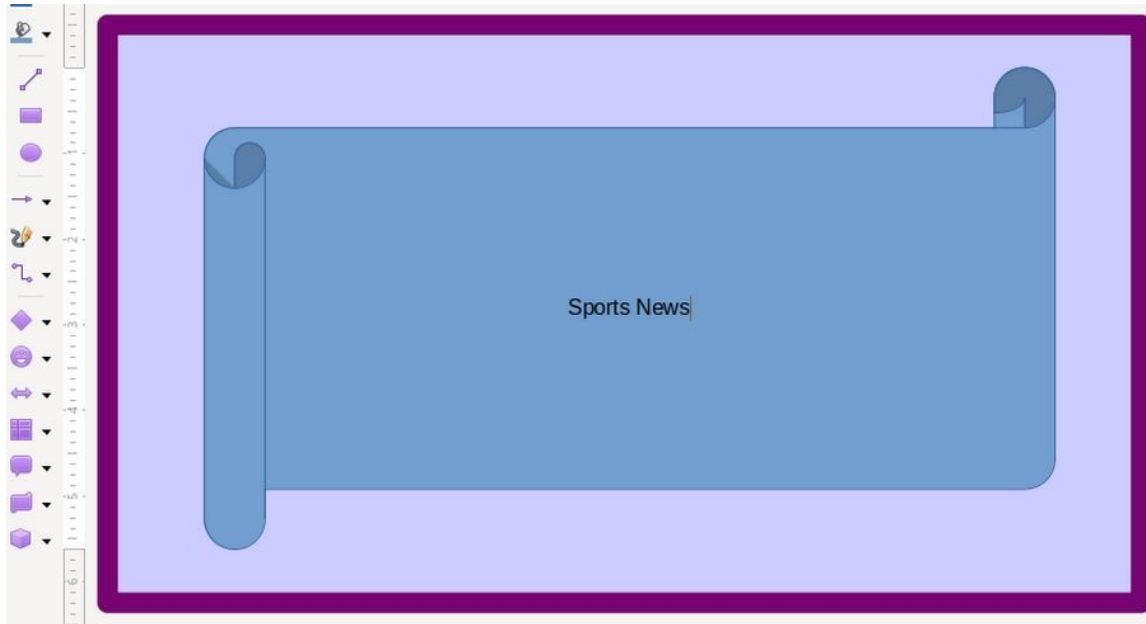
Then click OK.



Then right click on the rectangle and click Area to change the color to light blue #CCCCFF.

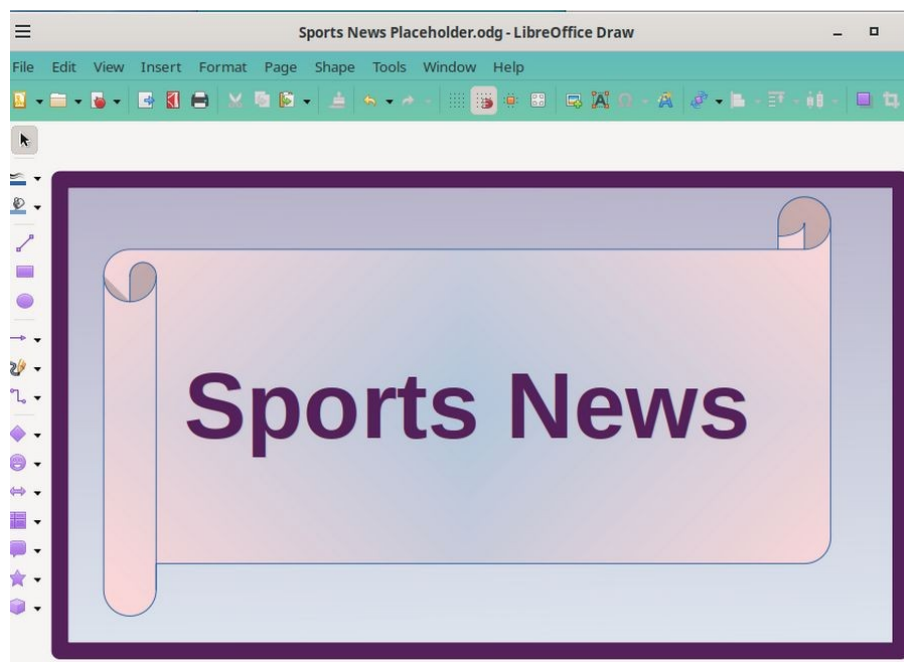


Then click on the star shape to add a scroll. Click in the middle of the scroll and add the text **Sports News**.



Select the words Sports News. Then right click and click **Character**. Change the font to 96 bold and change the font color to purple to match the border.

Then click on the scroll to select it and right click and click Area. Change the area to a lighter blue #EEEEFF. Below is our final result:



Use Flameshot to copy the entire screen including the purple border. Paste the image in a Write document:



Then right click on the image and click Compress. Compress the image to 150DPI JPEG and click Save. Save the image in your placeholder-images folder as sports-news.jpeg.

**Repeat the above steps to create school-news, business-news and community-news placeholder images**

Save the Sports News Placeholder Libre Draw file. Then save it again as School News Placeholder. Then save it again as Business News Placeholder. Then save it again as Community News Placeholder.

Next open the School News Placeholder drawing and change the border colors, text color, scroll background color.

Here is **School News** in blue:



Here is **Business News** in green:






















Here is **Community News** in red:



### **Use Gthumb to Resize and Crop each image**

Open Gthumb and go to your News Website images folder and open the placeholder-images folder. Then select the sports-news image and resize it to 800 wide. Then crop it to 450 high. Then save it as sports-news-800.jpeg. Then resize this image to 400 wide and save it as sports-news-400.jpeg. Then resize it to 200 wide and save it as sports-news.200.jpeg. Repeat to create **800, 400 and 200** images for the other three placeholder Topic images. Here is what our placeholder images folder looks like when we are done:

images placeholder-images ▶	
name ▼	Size
 business-news.jpg	27.8 kB
 business-news-200.jpg	7.5 kB
 business-news-400.jpg	14.2 kB
 business-news-800.jpg	30.0 kB
 Business News Placeholder.odg	27.1 kB
 community-news.jpg	34.5 kB
 community-news-200.jpg	8.9 kB
 community-news-400.jpg	17.1 kB
 community-news-800.jpg	36.6 kB
 Community News Placeholder.odg	41.3 kB
 school-news.jpg	26.1 kB
 school-news-200.jpg	6.8 kB
 school-news-400.jpg	13.3 kB
 school-news-800.jpg	27.9 kB
 School News Placeholder.odg	38.1 kB
 sports-news.jpg	29.7 kB
 sports-news-200.jpg	7.4 kB
 sports-news-400.jpg	14.6 kB
 sports-news-800.jpg	31.7 kB

## What's Next?

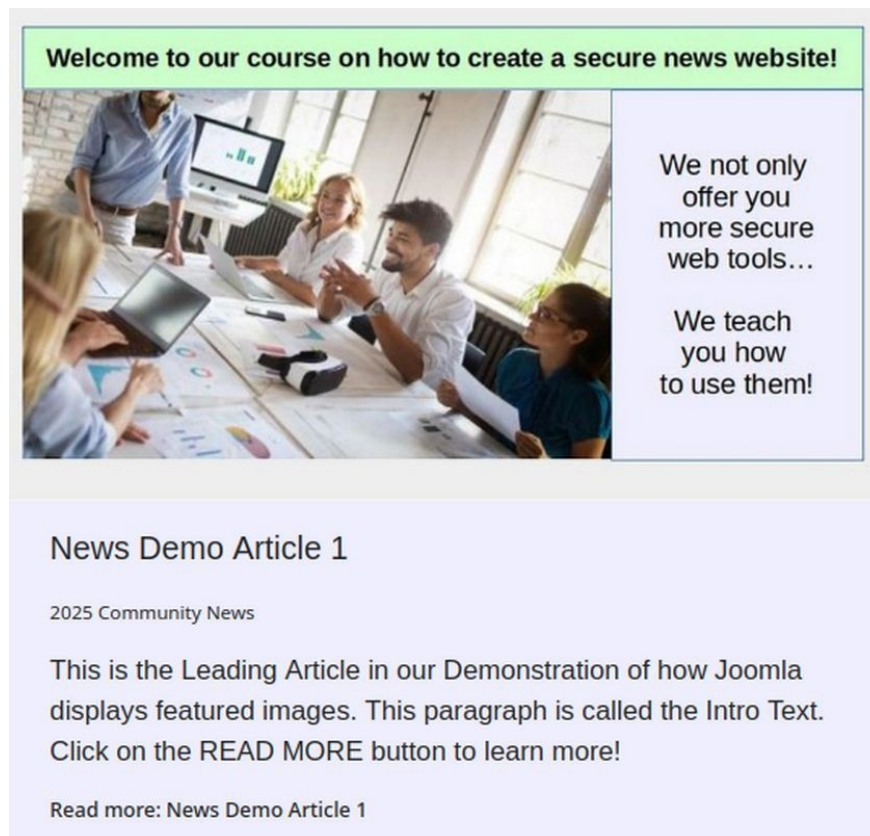
In our next article, we will review how to add these Featured Images to your Community News website and see which sizes we like best.



### 4.3 Add Featured Images to each Joomla News Article

Joomla offers a way to insert special images that are “associated with” rather than being inside of a Joomla article. Joomla calls these special images, “**Featured**” images. There are two kinds of Featured images. **Intro Featured Images** are smaller thumbnail images used on our News website Home page and typically include Intro Text and a Read More button which when clicked on takes us to the Full Article. **Full Article Featured** images are bigger images that are displayed on the Full Article page. In our previous articles, we have used Libre Draw to create our Featured Images and used Gthumb to resize these images. In this article, we will review how to add both types of featured images to a Joomla News article.

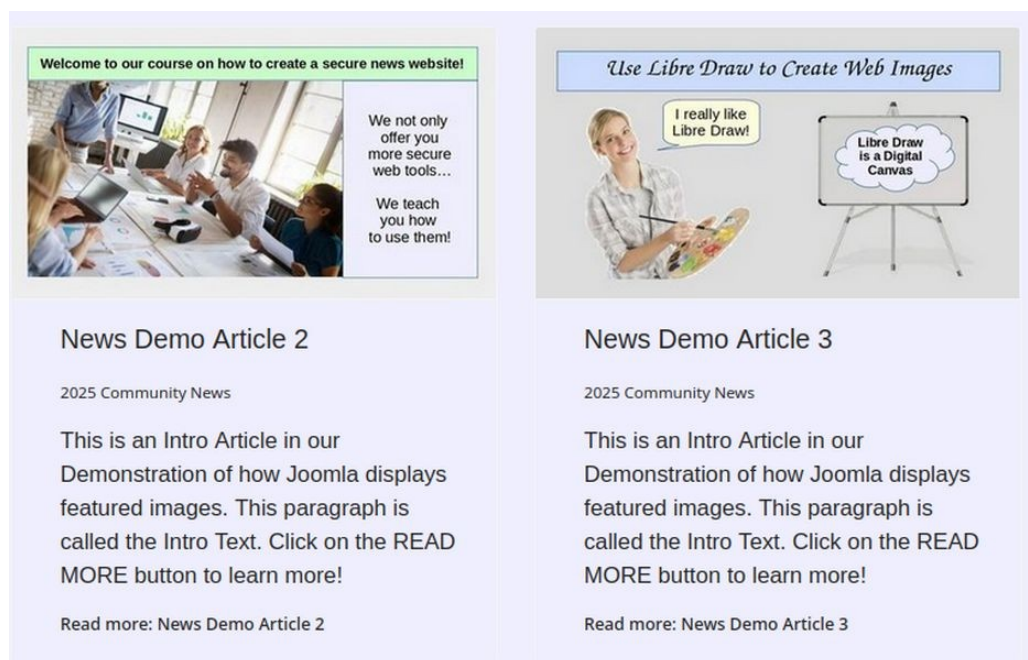
To better understand what we are trying to accomplish in this article, here is what “Intro” Featured Images with a width of 800 pixels and height of 450 pixels look like in a Single Column Leading article layout:



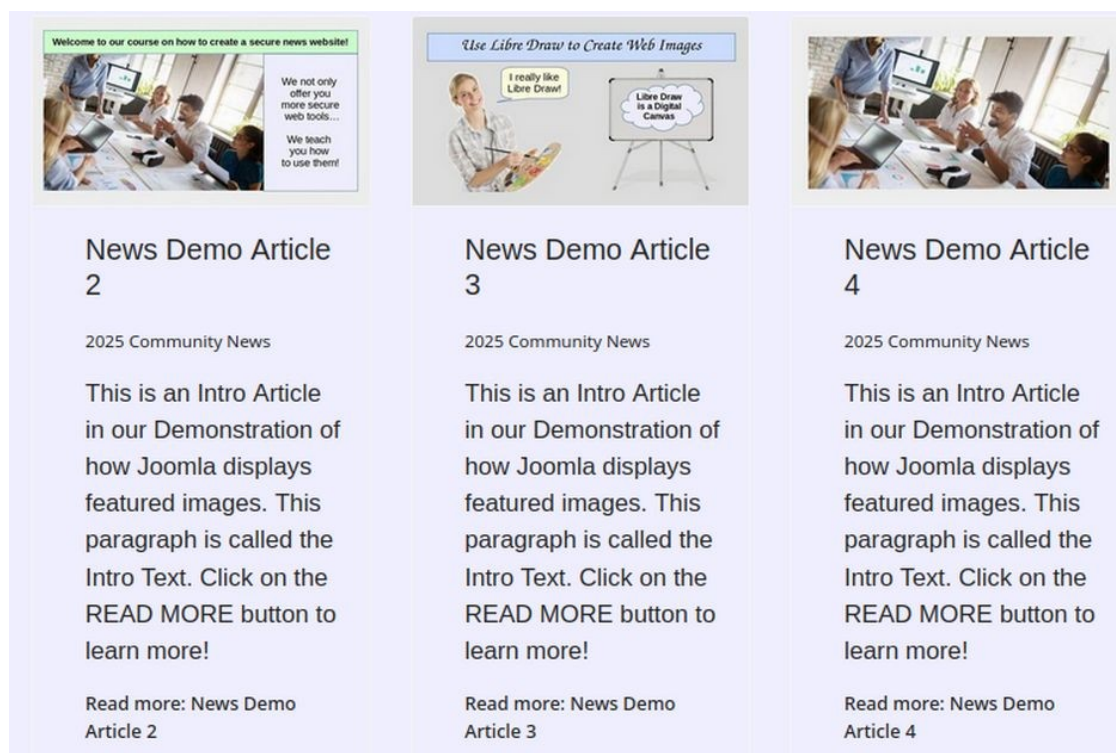
Click on the image, title or Read More text to go to the Full article.

Here is what two Intro Featured Images, each 400 px wide by 225 pixels

high look like in a two column Blog Layout:



Here is what three Intro Featured images with 400px Intro Images look like in a 3 column Blog Layout:



Let's look at the steps for adding featured images to articles.

### Use the Joomla Featured Article function

Joomla intends for featured images to be associated with Featured articles that display on the Home page of our website. Joomla assumes we will

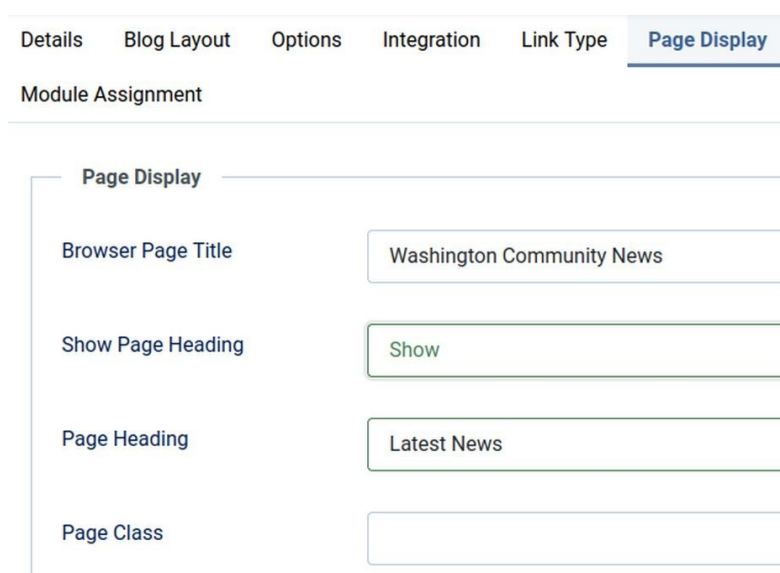
have several articles on our Home page. These are assigned to the Home page by clicking on Featured Article button when we create the article. This name “Featured Article” creates a lot of confusion because **a Featured article is not the same as a featured image!** Only articles assigned to the Featured Article section on our Home page are featured articles. However, every News article should be provided with two Featured images – one called the **Intro Image** and the other called the **Full Article Image**.

### Limit the number of Featured Articles

A huge benefit of using the Joomla Featured Article tool is that when you create an important News article, regardless of the Topic Category it is in, you can assign it to the Featured Article category in addition to assigning it to its normal Topic category. You can assign as many articles as you want to the Featured article category. However, it is best to only have three to six Featured articles at any given time. To remove an article from the Featured article category, simply edit the article and uncheck the Featured article box. Then save and close the article. The article will still display in its normal Topic category area of the Home Page and its Topic Category page.

### Change the Display Name for your website Home Page

One of the first steps in turning the appearance of a Joomla website to a News website is to change the Display Name for the Home page blog from the word **Home** to the words **Latest News**. To make this change, go to **Menus, Main Menu** and click the Home menu item to edit it. Then click on the Page Display tab and change the name from Home to Latest News:



The screenshot shows the Joomla! administration interface for editing a menu item. At the top, there are tabs: Details, Blog Layout, Options, Integration, Link Type, and Page Display (which is selected). Below the tabs is a section titled 'Module Assignment'. The main content area is titled 'Page Display' and contains four configuration options:

Page Display	
Browser Page Title	Washington Community News
Show Page Heading	Show
Page Heading	Latest News
Page Class	

In addition, while the Home menu item is open, click on the Blog Layout tab and assign your important news categories and sub-categories to display below the featured articles.

Details
Blog Layout
Options
Integration
Link Type
Page Display
Metadata
Page Title

Sort by Custom Field    Module Assignment

Blog Layout

*?* If a field is left blank, global settings will be used.

Select Categories

1 News ×

- 2025 Community News ×

- 2025 State News ×

- 2025 National News ×

- 2025 World News ×

2 Sports ×

- 2025 Local Sports ×

- 2025 College Sports ×

- 2025 Pro Sports ×

3 Schools ×

- 2025 State Funding & Policies ×

- 2025 School Board ×

- 2025 Local Schools ×

4 Business ×

- 2025 Local Business News ×

- 2025 State Business News ×

- 2025 National Business News ×

5 Government ×

- 2025 Issues ×

- 2025 Elections ×

- 2025 Elected Officials ×

- 2025 Politics ×

6 Events ×

- 2025 School Events ×

- 2025 Business Events ×

- 2025 City Events ×

- 2025 County Events ×

- 2025 Church Services ×

- 2025-Community Events ×

Type or select some options

Also scroll down the Blog Layout settings and change Pagination and Pagination Summary from Show to Hide. Then view your website front end to see the result:



By default, none of our News Topic categories or sub-categories will show on our Home page yet because none of them have any articles.

### Add Featured Image articles to our Media Manager

Go to Content, Media and click **Create New Folder**. Create a folder called **demo-featured-images** and another folder called **category-placeholder-images**. Then click Upload to load the images from your Home computer



that we created in our previous article.

### **Change the Home Menu Item to 1 Leading Article displayed in 1 column and 2 Intro articles, displayed in two columns.**

Open the Home Menu item to edit it. Then click on the Blog Layout tab. Leave Leading article at 1 and change Intro articles to 2 and increase columns to 2. Change Multi Column Direction from Down to Across and Linked Intro Image from No to Yes. Then click Save and Close.

### **Create Demo Articles**

We will next create several Demo articles to see how Featured Images display – both in the Blog View Layout and the Full Article Layout. We will eventually replace these Demo articles with real news articles in the future! It is important that any articles we show as Featured articles include a short description called **Intro Text** followed by inserting a “**READ MORE**” button which is then followed by the main article text.

### **Create our first Leading Article**

Go to **Content Articles** and click **New**. For Title, call it **News Demo Article 1**. For Text, copy and paste the following:

*This is the Leading Article in our Demonstration of how Joomla displays featured images. This paragraph is called the Intro Text. Click on the READ MORE button to learn more!*

*To insert a READ MORE button, place your cursor at the blank line just above this sentence. Then click on the READ MORE button at the bottom of this editor screen.*

*This is more content that is part of the Full Article but not visible on the Intro Article.*

Then check the Featured article box and assign the article to your 2025 Community News category. Then save the article.



Title \* Alias

News Demo Article 1 news-demo-article-1

Content Images and Links Options Blog Media Schema Publishing Configure Edit Screen Permissions

Article Text

Editor Code Preview

Format Styles

Font family Font size A A

This is the Leading Article in our Demonstration of how Joomla displays featured images. This paragraph is called the Intro Text. Click on the READ MORE button to learn more!

To insert a READ MORE button, place your cursor at the blank line just above this sentence. Then click on the READ MORE button at the bottom of this editor screen.

This is more content that is part of the Full Article but not visible on the Intro Article.

Status Published

Category \* - 2025 Community News

Featured Yes

Access Public

## Add the READ MORE link to the main article

After copying and pasting the text into the article workspace, enter a new line and with the cursor left at the beginning of the new line, click on the READ MORE button at the bottom of the page.

## Add the Intro and Full Article Images

To add the Intro Image and Full Article Image, click on the **Images and Links** tab. Then click on the Intro Image Select button and go to the featured-images folder. Normally, for the Intro Image, we would select a 400 wide image. However, because this is the Leading article, for it to display properly at the top of our Home page, we need to select the 800 wide image for the Intro Image. Select 1.1-featured-image-800.jpg.

Content Images and Links Options Blog Media Schema Publishing

Intro Image

Intro Image

Welcome to our course on how to create a secure news website!

We not only offer you more secure web tools... We teach you how to use them!

images/demo-featu Select

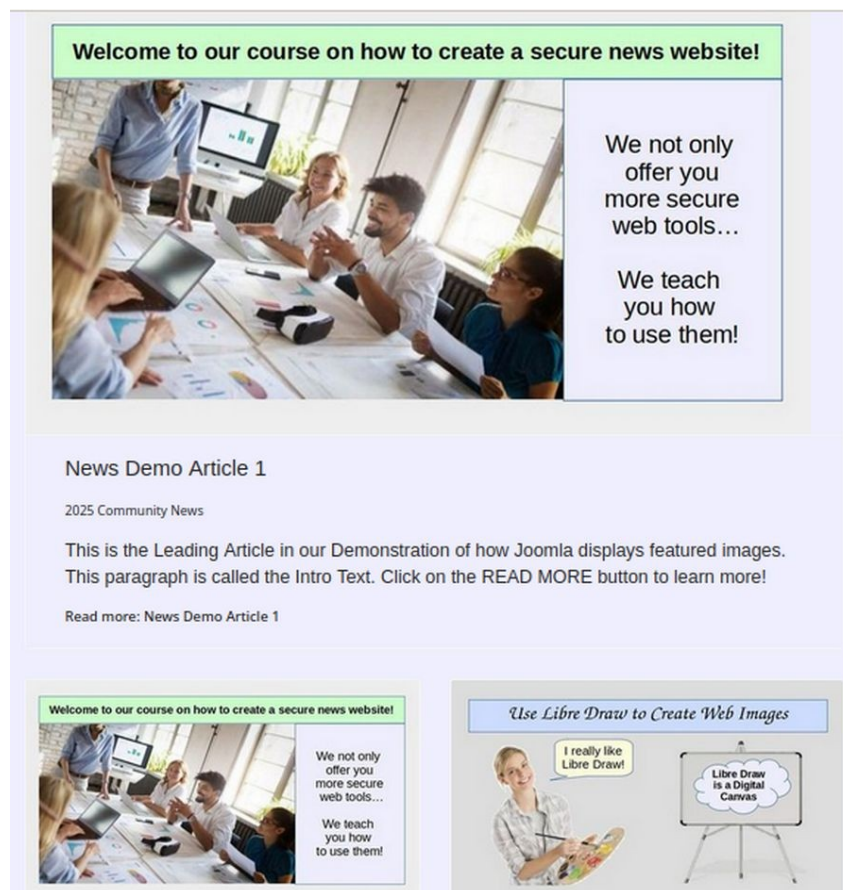
For the Full Article image click on the Select button and select the **1.1 800 wide image** we loaded into the Joomla Media Manager. Then click Save and Close.

### Create the Second, Third and Fourth Demo News Articles

Click on News Demo article 1 to open its Article Edit screen. Then use the arrow drop down to select Save as Copy. Rename the article News Demo Article 2. Change the first sentence to start “ This is an Intro Article...”

Then click on the **Images and Links** tab and change the Intro Image from an 800 wide featured image to a 400 wide featured image. Then click Save. Then click Save as Copy.

Rename the third article News Demo 3. Click the Images and Links tab and select a different Intro 400 wide featured image and a different 800 wide Full Article featured image. Then click Save. Then click Save as Copy. Rename the fourth article News Demo 4. Click the Images and Links tab and select a different Intro 400 wide featured image and a different 800 wide Full Article featured image. Visit your Home page to see the result:



## Display More Blog Categories on your Home Page

In addition to displaying our Topic Categories and Subcategories in our Main Menu, we also want to display three articles from each Topic Categories below our Latest News Featured articles on our Home page. To see what this looks like, we first need to create some additional Topic Category articles. We already have four articles in the Community News Topic category. We will next add three Demo articles for our Sports category – with one in each of our three Sports sub-categories – and using the Sports Placeholder 400 wide image for the Intro Image and the Sports Placeholder 800 wide image for the full article image.

### Create your first Sports Category article

Go to **Content, Articles** and click on the News Demo Article 2 to edit it. Then click Save as Copy and call change the title to **Sports Demo Article 1**. Also change the alias to **sports-demo-article-1**. Assign this first Sports article to the **2025 Local Sports** Topic Category. Also **uncheck the Featured article box**.

Then click the **Images and Links** tab and change the Intro Image to the 400 Sports Placeholder image. Change the Full Article Image to the 800 Sports Placeholder image. Click Save. Then click Save as Copy.

Change the title to **Sports Demo Article 2** and change the alias to **sports-demo-article-2**. Assign this second Sports article to the **2025 College Sports** Topic Category. We will not change the Intro or Full Article images. Click Save. Then click Save as Copy. Change the title to Sports Demo Article 3 and change the alias to sports-demo-article-2. Assign this second Sports article to the **2025 Pro Sports** Topic Category. We will not change the Intro or Full Article images. Click Save. Then click Save and Close.

Use a copy of the Sports Demo 1 article to repeat this process to create three Demo articles for the Schools Category and the Business Category. Also create three more News Demo articles (5, 6 and 7) which are not checked as Featured articles and which are using the News Placeholder 400 and 800 wide images. We now have 3 News articles, 3 Sports articles, 3 Schools articles and 3 Business articles which are not checked as Featured articles.

## Add Topic Category Module Positions to our Home Page Layout

Joomla modules are slightly different from Joomla articles. Modules are boxes of content that you can precisely place in specific module locations on your website. Before we create our modules, we first need to use our Helix template to create some new module positions.

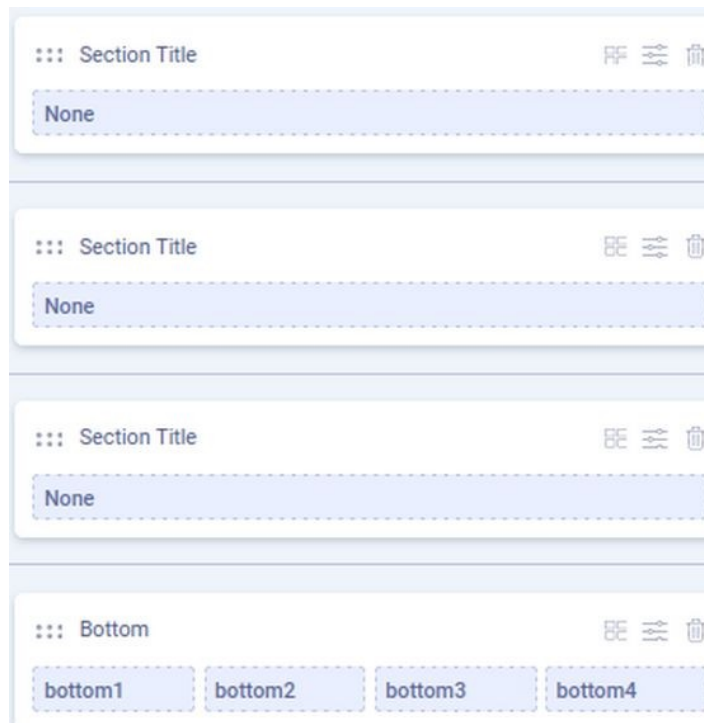
Module positions can be thought of as additional rows and columns we add to our page layout. We will add four module rows with one module position per row to appear below our Latest News featured articles. To add these module positions, go to our Home Dashboard and click **Template Styles**. Then click the Shaper Helix template to open the Template Edit screen. Click **Template Options**.

Then click **Layout**. Currently, our Layout has three rows above the Joomla Component area (which is our Latest News Featured articles).



Below the Joomla Component row are a Bottom row and a Footer row. Hover your cursor just above the Bottom row to reveal a small + (Plus)

sign. Click on it three times to create three more rows above the Bottom row. Then click Save. Here is what the rows below our Joomla component row now look like:

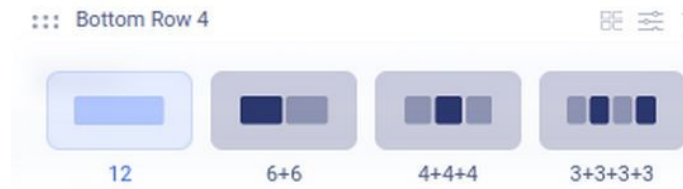


Click on the three arrows to the right of the first Section Title and change the row name to Bottom Row 1.

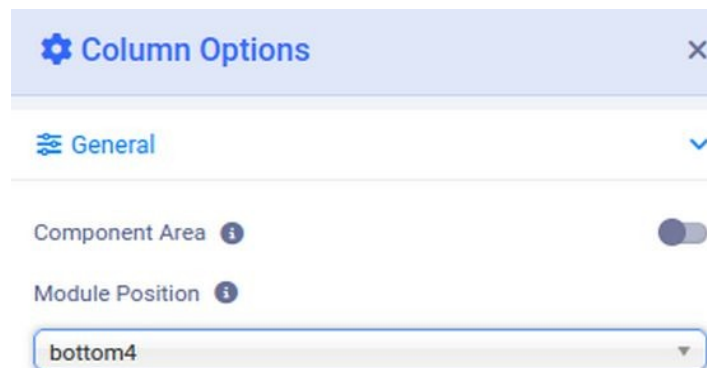


Repeat to change the names of the other three rows to Bottom Row 2, Bottom Row 3 and Bottom Row 4. Then click the tiny grid to the right of the three arrows for Bottom Row 4 and change it from four columns to 12 which equals one column.





The blue area below Bottom Row 1 will now read “bottom1.” Hover your cursor to the far right of this blue area to reveal three dots. Click on the three dots and change the Module Position from bottom1 to bottom 4:



Click Apply. Then click the three dots for Bottom Row 1 and assign its module position to bottom1. Repeat to assign the bottom2 module position to Bottom Row 2 and the bottom3 module position to Bottom Row 3. Click Save, then click Close to close the Template Edit screen. Now that we have our module positions, we are ready to add our first Topic Category module.

### Add a Joomla Extension to allow Article Modules on Home Page

Unfortunately, the default Joomla Module Manager does not allow us to display Articles Modules on our Home page. Thankfully, there is a free Joomla extension that replaces the Joomla Module Manager with a better one that will allow us to display Article Modules on our Home page. It is called the Advanced Module Manager. Here is a link to this extension in the Joomla Extension Manager: <https://extensions.joomla.org/extension/style-a-design/modules-management/advanced-module-manager/>

Click Download to go to this page:

<https://regularlabs.com/advancedmodulemanager/features>

Scroll down and click **Download Free**. Then in the Popup, click **Download Free**. Transfer the extension from your Downloads folder to your website extensions folder. Then in the Joomla Dashboard, click **System, Install, Extensions** to install the Advanced Module Manager. This will replace the Module Manager Menu Assignment tab with a better one we will use in a

moment.

## Create a More News Topic Category Module

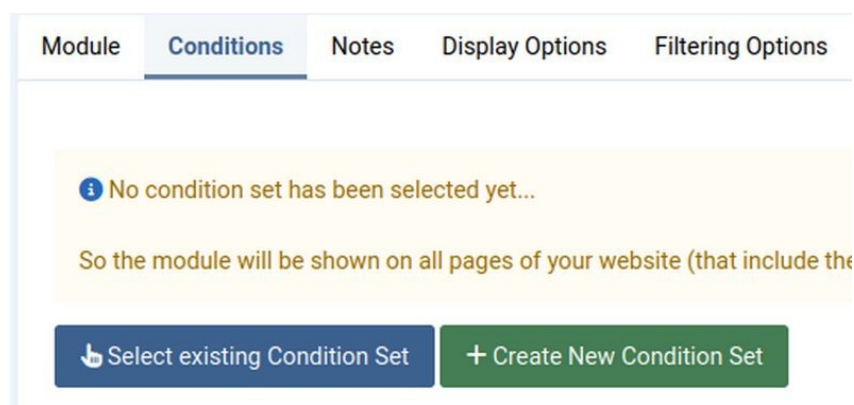
Go to **Content, Site Modules** and click New. Then click **Articles** to bring up this new Module: Articles Edit screen:

For Title, type **More News**. For Position, select **bottom-1**. For Mode, leave it at Normal. Reduce the Articles to Display from 5 to 3. For category, click **1 News category, 2025 Community News, 2025, State News, 2025 National News and 2025 World News**. For Child category Articles, change it from Exclude to Include. For Category Depth, change it from 1 to 3. For Exclude Current Article, leave it at Yes.

Click Save. Then click the **Conditions** tab.

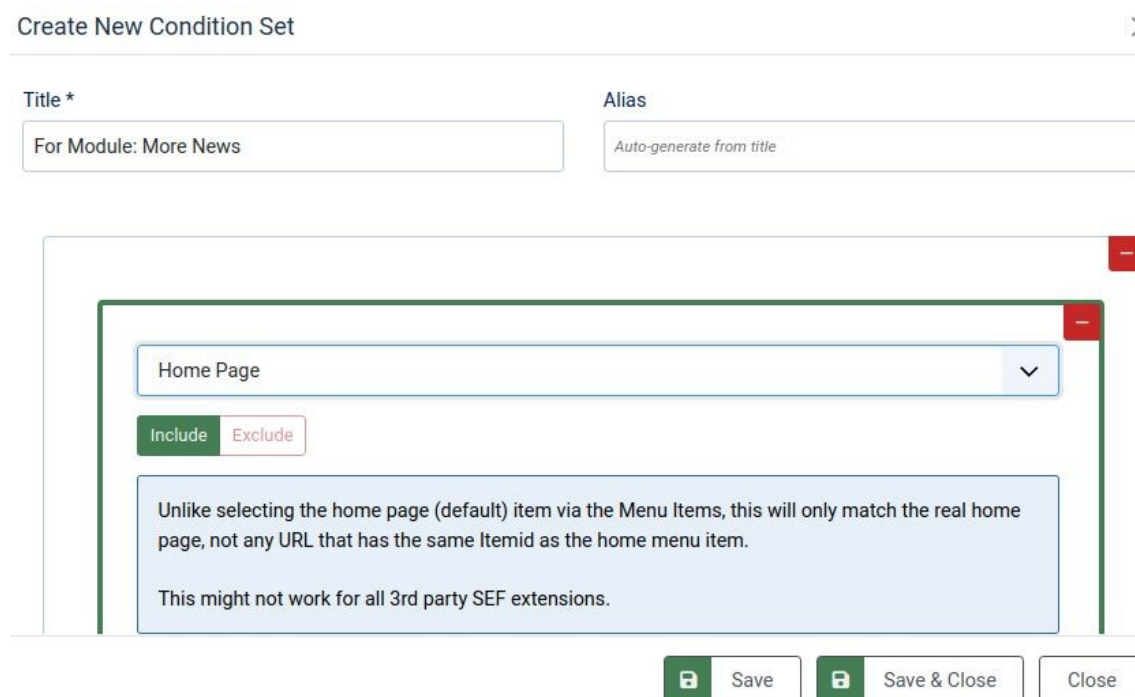
The Conditions tab replaces the normal Joomla Module Manager which

has a tab called Menu Assignment:



The screenshot shows a tabbed interface with 'Conditions' selected. A yellow message box states: 'No condition set has been selected yet... So the module will be shown on all pages of your website (that include the...'. Below the message are two buttons: 'Select existing Condition Set' and '+ Create New Condition Set'.

Click Create New Condition Set: For Select a Rule type, click Home Page Include. Then click Save and Close to close the Condition tab.



The 'Create New Condition Set' dialog box is shown. It has fields for 'Title \*' (containing 'For Module: More News') and 'Alias' (containing 'Auto-generate from title'). Below these is a nested window showing a dropdown menu with 'Home Page' selected, and buttons for 'Include' (highlighted in green) and 'Exclude'. A text box explains: 'Unlike selecting the home page (default) item via the Menu Items, this will only match the real home page, not any URL that has the same Itemid as the home menu item. This might not work for all 3rd party SEF extensions.' At the bottom are buttons for 'Save', 'Save & Close', and 'Close'.

Then click the **Display Options** tab. Change the Layout from Vertical or Horizontal. Set the Max Number of Columns to 3. Change category from Hide to Display with Category Link set to Yes. Leave Article Info Layout at Multiline instead of Single Line. Change Intro Text from Hide to Show. Increase the Intro text limit from 100 to 190. Change Show Intro/Full image from No to **Intro Image**. Change Read More link to Show. Increase the Read More Character Limit from 15 to 30. Click Save. Then click the **Filtering Options** tab. Change Featured articles from Show to Hide. Click Save.

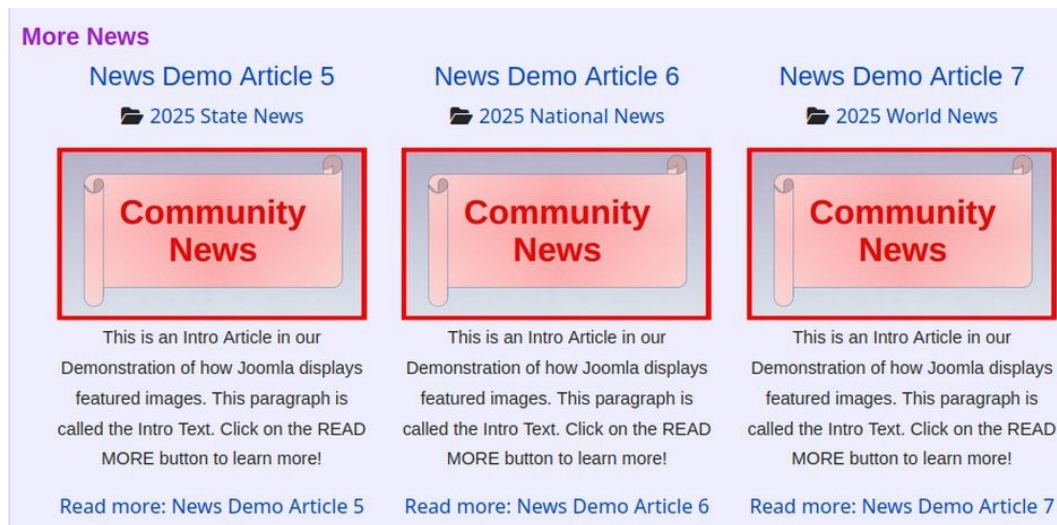
Then click the **Ordering Options** tab and change the Article Field to Order

by to Start Publishing Date. Click Save and Close. Clear the browser cache and view the front end to see the result. Unfortunately, the front end displays only two columns despite the fact that we set the Articles module to 3 columns. This is because the CSS for mod\_articles\_grid was set to only 1fr, 1 fr. To fix this, add this line to our Helix template custom css:

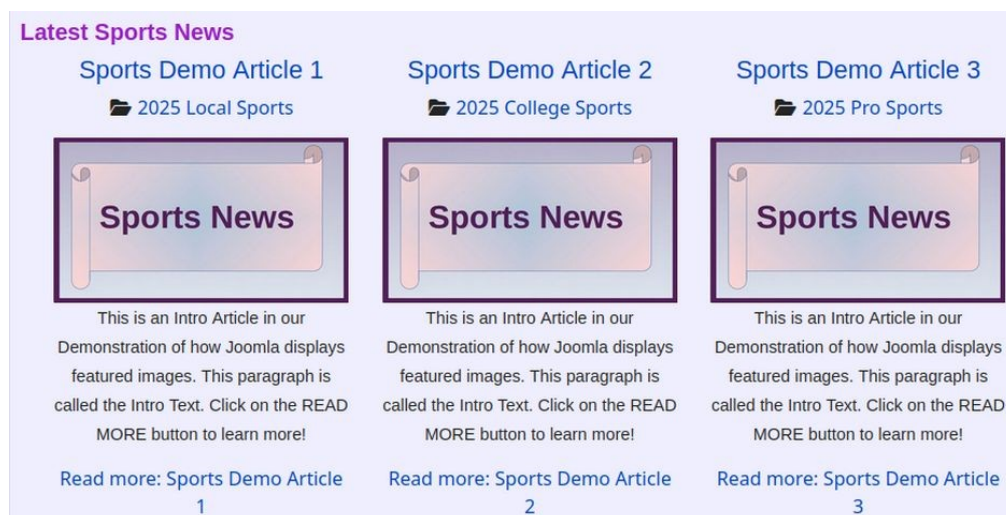
```
.mod-articles-grid {grid-template-columns: 1fr 1fr 1fr;}
```

```
ul { list-style-type: none;}
```

Here is the result:



Click **Module, New, Articles** and repeat the above steps to add a **Latest Sports News** row to the bottom2 module position:



Click **Module, New, Articles** and repeat the above steps to add a **Latest School News** row to the bottom3 module position.

Click **Module, New, Articles** and repeat the above steps to add a **Latest**

**Business News** row to the bottom2 module position:



Final Notes: The layout needs improvement to display better on mobile phones. For screen widths under 700 pixels, the custom CSS should be changed to

**.mod-articles-grid {grid-template-columns: 1fr 1fr;}**

If sub-topic headings appear on some pages, add the following to your Helix template custom CSS:

**.cat-children h3 {display: none;}**

The READ MORE button needs better styling. We will deal with that in a later article.

## What's Next?

It is important that Intro articles only have a few words in the Intro Text before the Read More button. Even then, the vertical format of having the image above the Title simply takes up too much room. We could add a class to float the image left. To solve this problem and create a more space efficient way to display Intro Articles, we will need to add a free Joomla extension called **Mini Front Page** – a tool which also automatically processes Featured images. We will cover this Joomla extension in our next article.



## 4.4 Automatically Process Featured Images

In our previous article, we used a Joomla module called Articles to display the three Latest Articles for our News, Sports, Schools and Business categories. The Joomla Articles module does not offer very many ways to customize the appearance of our Latest News Topic rows. Therefore, in this article, we will review how to download and install a free Joomla extension called **Mini Front Page**.

Here is the link to Mini Front Page in the Joomla Extensions Directory.

<https://extensions.joomla.org/extension/mini-frontpage/>

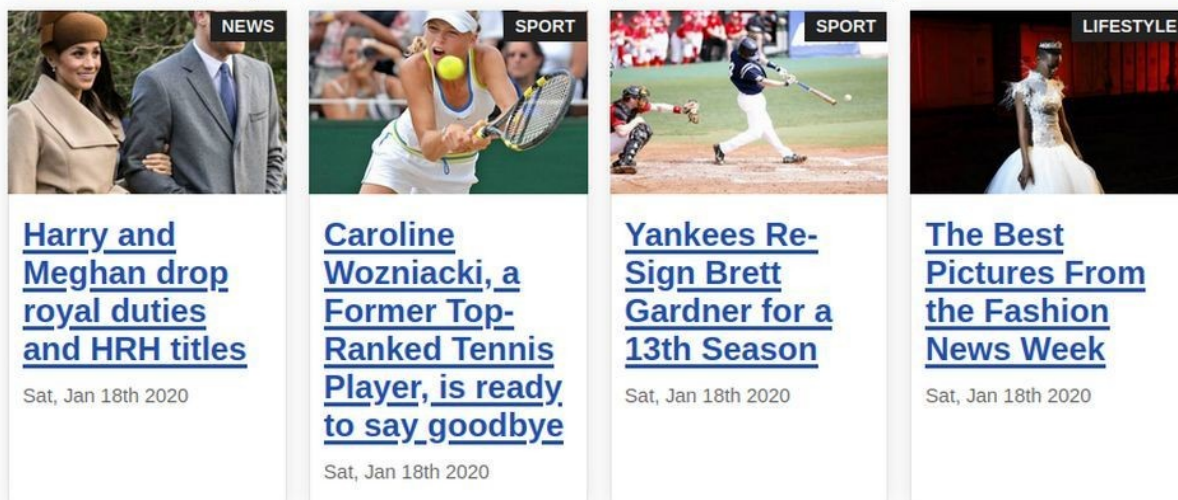
To Download the free version, go to this page:

<https://templateplazza.com/joomla-extensions/mini-frontpage>

To see a demo of this various ways to display this module, go to this page:

[https://demo.templateplazza.com/joomla/index.php/mini-frontpage-module#google\\_vignette](https://demo.templateplazza.com/joomla/index.php/mini-frontpage-module#google_vignette)

### Mini Frontpage Module - Demo 2 (Default Theme)



You will need to register. Then download this module. Then move it from your Downloads folder to your website Extensions folder. Then UNZIP the folder to reveal the Joomla 4 version of this extension. Then load the Joomla 4 version of this extension to your Joomla website with **Systems, Install, Extensions**. This popup will appear:

Mini Frontpage is an advanced news display module for Joomla. It displays the latest joomla articles with date, thumbnail, excerpt in various design and layout.

[Open Module Manager](#) to publish the module.

## Unpublish our four Articles Modules

Before we publish this module, we need to first unpublish the four Articles modules we created in our last article. Go to Content, Site Modules and check all four Article Modules. Then click Actions, Unpublish.

## Configure the Mini Front Page Module

Then click on the Mini Front Page module to configure it. Change the Title to **Breaking Sports News** and set the position to Helix **bottom2**. Then publish the module and set the articles to display to 3.

The screenshot shows the Joomla! Module Manager configuration page for the 'Minifrontpage' module. The 'Title' field is set to 'Breaking Sports News'. The 'Position' dropdown is set to 'bottom1'. The 'Show' checkbox is checked. The 'Conditions' tab is selected, and the 'Themes' tab is also visible. The 'Advanced' and 'Permissions' tabs are also present. The 'Minifrontpage' module description is visible at the bottom.

Scroll down the page and increase Intro text characters to 300. Then change the Category to 2 Sports 2025 Local Sports, 2025 College Sports and 2025 Pro Sports. Change Featured articles to Hide. Change thumbnail width from 64 to 120 and height from 64 to 68. Click Save.

Then click on the **Conditions** tab and set the condition for the Home Page just as we did in our last article. Then click the **Themes** tab and change the number of columns to 2. Hide the article date. Change Show category to show. Change Article date to Hide

Most important, **change the Thumbnail position to Left of Title**.

Change Show More Articles Block to Show after 3 items.

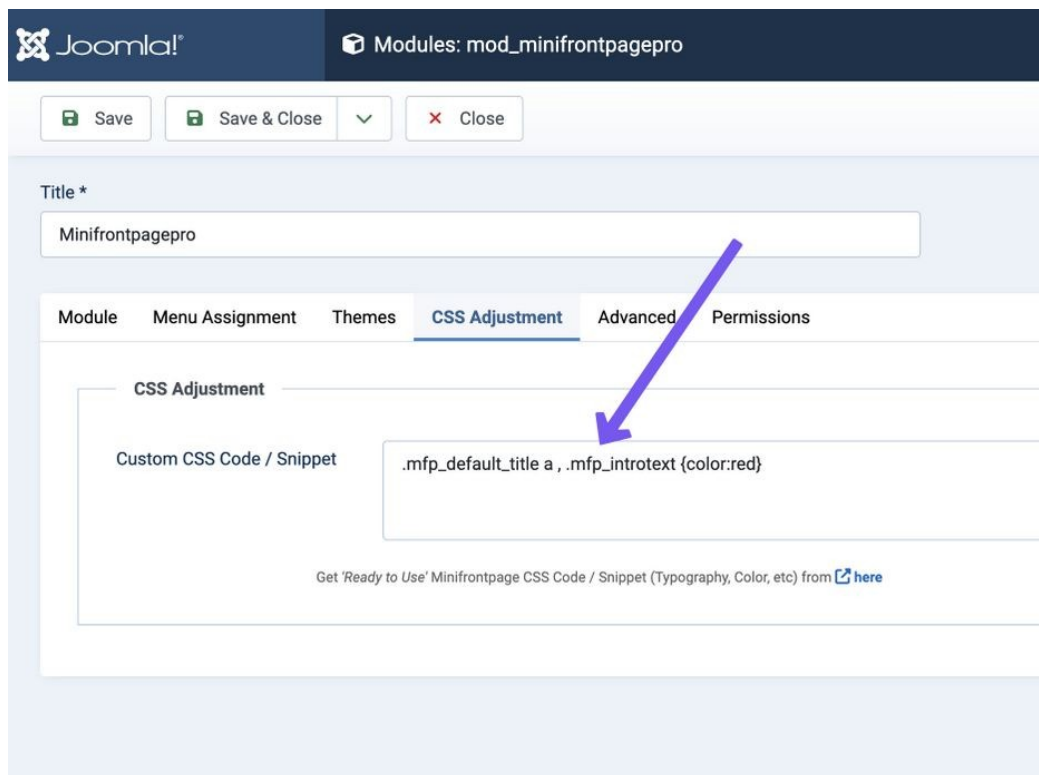
For theme skin, leave it at Default. Then click Save and Close and View the result:



Note that these three articles take up half the space of the Joomla layout above them. We can create these modules for all of our News Topic rows and readers can see twice as many articles in the same space. Your site visitors can quickly scan through these articles to see which ones they want to read. They can then go to the article they want by clicking on either the article title or the article image.

### How to change font colors of the topic titles

Just add the the following to your Helix Custom CSS or in the CSS Adjustment tab. For example, if you are using the default theme, the code to be added is: **`.mfp_default_title a , .mfp_introtext {color:red}`**



## Where the Mini Front Page Thumbnail Images come from

MiniFrontPage will first look for an image in the intro image. If it doesn't find one, it will then check the full text image, and if it still doesn't find one, it will search the body of the article. Minifrontpage only generates thumbnails once, and after that, every time it is loaded, minifrontpage checks the thumbnail folder. If the thumbnail already exists, minifrontpage will not regenerate the thumbnail. To generate new thumbnails, simply delete all image files in the folder `/images/thumbnails/mod_minifrontpage/`

The screenshot shows the 'Thumbnail Settings' section of the MiniFrontPage extension configuration. It includes a 'Thumbnail Width' field set to 64, a 'Thumbnail Height' field set to 64, and a 'Show Default Thumbnail' toggle set to 'Show'. Below these is a 'Custom Default Thumbnail' section with a preview of a yellow circular logo and a file input field containing the path 'images/Android\_O\_Preview\_Logo.png#joomlaimage://local-images/Android\_O\_Preview\_Logo.png?v'. The file input field has 'Select', 'Upload', and 'Close' buttons. Red boxes highlight the instructions for deleting thumbnails if the width or height settings don't change.

Thumbnail Settings

Thumbnail Width: 64  
Enter width of generated image thumbnail.  
If the width doesn't change, please Delete all thumbnail images under the folder `/images/thumbnails/mod_minifrontpage/` and then refresh/remove caches and cookies of your browser.

Thumbnail Height: 64  
Enter height of generated image thumbnail.  
If the height doesn't change, please Delete all thumbnail images under the folder `/images/thumbnails/mod_minifrontpage/` and then refresh/remove caches and cookies of your browser.

Show Default Thumbnail: Hide Show  
Show default thumbnail when no image found on the article

Custom Default Thumbnail  
images/Android\_O\_Preview\_Logo.png#joomlaimage://local-images/Android\_O\_Preview\_Logo.png?v Select Upload Close  
Upload your own image that will replace the default thumbnail

There are two minor problems with this extension. First, **it does not include Read More buttons**. There is a way to do an “over-ride” to add Read More buttons (although that would take up more vertical space). The process is described in the Mini Front page forum.

Second, the thumbnail images are generated automatically and placed in a folder in the Joomla Media Manager called **thumbnails/mod-minifrontpage** which is in a folder called thumbnails. It creates its own thumbnail images by scanning the Joomla article Intro Images. Here is what this images folder now looks like:



If you need to change an Intro Image in the future, you need to **delete the minifrontpage folder completely** and let it regenerate itself by leaving the media manager and then returning to the media manager. You can also simply re-install the module. But this would require configuring the module again.

### Why we do not recommend the Helix Featured Images

Helix adds a tab called Blog Options to the Joomla Article New screen. It looks like we can add images and even links to featured videos from here. However, the Helix Blog Options tool interferes with the functioning of many extensions, including Mini Front Page. This is because other Joomla extensions look for Featured images to be set by the Joomla Intro and Full Article Featured Image tools.

Also, the video Helix Blog Options URL method only works for YouTube and Vimeo. Both of these video hosting services have appalling censorship policies. I recommend Rumble as a more freedom respecting video hosting platform. Later, we will review ways to add Rumble videos to your Joomla articles.

### What's Next?

Now that we know how to create Joomla categories, articles and featured images, in the next article, we will take a closer look at News website navigation and how to configure several menu item types offered by Joomla. We will also review how to configure the Helix Mega Menu.



## 5 News Menus

We will now review the many different types of menu item links available for your Joomla website and how to add links to the categories we have created in our Category Manager. We will then describe how to add links to the articles we have created in our Article Manager and how to create navigational links inside of your articles.

This chapter includes the following four sections:

5.1 How to Create Menu Item Links

5.2 Create Category Menu Items

5.3 Create Article Menu Items

5.4 Create Mega Menu Dropdowns

## 5.1 How to Create Menu Item Links

Websites consist not just of text and images but also links to navigate between pages. When viewers visit your website, you can help them navigate between pages more easily if your Main Menu is set up like the Table of Contents of a book. The visible menu item links in the Main Menu are the chapter titles of the book and the hidden drop down menu items are the sections within each chapter. This article explains why the category structure in your Main Menu should match the category structure used to organize your News articles and images. We also review the Joomla system for creating menu items and displaying articles - which is based on a key concept called **Menu Item Types**. Joomla offers over two dozen menu item types. We will compare and contrast the most common options.

Before we describe these various menu item link types, we first need to review the importance of using a single horizontal main menu.

### Why use a single top horizontal menu?

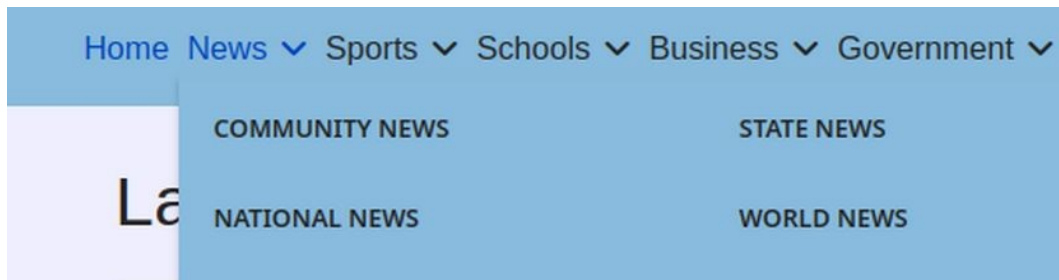
We recommend that you use a single horizontal drop down menu near the top of your web pages. Below is an example of a News Website single horizontal top menu just below the header:



A multilevel horizontal menu is the most efficient type of menu. There are several reasons to organize your website with a horizontal drop down menu. The first is that your website viewers have been reading books their entire life. They are used to seeing a Table of Contents and having the content organized into Sections, Chapters and Pages. The Main Menu should be a Table of Contents near the top of every page of your website which your viewer can quickly scan through in order to understand the organization of your website and where they might be able to find a particular article they are interested in reading.

Another important reason to use a single horizontal main menu is

conservation of space. It is now common for the main area of the website to be taken up with not only text and images, but also videos and feature boxes which Joomla calls modules. In order to provide more room for content and images in the Content section of your web page, the use of additional Menus in the Side Bar is declining. The Main Menu therefore is now commonly inserted as a Horizontal Menu between the Header and the Main Content Area. You therefore do not want the Main Menu to take up a lot of room or be too much of a distraction to the reader. The way to show all of your articles in a limited amount of space is to use a Horizontal “Drop Down Menu” in which all that appears on the opening screen are the BLOG TOPIC CATEGORIES. Most of the actual articles are hidden until the viewer points their cursor over the Category. Pointing the cursor over the categories or clicking on the category displays the TOPIC SUB CATEGORIES.



Clicking on any of these News Subcategories will take us to a Topic Category page showing the latest articles in that Topic category.

In the next section, we will look at the 5 most common options for displaying articles. However, first we will review the general process for creating menu items in Joomla and briefly look at the most common “groups” of menu item types.

### How to Create a Menu Item Link

The most common way to create a menu item in Joomla is to first write an article as we discussed in an earlier article. Then go to **Menus, Main Menu** and click on the **New** button.

This will take you to the **New Menu Item** screen.

The first task on this screen is to **select a menu item type**. To do this, click on the blue **Select** button. This brings up the Menu Item Type selection screen.

### Menu Item Type

Articles
Configuration
Contacts
News Feeds
Phoca Download
Privacy
Search
Smart Search
System Links
Tags

Joomla divides menu item types into eleven groups. In addition, many components, such as Phoca Download, will add their own menu item types.

Many of these groups we will never use. But it is nice to know they are there if we ever need them. The most commonly used category is the **Articles** group. Click on Articles to bring this up.

Menu Item Type	
Articles	
Archived Articles	Display all archived articles.
Category Blog	Displays article introductions in a single or multi-column layout.
Category List	Displays a list of articles in a category.
Create Article	Create a new article.
Featured Articles	Show all featured articles from one or multiple categories in a single or multi-column layout.
List All Categories in an Article Category Tree	Shows a list of all categories in the selected article category tree.
Single Article	

The most commonly used Article Menu Item types are **Category Blog**, **Category List** and **Single Article**. A Category blog is a display of articles with a single article introductory paragraph and optional image where all of these article introductions are on the same page with a READ MORE link to access the full article. A Category List is a Table with just the article titles. The Single Article Menu Item type is a menu item linked to the full article. This link can be either in the main menu or in a drop down menu below a category list main menu item. We will describe how to use these three important menu item types in the next section.

The next group of menu item types is called the **Configuration**. There are two types in this group. But they are very rarely used as they provide access to pages which are better left limited to the Administrator Control Panel.

The next group is called **Contacts** Menu Item types.



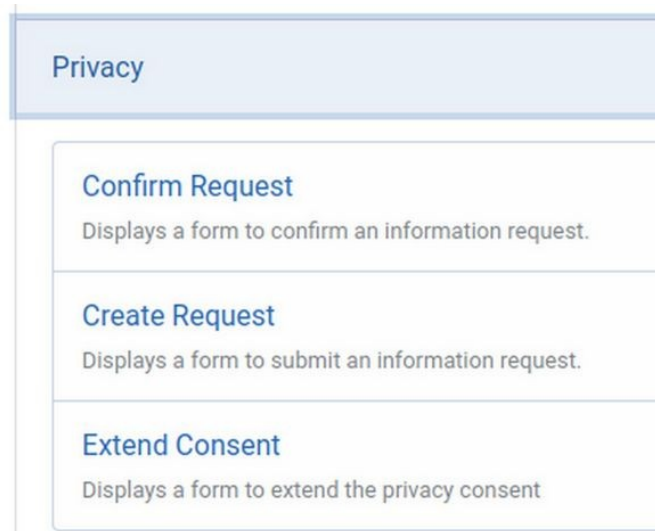
Contacts
<p><b>Create Contact</b></p> <p>Create a new contact.</p>
<p><b>Featured Contacts</b></p> <p>This view lists the featured contacts.</p>
<p><b>List All Categories in a Contact Category Tree</b></p> <p>Shows a list of categories within a contact category tree.</p>
<p><b>List Contacts in a Category</b></p> <p>This view lists the contacts in a category.</p>
<p><b>Single Contact</b></p> <p>This links to the contact information for one contact.</p>

The Contacts group can be used to display a list of contacts for a business or social club. However, you can better customize a Contacts page by using a special free Forms Component. We will explain how to create custom forms in a later article.

The next group of Menu Item types are called **Newsfeeds**. This is useful primarily for a site that focuses on the Latest News and wants to display the latest news from other sites which is automatically updated on a page which is linked from the Main Menu.

News Feeds
<p><b>List All Categories in a News Feed Category Tree</b></p> <p>Shows a list of all categories in the selected news feed category tree.</p>
<p><b>List News Feeds in a Category</b></p> <p>Show all news feeds within a category.</p>
<p><b>Single News Feed</b></p> <p>Show a single news feed.</p>

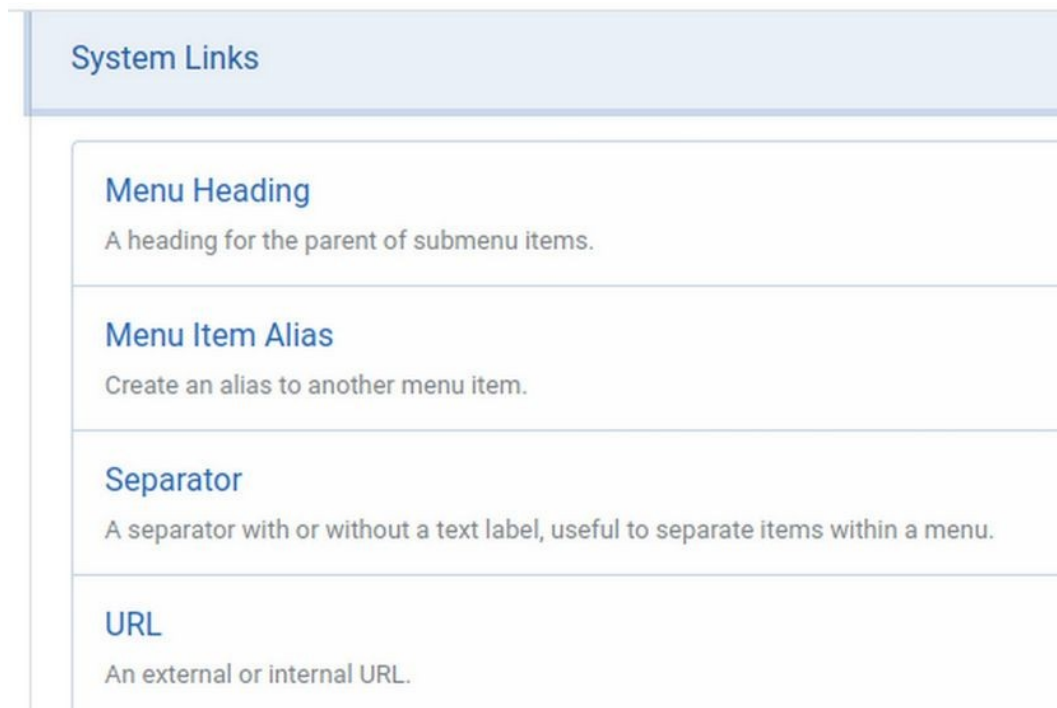
The next type is called **Privacy**:



International websites that have a significant presence in Europe should add Privacy policy pages to their websites and this menu items help do that.

The next type. **Smart Search**, is a Search Form page link. This is for very large websites.

The next group of Menu Item types are called **System Links**

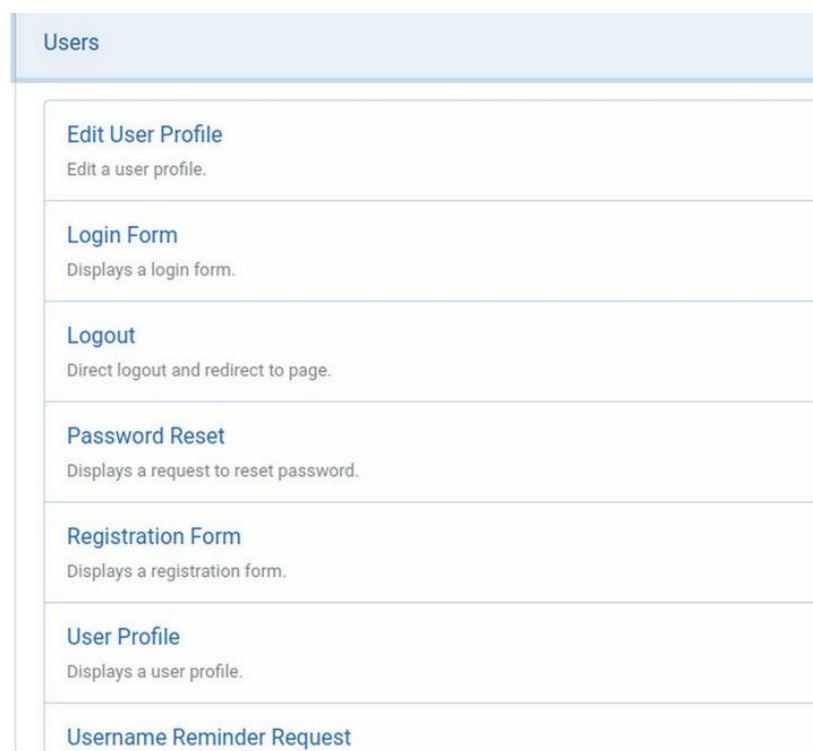


There are two important menu item types in this group.

The first is the **URL** which you can use to provide a link to any page on the

Internet – including a link to any page on your website. The other important menu item type is the **Menu Item Alias**. If you have a page that is so important that you would like to display a link to it in more than one place in your main menu, you can have the primary link assigned to wherever you want. But then you can also create a copy or alias of this link which you can assign to be displayed in another part of your main menu.

Next are the Tags menu item types. This allows you to create tags for articles and display these tags which brings up pages associated with these tags. Sadly, the tagging system often winds up as a disorganized mess. Next is the **Users** Menu Item types.



Users
<b>Edit User Profile</b> Edit a user profile.
<b>Login Form</b> Displays a login form.
<b>Logout</b> Direct logout and redirect to page.
<b>Password Reset</b> Displays a request to reset password.
<b>Registration Form</b> Displays a registration form.
<b>User Profile</b> Displays a user profile.
<b>Username Reminder Request</b>

This allows you to display various User Menu Item types in a User Menu.

The final menu item type is called **Wrapper**. It is a way to create a wrap around another website and then display that website page inside of your website.

Once you have selected a menu item type, click on it to return to the New Menu Item Edit screen. The main screen will change depending on the menu item type selected. For example, if we select the URL menu item type, the following New Menu Item Edit screen will appear.

To create a URL menu item, just give the menu item a title and copy paste the full URL link into the box provided. The link can be in the Main Menu or assigned to a drop down menu below any other Main Menu item (which is called a Parent Item above).

You can also select whether the link opens in a new window or in the current window by using the selector to the right of Target Window. It is generally best to have external links open in a new window. So we will select **New Window with Navigation**. This way, when a person clicks on this menu item, they are taken to the new page. But they can easily get back to your website or click back and forth between your website and the externally linked website. Then click on Save and Close – or Save and New if you are making several menu items.

## What's Next?

Now that we know about menu item types, in the next section we will look more closely at the five most common menu item types.

## 5.2 How to Create Category Menu Items

In this section, we will describe three ways to display a new article and provide examples of each. The first way is to simply place the article as a **Featured Article** on your Home page, which by default is a blog page. The second way places the article in a blog which is not on the Home page. The third way, category list, creates a table of articles assigned to that category. In section 5.3 we will review the other two ways which are to create links to your article in the Main Menu or in a drop down sub menu below a main menu item.

### Five Ways to Display a New Article

#### #1: Assign an Article to your Website Home Page

You can place any article on your Home page by clicking on the "Featured Article" button in the Article Edit screen.

OR

#### #2: Assign an article to a Category Blog Page

Create a blog category. Then assign article(s) to the blog category. Then make a category blog menu for the category. Articles display as a blog.

OR

#### #3: Assign an Article to a Category List Page

Create a List Category. Then assign article(s) to the list category. Then make a list category menu item. The articles will display in a list.

OR

#### #4: Create an Article Menu Item & Place it in a Sub Menu

Create a Single Article Menu Item. Then place this menu item under a category blog or list menu item. Done in addition to method #2 or #3.

OR

#### #5: Create Article Menu Item & Place it in your Main Menu

Create a Single Article Menu Item. Then, click on the "parent item" button in the Menu Item Edit screen and choose the option "Menu Item Root."

We will start with the simplest way to display an article which is to view it on the Home page of your website.



In an earlier article, we posted a new article called Welcome to our News Website. We placed this article on our Home page by clicking on the **Featured** box in the Edit Article screen and selecting Yes. We later moved this article to a Popup that new readers see when they first visit our website.

We can place as many articles as we want on our Home page by selecting **Features equals yes**. To view a list of our Featured Articles, click on **Content, Featured Articles** in the Top Menu.

We currently have four News Demo articles on our Home Page. In previous articles, we used these articles to demonstrate the appearance of featured images with various News page layouts.

Create a Secure News Website Page 241

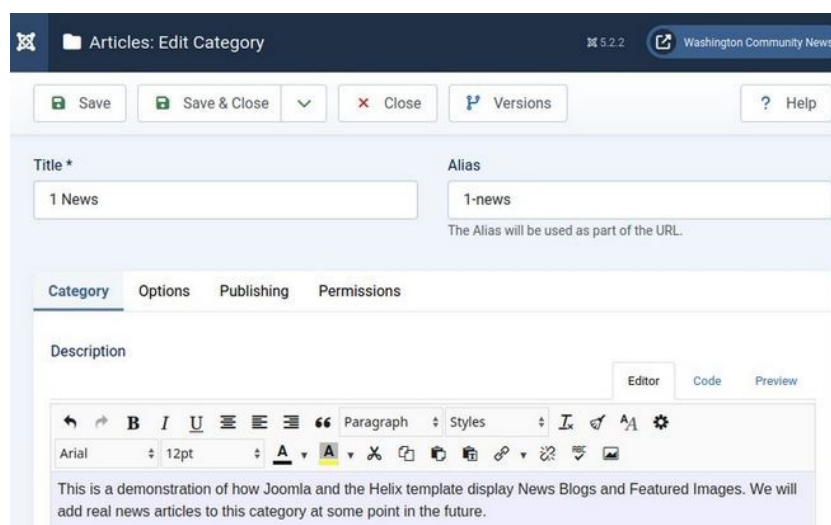
clicking on the **Ordering arrows** at the top of the Featured Articles table. Then use the arrows to move articles up or down on this list. We can also click on the **Gold Stars** to remove an item from the list of articles displayed on the Home page. The fastest way to display an article on your website is to simply put it on the Home page. But only a few articles should go on the Home page.

## #2: Assign an article to a Category Blog page

A Blog Category Menu Item is often used to create a particular News Topic page such as a “Latest Sports News” page or a Latest Business News page. The benefit of this menu item type is that any articles assigned to this category do not need separate menu items created for them. They will automatically appear in the Topic Category Blog page. The Home Page is a blog page and the HOME menu item can be adjusted simply by going to the Main Menu and clicking on it. We can assign an article to the Home page blog simply by setting Featured to Yes. Before we add an article to a blog page, **we first have to create a blog category** and then create a **Category blog menu item** for that category with the Main Menu Item Manager.

### 1 Create a Top Level and Second Level Blog Category

You can use any existing category for a blog category or you can create a new category. We will create a blog category called **1 News**. Go to **Content, Category** and click on NEW. Give the category a title. You can also give the blog page an introduction as shown below:



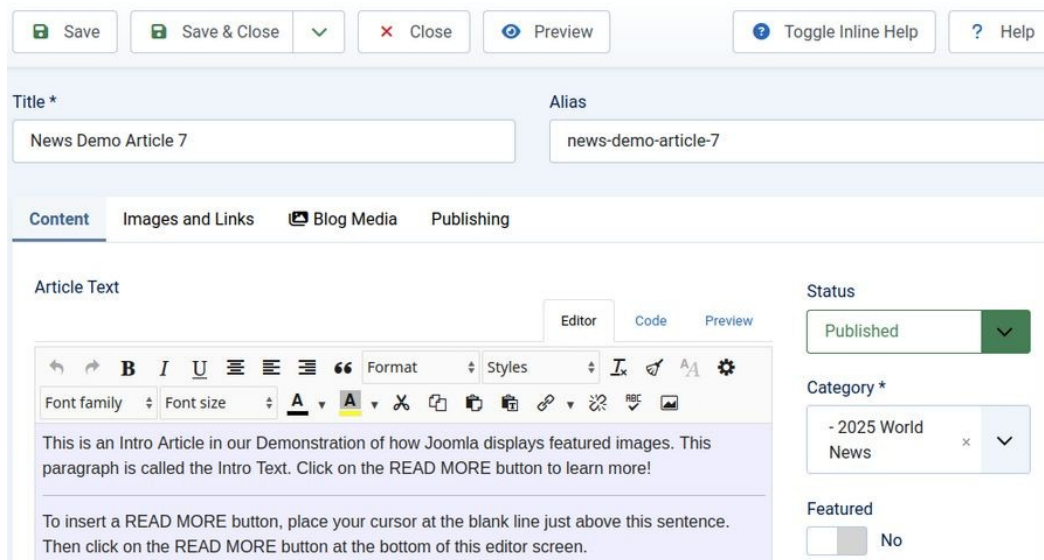
Then click Save and Close.

We will not post any articles to this blog category. Instead, we will create

four second level blog categories called 2025 Community News, 2025 State News, 2025 National News and 2025 World News. These may or may not have an introduction. Each of these category blogs will be assigned to the 1 News parent category.

## 2 Assign an article to our 2025 World News blog category

Go to Content, Articles and select an article or create a new one. Then use the drop down arrow to assign the article to a category:



Note that the category 2025 World News has been selected in the right hand column of the article edit screen. However, the Featured Category is set to No. Therefore, this article will appear in the 2025 Community News page but will not appear in our Latest News area at the top of our Home page.

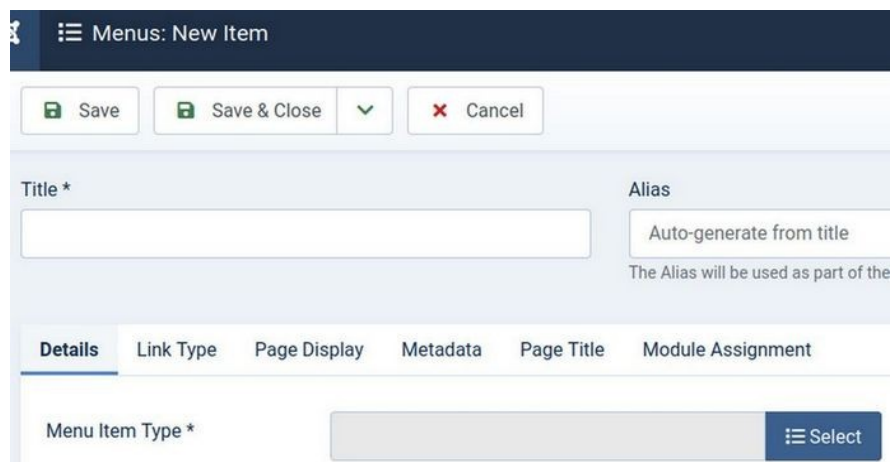
## 3 Create a READ MORE link after the introductory paragraph and image

To inserting a READ MORE link into an article, enter a new blank line and place the cursor where you want the READ MORE line to go, then click on the READ MORE button at the bottom of the page. With four or fewer articles, you can probably have two to three paragraphs before the READ MORE link without the page getting overly long. However with 5 to 8 articles per page, you may need to cut off each article after the first paragraph. Once you have added READ MORE buttons, click Save and Close.

## 4 Make a Top Level & Second Level Category Blog Menu Item

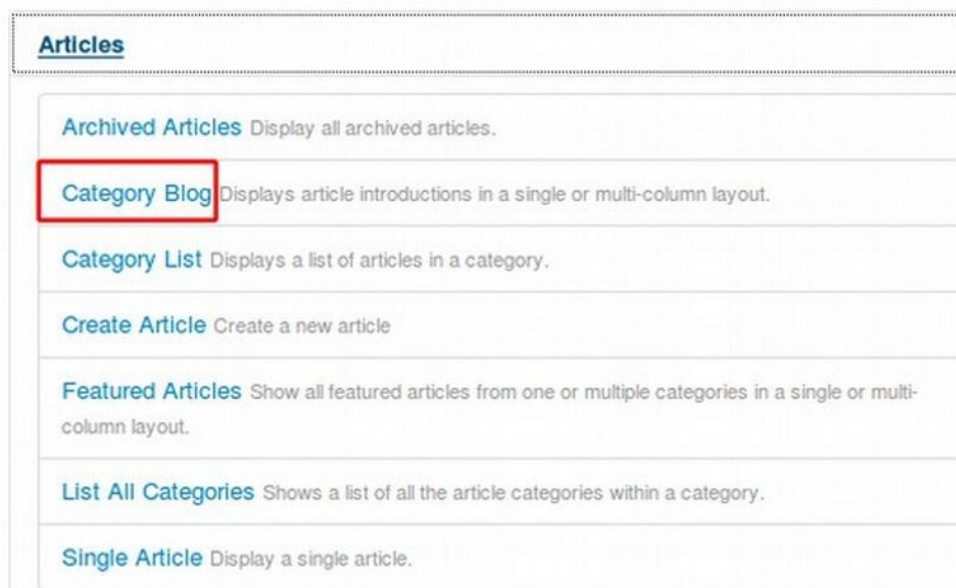
A category blog menu item can be used on any page where you want a

group of similar topic articles all displayed on the same page. In other words, it can be used for any page you would like to format like the Home page. To create a Category Blog Menu Item, go to the Main Menu and click NEW to create a New Menu Item. This brings up the New Menu Item screen.



The screenshot shows the Joomla! 'Menus: New Item' form. At the top, there are buttons for 'Save', 'Save & Close', and 'Cancel'. Below these are input fields for 'Title \*' and 'Alias'. The 'Alias' field has a dropdown menu with 'Auto-generate from title' selected. Below the input fields are tabs for 'Details', 'Link Type', 'Page Display', 'Metadata', 'Page Title', and 'Module Assignment'. The 'Details' tab is active, showing a 'Menu Item Type \*' field with a 'Select' button next to it.

Click the big blue **Select** button to bring up the Select Menu Item Type screen. Click on **Articles**. Then select **Category Blog**.



The screenshot shows the Joomla! 'Articles' selection screen. It has a title 'Articles' and a list of article types. The 'Category Blog' option is highlighted with a red box. The list includes: 'Archived Articles' (Display all archived articles.), 'Category Blog' (Displays article introductions in a single or multi-column layout.), 'Category List' (Displays a list of articles in a category.), 'Create Article' (Create a new article), 'Featured Articles' (Show all featured articles from one or multiple categories in a single or multi-column layout.), 'List All Categories' (Shows a list of all the article categories within a category.), and 'Single Article' (Display a single article.).

This will bring us back to the New Menu Item screen. However, it will also magically bring up a drop down list of categories allowing us to choose which category we want to use for our category blog. Select the **1 News** category which we just created. Then type in the title of the menu item.

If you type in the first letter, Joomla will suggest title names which you can click on. However, in this case, while the category is 1 News, we only want to display the word “News” in our Main Menu:

**Title \***  
News

**Alias**  
Auto-generate from title  
The Alias will be used as part of the URL.

**Details** | Category | Blog Layout | Options | Integration | Link Type | Page Display | Metadata | Page Title

**Menu Item Type \*** Category Blog Select

**Choose a Category \*** 1 News Edit Clear

**Tags** Type or select some tags ▼

**Menu \*** Main Menu ▼

**Parent Item** - No parent - × ▼

Note that a Top Level Blog does not have a Parent. To make a second level category blog (which we will assign articles to), click Save and then Save & New. Click Select to select the Category Blog Menu item type and then select the **2025 World News** category. Finally, assign this second level blog to the **News** Parent Menu Item.

**Title \***  
World News

**Alias**  
world-news  
The Alias will be used as part of the URL.

**Details** | Category | Blog Layout | Options | Integration | Link Type | Page Display | Metadata | Page Title

**Menu Item Type \*** Category Blog Select

**Choose a Category \*** 2025 World News Edit Clear

**Tags** Type or select some tags ▼

**Menu \*** Main Menu ▼

**Parent Item** - News × ▼

The above image shows a category blog menu item called World News linked to a category called 2025 World News. Any articles posted in this category will be displayed on this page. There is no need to create a separate menu item for articles assigned to a blog category. Then click Save and Close and View Site to check out the new menu item in our main menu.



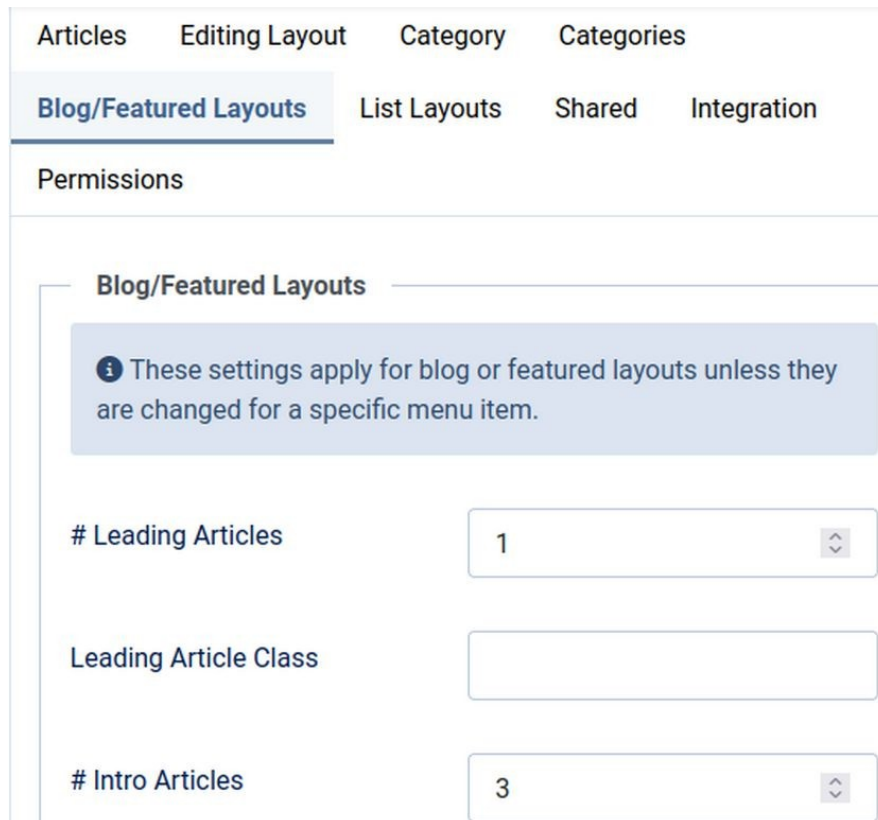


Click on WORLD NEWS to view our World News blog page which currently has only one article in it. The article displays as a Leading article but the image is only 400 pixels because by default, leading articles display the Intro Image and not the full article image. To see the full article featured image, click on the **Read More** button.



## 5 Blog Layout Options

Blog Layout Options, set either globally with the Article Manager or individually with the Menu Item Edit screen, control the appearance of the blog layout page. To adjust the layout with Global settings, go to your Article Manager and click on **Options** in the upper right corner. Then click on the Blog/Featured Layouts tab. Below we set it for **1 leading article followed by 3 Intro Articles**. These settings are now are “Global” settings. But they can be changed for any individual blog in the menu item for that blog.



The screenshot shows the Joomla! Article Manager interface. At the top, there are tabs: Articles, Editing Layout, Category, Categories, **Blog/Featured Layouts**, List Layouts, Shared, and Integration. Below these tabs is a 'Permissions' section. The main content area is titled 'Blog/Featured Layouts' and contains a blue information box with the text: 'These settings apply for blog or featured layouts unless they are changed for a specific menu item.' Below the information box, there are three settings: '# Leading Articles' with a value of '1', 'Leading Article Class' with an empty text field, and '# Intro Articles' with a value of '3'.

Articles	Editing Layout	Category	Categories
<b>Blog/Featured Layouts</b>	List Layouts	Shared	Integration
Permissions			

**Blog/Featured Layouts**

*These settings apply for blog or featured layouts unless they are changed for a specific menu item.*

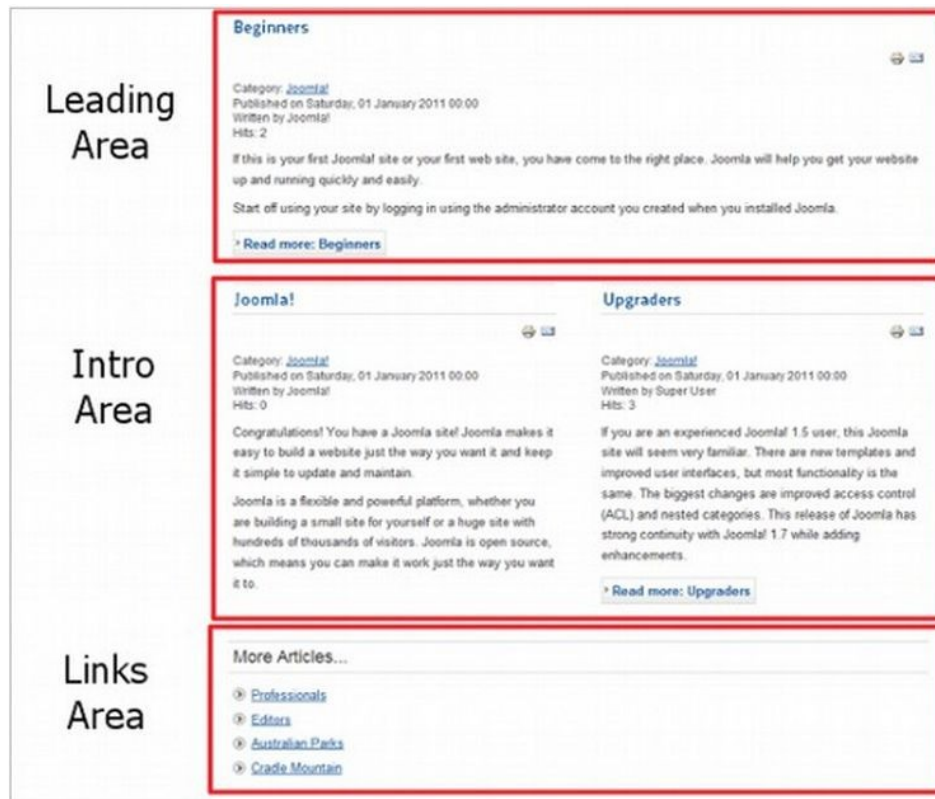
# Leading Articles

Leading Article Class

# Intro Articles

Blogs are often displayed as two or three columns of articles. But this can make them difficult to read. We will therefore use a **single column** and have 1 leading and 2 intro articles which viewers can see by scrolling down the page. Below this, we will set links to 8 if we do want to show links to 8 more articles. Then click Save and Close.

To get a clearer idea of what this means, a Blog Layout in Joomla has 3 main areas: Leading, Intro, and Links. These are shown in the diagram below.



Articles in the Leading Area display in one column, using the full page width. Articles in the Intro Area may display in one, two, or three columns, depending on the Columns setting. If an Article has a "Read more..." break, only the text before the break (called Intro Text) will display, along with a "Read more..." link.

## Blog Layout Options Recommended Settings

# **Leading Articles.** Number of Articles to show using the full page width.

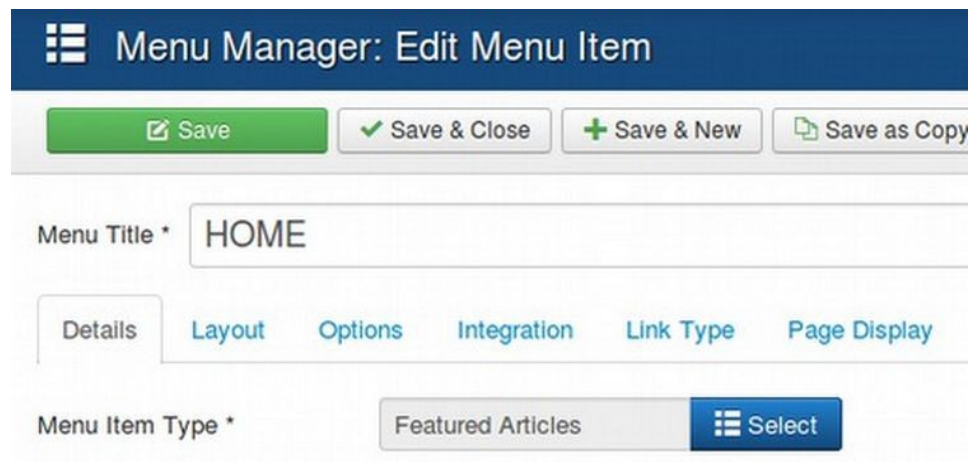
# **Intro Articles.** Number of Articles to display on the first page of the blog after the leading Article. The order in which the articles are displayed is determined by the Article Order parameter below.

# **Columns.** The number of columns to use in the Intro Text area. This is normally between 1 and 3. If 1 is used, the Intro Text Articles will display using the full width of the display area, just like the Leading Articles. 1 is the recommended setting.

# **Links.** The number of Links to display in the 'Links' area of the page. These links allow a User to link to additional Articles, if there are more Articles than can fit on the first page of the Blog Layout. This is a

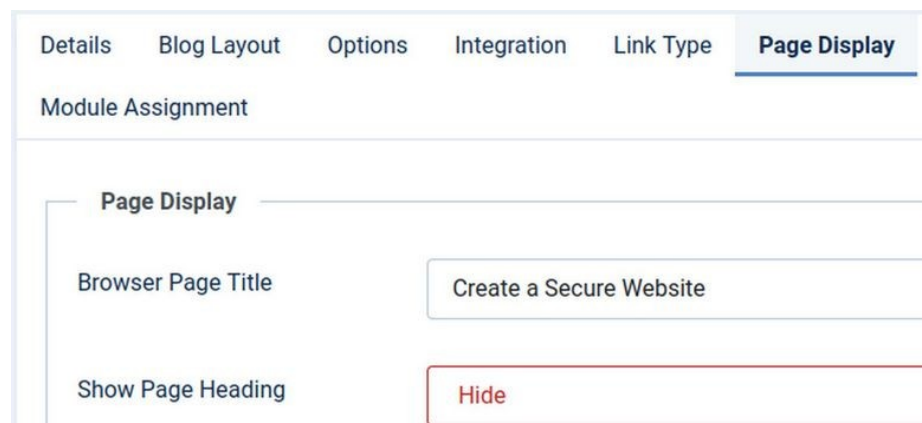
reasonable alternative to Pagination.

There are more settings that can be selected for each blog menu item after it is created. For example, go to your Main Menu and click on your HOME menu item.



It opens to the Details tab. But click on the **Layout** tab and you will see not only the Options listed in the Options tab earlier, but also a way to set the Article Order (which should be set for Featured Articles Order) and a way to set Pagination (which is typically set for Auto) but I recommend turning it off.

If you want to hide the title of the Home page, then click on the Page Display tab and set Show Page Heading to Hide. Then type in the title of your site to display in the browser tab:

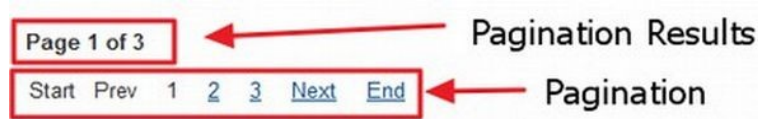


You can make similar changes to your World News blog by clicking on its menu item and then selecting the tab you want to make changes on.

**Article Order** This is the order of articles in this Layout. Choose Article

Manager Order. With this option, articles are ordered according to the Order column entered in the Article Manager. This option gives you the most control over article ordering.

**Pagination for Blog Articles.** This determines whether Page Links appear on your blog pages. Pagination provides page links at the bottom of the page that allow the User to navigate to additional pages. These may be needed if all of the Blog Articles will not fit on one page. An example is shown below.



**Select Show:** This option will show pagination links if they are needed.

**Pagination Results.** Hide or Show the current page number and total pages ("Page 1 of 2") at the bottom of each page.

Category Order	Use Global
Article Order	Article Manager Order
Date for Ordering	Use Global
Pagination	Show
Pagination Results	Show

Now that we have a category blog in our main menu, we will next see how to add some category list menu items to our main menu.

### #3: Assign an Article to a Category List Page

#### #3: Assign an Article to a Category List Page

Create a List Category. Then assign article(s) to the list category. Then make a list category menu item. The articles will display in a list.

Blog Menu Items are a good way to post a small number of articles in a time series. However, for posting a large number of articles that are all in the same category, a category list might be more efficient. Viewers can click on articles in the table without having to scroll down the page to find the article they want.

### 3.1 Create Categories with the Category Manager



The first step is creating a “Category List” category with our Category Manager. There is no difference between a blog category or a list category as far as the Category Manager is concerned. Any category can be turned into a blog or a list depending on how it is assigned within the Menu Item Manager.

### 3.2 Assign New Articles to these Categories

As we create new articles, in the Article Edit screen, we can assign each article to one of the categories we have created. This can be either a list or blog category. The only difference is that with a list category, there is no need to insert a READ MORE link after the introductory paragraph.

### 3.3 Make a Category List Menu Item

We previously discussed how to use categories to organize your Joomla articles and images. We should apply this same Category structure to organize our Main Menu. To create a new category list menu item, go to the Main Menu and click on New. This brings up the New Menu Item screen. Then click on the blue Select button to bring up the Menu Item type selection screen. Click on Articles.



In the previous section, we selected Category Blog. In this Section, we select the **Category List** menu item type. Once the Menu Item type is selected, we are automatically taken back to the Menu Item Edit screen. For Title, we type in the name of our category, for example 1 START UP. Below this there is a box to select the category we want to associate with this menu item.

Menu Title \* 1 STARTUP

Details Category List Layouts Options Integration Link Type

Menu Item Type \* Category List Select

Choose a category \* 01 Site Start Up

Click on the drop down arrow and choose the category 01 Start Up. As this will be a TOP menu item in the Main Menu, for Parent Item, we will leave the setting as Menu Item Root. Click SAVE and CLOSE to return to the Menu Manager for the Main Menu. Then click on VIEW SITE. When you click on a category list menu item, it will take you to a page which lists all of the articles which were placed in this category when the article was created. Here is an example of what appears when you click on the category list menu item called 1 STARTUP.



## What's Next?

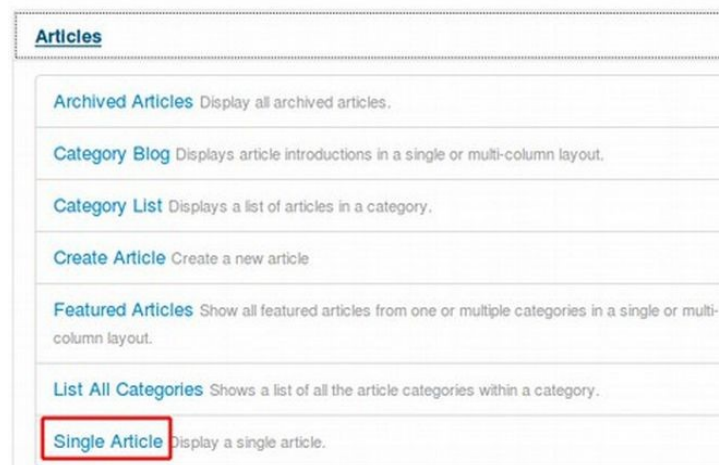
In our next article, we will review how to create a menu item for a single article.

## 5.3 How to Create Article Menu Items

In the previous section, we described how to post Featured articles to your Home page, how to create a Category Blog Menu Item and how to create a Category list menu item. In this section, we will review how to create a Single Article Menu Item under a Category Menu Item or create a Single Article Menu item and place it in the top level of our main menu.

### Create a Single Article Menu Item under a Category Menu Item

If a single article is not placed as a “Featured Article” on your HOME page and is not assigned to a Blog Category or List Category, it will need a Single Article Menu item in order to be viewed. Single Article Menu Items are generally not placed in the top level menu. In the previous sections, we set up the top level category blog menu items in our main menu. We will now create menu items for single articles, or single pages, which we will then place under those top level categories in the Main Menu. This is done in addition to creating the category blog and/or list menu items. To create a Single Article menu item, click **Menus, Main Menu**. Then click NEW to open the New Menu Item screen. Click the blue **Select** button to open the Select Menu Item screen. Then click on Articles and select **Single Article**.



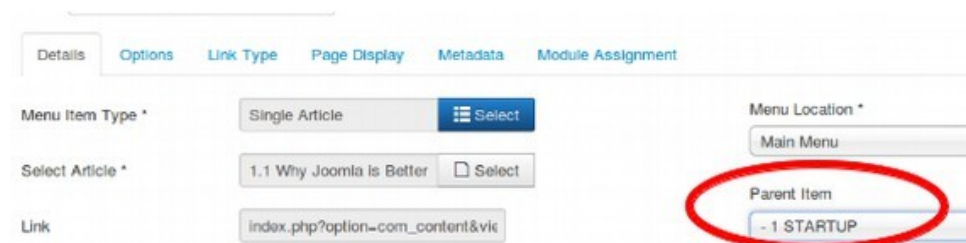
This will return us to the Menu Item Edit screen.

A screenshot of a web application interface for editing a menu item. It features a 'Menu Title' field at the top. Below it are several tabs: 'Details', 'Options', 'Link Type', 'Page Display', 'Metadata', and 'Module Assignment'. The 'Details' tab is active. Under 'Menu Item Type', there is a dropdown menu showing 'Single Article' and a blue 'Select' button. Below that, under 'Select Article', there is a dropdown menu showing 'Select an Article' and a 'Select' button.

Click on the **Grey Select** button. This will take us to the Article Manager where we can click on the article we want to associate with this menu item. Note that we first need to make an article in order to select it. You can also give the menu item a title. This does not need to be the same as the title of the article. Ideally **the title of menu items should be a shortened version of the title of the article** so as not to take up too much space in the main menu or in a drop down menu. Below is what the New Menu Item screen looks like after selecting our first article and giving it a title.



The final task is to place this article menu item as a child menu item beneath the matching category list menu item. This article is in a Category called 01 Startup. So use the Parent Item drop down arrow to select 1 START UP as the Parent Item. Here is what the right side of the New Menu Item screen now looks like.

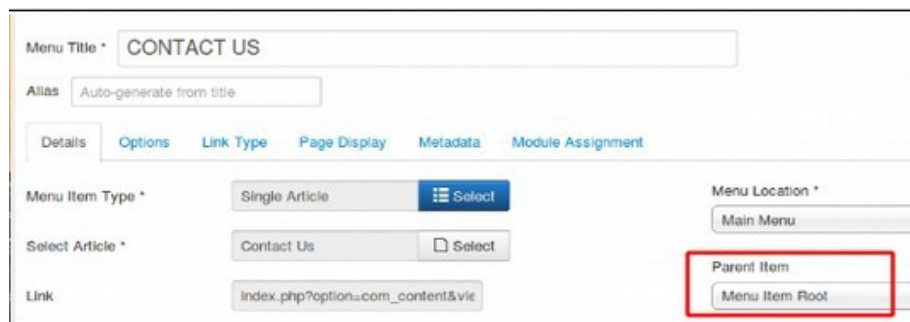


Click on the Parent Item Drop Down arrow. This will bring up all of your existing menu items. You can select any existing menu item to be a parent of any new menu item. It is however unwise to choose an Article to be a parent menu item of another article. Instead, it is much better to have categories be parent menu items of articles. The default setting is Menu Item Root. If you leave a new menu item with this setting, it will appear in the Main Menu as a Top Menu Item.

For the above example, we have selected 1 STARTUP. The Menu Item for the article “Why Joomla is Better than Wordpress” will therefore be placed below the Category List Menu Item called 1 STARTUP.

## Create an Article Menu Item & Place it in your Main Menu

Placing an article menu item in the top level of the main menu is the least common option. The main exception to this is a **Contact Us** page. This page is so important that it is often placed in the Top Level of the Main Menu. To create a new Menu Item to place an article in the Top level of the main menu, first create a short Contact Us article. Then go to the Main Menu and click New. This takes us to the New Menu Item page. Click on **Select** to bring up the **Menu Item Type** screen. For menu item type, to display a single article in the Main Menu, click on **Articles, then Single Article**. This will take us back to the New Menu Item screen. For the Title of the Article, type in Contact Us (or the name of your Article). When you select the Single Article Menu Item Type, Joomla creates a new dialog box below the Menu Item Type box where you can select the article you want to link to this menu item. Click on SELECT which takes us to the Article Manager. Select your article.



The screenshot shows the Joomla! 'New Menu Item' form. The 'Menu Title' field is filled with 'CONTACT US'. Below it, the 'Alias' field is set to 'Auto-generate from title'. There are tabs for 'Details', 'Options', 'Link Type', 'Page Display', 'Metadata', and 'Module Assignment'. The 'Menu Item Type' is set to 'Single Article', and a 'Select' button is visible. To the right, the 'Menu Location' is set to 'Main Menu'. Below the 'Menu Item Type', there is a 'Select Article' dropdown showing 'Contact Us' and a 'Select' button. At the bottom, the 'Link' field contains the URL 'index.php?option=com\_content&vie'. A red box highlights the 'Parent Item' dropdown, which currently shows 'Menu Item Root'.

So far this has been exactly like the steps we used to create a Single Article Menu Item to place under a Category List menu item. The only difference is that this time we will place the Single Article Menu Item in the top level of the Main Menu. This is done by using Menu Item Root for the Parent Item.

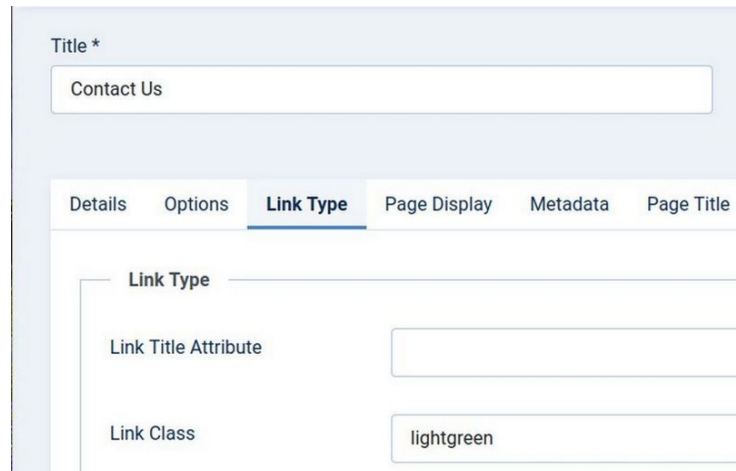
## Add a Background Color to a Top Level Menu Item

To change the background color of a top level menu item to light green, and change the font color to dark green and change the font weight to bold, copy paste this into your custom.css file:

```
.sp-megamenu-parent .lightgreen {  
background-color: #ddffdd;  
color: #115511;  
font-weight: bold;}
```



Then go to the menu item and click on it to edit it. Click on Link Type and in the Link Class box, type the class name **lightgreen**.



The screenshot shows the Joomla! menu item configuration interface. At the top, there is a 'Title' field with the text 'Contact Us'. Below this, there are several tabs: 'Details', 'Options', 'Link Type' (which is selected), 'Page Display', 'Metadata', and 'Page Title'. Under the 'Link Type' tab, there are two input fields: 'Link Title Attribute' and 'Link Class'. The 'Link Class' field contains the text 'lightgreen'.

Click Save and Close. Then clear the browser cache and view the website home page:



To change the background color of a sub-menu item to light blue, copy paste this into your custom.css file:

**.sp-menu-item .lightblue {background-color: #dddddff;}**

Then go to the menu item and click on it to edit it. Click on Link Type and in the Link Class box, type the class name lightblue.



1 USE A LINUX COMPUTER	2 CREATE A SECURE VPS	3 SITE SETUP
1.1 Why Replace Windows with Linux	2.1 Choose a Secure VPS Host	3.1 Joomla First Steps
1.2 Create a Secure Linux Computer	2.2 Install Hestia on your VPS	3.2 Add Joomla Extensions
1.3 Create a Linux Computer on a Stick	2.3 Install and Use Midnight Commander	3.3 Add a Better Editor and Welcome Article
1.4 Initial Configuration of a Linux Laptop	2.4 Use Hestia to Install Joomla	3.4 Real Website Security Tips

The screenshot shows a table of articles on the Joomla! website home page. The table has three columns: '1 USE A LINUX COMPUTER', '2 CREATE A SECURE VPS', and '3 SITE SETUP'. The article '3.4 Real Website Security Tips' is highlighted with a light blue background.

## What's Next?

Now that we have posted our articles and created menu items for them, in the next article, we will review how to use the Helix template to create Mega Menu drop downs that display below our Main Menu.

## 5.4 Helix News Main Menu and Mega Menus

In this article, we will review how to use our Helix template to add first a normal horizontal menu and then a custom Mega Menu. Our goal is to create Mega Menu Dropdown Menus that display below the Main Menu like this:

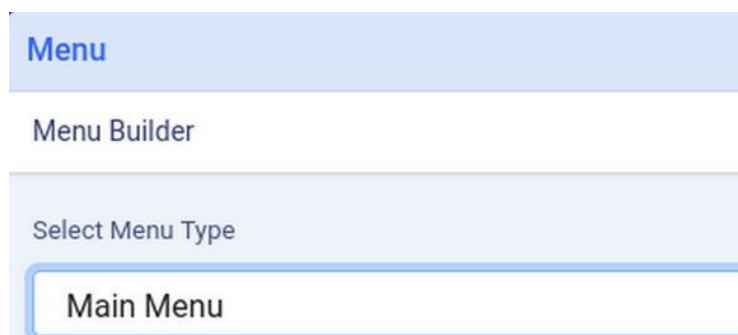


### Helix Horizontal Menu

To see our Helix menu, we need do four things. First, we need to use the Helix Layout tool to create a row called Menu with a **menu** module position. The word menu is very special because the Helix menu will automatically use this module position.



Second, we need click Menu and set the Helix Menu Builder for Main Menu:



Third, we need to create some Categories. We need at least **two levels of menu items** so that some menu items are the parent menu items and other menu items will be child menu items. Assuming that both the parent and child menu items are category blogs, we first need to create our two-level Category Blog structure by going to Content, Categories. Here is what our Category structure looks like:

<a href="#">1 News</a> Alias: 1-news
<ul style="list-style-type: none"><li>- <a href="#">2025 Community News</a> Alias: 25-community-news</li></ul>
<ul style="list-style-type: none"><li>- <a href="#">2025 State News</a> Alias: 25-state-news</li></ul>
<ul style="list-style-type: none"><li>- <a href="#">2025 National News</a> Alias: 25-national-news</li></ul>
<ul style="list-style-type: none"><li>- <a href="#">2025 World News</a> Alias: 25-world-news</li></ul>
<a href="#">2 Sports</a> Alias: 2-sports
<ul style="list-style-type: none"><li>- <a href="#">2025 Local Sports</a> Alias: 25-local-sports</li></ul>
<ul style="list-style-type: none"><li>- <a href="#">2025 College Sports</a> Alias: 25-college-sports</li></ul>

Fourth, we need to create some Top Level and Second Level Category Blog menu items. So go to Menus, Main Menu. Initially, there is only one menu item called Home.

### **Step 1 Add Top Level Menu Items**

We will make four top level menu items called News, Sports, Schools and Business. Click New.

Then click the Blue **Select** button. Click Articles, Category Blog. Then select the 1 News category. For Title, type **News**. For Parent, leave it at No Parent:

The screenshot shows the 'Menus: New Item' form with the 'Details' tab selected. The 'Title' field contains 'News' and the 'Alias' field contains 'news'. Below the tabs, the 'Menu Item Type' is set to 'Category Blog' with a blue 'Select' button. The 'Choose a Category' field shows '1 News' with 'Edit' and 'Clear' buttons. The 'Tags' field is empty with a placeholder 'Type or select some tags'. On the right, the 'Menu' is set to 'Main Menu' and the 'Parent Item' is set to '- No parent -'.

The screenshot shows the 'Menus: New Item' form with the 'Details' tab selected. The 'Title' field is empty and the 'Alias' field is set to 'Auto-generate from title'. Below the tabs, the 'Menu Item Type' is empty with a blue 'Select' button. The 'Link' field is empty. The 'Target Window' is set to 'Parent'. On the right, the 'Menu' is set to 'Main Menu' and the 'Parent Item' is set to '- No parent -'.

**Click Save and New.** Then click the Blue **Select** button. Click Articles, Category Blog. Then select the 2 Sports category. For Title, type **Sports**. For Parent, leave it at No Parent.

**Click Save and New.** Then click the Blue **Select** button. Click Articles, Category Blog. Then select the 3 Schools category. For Title, type **Schools**. For Parent, leave it at No Parent.

**Click Save and New.** Then click the Blue **Select** button. Click Articles, Category Blog. Then select the 4 Business category. For Title, type **Business**. For Parent, leave it at No Parent. Then click Save and Close and visit your website front end to see the result:

Here is our main menu in the front end:



## Step 2 Add Second Level Menu Items

We will next add second level menu items. To create our first second level menu item click New. Then click the Blue Select button. Click Articles, Category Blog. Then select the 2025 Community News category. For Title, type **Community News**. For Parent, select the News Menu item we just created. Then click **Save and New**. Click Articles, Category Blog. Then select the 2025 State News category. For Title, type State News. For Parent, select the News Menu item.

Repeat to create National News and World News in the News parent category and also to add the second level categories for our Sports top level menu item, our Schools top level menu item and our Business top level menu item. Then click Save and Close. Here is what the top of our Main Menu looks like in the backend:

Title	Menu	Home
<a href="#">Home</a> Alias: home Articles » Featured Articles	Main Menu	
<a href="#">News</a> Alias: news Articles » Category Blog	Main Menu	
- <a href="#">Community News</a> - Alias: community-news - Articles » Category Blog	Main Menu	
- <a href="#">State News</a> - Alias: state-news - Articles » Category Blog	Main Menu	

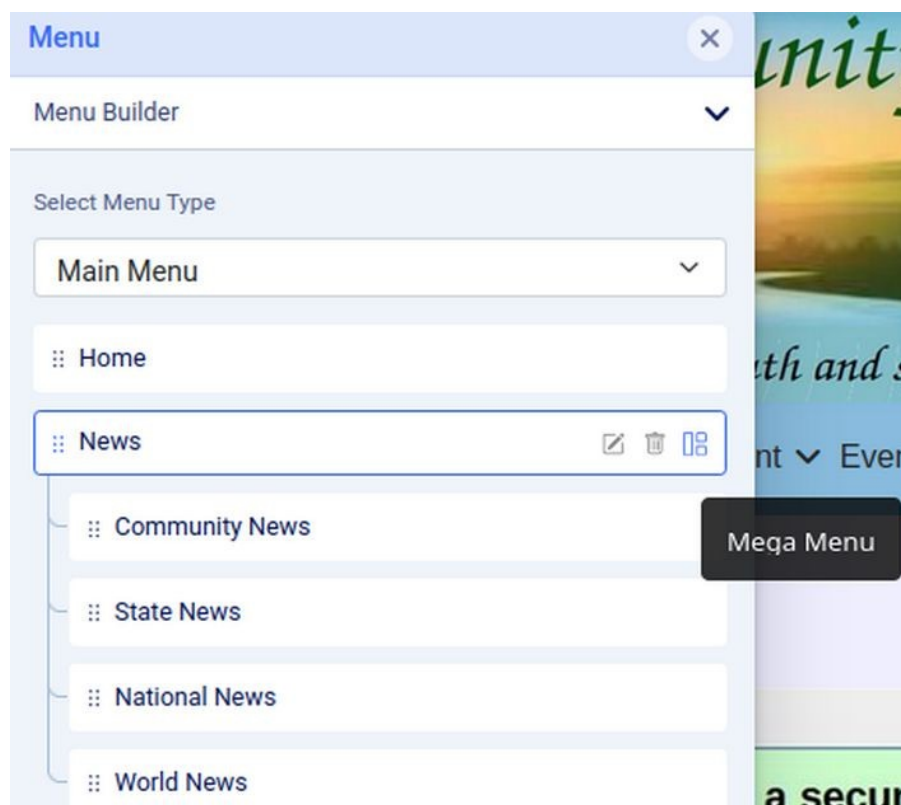
Note the indent dashes to the left of the child menu items.



### Step 3 Switch from a Normal Menu to a Mega Menu

The first steps for creating a mega menu are the same as for creating a normal menu. The key difference is that you **MUST** create second level menu items for the Mega Menu to display properly. We have already created our top level menu items – each with its own second level menu items. We therefore can create a mega menu for each of our three top level menu items.

To create your first mega menu, go to your Dashboard and click **Templates, Styles** and click on the Helix template to edit it. Go to **Menus** and find your first top level menu item which in our case is called **News**. Hover to the right of the News menu item to see three hidden icons. The first is Edit. The second is Delete and **the third is Mega Menu**:



Click on the mega menu icon to open it. Then click on the button to the right of the words Mega Menu to open the Mega Menu screen: Click **Add New Row**:

Mega Menu

Mega Menu
☒

Menu Width

600

px

Show Menu Title
☒

Alignment

Right

Icon

--Select--

+ Add New Row

This screen will appear:

+ Add New Row

12

6+6

4+4+4

3+3+3+3

4+8

3+9

3+6+3

2+6+4

2+10

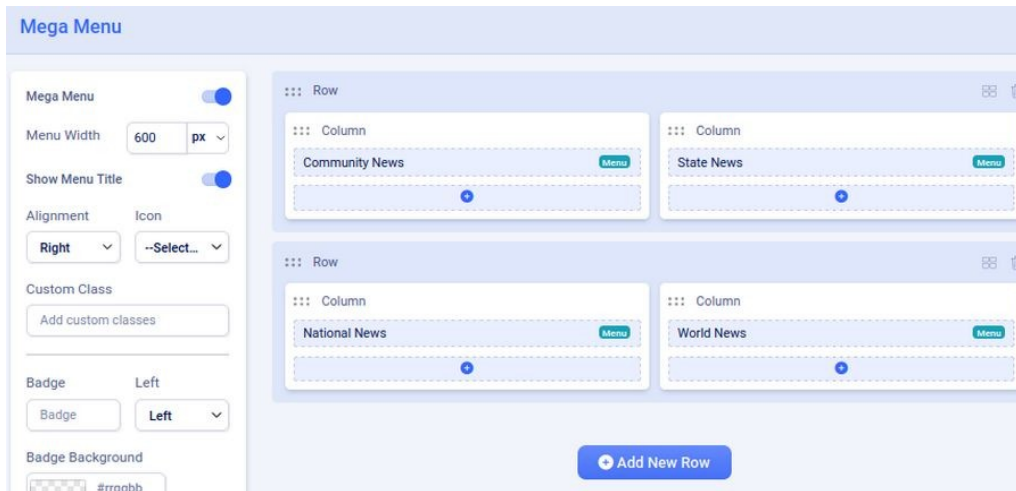
5+7

2+3+7

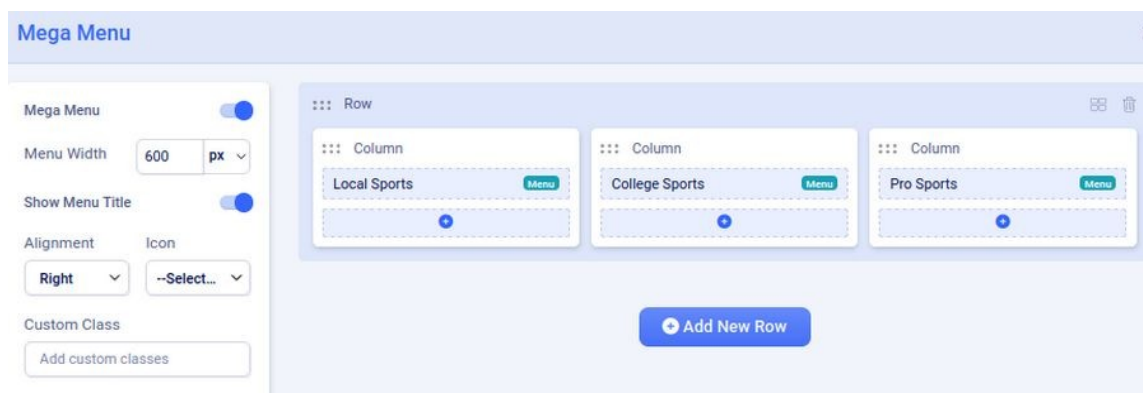
Custom

Click 4 + 4 to create a two column mega menu drop down. Then click Add New Row again to create a second two column row. Click Save.

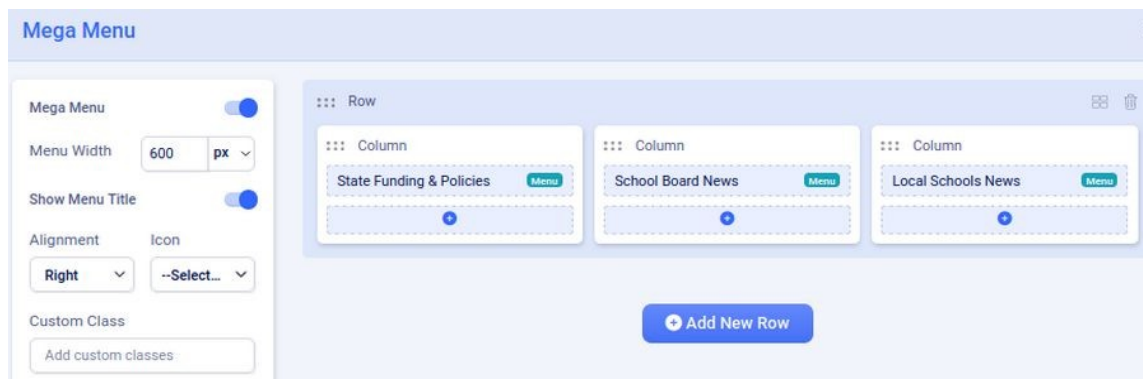
Helix should automatically place your four sub-menu items in the proper boxes. If not, you can drag them where you want them to appear.



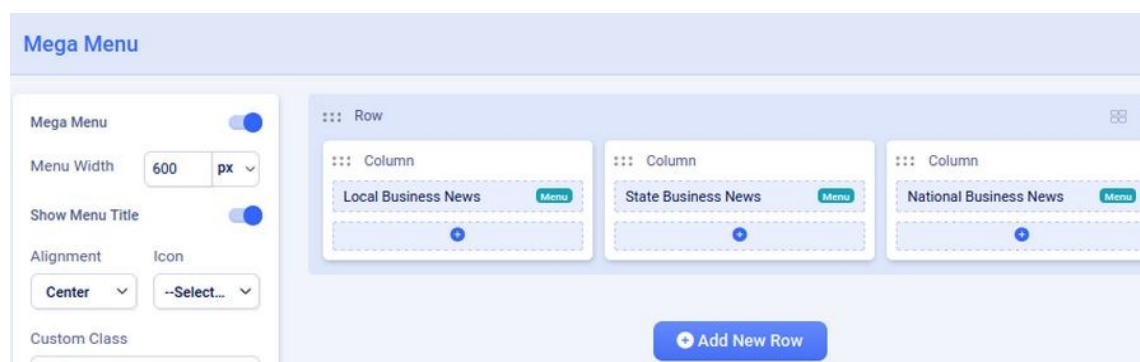
The Alignment had to be changed from Left to Right. Click Save. Then repeat for Sports. This one has a single row set for 4 – 4 -4 which is three columns:



Here is the Mega Menu for Schools:



Here is the Mega Menu for Business:



Note that the Alignment for the Business Mega Menu needed to be changed to Center to display properly. Save and Close the Template Edit screen and view the front end.

Below is an example of a three level drop down Mega Menu:



Congratulations! You now know how to use the Helix template to create your own mega menus!

## What's Next?

Another way to link to special menu items including ads and special events is to create custom modules displayed below or above our news menu items. In the next series of articles, we will review how to create custom modules, also known as Feature Boxes.

## 6 News Feature Boxes

We are ready to review how to create and style custom feature boxes. In contrast to articles, which take up the entire web page, feature boxes, which Joomla calls modules, are small boxes of content which take up a small portion of a page defined by a module position. Each feature box contains a title, text, image and or video with a READ MORE link that typically leads the reader to a full article page with more information about the topic or product. We will first explain how to make a simple module with only some text and a title. We will then review how to style this simple module to improve its appearance using basic inline commands, internal styles and external style sheets. Next, we will learn how to use modules classes to more rapidly and consistently control the appearance of a series of modules. We will then review how to combine border, background and link classes together to create complete module class presets. Finally, we will use our **Rainbow module class presets** to quickly create custom feature boxes. This chapter includes the following four sections:

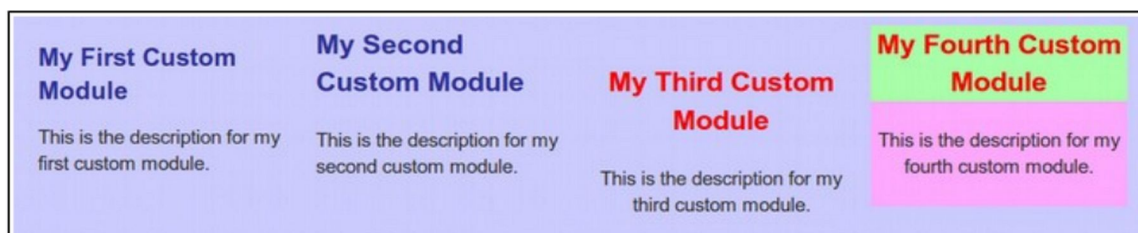
### 6.1 Style Custom Modules with Inline CSS

### 6.2 Style Custom Modules with Internal and External CSS

### 6.3 Use Preset Classes to Style Custom Modules

### 6.4 Use our Rainbow Presets to Style Custom Modules

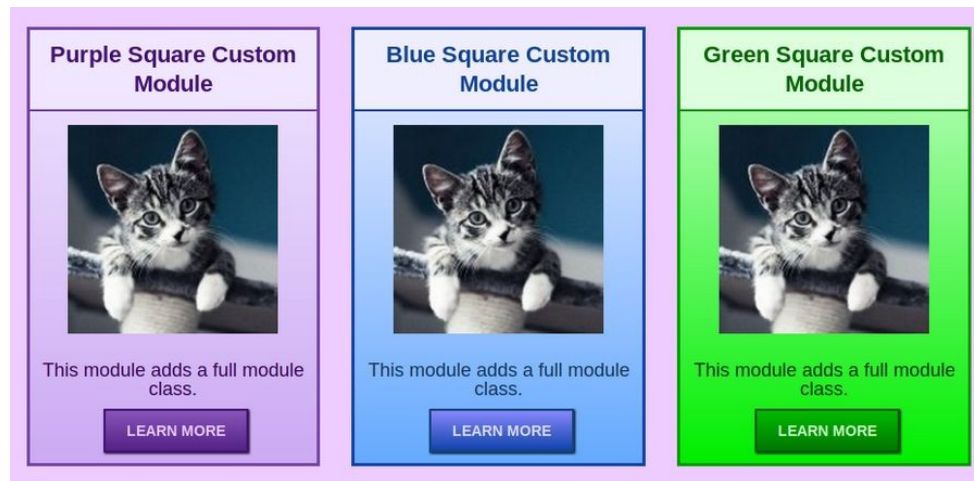
In every section, we will learn by actually creating several custom module banners and feature boxes.





## 6.1 Style Custom Modules with Inline CSS

Feature boxes are boxes shown on the Home page of your website with a title, a short description, a link to a full web page (and optionally an image). Here is an example of a row of feature boxes.



Feature boxes are used to direct your website visitors to special pages on your website. Feature boxes can be placed above or below the main content area of your Home page. There are often two to four feature boxes on a row with typically one to two rows above the main content area and two or more rows of boxes below the main content.

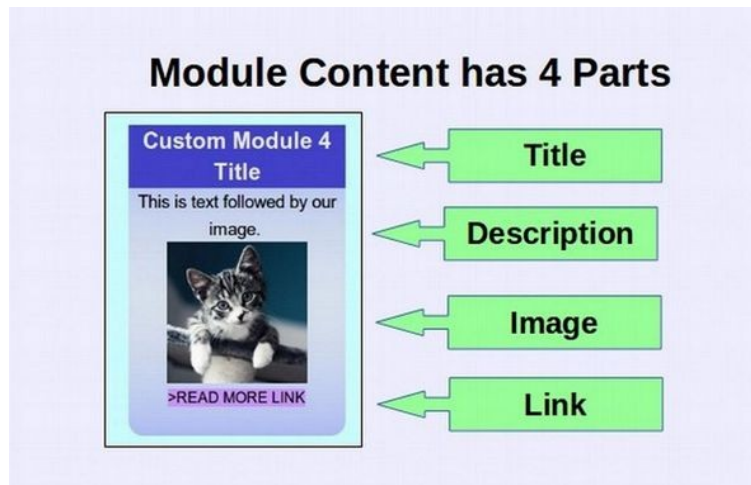
One glaring problem of the Helix template (and Joomla in general) is the difficulty of controlling the appearance of feature boxes (which Joomla calls “**modules**” and Bootstrap refers to as “**cards**”). There are a couple of “extensions” and “content construction kits” which attempt to solve this problem. But they simply add another layer of complexity and another set of CSS classes that can make controlling the appearance of your feature boxes even more difficult. Therefore, we will first review the native way that Joomla handles feature box content and appearance. We will then add a simple series of custom CSS classes that can help you quickly and easily control the appearance of your feature boxes.

### Each Module has 4 Parts for Content and 4 Parts for Styling

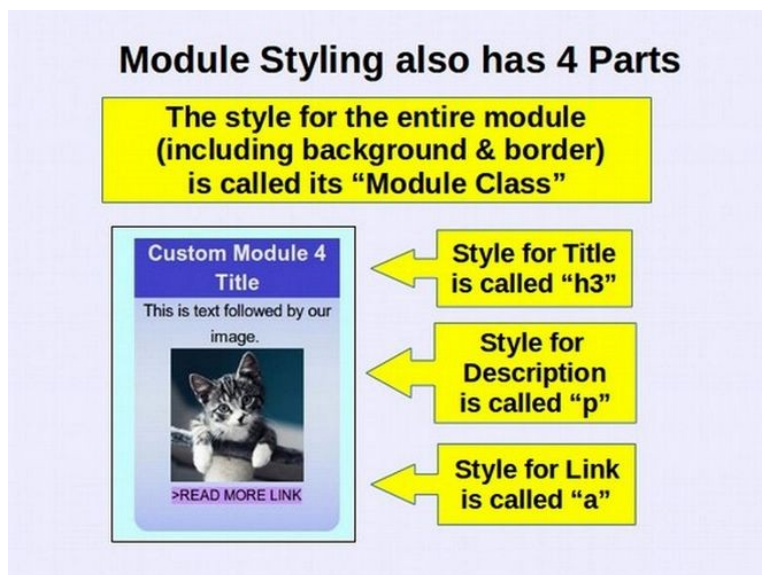
All websites consist of content – such as text, images and videos - and the style applied to this content – such as whether you use black font or red font.

The same is true of modules. The module has content and styling to determine its appearance. The content of a module typically has four main

parts. These are a Title, a Description, an Image (or video) and a READ MORE link leading to a more complete page describing the topic or product.



The style of appearance of a module also has four parts:



Controlling the style of our module means controlling the appearance of the Title Box, the Description area, the READ MORE link and the background color and border of the module. To take full advantage of this system, we need to learn how to create the content for and style the appearance of these modules. We will first explain how to create a simple custom module using HTML and then review how to control the appearance of this module using CSS.

While you do not need to know either HTML or CSS to create modules, it is helpful to understand these concepts to better understand how any given module is structured and styled.

PLEASE NOTE: If you really do not want to learn about HTML and CSS, you can skip this section and move directly to Section 6.4 where we explain how to control the content and appearance of modules just by using our **Rainbow Module Presets**.

### What are HTML and CSS?

HTML stands for Hyper Text Markup Language and CSS stands for Cascade Style Sheets. HTML controls the structure of web content, in other words, what order the content appears on the web page. CSS controls the appearance of web content, in other words, how our content looks on the web page. Together, these two website building languages are the foundation of every website in the world.

I want to make it clear that this brief explanation of HTML and CSS will not be a real course on either HTML or CSS. We will simply be using a couple of very basic commands in order to better understand how to make and style Joomla Custom Modules.

If you want to learn more about HTML and CSS, here is a link to our course on HTML and CSS: <https://learnhtmlandcss.com/>



Let's see how Joomla and Helix create modules or feature boxes.

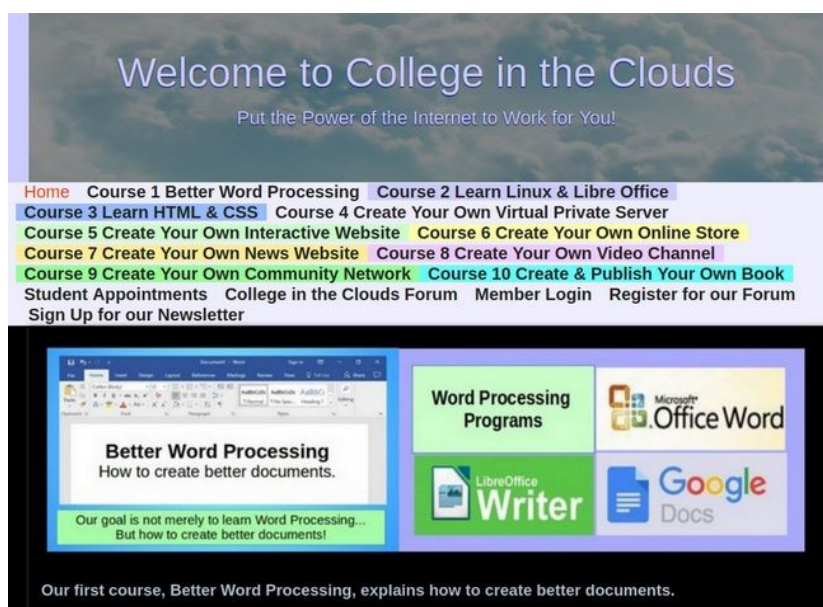
### Step 1 Use Helix to Create New Rows for Feature Boxes

One of the biggest benefits of the Helix template is its Layout tool which allows us to easily add more rows and more module positions to our Layout. Go to **Templates, Styles** and click on the Helix template to edit it.

Then click **Template Options, Layout**. We have previously created rows for our header, main menu and slideshow:



Here are what these three rows look like in the front end:



We have given the Header row a background color of medium blue, the Menu row a background color of light blue and the slider row a background color of black.

## Plan your News website module positions

Because we are using our Joomla Content area to display our Latest News articles at the top of our Home page, and have already added four rows below the Joomla Content area to display the latest articles in our four most popular Topic Categories (More News, Latest Sports News, Latest School

News and Latest Business News), and because we do not want to display modules above these important areas, we will create at least **10 “Module” rows** for up to 24 custom modules (4 rows at three per row and 6 rows at two per row) below the main content area and below our 4 Topic Rows.

On a real news website, we may not actually use all of these module rows and module positions. But in the case of our News Demo website, we will need enough module positions to demonstrate our **Rainbow Module Presets** which include 4 rows for 12 vertically stacked modules (6 round colors and 6 square colors) as well as 6 rows for 12 side by side modules (6 round and 6 square). To keep these all together, we will put all 24 modules below the main content area.

Thus, we will need four rows for our 12 vertically stacked modules. We will call these **Three Module Rows 1 through 4**. We will also need 6 rows for our side by side modules. We will call these **Two Module Rows 1 through 6**. The three columns for the four Three Module rows will be a, b and c. For example, the module positions for Three Module Row 1 will be 3module1a, 3module1b and 3module1c. The two columns for the 6 Two Module rows will be a and b. For example, the module positions for Two Module Row 1 will be 2module1a and 2module1b.

Here is a table of our ten new module rows and 24 new module positions below the main content area:

Module Row Name	Left Module	Middle Module	Right Module
Three Module Row 1	3module1a	3module1b	3module1c
Three Module Row 2	3module2a	3module2b	3module2c
Three Module Row 3	3module3a	3module3b	3module3c
Three Module Row 4	3module4a	3module4b	3module4c
Two Module Row 1	2module1a		2module1b



Two Module Row 2	2module2a		2module2b
Two Module Row 3	2module3a		2module3b
Two Module Row 4	2module4a		2module4b
Two Module Row 5	2module5a		2module5b
Two Module Row 6	2module6a		2module6b

## Use a New Custom Module to Add New Module Positions

Now that we have a plan of how many module positions we need to create and what we will name each module row and module position, we can start making our new module positions. There are two ways to add new module positions. We will first describe how to add module positions one at a time. Later, we will show you how to add several module positions all at the same time.

To add new module positions one at a time, add a custom module by going to **Content, Site Modules**. Then click **New** and click the plus sign to the right of the Custom Module. That will bring up this screen:

The screenshot shows the Joomla! Custom Module creation interface. At the top, there is a 'Title \*' field with the text 'Module Position 3module1a'. Below this is a tabbed interface with 'Module' selected. The 'Custom' module type is chosen, with a description: 'This module allows you to create your own Module using a WYSIWYG editor.' To the right, there is a 'Title' checkbox (checked) and a 'Show' button. Below that is a 'Position' dropdown menu currently showing 'None'. At the bottom, there is a WYSIWYG editor with a toolbar containing various formatting options like bold, italic, underline, and a 'Format' dropdown.

For the module Title, call it **Module Position 3module1a**. For description, copy and paste: *We will use this module to add a new module position.* Leave the status as Published. Then in the Position box, click on the word None to bring up this box:

Instead of using the drop down arrow to choose an existing module position, place your cursor inside the box that says “Type or select a Position. Then type (do not copy paste) the word **3module1a**. Then press Enter on your keyboard. Verify that the new module position was accepted by looking as shown below:

Then click Save. Make sure our new module position still displays. Then click Save and Close.

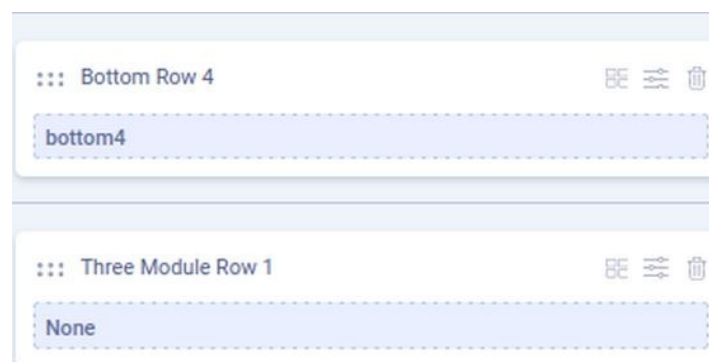
Then select the new module in the Module Table and in **Actions**, click **Duplicate**. Select it again and click Duplicate again. Then open the first duplicate module. Change its name to **Module Position 3module1b**.

In the Module Position Box, use the tiny x to delete the word **3module1a**. and type **3module1b**. Select it and press Enter. Then change it to published. Then click Save and Close. Repeat to add the third module using the **3module1c** module position.

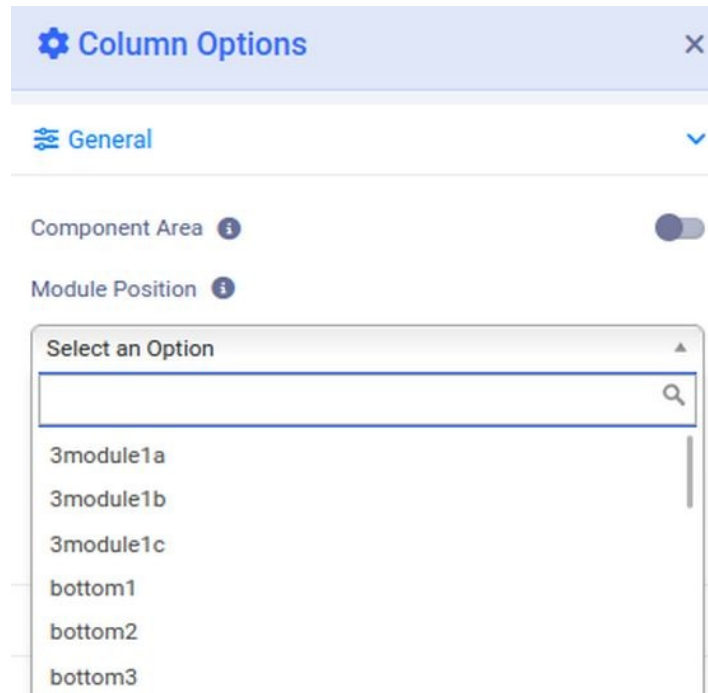
Here is what our module table now looks like:

<a href="#">Module Position 3module1a</a>	3module1a	Custom
<a href="#">Module Position 3module1b</a>	3module1b	Custom
<a href="#">Module Position 3module1c</a>	3module1c	Custom

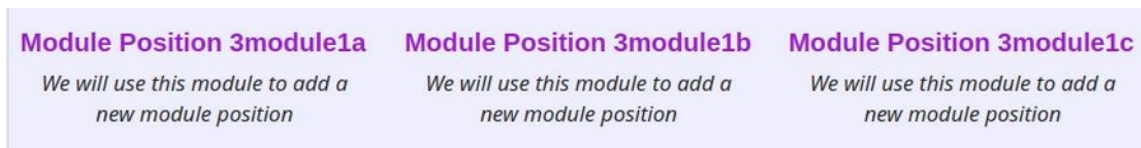
Next from your Home Dashboard, go to **Templates, Styles** and click on the Helix template to edit it. Click **Layout**. Then below the Main Body and our four existing Bottom rows, but above the Footer row, click the plus sign to add a new row. Click the three small arrows on the right to open Row Options. Call the Section Title **Three Module Row 1**. Click Apply.



Click on the four small boxes on the right to open the column selector and click 4, 4, 4 to add three columns to this row. This will change the blue row into three columns each of which has the word “None”. Click on the three hidden dots to the right of the first word None to open the Column Options. Then for Module Position, click the arrow to the right of Select an Option and choose **3module1a**. Click Apply.



Repeat to add 3module1b and 3module1c to the other two columns. Click Save and Close the Template Edit screen. Then view the front end of your website and scroll to the bottom of the Home page:



There are now three content boxes just above the (black) Footer row. Creating module positions one at a time is OK for adding just a few module positions to your website layout. But if you are building a News website where you are likely to need a lot of module rows and columns to place local business banner ads, then it is easier to add lots of module positions all at the same time. We will do that next.

### Add Many Module Positions

To add several module positions all at the same time, from your Dashboard, go to **Template, Code** and click on the Shaper\_helixultimate template to edit it. Then in the left side column, click on the file **templateDetails.xml** to edit it.

The module positions start at line 26 with:

```
<positions>
  <position>title</position>
  <position>top1</position>
  <position>top2</position>
  <position>top3</position>
```

Scroll down and between the slide position and user1 position, create a new line. Copy paste the following 12 module positions at this line:

```
<position>3module1a</position>
<position>3module1b</position>
<position>3module1c</position>
<position>3module2a</position>
<position>3module2b</position>
<position>3module2c</position>
<position>3module3a</position>
<position>3module3b</position>
<position>3module3c</position>
<position>3module4a</position>
<position>3module4b</position>
<position>3module4c</position>
```

Just below these new middle module positions, enter a new line. Then copy paste these 12 module positions:

```
<position>2module1a</position>
<position>2module1b</position>
<position>2module2a</position>
<position>2module2b</position>
<position>2module3a</position>
<position>2module3b</position>
<position>2module4a</position>
<position>2module4b</position>
<position>2module5a</position>
<position>2module5b</position>
<position>2module6a</position>
<position>2module6b</position>
```

Click Save and Close to close the XML file. Then click Close again to close the template edit screen.



Note: These changes to the template.Details.xml file will be lost whenever there is an update to the Helix template. You will need to open the xml file and copy paste the changes back in again. Alternately, Helix should soon add the ability to create Child Templates (a feature Joomla introduced with version 4.1 in February 2022). Once Helix has added this feature, we will be able to first create a Helix child template. Then make the changes in the child template xml file (which will not be affected by updates to the parent template. Then use the child template as our website template.

### Add New Rows, Columns and Module Positions

Click **Template, Styles** and click on the Helix template to edit it. Click Layout and scroll down to the Three Module Row 1 we created earlier. Click the Plus sign just above the Footer row to add three more rows. Name them Three Module Row 2, Three Module Row 3 and Three Module Row 4.

Make each three columns. Then click on each column in Three Module Row 2 and add the new module positions **3module2a, 3module2b and 3module2c**. Repeat to add three module positions to Three Module Row 3 and Three Module Row 4. Here is the result:



Below the Three Module Rows, click on the plus sign just above the Footer Row to add Two Module Rows 1 through 6. Then add two columns to each

of these rows and module positions to each column. To practice displaying different feature boxes in different rows, click on the three small arrows on the right side of each row, then click **Styles** to give each of the four Three Module and six Two Module rows a different background color such as #eeeeff, #eeffee, #ffeeee, #eeffff, #ccccff, etc. Click Save and Close to close the Template Edit screen.

### Step 3 Create a Module Demo Page

In order to see how our custom modules will appear on our website, without taking up a bunch of space on our News website Home page, create a new article called **Module Demo**.

Go to **Content, Articles New**. For Title, type in Module Demo. For description, type: "This is our page to view new modules we will be creating." Leave the article unassigned to any category and not Featured on the Home Page. Click Save and Close. Then create a single article menu item for our Module Demo page in our Main Menu. Click Save and Close. Then go to the Front End and click on this menu item to see the result:



The three custom modules we created to make module positions are appearing on every page of our News website! This is not good. Go to **Content, Site Modules** and unpublish these three modules so that they no longer appear on any of the pages on the front end of our website.

### Step 3 Create your First Custom Feature Box

Now that we have module positions and a page to assign our new practice modules to, we are ready to create our first feature box. Go to **Content, Site Modules, New**. This will bring up a page called Select a Module Type. This page has a list of many module types. Scroll down the page and click

**Custom.** This takes us to the Joomla Modules: Custom screen which looks like the Article Edit screen.

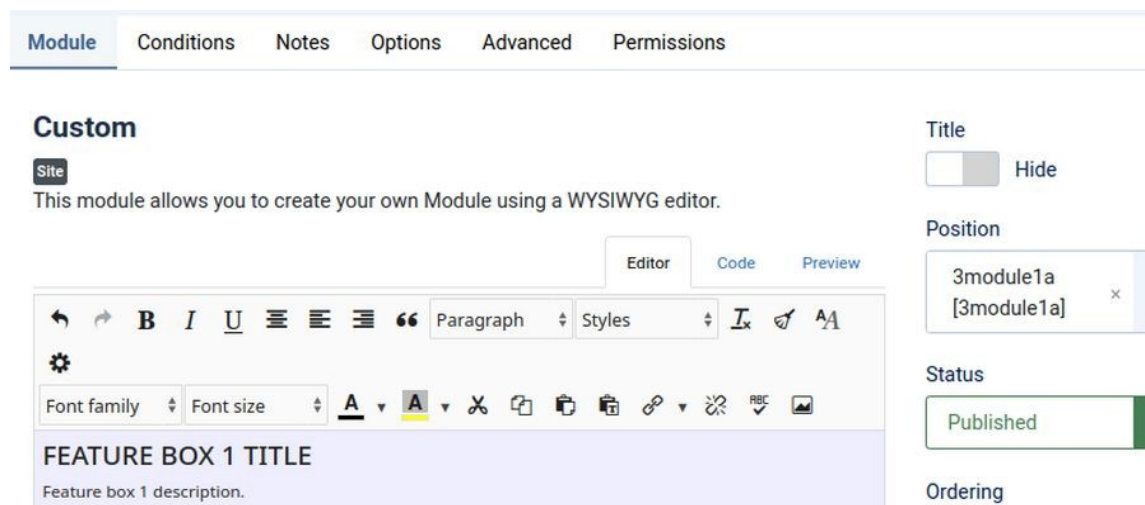
To simplify the module creation process, we will focus on only the title and description. Once we have mastered controlling the appearance of the title and description, we will review adding the image and READ MORE link.

For Title, type **Module 1a**. For Show Title, change it to Hide. For Position, choose Helix 3**module1a**. Then in the JCE Editor workspace, type or copy paste these two lines:

FEATURE BOX 1 TITLE

Feature box 1 description.

Then select the title line and use the Styles dropdown box to change the format to **Heading 3**. Here is the result in the workspace:



## HTML uses elements and brackets

There are two HTML elements in the above feature box. The Title uses the **h3 (or heading 3) element** and the description uses the **p (or paragraph) element**. To see the HTML for these two elements, click on the **Code** tab:



Note that both the heading 3 and paragraph elements have an **opening and closing bracket** around the actual text which is placed between the

brackets like this:

### HTML Opening and Closing Brackets

**<opening-bracket>** Content between brackets. **</closing bracket>**

**<element-name>** Content between brackets. **</element-name>**

**<h3>** Content between brackets. **</h3>**

**<p>** Content between brackets. **</p>**

The only difference between the opening bracket and closing bracket is the **addition of a forward slash /** in the closing bracket.

Click Save. Then on the **Menu Assignment** (Conditions) tab, click Create New Conditions Set. For Rule Type, select Menu Items. Click on the **Module Demo page**. Then click Save and Close and view the result in the front end of your website:

### FEATURE BOX 1 TITLE

Feature box 1 description.

When no CSS has been added to the module, its appearance is controlled by the default CSS settings in your web browser.

The web browser default CSS settings are pretty ugly. It is therefore important to add our own custom CSS to each of our feature boxes. To see the difference that adding CSS can make to a feature box, we will add two more feature boxes and add our CSS to these – but leave our first module unstyled so we can see the difference that our custom CSS makes. To add two more feature boxes, go back to **Content, Modules** and select your first feature box.

Then click **Duplicate**. Then select and click Duplicate again. Then open and change the name of the second module to **Module 1b** and change the position to **3module1b** and publish it. Then change the title to **FEATURE BOX 2 TITLE**. Then click Save and Close and repeat these steps for Module 1c in position **3module1c**. Then view the result:

### FEATURE BOX 1 TITLE

Feature box 1 description.

### FEATURE BOX 2 TITLE

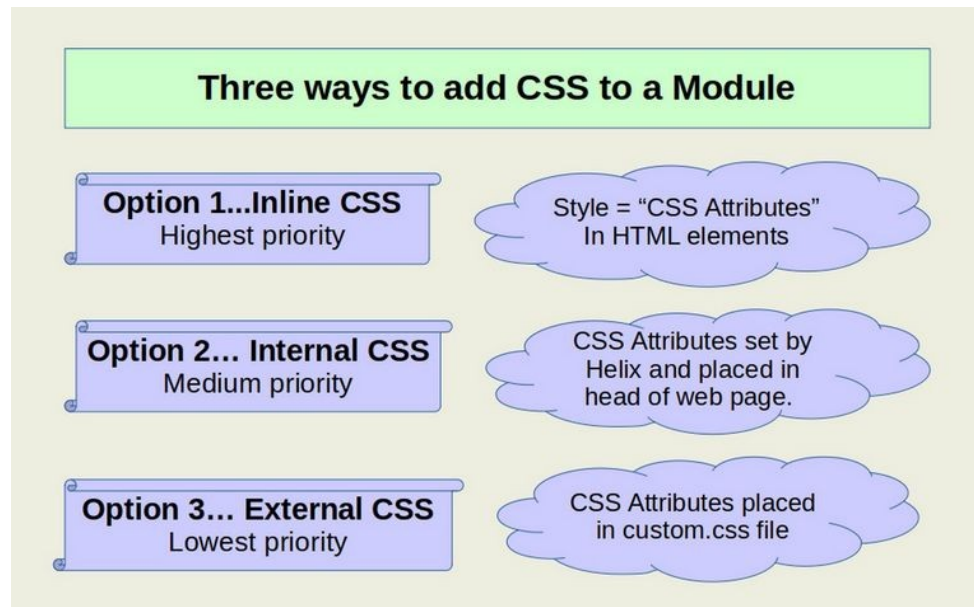
Feature box 1 description.

### FEATURE BOX 3 TITLE

Feature box 1 description.

## Three Ways to Add CSS to a Module

There are three ways to add custom CSS to a module. These are **Inline CSS**, **Internal CSS** and **External CSS**:



In this article, we will use Inline CSS to add styles directly to the Heading 3 and Paragraph elements. Then in the next article, we will use Internal and External CSS to make the same changes to our Heading 3 and Paragraph elements.

### Option 1 Inline CSS... Applying the Style Attribute to Elements

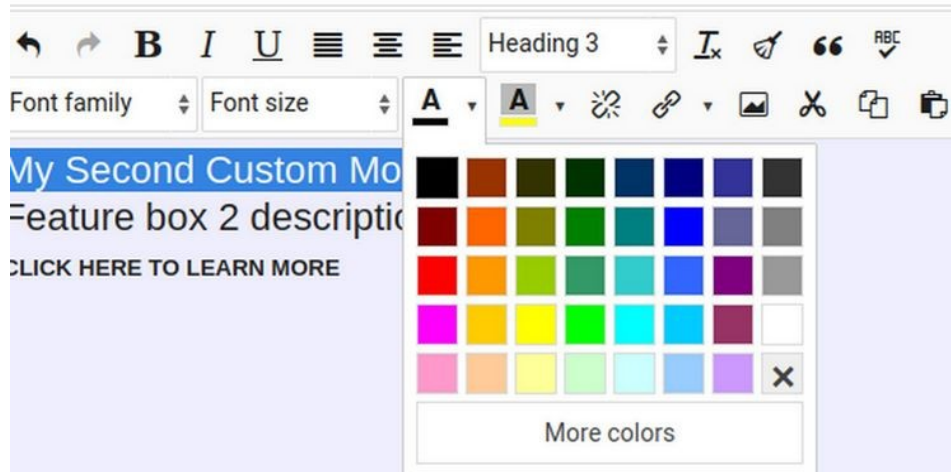
Inline CSS applies the **style attribute** to customize our headings and paragraphs. Whenever you select an element and make a change to it using the JCE editor, the JCE editor will apply the style attribute to the content you selected.

### Use the JCE Editor to set the Module Title Style

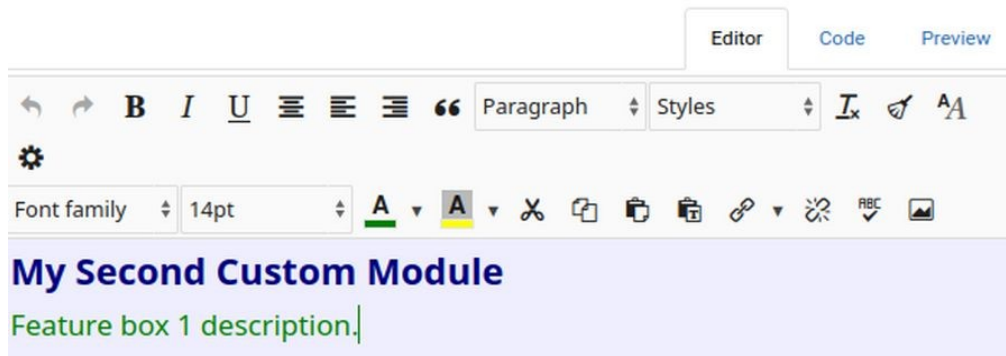
In order to change the appearance of content with the JCE Editor, go to **Components, JCE, Global Configuration** and change Validate HTML from Yes to No. Then click **JCE, Profiles, Default** and click the **Plugin Parameters** tab. Then click Clipboard and change Clean HTML (Remove all Styles) to Keep Styles. Click Save and Close.

Then go to **Content, Modules** and click on **Module 1b** to edit it. Change its title to **My Second Custom Module** in the Work Space just above the description. Select the title and use the JCE editor to make it 18 pt, bold and dark blue #333399). Click Save.





Then select the description and change the font size to 14pt and dark green. Then click Save. Here is what the workspace now looks like:



Then click on the **Code** tab to see the changes made to the HTML code. Here is the HTML with the h3 element in bold:

```
<p class="h3"><span style="color: #000080;"><strong><span style="font-size: 18pt;">My Second Custom Module</span></strong></span></p>
```

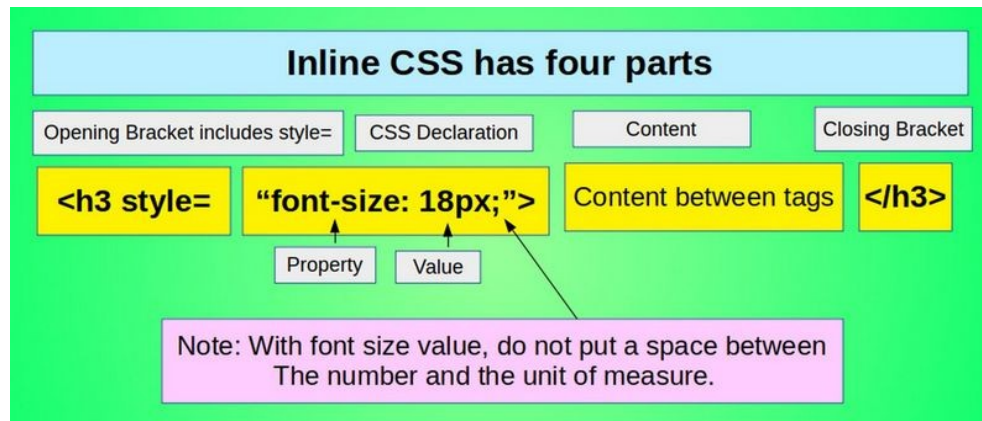
```
<p><span style="font-size: 14pt; color: #008000;">Feature box 2 description.</span></p>
```

Inline styles uses <element style="property: value; property: value;">

### Each Inline CSS Style Attribute Rule has four main parts

The first part is an html element opening bracket such as <h3 followed by a STYLE EQUALS function. The second part is one or more properties with one or more values placed inside of quotation marks and separated by

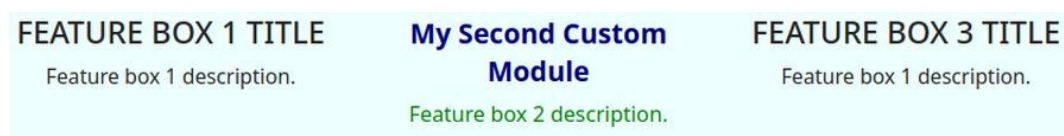
colons and semi-colons. The third part is the content or words that the style is being applied to. The fourth part is the element closing bracket. Here is a graphic of Inline CSS:



Here is the generic format of inline CSS using the style attribute:  
<html element style="Property:Value; Property:Value;"><This is the text being modified by the inline CSS></element closing tag>

Note that the style equals function is placed inside of the html opening bracket arrows: **<h3 style="property:value;">**

Now that we understand the inline CSS added by the JCE editor, click Save and Close and View Site.



## Drawbacks and Advantages of Inline CSS

There are several problems with the Inline CSS method of creating custom modules. First, it requires knowing at least some HTML and CSS. Even one small mistake may prevent the module content or styling from displaying properly. Second, each module will need to be styled one at a time – a very time consuming task if you have a lot of modules to make. But the biggest problem is trying to remember what hexadecimal color combinations go with what modules. This is why most courses on HTML and CSS will tell you to NOT use the style attribute to customize the appearance of your text. Instead, they will tell you that you should ALWAYS use an External CSS Style sheet.

However, using the style attribute to define the appearance of a particular

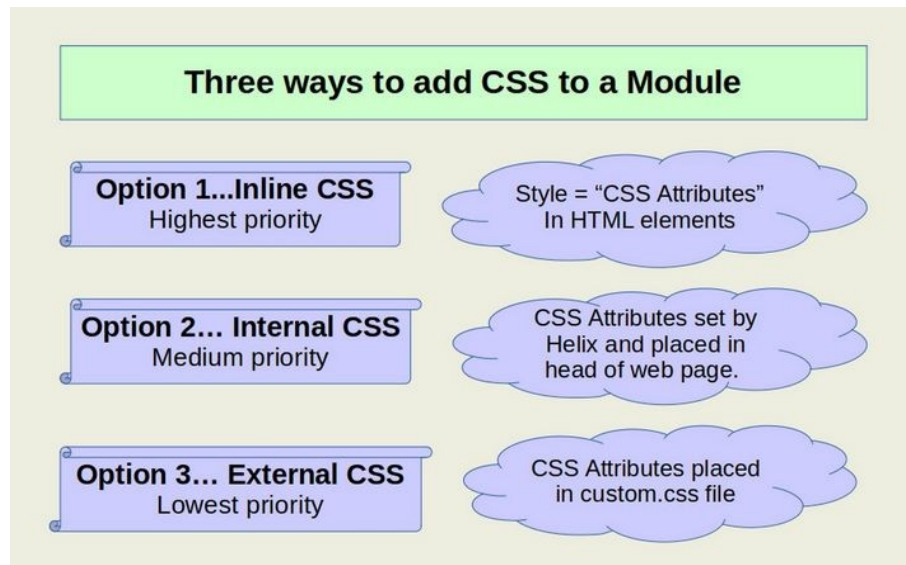
element, such as a particular heading or a particular paragraph, can be useful when you want an element to appear differently from the other headings and paragraphs around it. You can even use the **<span>** element combined with the **style attribute** to make any section of a paragraph or sentence appear different from the rest of the paragraph or sentence. The reason this is possible is that the Style Attribute has priority over whatever appearance settings are placed in a CSS style sheet. Inline Style attributes will also over-ride the default style settings in your web browser. Thus, style settings give you full control over the appearance of the content on your website – even if for some reason you are working on a web page that has a dozen different style sheets applied to it and you do not have access to any of these style sheets.

### **What's Next?**

In the next article, we explain how to use Internal and External CSS.

## 6.2 Style Custom Modules with Internal and External CSS

In the last article, we styled a feature box title and description with inline CSS using the JCE Editor. In this article, we will use Helix to style a feature box title and description using Internal CSS. We will then use External CSS to style a feature box.



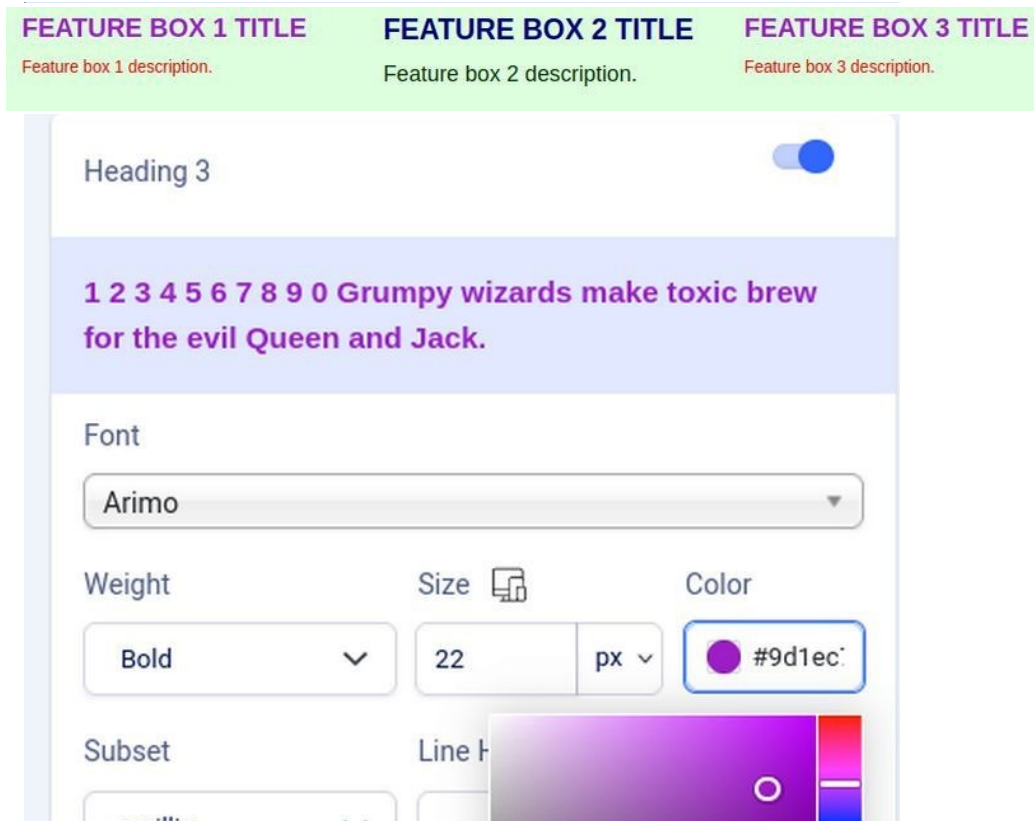
### Style a Module Title and Description with Helix and Internal CSS

Go to **Templates, Styles** and click on the Helix template. Click **Layout, Top Row 1 Edit**. Then click **Style**. Change the text color to red (#ff0000).

The screenshot shows the Helix Style editor interface. The 'Style' tab is selected. The 'Text Color' field is set to red (#ff0000). The 'Padding' and 'Margin' fields are both set to 10px.

Then click **Apply**. Then click **Typography. Heading 3**. Change the text color to purple and the font size to 22.

Then click Save and close and view the site.



This changed the title color and size and the description text color on the first and third modules, but not the second one. This is because the second module was styled with Inline CSS and **Inline CSS has priority over Internal CSS**. To see the Internal CSS, right click on the Demo Page and click View Page Source/ Scroll down to about line 24 to see several internal styles:

```
24 <style>h3{font-family: 'Arimo', sans-serif;font-size: 22px;font-weight: 700;color: #9d1ec7;text-decoration: none;}
25 </style>
26 <style>.sp-megamenu-parent > li > a, .sp-megamenu-parent > li > span, .sp-megamenu-parent .sp-dropdown li.sp-menu-
27 </style>
28 <style>.logo-image {height:0px;}.logo-image-phone {height:0px;}</style>
29 <style>.sp-menu{ background-color:#EEEEFF;padding:10px; }</style>
30 <style>#sp-top-row-1{ background-color:#DDFFDD;color:#FF0000;padding:10px;margin:10px; }</style>
```

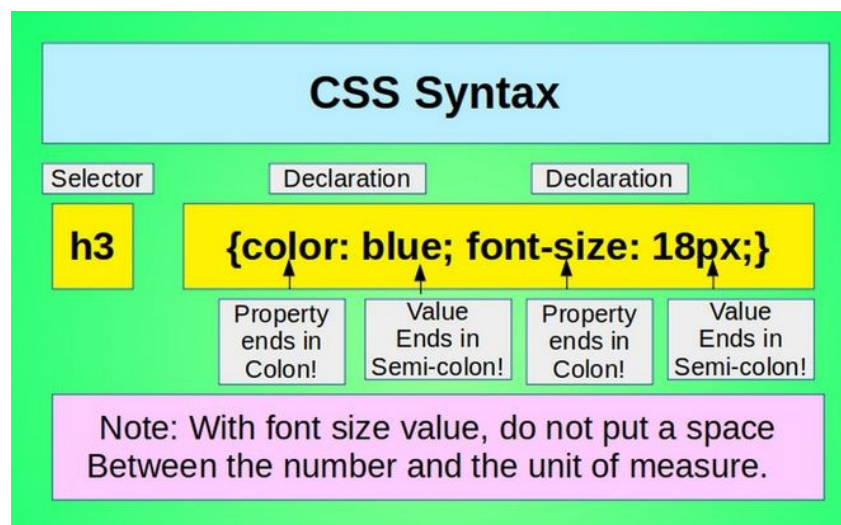
Here are the two relevant internal styles:

```
<style>h3{
font-family: 'Arimo', sans-serif;
font-size: 22px;
font-weight: 700;
color: #9d1ec7;
text-decoration: none;}</style>
```



```
<style>#sp-top-row-1{
background-color:#DDFFDD;
color:#FF0000;
padding:10px;
margin:10px; }</style>
```

Internal styles are always placed in the head section of the HTML and always begin with **<style>** and end with **</style>**. Between the style opening and closing brackets, the first item is either an element selector such as **h3**, or an ID selector such as **#sp-top-row-1** or a class selector which begins with a dot (example: **.my-class**). We will take a closer look at classes in a moment. After the selector, there is a curly bracket. This is followed by other properties and values. After each property is a colon and after each value is a semi-colon.



A **CSS rule** is a line of code which modifies a particular HTML element. Each CSS Rule has three main parts: a **selector**, and one or more **properties** and one or more **values**.

Each CSS or Style declaration consists of a property and a value. The property is the style attribute you want to change. Each property has a value which must be precisely spelled out.

## CSS Properties

CSS properties are the specific options for modifying the appearance of HTML tags or elements. There are different property options for Headings, Paragraphs, Tables, Rows, and Cells. A common question is which properties of the headings, paragraphs, tables, rows and cells should be called out or modified?

The truth is that all property modifications are optional. However, be aware that if you fail to specify the precise properties you want for the appearance of your web page or table, you will be leaving it up to the browser default settings to define the various properties. Because different browsers have different default settings, if you fail to define module properties, your web page may look very different from one browser to the next. So the best option is to define all of the important properties for every heading, paragraph, table, row and cell if its appearance matters.

### How to change the module description paragraph style?

Using Inline CSS, we were able to change the paragraph style for any given module without affecting the general paragraph style used on the rest of our website. However, while the row style allowed us to change the font color for that row, it did not have a setting to change the font size for that row. One solution to this problem is to view the page with Firefox or Libre Wolf browser. Then click **Tools, Browser Tools, Web Developer Tools**. Then click on the far left icon called **Pick an Element** and hover over the first module description. Then click on it. In the left column is the HTML and in the middle column is the CSS. The font size is take from the body font size which is 14px. In the HTML, there is a class called **sp-module**.

We can add a custom value to this sp-module class:

**.sp-module {font-size: 20px;}**

In the Helix Template Edit screen, click on **Custom Code** and copy paste the above into the Custom CSS box. Then click Save and Close and View the site:

FEATURE BOX 1 TITLE	FEATURE BOX 2 TITLE	FEATURE BOX 3 TITLE
Feature box 1 description.	Feature box 2 description.	Feature box 3 description.

Again, the change only affected the first and third modules, but not the second one. Right click on the Page and click View Page Source to see that a new internal style has been added to the head of the HTML code:

```
<style>.sp-module {font-size: 20px;}</style>
```

### Problems with Internal CSS

The biggest problem with Internal CSS is that it has to be added line by line to the head of each web page. A modern web page may have more than 10,000 lines of custom CSS. **Internal CSS turns your website source code into an unreadable mess.** It addition, it is very time consuming to

use the Firefox Inspector to figure out the names of each class that needs to be changed. Thankfully, there is a better option. That is to use the **custom.css** external style sheet and spend time at the beginning to create a series of styles or classes for your modules and then assign module classes to your modules as you create your modules. Let's take a look at how this is done.

### How to Transfer Internal CSS to your custom.css file

Open your Module Demo Page. Then right click and select **View Page Source**. Here are three internal CSS styles we just created for our custom modules:

```
<style>.sp-module {font-size: 20px;}</style>
```

```
<style>h3{font-family: 'Arimo', sans-serif;font-size: 22px;font-weight: 700;color: #9d1ec7;text-decoration: none;}</style>
```

```
<style>#sp-top-row-1{ background-color:#DDFFDD;color:#FF0000;padding:10px;margin:10px; }</style>
```

To transfer these 3 styles to our custom.css file, copy paste the CSS. Then **remove the style opening and closing brackets** to form this CSS list:

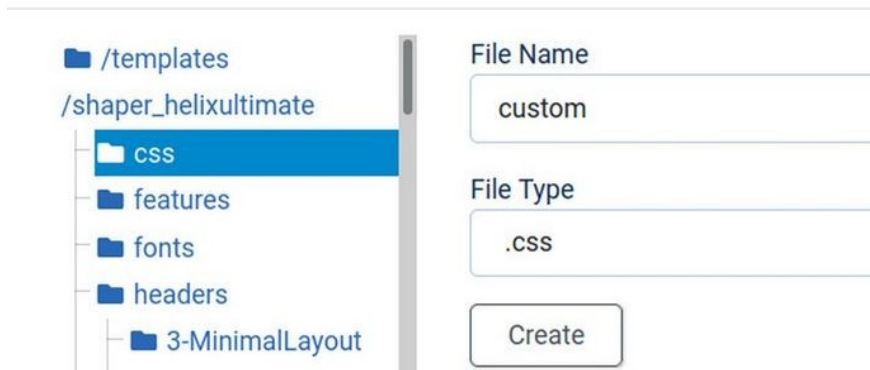
```
.sp-module {font-size: 20px;}
```

```
h3{font-family: 'Arimo', sans-serif;font-size: 22px;font-weight: 700;color: #9d1ec7;text-decoration: none;}
```

```
#sp-top-row-1{ background-color:#DDFFDD;color:#FF0000;padding:10px;margin:10px; }
```

Then go to **Template Code** and click on the Helix template to edit it. Then click on the **css** folder in the left column to open it. We have previously created a custom.css file. But if you do not have a **custom.css** file in your template css folder, just click the New File button at the top of the page. For file name, type custom and for File Type, select css. Then click on the css folder in the left column to select it. Then click Create.

Create or Upload a new file.



Open the custom.css file and copy paste the above internal css into the end of the custom.css file. Then click Save and Close. Then click Close.

We next need to undo the Internal CSS changes we made. Click **Templates, Styles**, Then click on the Helix Template to edit it. Click Custom Code and delete this line: **.sp-module {font-size: 20px;}**

Then click Save. View the front end to confirm that the description font is still 20 px. Then right click on the page and view source to confirm that this internal style is now gone. Thus, the sp-module font size is now controlled by our custom.css file rather than by the Helix Internal CSS.

Next in the Helix Template Edit screen, click Typography and turn off Heading 3. Then click Save. View the front end to confirm that the Heading 3 font is still purple. Then right click on the page and view source to confirm that the h3 internal style is now gone. Thus, the h3 font is now controlled by our custom.css file rather than by the Helix Internal CSS.

Next in the Helix Template Edit screen, click **Layout, Three Modules Row 1 Edit, Style**. Delete the Padding, Margin, red font color and change the background color to sky blue #ccccff. Then click Apply. Then click Save. View the front end to confirm that the module description font is still red. However, the background color for row 1 is now sky blue rather than light green:



Right click on the page and view source. The top row 1 internal style now shows this line:

```
<style>#sp-top-row-1{ background-color:#CCCCFF; }</style>
```

Most of the CSS for top row 1 is now controlled by our custom.css file. However, the background color is still controlled by the Helix Internal CSS. Feature Box 2 is still controlled by Inline CSS created by the JCE Editor.

## Cascading Order

CSS actually stands for Cascading Style Sheets. The word cascading means that – when an element has more than one style method applied to it - some styles have priority over other styles. As we have seen, an inline style has the highest priority, and will override internal and external styles and browser defaults.

Next, internal styles have priority over our custom.css file. Because our custom.css file is not actually part of the web page, but is a separate file linked in the head of the web page, our custom.css file is called an External Style Sheet. Here is the link to our custom.css file in the head or top section of the Page Source:

```
<link href="/templates/shaper_helixultimate/css/custom.css"
rel="stylesheet" />
```

Look at View Page Source and you will see that there are actually 12 external CSS style sheets with links in the head of our Page Source. Because the custom.css file is the last CSS Style Sheet, whatever is in our custom.css file will “over-ride” all of the other style sheets and will be chosen by the web browser to display the page. In fact, if there is more than one style set for the same element or selector in the custom.css file, the last CSS setting will be applied to that element and any prior settings will be ignored.

## Understanding CSS Inheritance and Specificity

In addition to Inline CSS having priority over Internal CSS and Internal CSS having priority over External CSS, some types of selectors have priority over other types of selectors. The term “Specificity” is the method browsers use to decide which CSS property values will be applied when displaying a web page. As we noted earlier, there are three primary types of selectors. These are **elements**, such as h3, **classes** such as .my-class and **ID selectors** such as #sp-top-row-1. Because an ID selector can only be used ONCE on a given website, it is the most specific. Any CSS applied to this ID will have priority over any ID applied to a class or an element. Thus, we need to be careful when adding styles using the Helix Layout Style function



as these styles will have priority over the class styles we will look at below!

Class styles are more specific than the element styles and will thus have priority over element styles. However because the same class style can be used in several places on our website, it is not as specific as an ID selector.

In short, an ID selector is a name preceded by a hash character (#) while a class selector is a name preceded by a period. An ID selector is used to style an individual element while a class selector can be used to style a group of elements.

### **Why Classes are better than ID Selectors**

We have seen that the Helix template uses element selectors such as the h3 selector to style the h3 element. Helix also uses class selectors such as **.sp-module** to style a group of modules. In addition, Helix uses ID selectors such as **#sp-top-row-1** to style elements in a particular row we create with the Helix Layout tool. Element selectors, class selectors and ID selectors can then be placed either in the internal <style> in the head or top section of the web page or linked to an external style sheet such as our custom.css file. We can also use Inline CSS to style an individual custom module – but this can be a lot of work and result in some modules looking much different from other modules.

What we really need is a way to first create one or more module designs – much as an architect can design one or more houses - and then apply a specific module design to a specific custom module regardless of the actual content in the module. ID selectors can not be used for this purpose because they are too specific. Each ID selector can only be applied to one module. Element selectors also will not work because they are too general and would apply styles to other parts of our website that we do not want to have a custom style. Thankfully, classes are just right because they can be applied to many modules without affecting our entire website.

To solve this problem of assigning a specific style to a specific module, Joomla allows us to create Preset classes and then assign the class to any module we want to control the appearance of each custom module.

### **What's Next?**

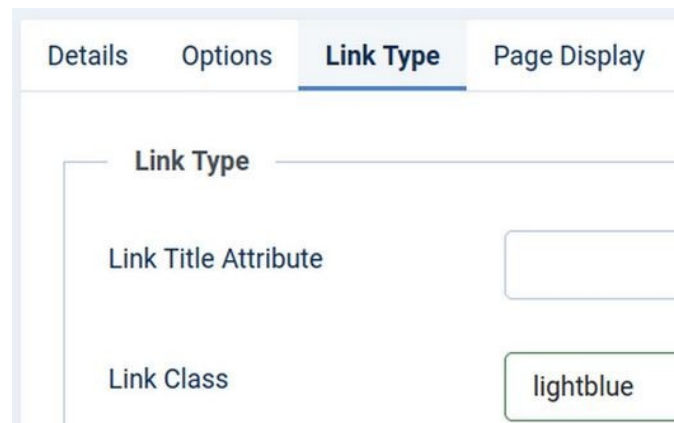
In the next article, we will create a custom class and then use Joomla to apply our custom class to a specific custom module.

## 6.3 Use Preset Classes to Style Custom Modules

Joomla offers us the ability to use CSS styles to change the style of groups of modules with module classes. In fact, module classes are the main way that professional template designers control the appearance of modules in their templates. They create beautiful module classes and then have their customers type in these module class names to give their modules a distinctive appearance. In this article, we will create our own custom module class and then apply it to one or more of our custom modules.

### Apply a simple background color class to a custom module

We have already seen how classes can be used to change the background color of a menu item. Recall that we placed classes such as **.lightblue {background-color: #eeeeff; font-weight: bold;}** in the Helix Template Custom CSS file. Then for any menu item we wanted to have a light blue background, we simply typed in lightblue (without the leading dot) in the menu item Link Class box.



The screenshot shows the Joomla! administrator interface for editing a menu item. The 'Link Type' tab is selected. The 'Link Class' field is filled with the text 'lightblue'.

We can use this style on as many menu items as we want and on as many menus as we want. Here is what this light blue class looks like on the front end Main Menu:



The reason the bold part does not appear is because our custom.css is being over-ridden by the Helix Typography Internal CSS. Right click on the Page Source to see this:

```
<style>.sp-megamenu-parent > li > a, .sp-megamenu-parent > li >
span, .sp-megamenu-parent .sp-dropdown li.sp-menu-item > a{font-family:
```

'Arimo', sans-serif; font-size: 18px; **font-weight: 400**; text-decoration: none;}</style>

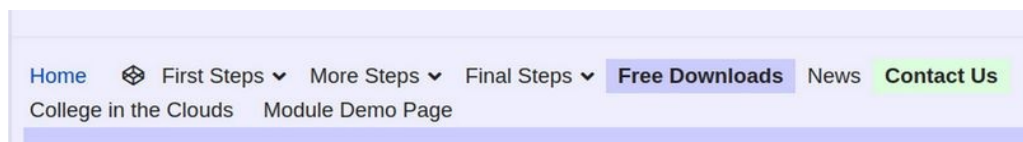
To allow us to control the appearance of individual menu items, we should first go to **Templates, Styles, Helix, Typography** and turn off the Helix Navigation typography. Unfortunately, this makes our font size for all of our menu items very small:



So we can and should add the following to our custom.css file:

```
.sp-megamenu-parent > li > a, .sp-megamenu-parent > li > span, .sp-megamenu-parent .sp-dropdown li.sp-menu-item > a{font-family: 'Arimo', sans-serif; font-size: 18px; text-decoration: none;}</style>
```

Now we have a readable font size and can control the font weight and background colors of specific menu items:



Creating and using module classes works the same way. In fact, we can use the .lightgreen class we created for our menu items to set the background for our modules!

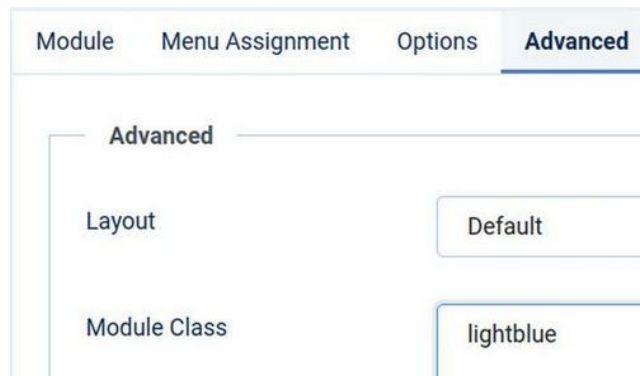
### Create three more custom modules

Go to **Content, Site Modules** and create three duplicates of our third Custom Module. Open each and rename them as Module 2a, 2b and 2c. Assign them to 3module2a, 3module2b and 3module2c.

<b>FEATURE BOX 1 TITLE</b> Feature box 1 description.	<b>My Second Custom Module</b> Feature box 2 description.	<b>FEATURE BOX 3 TITLE</b> Feature box 3 description.
<b>FEATURE BOX 4 TITLE</b> Feature box 4 description.	<b>FEATURE BOX 5 TITLE</b> Feature box 5 description.	<b>FEATURE BOX 6 TITLE</b> Feature box 6 description.

Select Module 4 to edit it. Then click on the Advanced tab. The second box is called Module Class. Here we will **type in first a blank space**. Then type

lightblue:



The screenshot shows a configuration interface with four tabs: 'Module', 'Menu Assignment', 'Options', and 'Advanced'. The 'Advanced' tab is selected. Inside the 'Advanced' tab, there are two fields: 'Layout' and 'Module Class'. The 'Layout' field has a dropdown menu with 'Default' selected. The 'Module Class' field has a dropdown menu with 'lightblue' selected.

Then click Save and Close and View Site.

FEATURE BOX 4 TITLE	FEATURE BOX 5 TITLE	FEATURE BOX 6 TITLE
Feature box 4 description.	Feature box 5 description.	Feature box 6 description.

### Create a More Complete Module Class Preset

Let's create a new module class called **.my-module**. We can style all h3 elements with the class of my-module by adding **.my-module h3 {property: value;}** in our Helix template custom CSS and do the same for all p elements. This way, we can give different styles to our h3 heading element versus our p paragraph element. Here is the CSS for our new my-module class. Note that there are three parts, one class for the entire module, a second part for just the module h3 element and a third part for just the module p element.

```
.my-module {font-family: arimo, sans-serif; margin: 0; display: block; text-align: center; min-height: 250px; background-color: #eeffee;}
```

```
.my-module h3 { text-align: center; font-size: 22px; color: #ff0000; font-weight: bold; line-height: 1.3; padding: 10px; background-color: #eeeeff;}
```

```
.my-module p { text-align: center; color: #770077; font-size: 18px; font-weight: normal; line-height: 1.2; padding: 5px;}
```

The above is very similar to the Inline CSS we used in our earlier examples.

There is now some CSS Style for the entire module and some CSS for just the title (h3 tag) and some CSS for just the description (p tag). In the back end, go to **Templates, Code** and click on the Custom CSS file to edit it. Then copy and paste the above module classes into the end of our Helix custom CSS file. Then click Save and Close.

Now that we have a module class to work with, go to Content, Modules and click on our fifth custom module to edit it. Click on the Advanced tab. Add the following to the module class box:

**(space) my-module**

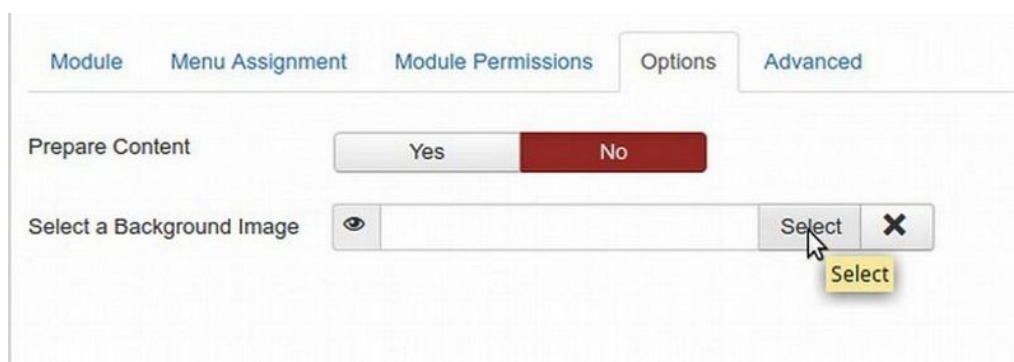
Then click Save and Close and view the site.



It is much easier to make dozens of modules with Module Classes than to make dozens of modules with Inline CSS. Plus we can control the appearance better. As just one example, we were able to add a minimum height property for our Module Class which will give our modules a more consistent appearance. Still, our fifth Custom Module has a rather plain looking background. We will next explain how to quickly and easily change the background to a more attention getting background using a Gradient Background Module Class.

### Create Gradient Background Module Classes

We could provide a background image for any module by loading the image to the images folder in our media manager and then linking to the image at the Options tab of our Custom Module.



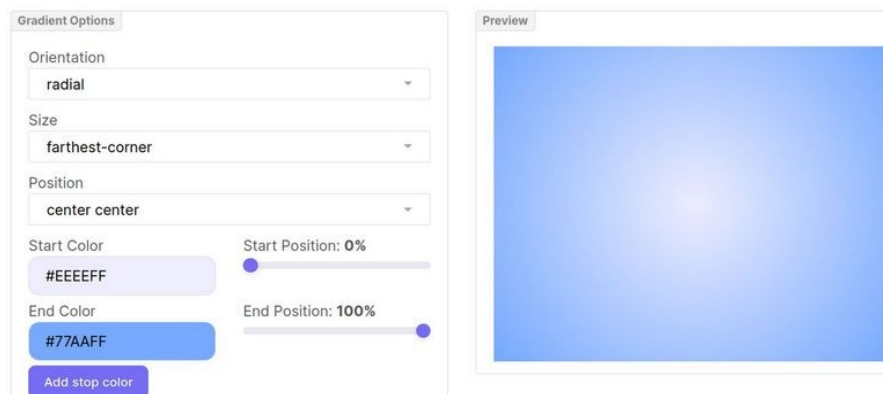
Alternately, we could place background images in the images folder of our template and then link to them by creating a class. Either way, we would have to make the image and optimize it and scale it. Thankfully, there is a much easier way to create gradient background images with CSS module classes. Once we have our gradient module classes, we first copy and paste them into our Helix template custom CSS file. Then type this new class into the module style box on the Advanced tab of our custom module.



As an example of how this is done, let's create a gradient module background style. A gradient is a transition between two colors in the background. We will start with a medium blue at the bottom leading to a lighter blue at the top. But you can change these to any two colors you would like. It is best to use an online gradient generator to help you determine the right CSS for the background gradient you would like. Here is a link to one of the easiest gradient generators:

<http://www.cssportal.com/css-gradient-generator/>

Go to this web page. Then Click on either the Linear or the Radial Style. Then enter the two colors you want. We used Radial with #EEEEFF to Start and #77aaFF to End.



Then replace the CSS for the my-module class background color with the following gradient:

**background: #eeeeFF;**

**background: radial-gradient(circle farthest-corner at center center, #eeeeFF 0%, #77AaFF 100%)**

Click Save and Close and view the Module Demo Page:



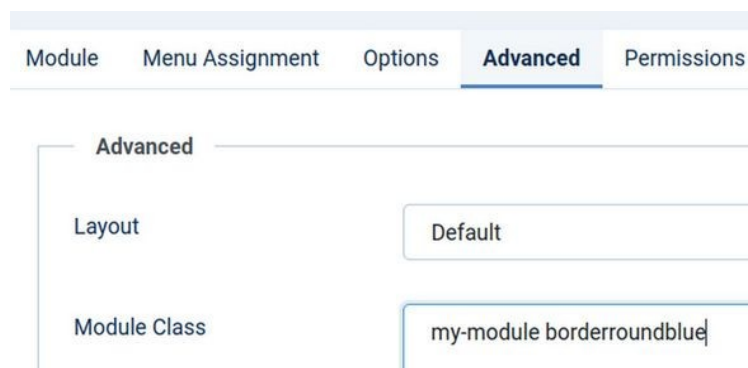
Our custom modules are gradually starting to look more professional! We can use the above gradient generator to create 10 radial gradient background colors and 10 linear gradient background colors to use as Preset styles in our Rainbow template.

## Add a Module Border

Our final example of the power of Module Classes will be to add a Module Class to provide a border around our custom module. We will add the following Module Border class to the end of our Helix template Custom CSS file.

```
.borderroundblue {  
border-style: solid;  
border-width: 3px;  
border-color: #333399;  
border-radius: 12px;}
```

Once you have added this in your custom CSS file, it is very easy to change its value to whatever you want. Our main purpose is simply to create it so we have something to work with. Next, click on the Advanced tab of our sixth module and add our new Module Border class called **borderroundblue** to the box. Here is what the Module Class suffix box looks like for our third custom module.



The screenshot shows a configuration interface with tabs: Module, Menu Assignment, Options, Advanced (selected), and Permissions. Under the Advanced tab, there is a section titled 'Advanced' containing two fields: 'Layout' with a dropdown menu set to 'Default', and 'Module Class' with a text input field containing 'my-module borderroundblue'.

Now click Save and Close. Refresh the front end browser:

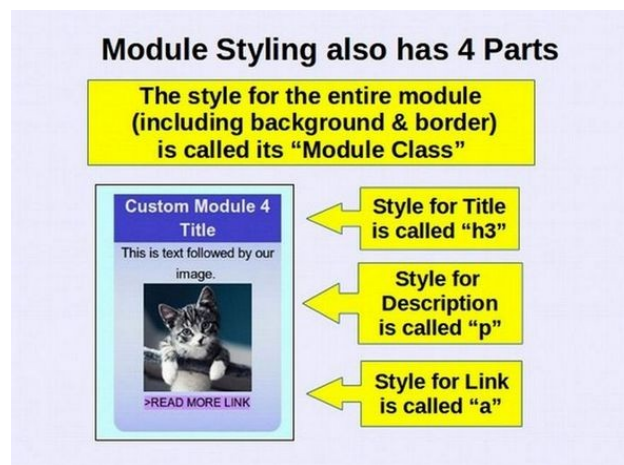


Another benefit of using a module class is that if we wanted to change something, such as making the description font darker, all we need to do is change it in the template Custom CSS file and it would automatically change in any modules that used the my-module class. The benefit of

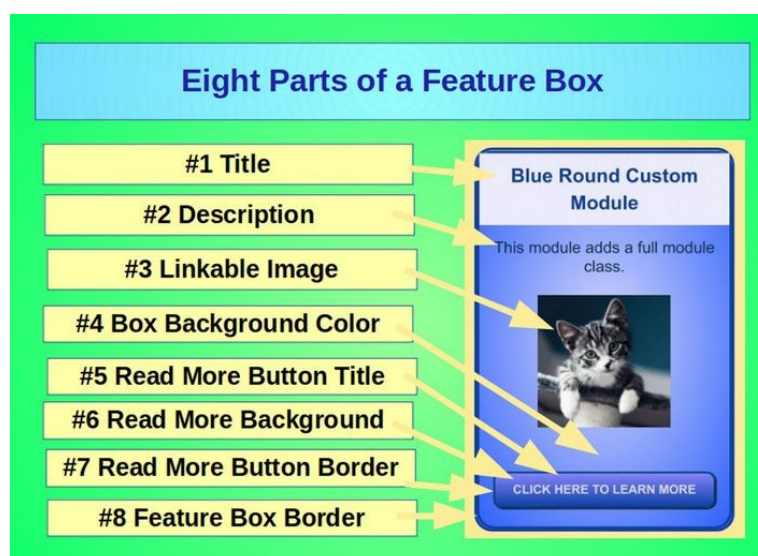
dividing the border class from the module class is that you can apply any color of border and any color of background to any module. But the drawback is that it is still a lot of work.

### Add an Image and a Link to our Demo Modules

We will next add an image and a link to our practice modules. We will then place the border styling and the background styling and the link styling inside of the module class. This way, we can completely style any module just by adding the module class to the Module Class Suffix box in the Module Advanced tab. Up until now, we have focused on styling just our Module Title and Description. Earlier we said there were 4 parts to Module Styling. These are the Module Class, title “h3” styling, description “p” styling and link a styling.



In reality, a custom module has 8 parts:



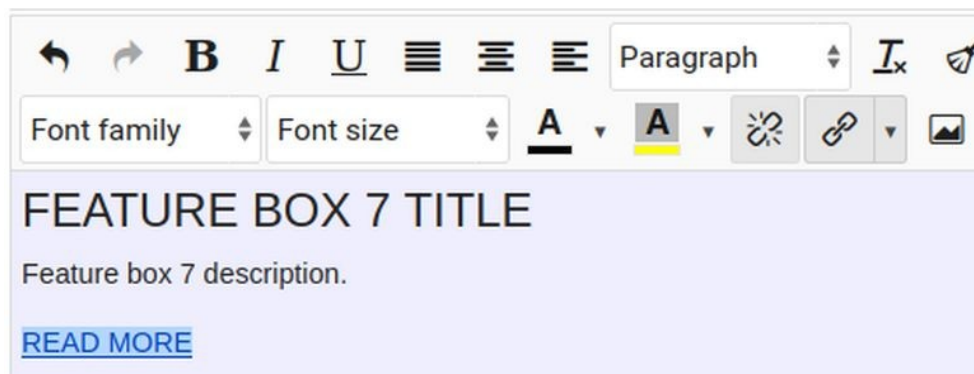
## How to Add a READ MORE button to our Joomla Modules

Thus far, we have simply styled the h3 and p elements. Before we put all of the styles together, we will review how to create CSS for our link elements. Links are styled using the “a” and “a hover” tags. Links are also called buttons. Joomla has a one click tool for adding a READ MORE link to any Joomla article. But it does not offer this tool to add a READ MORE link to a Joomla module. The reason there is not a READ MORE button function in a Joomla Module Edit screen is because the module would not know what to link the Module to. Thankfully, we can use the link function in the JCE editor to not only define where the reader is to be directed when they click on the READ MORE button but also to define what the READ MORE button looks like and have it related to the style of the rest of our module.

### Create three more custom modules

Make 3 duplicates of Feature Box 6. Rename them as Modules 7 8 and 9. Assign them to module positions top3a, top3b and top3c. Then open Module 7 and manually type the words READ MORE below the description. Select this READ MORE text. Then click on the LINK button in the JCE editor to open it. Then select any existing menu item or article as a link. Then click INSERT. The text for this new link will now turn blue.

Here is what the workspace screen looks like:



Then click on the Code tab and note that the JCE editor has created an “a” tag for our READ MORE Text:



We can style this “a” tag just like we styled the h3 tag and the p tag. For example, we could add the following to our Custom CSS file:

```
.my-module a { background-color: #333399; border-radius: 20px; color: #dddddff; text-align: center; font-size: 14px; font-weight: bold; line-height: 1.3; padding: 10px; display: inline-block; vertical-align: middle;}
```

Because we have already added our my-module class to our third module, there is no need to add anything more to the module. Just refresh your browser and this is what our seventh module looks like:



The border radius property is what creates the rounded border on our button.

### **Add real titles descriptions images and links**

Our eventual goal is to add three Feature Boxes to our College in the Clouds dot org website to promote our first three courses. Go to **Content, Modules** to edit modules 7, 8 and 9. Here are the real titles and descriptions for our 3 feature boxes:

#### **1 BETTER WORD PROCESSING**

Learn how to create better documents and web pages

[CLICK HERE TO LEARN MORE!](#)

#### **2 LEARN LINUX AND LIBRE OFFICE**

Replace Windows with the Free Secure Linux operating system!

[CLICK HERE TO LEARN MORE!](#)

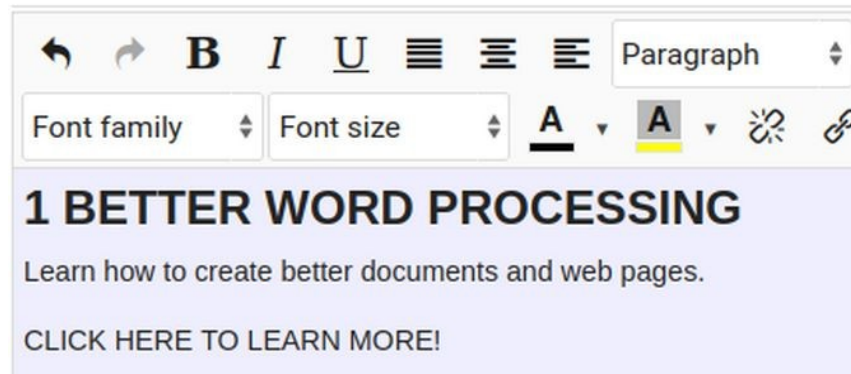
#### **3 LEARN HTML AND CSS**

Customize the structure and appearance of your web pages!



CLICK HERE TO LEARN MORE!

Here is what replacing the example text with the real text looks like in the back end:



Note that we simply select the title and assign it to Heading 3. But we do not set the font size as we want to control that with our custom.css file rather than with Inline CSS from the JCE editor. Also change the name of the module to match the title in the workspace. Then click Save and Close and repeat to get real titles and descriptions in Module 2 and 3. Also set the first two modules to have the same module class as the third module. Then view our module demo page:



### Add Links to the READ MORE Text

Edit each module again and add links to the LEARN MORE text

Here are the links to our three courses:

<https://betterwordprocessing.com/>

<https://learnlinuxandlibreoffice.org/>

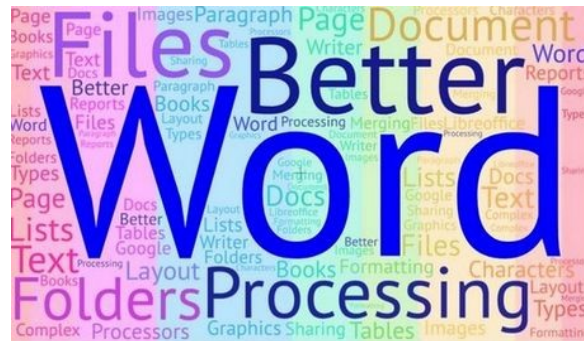
<https://learnhtmlandcss.com/>



## Add an Image to each Feature Box

Here are the three images we will place in the feature boxes:

## Course 1 Better Word Processing



## Course 2 Learn Linux and LibreOffice



## Course 3 Learn HTML and CSS



Place these images in a Writer Document. Then right click on each image and compress it to 150 DPI. Then save each image as fb01, fb02 and fb03. Then open each image with Gthumb and edit each image so that all three have the same height which we will set for 150 pixels. Name these revised images fb01-150.jpeg, fb02-150.jpeg and fb03-150.jpeg.

Then go to **Content Media** and create a folder called **feature-box-images**. Then open it and load the three 150 images to this folder.

Name	Size	Dimensions
fb01-150.jpg	26.42 KB	257px * 150px
fb02-150.jpg	20.37 KB	237px * 150px
fb03-150.jpg	14.97 KB	203px * 150px

Then go to Content Modules and open the first custom module. Place the cursor at the beginning of the description and press Enter to create a new line. Then place the cursor at the new line and click on the Images icon to select the first image. Click Save and Close. Repeat for the other two modules. Then view the result:



## Create links to each Feature Box image

Go back to Content Modules and click on the first module again. Select the image and click on the JCE editor LINK icon. Copy paste the first link and then click Insert. Then save and close the module.

<https://betterwordprocessing.com/>

Repeat with the second and third module to add these links to their images:

<https://learnlinuxandlibreoffice.org/>

<https://learnhtmlandcss.com/>

Then view the result in the front end demo page and click on the links to make sure they all work.

## What's Next?

It gets pretty boring having all of the modules using the same Custom CSS Preset. In the next article, we will review how we made the Rainbow Module CSS Presets. You can then either copy our Presets or create your own!



## 6.4 Use Rainbow Presets to Style Custom Modules

In this article, we will explain how we created our 24 Rainbow Module Presets. The Rainbow Module Presets include 12 vertical module layouts – intended to be used with 3 boxes per row - and 12 side by side module layouts intended to be used one or two boxes per row. Here is an example of our Rainbow vertical layouts:



Here is an example of our side by side module layout:



Both the vertical and side by side layouts come in 6 different colors with round buttons and 6 colors with square buttons.



In this article, we will review how we created these 24 CSS Presets, how to use them and how you can customize them even further.

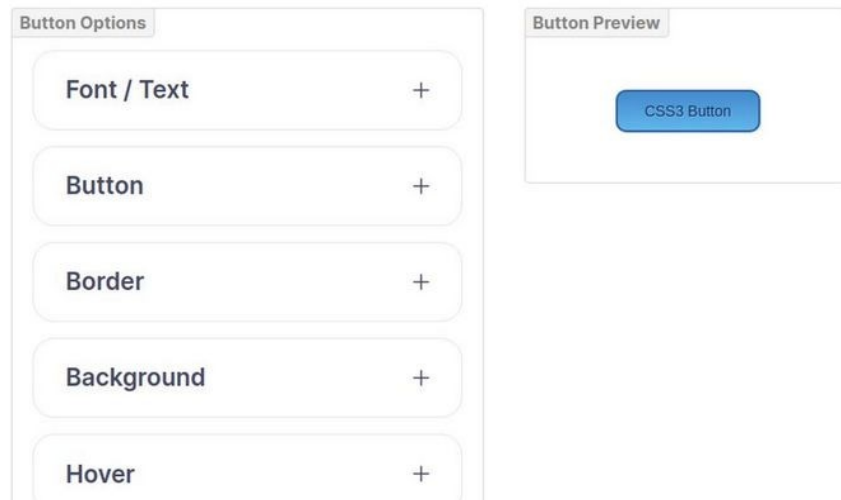
### How to Create Your Own Custom READ MORE Buttons



The easiest way to create your own buttons is to go online to a button CSS generator. Here is a link to a very easy one:

<http://www.cssportal.com/css3-button-generator/>

Here is the default screen for this button generator



The above Demo button uses a gradient background that changes color when we hover over it. To keep things simple, we will use a plain dark background that does not change color when we hover over it. Designing a button is like designing a miniature version of an entire module. We need to specify several properties. We will create 6 different buttons to match our 6 Rainbow module classes. We will also reverse the colors to make our button more distinctive. In other words, we will use light colored text on a dark background.

Below is a table of values for our 6 Rainbow button color settings. The only difference between the 16 round and 6 square buttons is that the round buttons have a border radius of 6 pixels and the square buttons have a border radius of 0 pixels.

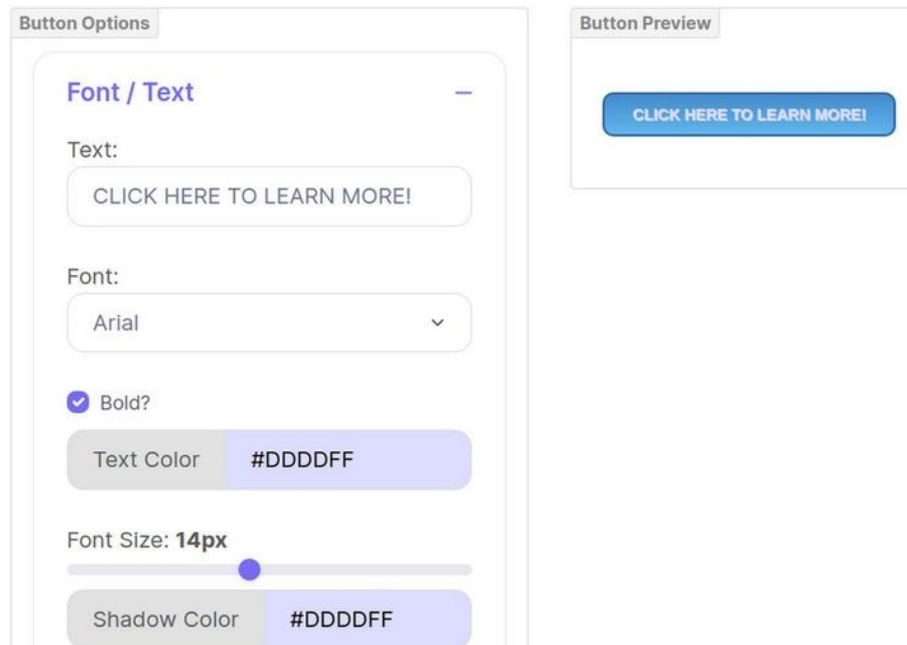
Button Color	Button Text Color Very Light	Background Start Color Medium	Background End Color Dark	Border Color Very Dark
purple	#eecff	8855bb	552288	441177
blue	#dddddff	8888ff	1144aa	114477
green	#ccffcc	00bb00	007700	005500
gray	#eeeeeee	999999	555555	444444

yellow	#ffffdd	ffdd00	ddaa00	666600
pink	#ffddff	bb66bb	993399	881188

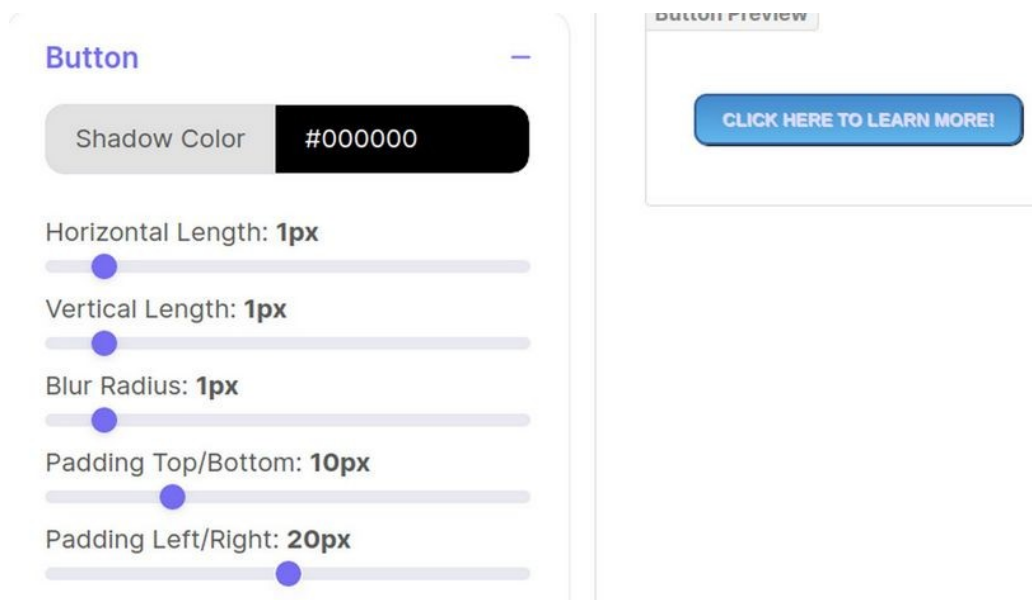
Here are what our 6 light and 6 medium color options look like:



We will use **CLICK HERE TO LEARN MORE!** for our text. We will make each button bold Arial and a light color from the table above. Leave the font size at 14px. Make the Shadow color the same as the text color to make it more readable.



Then click on the Button tab. The Shadow color sets the border shadow. Set all Border Shadows to black with a thickness of 1 pixel but change the border color as shown in the table above. Leave the padding at 10 top and bottom. Reduce it from 25 to 20 left and right.



Then click on the **Border** tab. We will leave this at Solid and the radius at 10. Next click on the **Background** tab. Use a lighter color for the background and the same light color at the start and a darker color to finish. This is the blue button.

CLICK HERE TO LEARN MORE!

Click on the Hover tab. Change the hover text color to #ddddee to match the normal text color. Then reverse the gradient colors on hover. Type in the colors. Then copy the code to a button code document on your home computer.

### Button color CSS

When copying, replace the .testbutton class with **.buttonroundblue** class and replace the “test button hover” with “buttonroundblue hover.” Here is the button code for our round blue button. There are two CSS selectors, one for the link and the other for hover:

```
.buttonroundblue a {  
display: inline-block;  
line-height: 1.3;  
text-align: center;  
vertical-align: middle;  
margin-bottom: 20px;  
font-family: arial;  
font-weight: bold;  
color: #DDDDFF !important;  
font-size: 14px;  
box-shadow: 1px 1px 1px #000000;  
padding: 10px 20px;  
border-radius: 10px;  
border: 2px solid #114477;  
background: #8888ff;  
background: linear-gradient(top, #8888FF, #1144AA);}  
  
.buttonroundblue a: hover {  
display: inline-block;  
line-height: 1.3;  
text-align: center;  
vertical-align: middle;  
margin-bottom: 20px;  
color: #DDDEEE !important;  
background: #1144AA;
```

```
background: linear-gradient(top, #1144AA, #8888FF);}
```

## **Combine Button CSS with the previous module CSS**

Now that we have all of our individual CSS classes, it is time to put them altogether. We will start with a simple module that does not use a gradient color either for the module background or the button background. Here is the code for our `simpleroundbluemodule`:

### **.simpleroundblue {**

```
font-family: arial, helvetica, sans-serif;
```

```
margin: 0;
```

```
display: block;
```

```
min-height: 250px;
```

```
background-color:#ccccff !important;
```

```
/* MODULE BORDER ROUND STYLE */
```

```
border-radius: 10px;
```

```
border: 2px solid #1144AA;}
```

### **.simpleroundblue h3 {**

```
/* MODULE HEADER STYLE */
```

```
text-align: center;
```

```
font-size: 22px;
```

```
color: #114499;
```

```
font-weight: bold;
```

```
line-height: 1.3;
```

```
padding: 10px;
```

```
background-color: #eeeeff;}
```

### **.simpleroundblue p {**

```
/* MODULE DESCRIPTION STYLE */
```

```
text-align: center;
```

```
color: #113355;
```

```
font-size: 18px;
```

```
font-weight: normal;
```

```
line-height: 1.2;
```

```
padding: 5px;}
```

### **.simpleroundblue a {**

```
/* BUTTON ROUND STYLE */
```

```
display: inline-block;
```



```
line-height: 1.3;
text-align: center;
vertical-align: middle;
margin-bottom: 20px;
font-family: arial;
font-weight: bold;
color: #DDDDEE !important;
font-size: 14px;
box-shadow: 1px 1px 1px #000000;
padding: 10px 20px;
border-radius: 10px;
border: 2px solid #114477;
background-color: #8888ff;
```

```
.simpleroundblue a:hover {
/* BUTTON ROUND HOVER STYLE */
display: inline-block;
line-height: 1.3;
text-align: center;
vertical-align: middle;
margin-bottom: 20px;
color: #DDDDEE !important;
background-color: #1144AA;}
```

Note that we have only one class above that needs to be added to our module Advanced tab. It is called **simpleroundblue**. The first section styles the entire module. The second section styles the h3 header box. The third section styles the “p” text box. Then the final two sections or selectors style the button.

### **Full Round Class 6 color options**

Here is a more complex version of the above module with a radial gradient color for the module background and a different gradient color for the button and button hover.

```
.fullroundblue {
font-family: arial, helvetica, sans-serif;
margin: 0;
display: block;
min-height: 250px;
```

```
/* RADIAL BACKGROUND STYLE */  
background-image: radial-gradient(ellipse farthest-corner at center,  
#DDDDFF 0%, #3366FF 100%);
```

```
/* MODULE BORDER ROUND STYLE */  
border-radius: 10px;  
border: 3px solid #1144AA;}
```

### **.fullroundblue h3 {**

```
/* MODULE HEADER STYLE */  
text-align: center;  
font-size: 22px;  
color: #114499;  
font-weight: bold;  
line-height: 1.3;  
padding: 10px;  
background-color: #eeeeff;}
```

### **.fullroundblue p {**

```
/* MODULE DESCRIPTION STYLE */  
text-align: center;  
color: #113355;  
font-size: 18px;  
font-weight: normal;  
line-height: 1.2;  
padding: 5px;}
```

### **.fullroundblue a {**

```
/* BUTTON ROUND STYLE */  
display: inline-block;  
line-height: 1.3;  
text-align: center;  
vertical-align: middle;  
margin-bottom: 20px;  
font-family: arial;  
font-weight: bold;  
color: #DDDDEE !important;  
font-size: 14px;  
box-shadow: 1px 1px 1px #000000;
```

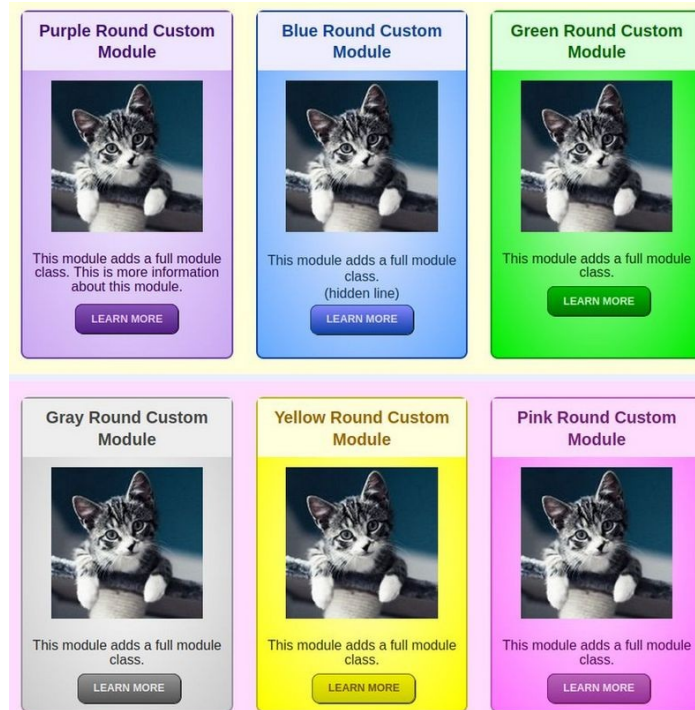
```
padding: 10px 20px;
border-radius: 10px;
border: 2px solid #114477;
background: #8888ff;
background: linear-gradient(top, #8888FF, #1144AA);}
```

### **.fullroundblue a: hover {**

```
/* BUTTON ROUND HOVER STYLE */
```

```
display: inline-block;
line-height: 1.3;
text-align: center;
vertical-align: middle;
margin-bottom: 20px;
color: #DDDDEE !important;
background: #1144AA;
background: linear-gradient(top, #1144AA, #8888FF);}
```

Assuming you added the Rainbow CSS Presets to your template custom.css file, all you need to do to apply this style to a module is type “**fullroundblue**” into the Module Advanced Tab Module Class box. After finishing all 6 full round and all 6 full square module styles, then creating one module to show each style, here is our 6 finished round modules:



## How to Change the Module Layout from Vertical to Side by Side

One concern about traditional stacked modules is that they take up more vertical space on the screen than needed.

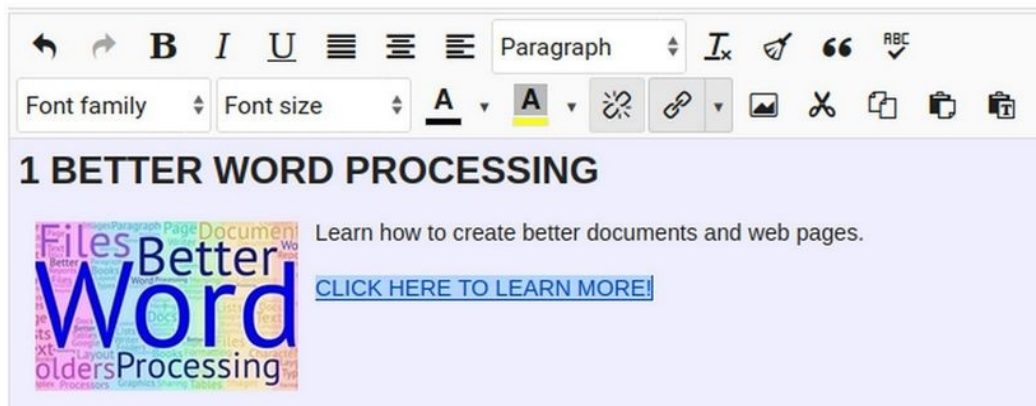


The large amount of vertical space is due to the fact that all of the elements of each module are vertically stacked from the Heading on top to the description, image and button on the bottom. This vertical stacking creates problems for viewing modules on mobile devices as it requires more scrolling. Therefore, we will review how to change the orientation of the module elements so that the description and button are placed to the right of the image. There should be no more than two of these modules per row.



### If using one Module per row Change the Module Image Order and Alignment

This change must be made directly in each module using the JCE editor. Go to **Content, Site Modules** and create duplicates of three vertical modules. Open the first duplicate and change its name by adding Side By Side to the end. Change the module position to **bottom1a** and publish it. Then if the image was below the description, **cut and paste the description to put it below the image.** . Next, select the image and **change the image float from the default of align center to align left.** Also add 10px of margin all around the image. Click Update. Here is what the workspace now looks like:



Click Save and Close and View the result:



### If using two Modules per row, Change the Module Image Order Alignment and Size

Open the second duplicate and change its name by adding Side By Side to the end. Change the module position to **bottom1b** and publish it. Then if the image was below the description, cut and paste the description to put it below the image. Next, select the image and change the image float from the default of align center to align left. Also add 10px of margin all around the image. **Also reduce the width of the image from 250px to 200px.**



**Also reduce the button to LEARN MORE.** Click Update. Repeat for the third duplicate module putting it in bottom1c. The view the result:





## How to Insure Feature Boxes Have Equal Heights

Our feature box modules now look pretty nice. But if some of our module titles or descriptions are much longer than the other titles and descriptions, some modules will be taller than others:



The Helix Template uses a CSS property called Flexbox to control the appearance of modules in rows. Using Flexbox should result in all modules being the height of the tallest module. The reason it does not is because Helix adds several hidden selectors to the HTML chain.

Open the page with the Libre Wolf browser and click **Tools, Browser Tools, Web Developer Tools**. Then click **Pick an element** to select the HTML element, which in this case is called `<section id='sp-top-row-3'>`. Click on the right facing arrows in the HTML column several times to expand the HTML chain:

```

▼ <section id="sp-top-row-3">
  ▼ <div class="container"> overflow
    ▼ <div class="container-inner">
      ▼ <div class="row"> flex
        ▼ <div id="sp-top7" class="col-lg-4 ">
          ▼ <div class="sp-column ">
            ▼ <div class="sp-module my-module borderroundblue">
              ▼ <div class="sp-module-content">
                ▼ <div id="mod-custom130" class="mod-custom
                  custom">
                    ▶ <h3> ... </h3>
                    ▶ <p> ... </p>
                    ▶ <p> ... </p>
                    ▶ <p> ... </p>
                </div>

```

Note that one of the divide elements has a class called **“row”**. To the right of this class is the word **flex**. This is where the Helix template applies the flex property. However, this property only makes the heights equal for the child of the **row** divide – which is a divide with the class **sp-middle3a**. There is an identical chain for **sp-middle3b** and **sp-middle3c**. These three modules should have the same height. However, the additional divides below this prevent the module heights from being equal. The solution is to **add the flex property to two more elements**:

```
.sp-column {display: flex; height: 100%; justify-content: space-evenly;}
```

```
.sp-module {display: flex; flex-direction: column; height: 100%; }
```

Then click Save and Close and view the result:



There is a problem with the **sp-module** class as adding the flex property to

all modules causes some modules such as the mobile menu to not display properly. We therefore need to delete the general sp-module css class and specifically target our rainbow module classes with the following CSS added to our custom.css file:

```
.sp-module.fullroundpurple {display: flex; flex-direction: column; height: 100%; }
```

```
.sp-module.fullroundblue {display: flex; flex-direction: column; height: 100%; }
```

```
.sp-module.fullroundgreen {display: flex; flex-direction: column; height: 100%; }
```

```
.sp-module.fullroundgray {display: flex; flex-direction: column; height: 100%; }
```

```
.sp-module.fullroundyellow {display: flex; flex-direction: column; height: 100%; }
```

```
.sp-module.fullroundpink {display: flex; flex-direction: column; height: 100%; }
```

```
.sp-module.fullsquarepurple {display: flex; flex-direction: column; height: 100%; }
```

```
.sp-module.fullsquareblue {display: flex; flex-direction: column; height: 100%; }
```

```
.sp-module.fullrsquaregreen {display: flex; flex-direction: column; height: 100%; }
```

```
.sp-module.fullsquaregray {display: flex; flex-direction: column; height: 100%; }
```

```
.sp-module.fullsquareyellow {display: flex; flex-direction: column; height: 100%; }
```

```
.sp-module.fullsquarepink {display: flex; flex-direction: column; height: 100%; }
```

We can add 2 hidden lines to the HTML of the two module with less content to push the READ MORE link to the bottom of the module:



We also need to add the following CSS to our custom.css file:

```
.container { padding-top: 10px; padding-right: 10px; padding-bottom: 10px; padding-left: 10px;}
```

```
.col-lg-6 {flex: 1 1 auto;}
```

```
.sp-module {flex: 1 1 auto;}
```

Here is an example of our side by side Rainbow modules:



## Summary

To add our Rainbow Module Presets to your website, rather than attempting to add all this code to your CSS file, all you need to do is:

First, download our zipped Rainbow Module Presets file from our website:

<https://createasecurewebsite.com/free-downloads>

Second, go to Templates, Code and click on the Helix template to edit it. Then create your own custom.css file.

Third, unzip the Rainbow Module Presets file and open the custom.css file. Then copy paste the contents into your own custom.css file.

Fourth, open the **templateDetails dot xml** file and add the 33 module positions as we demonstrated earlier in section 6.1 of this chapter.

This xml file will be overridden during a Helix update. However, Helix should soon add the ability to create Child templates. Once this feature is available, we can create a child template, change the xml file in the child template and then use the child template to display the pages of our website.

Fifth, go to Templates, Styles and click on the Helix template to edit it. Then click Layout and add the three top rows and 9 top module positions. Then add the four middle rows and 12 middle module positions. Then add the six bottom rows and 12 bottom module positions (all as explained in Section 6.1).

Sixth, create your own feature box images.

Seventh, go to Content, Site Modules, New and select the custom module. Then click ADD. Name the module whatever you want and add the heading 3 text, the feature image, the description text and the READ MORE line and link.

Assign the module to one of our custom module positions, for example, middle1a.

Then click on the Advanced tab and in the module class box, type a space, then type the rainbow module class you want to use, for example, **fullroundblue**.

Then click Save and Close and view the result.

Congratulations! You can now make as many custom Rainbow modules as you want!

### **What's Next?**

This concludes our chapter on making custom modules. In the next chapter, we will review several Page Layout options for our News website.



## **7 News Website Page Layouts**

In this chapter, we review a few other news websites to better understand what a well structured News website might look like. We then explain how to create our own custom News template to turn our basic Joomla website into a well organized and easily managed News website – with space to add and rotate news articles over time.

Here are the four sections for this chapter

7.1 How to Organize and Display News Articles

7.2 Create a Community News Template Part 1

7.3 Create a Community News Template Part 2

7.4 Customize our Community News Page Layout

## 7.1 How to Organize and Display News Articles

Most readers judge the professionalism of the website by its page navigation and layout. A News website typically contains several distinct areas on its Home Page. Below the head banner is a main menu which includes links to each of the primary news topic categories. Below the main menu is a “featured articles” area that can contain the latest news from any of the actual topic categories. Below the Features articles area are the Topic category areas with the latest news article in each topic category. A good example is the Los Angeles Times website which has more than a million visitors a day! Here is their header and main menu with a nicely displayed single lead article with a single line above it:



Below the lead story, they have three “featured” stories with images. Note that there is no READ MORE link as everyone now knows to just click on the image or intro text to go to the story:



**Santa Clara County hospitals illegally dumped fentanyl, human tissue, patient data, prosecutors say**



**Just one mutation can make H5N1 bird flu a threat to humans, California researchers say**



**How does a holiday tradition shine for 104 years? Meet Altadena's village of volunteers**

Below this are four “Featured” stories without images:

**Boiling Point:**  
L.A.'s massive new solar farm is cheap and impressive. More, please

**Gunman took Uber to Northern California school, met with staff, then shot 2 students**

**Federal officials launch probe into Cybertruck crash in California that killed 3 college students**

**'Deny,' 'defend' and 'depose': Ammunition used in CEO's killing had writing on it, source says**

The point to these featured stories is that they can come from any topic category. But eventually, they should be removed from the top features articles section and still remain in their assigned topic category pages.

Below this Featured articles section are rows showing the Latest News from a series of Topic categories beginning with a topic called Politics followed by a Topic category called Word and Nation:

---

## Politics >



Olympics leader talks up working with President-elect Trump ahead of L.A. Games



Secret Service director vows reorganization as members of Congress press him over major lapses



Defense Secretary Lloyd Austin endorses women in combat jobs, exhorts West Point cadets to defend the Constitution



Bitcoin tops \$100,000 as big rally sparked by Trump election win rolls on

---

## World & Nation



Is the Supreme Court about to let red states ban hormone treatment for



News Analysis: Donald Trump and Vladimir Putin: A much-scrutinized

Some of the categories use horizontal arrangements with text to the right of the image rather than vertical arrangements with the text below the image.

---

## Hollywood Inc. >



Mattel sued by mom over 'Wicked' merchandise with link to porn site



ESPN on Disney+ launches Wednesday, as Disney looks to increase streaming subscribers



'Squid Game' tracksuits, sneakers and whisky: Behind Netflix's latest retail pitch

The horizontal arrangement can lead to wasted white space. But it helps provide variety to the page layout.

## Linking the latest Topic Articles to a Topic page with all of the articles in that category

Huffington Post has a specific link to the Topic page:

---

### POLITICS



House Republicans  
Reject Release Of Matt  
Gaetz's Ethics Report



Elon Musk Meets With  
Lawmakers About  
'DOGE' Crusade Against  
Government Spending



Dem Group: Voters In  
The End Did Not Really  
Care That Trump  
Instigated Jan. 6 Attack

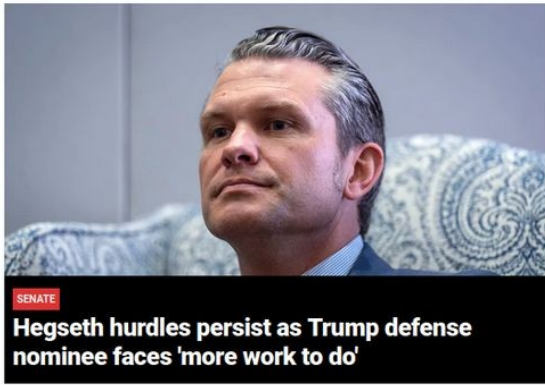


Secret Service Director  
And Texas Rep Get Into  
Yelling Match During  
Trump Assassination  
Attempt Hearing

[MORE POLITICS](#)


Some News websites use a two column arrangement with images to the right of the Title and Description. Here is the Washington Examiner Latest News section:






**SENATE**

**Hegseth hurdles persist as Trump defense nominee faces 'more work to do'**



**HOUSE**

**House progressives anoint new leaders to battle Republican trifecta**




**IN FOCUS**

**The FBI has proven it is not 'independent'**

- The FBI needs reform, not retribution


Hon. Christopher Wray



**HOUSE**

**House Republicans vote down two attempts to release Gaetz ethics report**

- Trump AG nominee Bondi heads to Capitol Hill after Gaetz fallout















**WHITE HOUSE**

**Harris makes surprise event appearance month after defeat**

- Biden and Harris unite for final Christmas tree lighting amid backlash

These five featured articles are followed by 6 two column rows with 12 more featured stories.

 <p><b>Newsom wants Biden to help launch new port of entry for migrants before Trump takes over</b></p>	 <p><b>Eric Adams continues warming to Trump with NYC elections looming</b></p>
 <p><b>British Special Forces join drone hunt at RAF Lakenheath</b></p>	 <p><b>Seventh day Adventist school where two kids were wounded was likely religious ta</b></p>
 <p><b>Anthem Blue Cross Blue Shield nixes controversial anesthesia time limit plan</b></p>	 <p><b>Secret Service director grilled on reforms after Trump assassination attempts</b></p>
 <p><b>Tennessee attorney general claims victory in admission of ACLU lawyer in transgender case</b></p>	 <p><b>White House weighing preemptive pardons: Report</b></p>
 <p><b>Democrats flip key California House races against national tide</b></p>	 <p><b>Historic: Bitcoin surges past \$100,000 in wake of Trump win</b></p>
 <p><b>Tuberville says GOP shouldn't vet Trump's nominees</b></p>	 <p><b>Joni Ernst emerges as Hegseth backup with defense nomination in limbo</b></p>

The above Featured articles section is followed by several Topic Category areas. Here is their Topic Category **Justice Latest News** layout. Note the link at the top right of this category to continue to the Topic category:



## Justice

[Continue to the category](#)



**Daniel Penny faces lawsuit from Jordan Neely's father amid jury deliberations**

**DOJ briefs House GOP on internal inquiry into Jack Smith misconduct allegations**

**Arizona attorney general indicts two nonresidents for defrauding school voucher program**

**Fani Willis ordered to turn over messages with Jack Smith and Jan. 6 committee**

**Judge rebukes Joe Biden for misleading claims about Hunter's tax case**

**Charlamagne the God spars on The View about Hunter Biden pardon**

**Trump tells Georgia court to end Fani Willis RICO case**

**New abortion laws face challenges in Arizona and Missouri**

**Fani Willis subpoena defiance tested in Georgia court**

The National Review has a topic for Transgender Ideology

### TRANSGENDER IDEOLOGY



**LAW & THE COURTS**

#### The Supreme Court Should Rule That Reality Exists

By THE EDITORS

Sex differences are real. So is the challenge of safeguarding children struggling with gender dysphoria. Tennessee should be able to protect them from risky treatments.



#### Alito Calls Out Solicitor General for Ignoring Research That Exposed Risks of Trans Procedures for Kids

By JAMES LYNCH

Prelogar inflated the supposed benefits of trans procedures for minors.

#### Stop Calling It 'Gender-Affirming Care'

By NOAH ROTHMAN

It's a rhetorical trick designed not to clarify the debate but to muddy the waters.

[VIEW MORE](#)

Click **View More** to go to this page which has a series of articles each in a horizontal arrangement with images on the left and titles and text on the right:



LAW & THE COURTS

## The Supreme Court Should Rule That Reality Exists

By THE EDITORS | about 14 hours ago

Sex differences are real. So is the challenge of safeguarding children struggling with gender dysphoria. Tennessee should be able to protect them from risky treatments.



NR PLUS | WOKE CULTURE

## Stop Calling It 'Gender-Affirming Care'

By NOAH ROTHMAN | December 4, 2024

It's a rhetorical trick designed not to clarify the debate but to muddy the waters.



LAW & THE COURTS

## Critical Concessions in *Skrametti* Should End the Case

By CHRISTOPHER MILLS | December 4, 2024

Tennessee's law differentiates based on medical treatment (and age) — not sex. Heightened scrutiny does not apply.



LAW & THE COURTS

## Alito Calls Out Solicitor General for Ignoring Research That Exposed Risks of Trans Procedures for Kids

By JAMES LYNCH | December 4, 2024

The Washington Times uses the same layout for Topic areas but without any descriptions – just the titles:

POLITICS

[VIEW ALL](#)



## Musk-led DOGE sparks 'new day in America' energy on Capitol Hill

By Seth McLaughlin and Alex Miller - *The Washington Times*



## House scuttles Democrats' attempt to force release of Gaetz ethics report

By Alex Miller - *The Washington Times*



## House task force recommends Secret Service improvements after probing Trump assassination attempts

By Lindsey McPherson - *The Washington Times*



## More than 80 years later, Pearl Harbor still worth remembering

By Jennifer Harper - *The Washington Times*

The Gateway Pundit placed Featured labels and their logo at the bottom of Featured Images

**Coalition of Black Churches Representing 28 Million Americans Demands MSNBC Fire Al Sharpton, Calls for Investigation into Kamala Harris Payments**

Jim Hoft   Dec. 5, 2024 4:40 pm   476 Comments

**FIREWORKS! Acting Secret Service Director Ronald Rowe Goes Bonkers and Starts a Shouting Match With Rep. Pat Fallon During Hearing on Trump Assassination Attempts After Being Showed a Damning Picture (VIDEO)**

Cullen Linebarger   Dec. 5, 2024 12:40 pm   1130 Comments

**KARMA: Idaho Salon Owner Pays a Heavy Price After Making Disgusting Comments About President Trump and His Supporters (VIDEO)**

Cullen Linebarger   Dec. 5, 2024 12:20 pm   1322 Comments

Sadly, the Gateway Pundit is a Wordpress site with 90,000 articles all on the same page:

**Hohmann: The War Whores of the Military-Industrial Complex are Lighting the World on Fire**

Guest Contributor   Dec. 5, 2024 8:30 am   304 Comments

**Rep. Keith Self Pulls the Rug from Under The New York Times: "President Trump, I've Got Your Back"**

Michelle Myers   Dec. 5, 2024 8:15 am   138 Comments

This is one of several huge drawback of using Wordpress – the Home page eventually turns into a 4,000 page mess – plus there is a huge risk of hackers taking over and taking down your News website.

## What's Next?

There are also challenges of using Joomla for a News website. The biggest is that while Joomla does a great job of keeping your articles well organized into Topic categories, it does not to a great job of displaying Featured articles on the News Home page. We will need to do a significant amount of customization to get the display of the Joomla Home page to look like the Los Angeles Times Home page. That process will be the topic of our next article.

## 7.2 Create a Child Template Part 1

The problem with customizing the appearance of our News Page Layouts is that our changes can get lost during Joomla updates and template updates. The solution to this problem is to use a **“Child” template** which preserves our Page Layout changes regardless of any updates to Joomla or to the Parent template.

Sadly, the Helix template we have been using until now does not yet have the child template feature. Equally bad, it is nearly impossible to alter the appearance of the Helix template to get the Page Layout on the Home page to match the layout of the Los Angeles Times. We have been using the Helix Template until now because it offered an easy way to introduce you to the layout of Joomla module rows and module positions.

The time has come to graduate to the default Joomla template, called **Cassiopeia**, which allows us to create child templates. In addition, the Cassiopeia template comes with special “CSS classes” which give us the ability to match the page layout of the Los Angeles Times. However, the drawback of using a Cassiopeia child template is that it is much more difficult to create additional module rows with Cassiopeia than it was with the Helix template.

The good news is that **we only need to do this change process once**. We can then use copies of our modified Cassiopeia Child Template to create other Community News websites. Thus, while we will be going through some complex steps in this article, we are describing these steps mainly to explain how this is done – so that anyone who wants to create their own custom child templates will have a series of steps to follow.

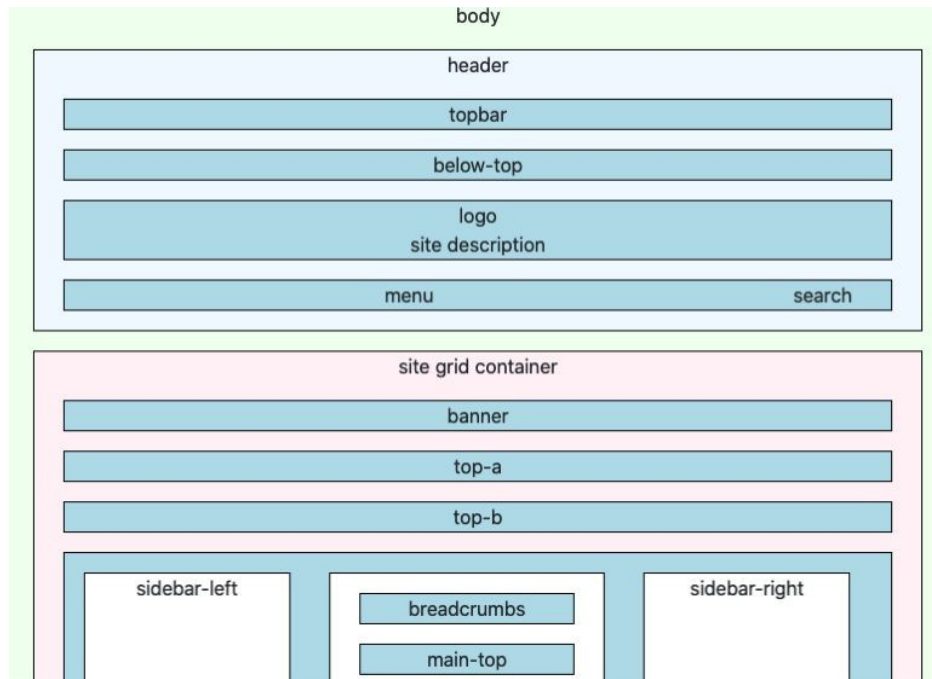
**You do not actually need to complete or even understand any of these steps we describe in this article as we will be offering our heavily modified Cassiopeia Child Template as a Free Download on our Create a Secure News Website Downloads page.**

Nevertheless, it is useful to give this a try as “practice” because it will give you a better idea of how the appearance of a Joomla News website is actually structured. Let’s begin by reviewing how module rows are structured in the Cassiopeia Template.

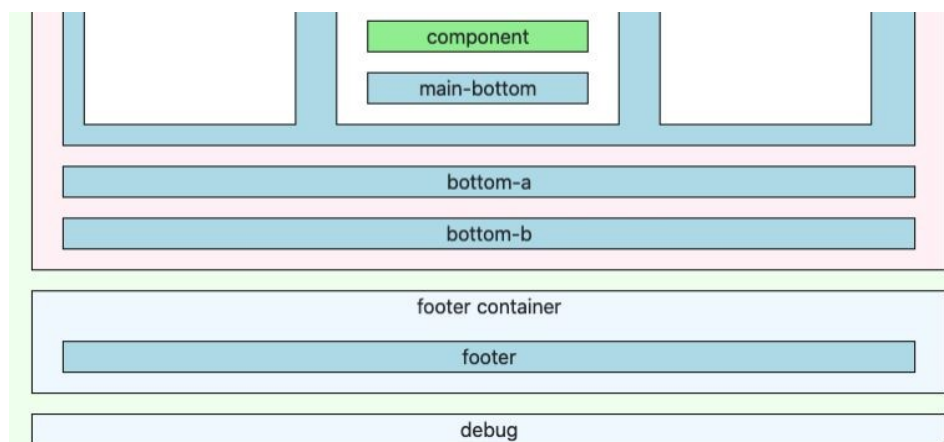


## Cassiopeia Template initial module rows

The Joomla default Cassiopeia Template only comes with a few module rows and positions. Here are the initial rows above the Component:



Here are the initial module rows below the Component area:



There are only two module rows above the footer. These are called **bottom-a** and **bottom-b**. We need at least **nine more module rows below the component** just to display our news topic categories. We will begin by creating a simple demo-1 child template and adding just one row below the bottom-b row to see if it displays properly. Once we confirm that it displays properly, we will then download a more complex child template to review the steps for adding a child template that has already been created. Finally, we will add module rows to this more complex child template to create our own news-1 child template.



## Six Steps to add Module Rows to our Child Template

There are basically six steps. The first step is to create a **child template** and make our code changes in the child template. When we create a child template, it will automatically create its own independent **templateDetails.xml** file which is not changed when Joomla updates.

The second step is to add some code to the child template **templateDetails.xml** file.

**The third step is to create a child template user.css file** and then use CSS Grid properties to add one or more “grid rows” to the child template by adding a few lines of CSS to our child template user.css file.

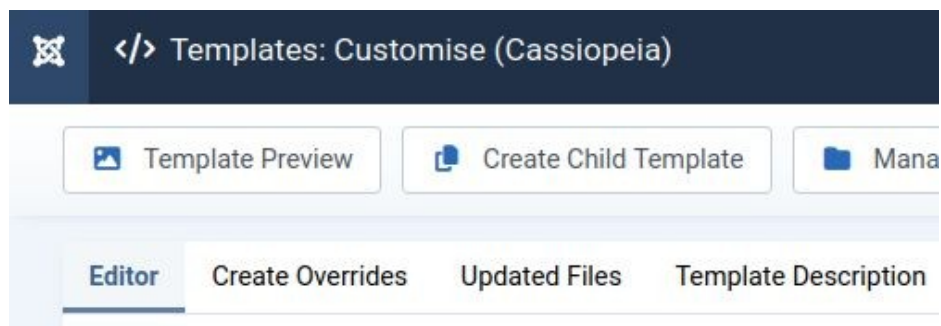
**The fourth step is to create a child template index.php file** and then copy and paste a few lines of code into our Child template index.php file.

**The fifth step is to create a new custom module** and assign it to the new row you created in your child template.

The last step is to change your default template from the Casseopeia parent template to the Child template and confirm that the new module displays properly in the new module row.

### Step #1 Create a Child Template

A child template is a “partial” version of a parent template in that the child template has only three files, the child **templateDetails.xml** file, the child **user.css** file and the child **index.php** file. Child templates must be associated with a parent template. To create a child template, from your administrator dashboard, go to **Templates Code <>** (which is not the same as Templates Styles). Click on **Cassiopeia Details and Files** to edit it.



Click **Create Child Template**. Give the Template a short name such as **demo1**. Then use the drop down arrow to select the **Cassiopeia Default** Template Styles. Then click Create Child Template.

Child Template

Child Template Name

demo1

Letters, numbers and underscore only.

Additional Template Styles

Cassiopeia - Default

Type or select some options



▼

Duplicate existing styles for the new child template.

Close

Create Child Template

Close the Template Edit screen. There are now two Cassiopeia templates:

Image	Template ▲	Version
	<a href="#">Cassiopeia Details and Files</a> <a href="#">Preview</a> <div>Parent</div>	1.0
	<a href="#">Cassiopeia_demo1 Details and Files</a> <a href="#">Preview</a> <div>Child of Cassiopeia</div>	1.0

Click the Child template Details and Files to open it.

Template Preview

Manage Folders

New File

Close

Editor

Create Overrides

Updated Files

Template Description

/templates

/cassiopeia\_demo1

html

templateDetails.xml

/media/templates

/site/cassiopeia\_demo1

css

images

js

scss

Select a File

You can select from a number of options to cus  
Manager supports Source files, Image files, For  
be performed on those files. Select a file and yc  
to know more.

Documentation

Click the **templateDetails.xml** file to open it.

## Step #2 Edit the child template templateDetails.xml file

You will see all of the default module positions beginning on Line 11:

```
11 <position>topbar</position>
12 <position>below-top</position>
13 <position>menu</position>
14 <position>search</position>
15 <position>banner</position>
16 <position>top-a</position>
17 <position>top-b</position>
18 <position>main-top</position>
19 <position>main-bottom</position>
20 <position>breadcrumbs</position>
21 <position>sidebar-left</position>
22 <position>sidebar-right</position>
23 <position>bottom-a</position>
24 <position>bottom-b</position>
25 <position>footer</position>
26 <position>debug</position>
```

Scroll down to **Line 24** and use your keyboard to create a new blank line after the bottom-b module position. Copy Line 24 and paste it into the new row. Then change the row name on Line 25 from bottom-b to test-1.

```
<position>test-1</position>
```

Then click Save and Close to close the XML file.

## Step #3 Create and edit a child template user.css file

We will now create a **user.css** file and place our CSS Grid code in the user.css file. Note that our child template will use all of the files of their parent template except for any files **of the same name** you create in the child template. So while the Casseopeia template.css file has over 15,000 lines our child template will only have a few lines of CSS.

We will copy of the final part of the Cassiopeia template.css file and paste it in our child **user.css**. **We will then add the CSS for a new module row called test-1 in our child user.css file.**

In the child template code edit screen, click **New File** to bring up this screen :

Create or Upload a new file.



/templates

/cassiopeia\_demo1

html

/media/templates

/site/cassiopeia\_demo1

css

images

File Name

user

File Type

.css

Create

For File Name, type **user**. For File Type, click on the **css** option. Also click on the **css folder** in the left column to select it. Then click **Create**. This screen will appear:

Editor

Create Overrides

Updated Files

Template Description

Editing file "/media/templates/site/cassiopeia\_demo1/css/user.css" in template "cassiopeia\_demo1".

/templates

/cassiopeia\_demo1

html

templateDetails.xml

/media/templates

/site/cassiopeia\_demo1

css

user.css

images

js

scss

1

Create a Secure News Website Page 334

Save but do not close this file. We next need to find the code we want to paste into this file to copy it into your computer clipboard. So in your Home computer file manager, unzip the Joomla zipped installation folder. Then click on the **media** folder to open it. Then click on **templates** folder. Then the **site** folder. Then the **cassiopeia** folder. Then the **css** folder. Then open the template.css file with your Bluefish HTML editor and scroll to the very end of the file. It is 15,643 lines long. Copy **Lines 14725 to 14765** into your computer clipboard. Here at these 40 lines:

```
.site-grid { margin-bottom: auto;}

@supports (display: grid) {

  .site-grid {

    grid-gap: 0 1em;

    grid-template-columns: [full-start] minmax(0, 1fr)[main-start] repeat(4,
minmax(0, 19.875rem))[main-end] minmax(0, 1fr)[full-end];

    grid-template-areas: ". banner banner banner banner ."

                        ". top-a top-a top-a top-a ."
                        ". top-b top-b top-b top-b ."
                        ". comp comp comp comp ."
                        ". side-r side-r side-r side-r ."
                        ". side-l side-l side-l side-l ."
                        ". bot-a bot-a bot-a bot-a ."
                        ". bot-b bot-b bot-b bot-b .";

    display: grid; }

.site-grid > [class^="container-"], .site-grid > [class*=" container-"] {

  column-gap: 1em;

  width: 100%;

  max-width: none; }

.site-grid > .full-width {

  grid-column: full-start / full-end; }
```



```

@media (width >= 992px) {
  .site-grid {
    grid-template-areas: ". banner banner banner banner ."
      ". top-a top-a top-a top-a ."
      ". top-b top-b top-b top-b ."
      ". side-l comp comp side-r ."
      ". bot-a bot-a bot-a bot-a ."
      ". bot-b bot-b bot-b bot-b .";

    } } }

```

Paste these 40 lines into your child template user.css file then save the file again but do not close it. We will add our new row just below the bottom-b row by copy pasting the following line:

**". test-1 test-1 test-1 test-1 .";**

```

11      ". side-l side-l side-l side-l ."
12      ". bot-a bot-a bot-a bot-a ."
13      ". bot-b bot-b bot-b bot-b ."
14      ". test-1 test-1 test-1 test-1 .";
15      display: grid; }

```

Then scroll down to Line 29 enter a new line and copy past the new row in again:

```

24      grid-template-areas: ". banner banner banner banner ."
25      ". top-a top-a top-a top-a ."
26      ". top-b top-b top-b top-b ."
27      ". side-l comp comp side-r ."
28      ". bot-a bot-a bot-a bot-a ."
29      ". bot-b bot-b bot-b bot-b ."
30      ". test-1 test-1 test-1 test-1 .";
31      } } }
32

```

Now that we have added our new module row, we also need to add some styling to the new row so it will appear properly. We will copy the styles used by the bottom-1 row. On your home computer, go back to the template.css file and scroll to **Line 13928 to 13947**, copy the following into your computer clipboard and then paste it to your user.css file.

```
.container-top-a, .container-top-b, .container-bottom-a, .container-bottom-b  
{ position: relative; }
```

```
.container-top-a > *, .container-top-b > *, .container-bottom-a >  
*, .container-bottom-b > * { flex: 1; margin: .5em 0; }
```

```
@media (width <= 991.98px) {
```

```
  .container-top-a, .container-top-b, .container-bottom-a, .container-bottom-  
  b { flex-direction: column; }
```

```
  .container-top-a > *, .container-top-b > *, .container-bottom-a >  
  *, .container-bottom-b > * { flex: 0 auto; } }
```

Add the test-1 container to each of the above lines so it appears like this in your user.css file:

```
.container-top-a, .container-top-b, .container-bottom-a, .container-bottom-b,  
.container-test-1 { position: relative; }
```

```
.container-top-a > *, .container-top-b > *, .container-bottom-a >  
*, .container-bottom-b > *, .container-test-1>* { flex: 1; margin: .5em 0; }
```

```
@media (width <= 991.98px) {
```

```
  .container-top-a, .container-top-b, .container-bottom-a, .container-bottom-  
  b, .container-test-1 { flex-direction: column; }
```

```
  .container-top-a > *, .container-top-b > *, .container-bottom-a >  
  *, .container-bottom-b > *, .container-test-1>* { flex: 0 auto; }
```

```
}
```

**Also copy and paste Line 14806:** .container-bottom-b { grid-area: bot-b; }

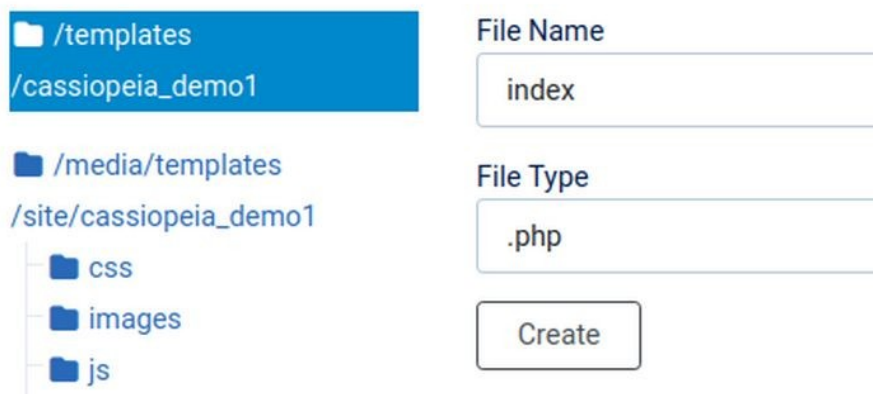
Then change the name from bottom-b to test-1 and the grid area from bot-b to test-1: **.container-test-1 { grid-area: test-1; }**

Then save and close the user.css file and close the child template edit screen.

## Step #4 Create and edit a child template index.php file

Click New File to add the index.php file. For File Name, type index. For File Type, select php. Also be sure to click the templates/cassiopeia\_demo1 folder to place this new file in this folder. Then click Create.

Create or Upload a new file.

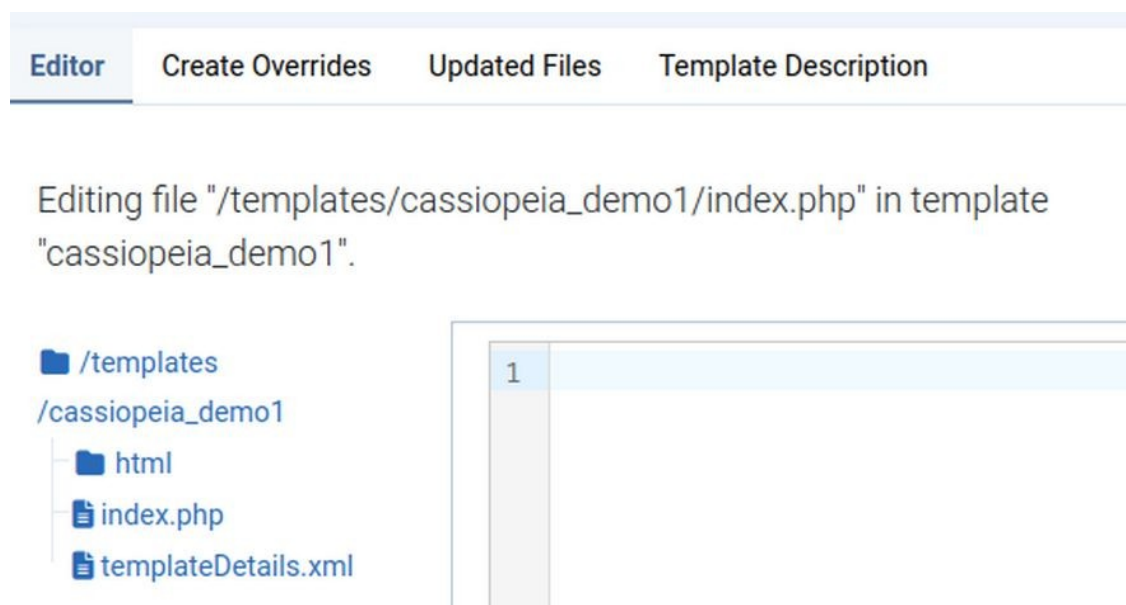


The screenshot shows the Joomla! interface for creating a new file. On the left, a file tree is visible with the following structure:

- /templates
  - /cassiopeia\_demo1**
- /media/templates
  - /site/cassiopeia\_demo1
    - css
    - images
    - js

On the right, the 'File Name' field contains 'index' and the 'File Type' dropdown is set to '.php'. A 'Create' button is located at the bottom right of the form.

That will display this file edit screen:



The screenshot shows the Joomla! file editor interface. The top tab bar contains the following tabs: 'Editor', 'Create Overrides', 'Updated Files', and 'Template Description'. The main area displays the message: "Editing file "/templates/cassiopeia\_demo1/index.php" in template "/cassiopeia\_demo1".

Below this message, a file tree on the left shows the following structure:

- /templates
  - /cassiopeia\_demo1**
    - html
    - index.php
    - templateDetails.xml

The main editor area shows a single line of code on line 1.

Click Save but do not close this file. We next need to copy paste the entire index.php file into this file. In your Home computer file manager, open the Joomla installer folder and open the templates folder. Then open the cassiopeia folder and use your Bluefish editor to open the index.php file. Click Edit, Select All. Then Edit Copy to place it into your clipboard.

Then paste it into your child template index.php file and save but do not close the file. Scroll down to near the end of the file and copy paste this **just above the closing divide that is just above the footer**. Enter a new line at Line 238 and add this code:

```
<?php if ($this->countModules('test-1', true)) : ?>
    <div class="grid-child container-test-1">
        <jdoc:include type="modules" name="test-1" style="card" />
    </div>
<?php endif; ?>
```

Then save and close your child template index.php file.

### **Step #5 Add a custom module and place it in the child template test-1 position**

Go to Content, Site Modules and click New. Select a custom module and name it Test 1. Place it in the child template (demo1) test-1 module position. Assign it to a page such as our Module Demo page.

### **Step #6 Assign the Module Demo Page to our Child Template**

From the Home Dashboard, click Templates, Styles. Then click on the Child **“copy of Cassiopeia Default”** template to open it. Click Menu Assignment and assign this template to our Module Demo page. Then click Save and Close. Then open a new browser window and clear the cache and view the page in the front end to confirm that it appears properly.



If there are problems, you can use the CSS Inspector to identify and fix them. Now that we understand the basic six-step process of adding a new module row to a Cassiopeia child template, we are ready to add a fully designed existing child template to our Community News website.

## Delete the demo1 child template

Before we can delete a child template, we first need to make sure that it is not assigned to any pages. Go to **Templates, Styles** and click on the child template to edit it. Click on Menu Assignment and uncheck the Module Demo Page. Then save and close the child template. Then in Templates, Styles, check the child template and click Delete. Then select the other child template and click Delete. Sadly a warning will appear explaining that you can not delete the last style of a child template. To delete the final child template style, go to **System, Manage, Extensions** and Filter Type for Templates. Select and uninstall the last child template.

## Use the Linelab child template to create our News1 Child Template

The Linelab child template has several benefits over the default Cassiopeia template. This child template addresses problems with the display of the hamburger menu and the main menu. It also includes additional styling options such as custom background and text color selections for each of the module rows. But its main advantage is that its user.css file is already made and is much shorter and therefore easier to work with than the Cassiopeia template.css file. Finally, once we make our own custom Community News child template, we can use these same steps to install a copu of our custom child template onto any News website. We will therefore describe how to install and customize the Linelab child template.

To download this child template, go to this page:

<https://www.linelab.org/support/joomla-4-template-cassiopeia-customization-child-template>

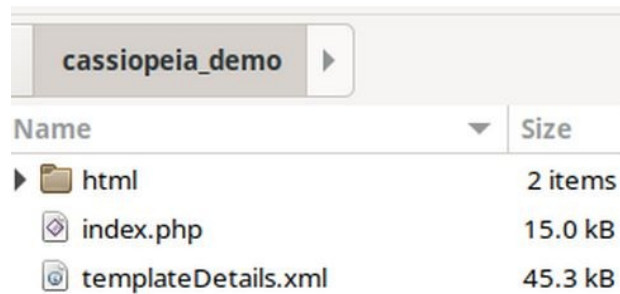
Download the template which is in a box called Attachments. Then transfer the zipped file from your Downloads folder to your website Extensions folder and extract it.



The Linelab Child template, called **demo**, has three folders. Click on the



templates folder which has a folder called **cassiopeia\_demo**. Click on this folder to see an html folder, an index.php file and a templateDetails.xml file.



cassiopeia_demo	
Name	Size
html	2 items
index.php	15.0 kB
templateDetails.xml	45.3 kB

Use the Bluefish Editor to open the the Linelab XML file. Select and delete the first seven lines to leave line beginning with copyright:





```
1
2 <copyright>(C) 2017 Open Source Matters, Inc.</copyright>
3 <description>TPL_CASSIOPEIA_XML_DESCRIPTION</description>
4 <positions>
5   <position>topbar</position>
6   <position>below-top</position>
7   <position>menu</position>
8   <position>cart</position>
9   <position>search</position>
10  <position>banner</position>
11  <position>top-a</position>
12  <position>top-b</position>
13  <position>top-c</position>
14  <position>main-top</position>
15  <position>main-bottom</position>
16  <position>breadcrumbs</position>
17  <position>sidebar-left</position>
18  <position>sidebar-right</position>
19  <position>bottom-a</position>
20  <position>bottom-b</position>
21  <position>footer</position>
22  <position>debug</position>
```

Leave this XML file open for a few minutes while we use our Joomla admin screen to create a new child template.

### Step #1 Create a news1 Child Template

From your administrator dashboard, go to **Templates Code**. Click on **Cassiopeia Details and Files** to edit it. Click **Create Child Template**. Give the Template a short name such as **news1**. Then use the drop down arrow to select the **Cassiopeia Default** Template Styles. Then click **Create Child Template**. Close the Template Edit screen.

There are now two Cassiopeia templates:

Image	Template ▲	Version
	<a href="#">Cassiopeia Details and Files</a> <a href="#">Preview</a> <a href="#">Parent</a>	1.0
	<a href="#">Cassiopeia_news1 Details and Files</a> <a href="#">Preview</a> <a href="#">Child of Cassiopeia</a>	1.0

Click the Child template Details and Files to open it. Then click the **templateDetails.xml** file to open it.

### Step #2 Edit the child template **templateDetails.xml** file

Go back to your Bluefish editor and click Edit Select All, then Edit copy. This will place the Linelab XML file in your clipboard. In your new1 child template XML file edit screen, create a new line starting at Line 8. Then delete the rest of the default child XML file and paste the Linelab XML file into the workspace. Click Save but do not close this file.

You will see all of the default module positions beginning on Line 11. This includes two new module rows Linelab has added to their XML file. Scroll down to **Line 26** and use your keyboard to create a new blank line after the bottom-b module position. Copy Line 26 and paste it into the new row. Then change the row name on Line 27 from bottom-b to bottom-01.

**<position>bottom-01</position>**

Then scroll to the end of the XML file and change the destination from **demo** to **news1**. Then save and close the XML file.

### Step #3 Create and edit the news1 child template **user.css** file

We will now create a **user.css** file. In the new1 child template code edit screen, click **New File** to bring up this screen :

Create or Upload a new file.



File Name

user

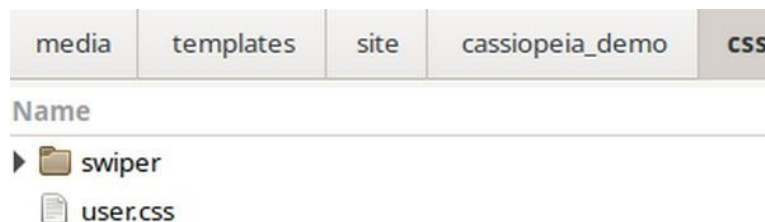
File Type

.css

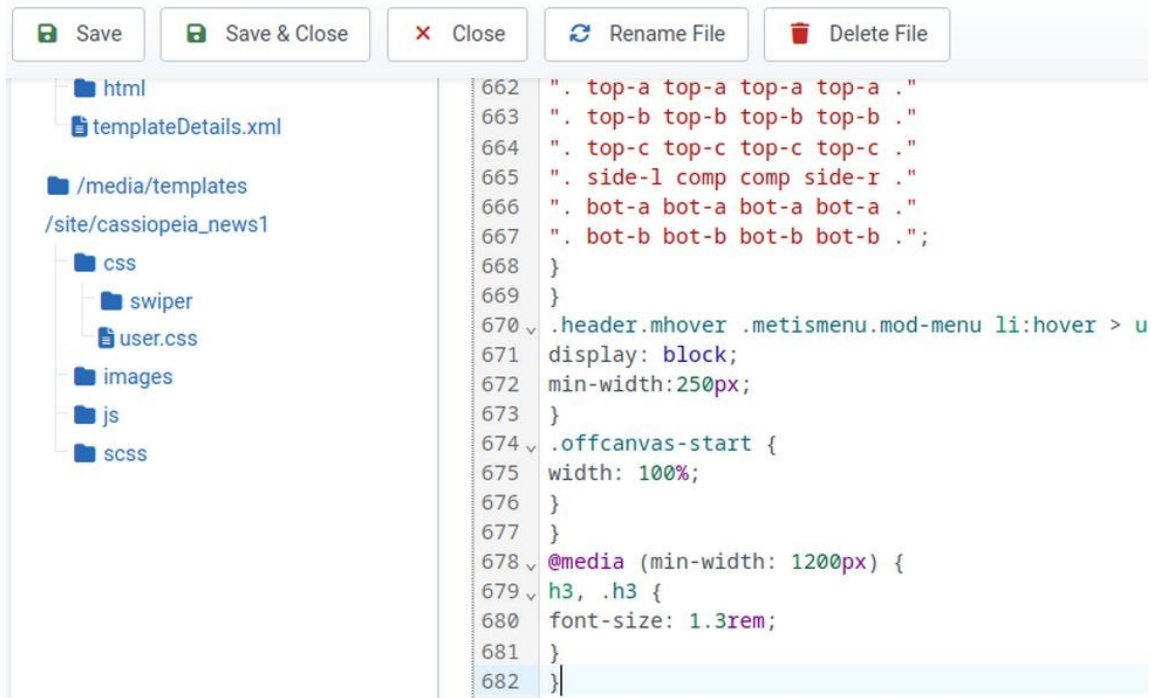
Create

For File Name, type **user**. For File Type, click on the **css** option. Also click on the **css folder** in the left column to select it. Then click **Create**. The user.css edit screen will appear. Save but do not close this file.

On your Home computer file manager, click on the Linelab child template **media** folder to see that it contains a **templates** folder. Click on the templates folder to see that it contains a **site** folder. Click on the site folder to see that it contains a **cassiopeia\_demo** folder. Click on this folder to see that it contains a swiper folder and a user.css file.



Use the Bluefish Editor to open the user.css file. It is 682 lines long which is thankfully much shorter than the Cassiopeia template.css file. Select and copy the Linelab user.css file. Then close the Bluefish editor and paste the css into our news1 user.css file. It should paste all 682 lines:



Save the file but do not close it.

### Add our new bottom-01 row to both CSS grid layouts

Both grid layouts are near the end of our news1 child template user.css file. Copy and paste into the first grid on a new line below the bottom b row:

**". bottom-01 bottom-01 bottom-01 bottom-01 .";**

Then copy paste the same line into the second grid on a new line below the bottom b row (Line 668).

### Add styling to our new bottom-01 row

Linelab has added a new row called top-c which we will use to create our styles for our bottom-01 row. Scroll down to **Line 120 through 143** to copy and paste these 23 rows into a Writer document (I have condensed the lines to take less space and make them easier to read and copy:

```
.container-top-c > *{ flex: 1; margin: 0.5em 0;}
```

```
.container-top-c{ position: relative; grid-area: top-c;}
```

```
.topc{ position:relative; color: var(--cassiopeia-color-text-topc);
```

```
background-color: var(--cassiopeia-color-primary-topc);
```

```
/* background-image: linear-gradient(135deg, var(--cassiopeia-color-
primary-topc) 0%, var(--cassiopeia-color-hover-topc) 100%);*/
```

```

}

.topc:before{background-color: inherit; background-image: inherit;}

.topc a {color: var(--cassiopeia-color-link-topc);}

.topc a:hover,.topc a:focus { color: var(--cassiopeia-color-hover-topc);}

```

The lines in bold are just a comment which is not needed. We will therefore delete it and then copy and paste the other lines below, changing the top-c row names to bottom-01 row names.

```

.container-bottom-01 > *{ flex: 1; margin: 0.5em 0;}

.container-bottom-01{ position: relative; grid-area: bottom-01;}

.bottom01{ position:relative; color: var(--cassiopeia-color-text-bottom01);
background-color: var(--cassiopeia-color-primary-bottom01);}

.bottom01:before{background-color: inherit; background-image: inherit;}

.bottom01 a {color: var(--cassiopeia-color-link-bottom01);}

.bottom01 a:hover,.bottom01 a:focus {color: var(--cassiopeia-color-hover-bottom01); }

```

Make a new line starting at Line 177 to paste the 7 lines from above. Then **scroll down to Line 362** where you will find the following for the top-c row:

```

.container-top-c > .card{padding: 80px 30px 80px 0;}

.container-top-c > .card:last-child{padding: 80px 0 80px 30px;}

```

Create a new line at Line 363 and copy paste the above changing the top-c names to bottom-01. **Also reduce the padding as shown:**

```

.container-bottom-01 > .card {padding: 10px 10px 10px 10px;}

.container-bottom-01 > .card:last-child {padding: 10px 10px 10px 10px;}

```

Then scroll down to **Line 564** where you will see the following:

```

.bottoma .card-header{ text-align: center; padding: 20px 0;}

```

Create a new line at Line 568 and copy paste the above changing the bottoma names to bottom01. **Also reduce the padding as shown:**

```

.bottom01 .card-header{ text-align: center; padding: 10px 0;}

```



Next, scroll down to about **Line 620** where you will see this line:

```
.container-top-c > .card, .container-top-c > .card:last-child {  
padding: 80px 0; }
```

Enter a new line below this line and copy paste the above row then changing the top-c names to bottom-01. **Also reduce the padding:**

```
.container-bottom-01 > .card, .container-bottom-01 > .card:last-child {  
padding: 20px 0;}
```

Last, scroll down to about Line 650 where you will see:

```
.container-top-c { flex-direction: column; }  
.container-top-c > * { flex: 0 1 auto; }
```

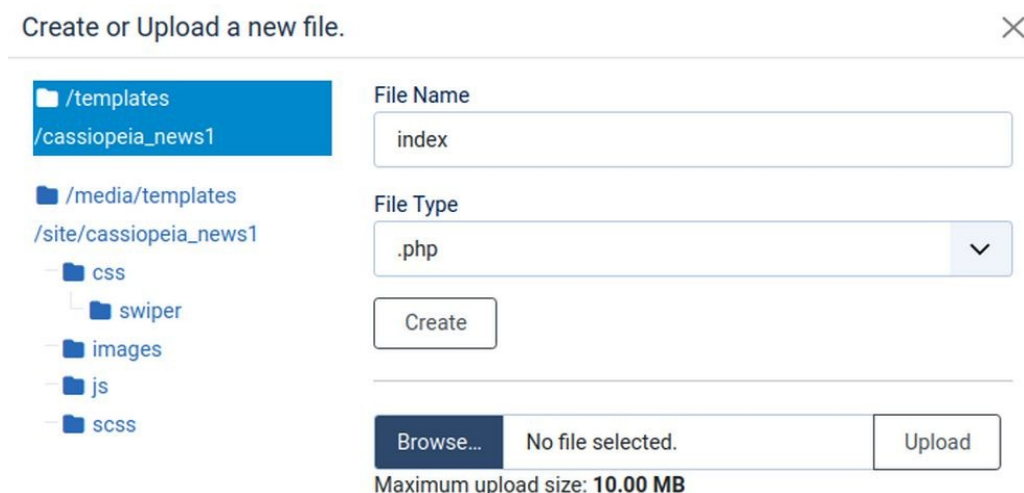
Enter a new line below this line and copy paste the above row then changing the top-c names to bottom-01.

```
.container-bottom-01 {flex-direction: column;}  
.container-bottom-01 > * {flex: 0 1 auto;}
```

Then save and close the user.css file.

#### Step #4 Create and edit the news1 child template index.php file

Click **New File** to add the index.php file. For File Name, type **index**. For File Type, select **php**. Also be sure to click the templates/cassiopeia\_news1 folder to place this new file in this folder.



The screenshot shows a file management window titled "Create or Upload a new file." with a close button (X) in the top right corner. On the left, a file tree shows the following structure:

- /templates (selected)
- /cassiopeia\_news1
- /media/templates
- /site/cassiopeia\_news1
  - css
  - swiper
  - images
  - js
  - scss

On the right, the "File Name" field contains "index". The "File Type" dropdown menu is set to ".php". Below these fields is a "Create" button. At the bottom, there is a "Browse..." button, a text field showing "No file selected.", and an "Upload" button. A note at the bottom states "Maximum upload size: 10.00 MB".

Then click Create. This will display the news1 index.php file edit screen. Click Save but do not close this file.

We next need to copy paste the entire **Linelab index.php file** into this news1 index.php file. In your Home computer file manager, open the Linelab folder and open the **templates** folder. Then open the **cassiopeia** folder and use your Bluefish editor to open the **index.php** file. Click Edit, Select All. Then Edit Copy to place it into your clipboard. Then paste it into your news1 child template index.php file and save but do not close the file. Scroll down to Line 87, make a new line and add the following just below bottomb: **'bottom01'**, Then scroll down to Line 331 and enter a new line. Copy paste this **just above the divide that is just above the footer**.

```
<?php if ($this->countModules('bottom-01', true)) : ?>

    <div class="grid-child container-bottom-01 bottom01">?php
echo $bgimage_class['bottom01'];?>" <?php echo !
empty($bgimage['bottom01'])?style="background:url('.
$bgimage['bottom01'].');":" ?>>

<jdoc:include type="modules" name="bottom-01" style="card" />

</div> <?php endif; ?>
```

Then save and close your news1 child template index.php file. Then save and close the child template.

### **Step #5 Add a custom module and place it in the bottom-01 position**

Go to **Content, Site Modules** and click New. Select a custom module and name it **News 1 Row Bottom 01**. Place it in the news1 child template **bottom-01** module position. Assign it to our Module Demo page.

### **Step #6 Assign the Module Demo Page to our Child Template**

From the Home Dashboard, click Templates, Styles. Then click on the Child **"copy of Cassiopeia Default"** template to open it. Click Menu Assignment and assign this template to our Module Demo page. Then click Save and Close. Then open a new browser window and clear the cache and view the page in the front end to confirm that it appears properly.



## Add the second and third module rows

Now that we have the first row of our News 1 Child Template made, we can copy and repeat this process to add the second and third rows. Because we have already created the child template, we only need 5 steps to add these two rows.

### Step #1 Edit the child template `templateDetails.xml` file

In your news1 child template XML file edit screen, scroll down to Line 27 and use your keyboard to create a new blank line after the bottom-01 module position. Copy Line 27 and paste it into the new row. Then change the row names to bottom-02 and bottom-03.

```
<position>bottom-02</position>
```

```
<position>bottom-03</position>
```

Then save and close the XML file.

### Step #2 Edit the news1 child template `user.css` file

We will open the news1 child template `user.css` file and scroll down to copy all the bottom01 row styles to create bottom02 and bottom03 row styles.

Scroll down to Line 174. Copy the 7 Bottom01 row lines:

```
.container-bottom-01 > *{ flex: 1; margin: 0.5em 0;}
```

```
.container-bottom-01{ position: relative; grid-area: bottom-01;} 
```

```
.bottom01{ position:relative; color: var(--cassiopeia-color-text-bottom01);  
background-color: var(--cassiopeia-color-primary-bottom01);}
```

```
.bottom01:before{background-color: inherit; background-image: inherit;}
```

```
.bottom01 a {color: var(--cassiopeia-color-link-bottom01);}
```

```
.bottom01 a:hover,.bottom01 a:focus {color: var(--cassiopeia-color-hover-  
bottom01); }
```

Make a new line at the end of the bottom01 lines and paste the 7 lines in. Change all of the bottom01 numbers to 02. Then make a new row at the

end of the bottom 02 lines and paste the 7 lines in again. Change all of the bottom01 numbers to 03.

Then **scroll down to about Line 377** where you will find the following bottom01 row:

```
.container-bottom-01 > .card {padding: 10px 10px 10px 10px;}  
.container-bottom-01 > .card:last-child {padding: 10px 10px 10px 10px;}
```

Copy these two lines. Then create a new line and paste these lines in twice. Change the first two row numbers from 01 to 02 and the second two row numbers from 01 to 03.

Then scroll down to about Line 590 where you will see the following:

```
.bottom01 .card-header{ text-align: center; padding: 10px 0;}
```

Copy the bottom01 line. Then make a new line and paste the line in twice. Change the first row numbers from 01 to 02 and the second row numbers from 01 to 03.

Next, scroll down to about **Line 640** where you will see this line:

```
.container-bottom-01 > .card, .container-bottom-01 > .card:last-child  
{ padding: 20px 0;}
```

Copy the bottom01 line. Then make a new line and paste the line in twice. Change the first row numbers from 01 to 02 and the second row numbers from 01 to 03.

Last, scroll down to about Line 670 where you will see:

```
.container-bottom-01 {flex-direction: column;}  
.container-bottom-01 > * {flex: 0 1 auto;}
```

Copy these two lines. Then create a new line and paste these lines in twice. Change the first two row numbers from 01 to 02 and the second two row numbers from 01 to 03.

### **Add our new bottom-02 and bottom-03 rows to both CSS grid layouts**

Both grid layouts are near the end of our news1 child template user.css file. Copy and paste into the first grid on a new line below the bottom 01 row:

```
". bottom-02 bottom-02 bottom-02 bottom-02 .";
```

```
". bottom-03 bottom-03 bottom-03 bottom-03 .";
```

Then copy paste the same line into the second grid on a new line below the bottom 01 row. Then save and close the user.css file.

### Step #3 Edit the news1 child template index.php file

Open your news1 child template index.php file and scroll down to Line 88, make a new line and add the following just below bottom01:

**'bottom02',**

**'bottom03',**

Then scroll down to about Line 338 and enter a new line. Copy paste this **just above the divide that is just above the footer.**

```
<?php if ($this->countModules('bottom-01', true)) : ?>

    <div class="grid-child container-bottom-01 bottom01">?php
echo $bgimage_class['bottom01'];?>" <?php echo !
empty($bgimage['bottom01'])?style="background:url(
$bgimage['bottom01'].');"" ?>>

<jdoc:include type="modules" name="bottom-01" style="card" />

</div> <?php endif; ?>
```

Change all six of the numbers from 01 to 02. Then make a new line and paste it again. Change all six of the numbers from 01 to 03. Then save and close your news1 child template index.php file. Then save and close the child template.

### Step #4 Add a custom module and place it in the bottom-02 position

Go to **Content, Site Modules** and click New. Select a custom module and name it **News 1 Row Bottom 02**. Place it in the news1 child template **bottom-02** module position. Assign it to our Module Demo page.

Then duplicate the second module and name the third module News 1 Row Bottom 03. Place it in the news1 child template **bottom-03** module position. Assign it to our Module Demo page.

### Step #6 Assign the Module Demo Page to our Child Template

From the Home Dashboard, click Templates, Styles. Then click on the Child **“copy of Cassiopeia Default”** template to open it. Click Menu Assignment and assign this template to our Module Demo page. Then click Save and Close. Then open a new browser window and clear the cache and view the page in the front end to confirm that all three modules appears properly in



all three module rows.



### **Add module rows bottom04, bottom05 and bottom06**

We will add three more module rows and then check the result. Assuming it is OK, we will then repeat the process to add the final three rows.

#### **Step #1 Add Rows three at a time to the child template XML file**

Open the News Child template templateDetails.xml file. At Line 30, just above the footer position, create a new line. Then copy and paste the following three positions:

```
<position>bottom-04</position>
```

```
<position>bottom-05</position>
```

```
<position>bottom-06</position>
```

Then save and close the XML file.

#### **Step #2 Edit your child template user.css file**

Open your previous Writer document used to change line numbers in bold. Copy three row blocks of CSS into a new Write Document. Change the row numbers from 01, 02 and 03 to **04, 05 and 06**.

```
.container-bottom-04 > * {flex: 1; margin: 0.5em 0;}
```

```
.container-bottom-04 {position: relative; grid-area: bottom-04;
```

```

.bottom04 {position:relative; z-index:0; color: var(--cassiopeia-color-text-bottom04); background-color: var(--cassiopeia-color-primary-bottom04);}
.bottom04:before{background-color: inherit; background-image: inherit;}
.bottom04 a {color: var(--cassiopeia-color-link-bottom04);}
.bottom04 a:hover,.bottom04 a:focus {color: var(--cassiopeia-color-hover-bottom04); }

.container-bottom-05 > * {flex: 1; margin: 0.5em 0;}
.container-bottom-05 {position: relative; grid-area: bottom-05;}
.bottom05 {position:relative; z-index:0; color: var(--cassiopeia-color-text-bottom05); background-color: var(--cassiopeia-color-primary-bottom05);}
.bottom05:before{background-color: inherit; background-image: inherit;}
.bottom05 a {color: var(--cassiopeia-color-link-bottom05);}
.bottom05 a:hover,.bottom05 a:focus {color: var(--cassiopeia-color-hover-bottom05);}

.container-bottom-06 > * {flex: 1; margin: 0.5em 0;}
.container-bottom-06 {position: relative; grid-area: bottom-06;}
.bottom06 {position:relative; z-index:0; color: var(--cassiopeia-color-text-bottom06); background-color: var(--cassiopeia-color-primary-bottom06);}
.bottom06:before{background-color: inherit;background-image: inherit;}
.bottom06 a {color: var(--cassiopeia-color-link-bottom06);}
.bottom06 a:hover,.bottom06 a:focus {color: var(--cassiopeia-color-hover-bottom06);}

```

**Paste these into your child template user.css file at Line 193 just above the footer.**

**Line 400 Add new lines:**

```

.container-bottom-04 > .card { padding: 10px 10px 10px 10px;}
.container-bottom-04 > .card:last-child{padding: 10px 10px 10px 10px;}
.container-bottom-05 > .card { padding: 10px 10px 10px 10px;}
.container-bottom-05 > .card:last-child{padding: 10px 10px 10px 10px;}

```

```
.container-bottom-06 > .card { padding: 10px 10px 10px 10px;}  
.container-bottom-06 > .card:last-child{padding: 10px 10px 10px 10px;}
```

**Line 608 add new lines:**

```
.bottom04 .card-header{text-align: center;padding: 10px 0;}  
.bottom05 .card-header{text-align: center;padding: 10px 0;}  
.bottom06 .card-header{text-align: center;padding: 10px 0;}
```

**Line 660 add rows to the grid areas:**

```
". bottom-04 bottom-04 bottom-04 bottom-04 ."  
". bottom-05 bottom-05 bottom-05 bottom-05 ."  
". bottom-06 bottom-06 bottom-06 bottom-06 .";
```

**Line 679: add**

```
.container-bottom-04 > .card, .container-bottom-04 > .card:last-child{  
padding: 20px 0;}  
.container-bottom-05 > .card, .container-bottom-05 > .card:last-child{  
padding: 20px 0;}  
.container-bottom-06 > .card, .container-bottom-06 > .card:last-child{  
padding: 20px 0;}
```

**Line 720: add**

```
.container-bottom-04 {flex-direction: column;}  
.container-bottom-04 > * {flex: 0 1 auto;}  
.container-bottom-05 {flex-direction: column;}  
.container-bottom-05 > * {flex: 0 1 auto;}  
.container-bottom-06 {flex-direction: column;}  
.container-bottom-06 > * {flex: 0 1 auto;}
```

**Add to both grid layouts near the end of the user.css file. Note that there is a semi-colon added to the last line only:**

```
". bottom-04 bottom-04 bottom-04 bottom-04 ."
```

". bottom-05 bottom-05 bottom-05 bottom-05 ."

". bottom-06 bottom-06 bottom-06 bottom-06 .";

Then save and close the user.css file.

### Step #3 Add rows three at a time to the News1 Child Template index.php file

Scroll down to line 88 and enter a new line to add the following three module rows just above the footer row:

'bottom04',

'bottom05',

'bottom06',

Then scroll down to Line 356 just above the closing divide and enter a new line to copy and paste the following three rows:

```
<?php if ($this->countModules('bottom-04', true)) : ?>
```

```
    <div class="grid-child container-bottom-04 bottom04">?php
    echo $bgimage_class['bottom04'];?>" <?php echo !
    empty($bgimage['bottom04'])?style="background:url(
    $bgimage['bottom04'].);"" ?>>
```

```
        <jdoc:include type="modules" name="bottom-04"
style="card" />
```

```
    </div>
```

```
    <?php endif; ?>
```

```
<?php if ($this->countModules('bottom-05', true)) : ?>
```

```
    <div class="grid-child container-bottom-05 bottom05">?php
    echo $bgimage_class['bottom05'];?>" <?php echo !
    empty($bgimage['bottom05'])?style="background:url(
    $bgimage['bottom05'].);"" ?>>
```

```
        <jdoc:include type="modules" name="bottom-05"
style="card" />
```

```
    </div>
```

```
    <?php endif; ?>
```

```

<?php if ($this->countModules('bottom-06', true)) : ?>

    <div class="grid-child container-bottom-06 bottom06">?php
echo $bgimage_class['bottom06'];?>" <?php echo !
empty($bgimage['bottom06'])?style="background:url(
$bgimage['bottom06'].');":" ?>>

        <jdoc:include type="modules" name="bottom-06"
style="card" />

    </div>

<?php endif; ?>

```

Save and close the index.php file.

#### **Step #4: Test the new positions to make sure they appear in the back end and display in the front end properly**

Go to **Content, Site Modules**. Duplicate an existing Custom Module or create a new one. Display it in the bottom-04 position. Then create a duplicate of this module and assign it to the bottom-05 position. Then create a duplicate of this module and assign it to the bottom-06 position and view it in the front end.

#### **Add module rows bottom07, bottom08 and bottom09**

We will repeat the above process to add the final three rows.

##### **Step #1 Add Rows three at a time to the child template XML file**

Open the News Child template templateDetails.xml file. At Line 33, just above the footer position, create a new line. Then copy and paste the following three positions:

```

<position>bottom-07</position>

<position>bottom-08</position>

<position>bottom-09</position>

```

Then save and close the XML file.

##### **Step #2 Edit your child template user.css file**

**Open your child template user.css file and add the final three rows at Line 215. Change row numbers from 04, 05 and 06 to 07, 08 and 09:**

```
.container-bottom-07 > * {flex: 1; margin: 0.5em 0;}
```



```

.container-bottom-07 {position: relative; grid-area: bottom-07;}

.bottom07 {position:relative; z-index:0; color: var(--cassiopeia-color-text-bottom07); background-color: var(--cassiopeia-color-primary-bottom07);}

.bottom07:before{background-color: inherit;background-image: inherit;}

.bottom07 a {color: var(--cassiopeia-color-link-bottom07);}

.bottom07 a:hover, .bottom07 a:focus {color: var(--cassiopeia-color-hover-bottom07); }

.container-bottom-08 > * {flex: 1; margin: 0.5em 0;}

.container-bottom-08 {position: relative; grid-area: bottom-08;}

.bottom08 {position:relative; z-index:0; color: var(--cassiopeia-color-text-bottom08); background-color: var(--cassiopeia-color-primary-bottom08);}

.bottom08:before{background-color: inherit;background-image: inherit;}

.bottom08 a {color: var(--cassiopeia-color-link-bottom08);}

.bottom08 a:hover,.bottom08 a:focus {color: var(--cassiopeia-color-hover-bottom08);}

.container-bottom-09 > * {flex: 1; margin: 0.5em 0;}

.container-bottom-09 {position: relative; grid-area: bottom-09;}

.bottom09 {position:relative; z-index:0; color: var(--cassiopeia-color-text-bottom09); background-color: var(--cassiopeia-color-primary-bottom09);}

.bottom09:before{background-color: inherit;background-image: inherit;}

.bottom09 a {color: var(--cassiopeia-color-link-bottom09);}

.bottom09 a:hover, .bottom09 a:focus {color: var(--cassiopeia-color-hover-bottom09);}

```

Scroll down to **Line 430 Add new lines:**

```

.container-bottom-07 > .card { padding: 10px 10px 10px 10px;}

.container-bottom-07 > .card:last-child{padding: 10px 10px 10px 10px;}

.container-bottom-08 > .card { padding: 10px 10px 10px 10px;}

.container-bottom-08 > .card:last-child {padding: 10px 10px 10px 10px;}

.container-bottom-09 > .card { padding: 10px 10px 10px 10px;}

```

```
.container-bottom-09 > .card:last-child{padding: 10px 10px 10px 10px;}
```

### **Line 640 add new lines**

```
.bottom07 .card-header{text-align: center;padding: 10px 0;}
```

```
.bottom08 .card-header{text-align: center;padding: 10px 0;}
```

```
.bottom09 .card-header{text-align: center;padding: 10px 0;}
```

### **Line 693 add rows to the grid areas:**

```
". bottom-07 bottom-07 bottom-07 bottom-07 ."
```

```
". bottom-08 bottom-08 bottom-08 bottom-08 ."
```

```
". bottom-09 bottom-09 bottom-09 bottom-09 .";
```

### **Line 720: add**

```
.container-bottom-07 > .card, .container-bottom-07 > .card:last-child{padding: 20px 0;}
```

```
.container-bottom-08 > .card, .container-bottom-08 > .card:last-child{padding: 20px 0;}
```

```
.container-bottom-09 > .card, .container-bottom-09 > .card:last-child{padding: 20px 0;}
```

### **Line 767: add**

```
.container-bottom-07 {flex-direction: column;}
```

```
.container-bottom-07 > * {flex: 0 1 auto;}
```

```
.container-bottom-08 {flex-direction: column;}
```

```
.container-bottom-08 > * {flex: 0 1 auo;}
```

```
.container-bottom-09 {flex-direction: column;}
```

```
.container-bottom-09 > * {flex: 0 1 auto;}
```

**Add to both grid layouts near the end of the user.css file. Note that there is a semi-colon added to the last line only:**

```
". bottom-07 bottom-07 bottom-07 bottom-07 ."
```

```
". bottom-08 bottom-08 bottom-08 bottom-08 ."
```

". bottom-09 bottom-09 bottom-09 bottom-09 .";

Then save and close the user.css file.

### Step #3 Add rows three at a time to the News1 Child Template index.php file

Scroll down to line 88 and enter a new line to add the following three module rows just above the footer row:

'bottom07',

'bottom08',

'bottom09',

Then scroll down to Line 374 just above the closing divide and enter a new line to copy and paste the final three rows:

```
<?php if ($this->countModules('bottom-07', true)) : ?>

    <div class="grid-child container-bottom-07 bottom07"><?php
echo $bgimage_class['bottom07'];?>" <?php echo !
empty($bgimage['bottom07'])?style="background:url(
$bgimage['bottom07'].');"" ?>>

        <jdoc:include type="modules" name="bottom-07"
style="card" />

    </div>

<?php endif; ?>

<?php if ($this->countModules('bottom-08', true)) : ?>

    <div class="grid-child container-bottom-08 bottom08"><?php
echo $bgimage_class['bottom08'];?>" <?php echo !
empty($bgimage['bottom08'])?style="background:url(
$bgimage['bottom08'].');"" ?>>

        <jdoc:include type="modules" name="bottom-08"
style="card" />

    </div>

<?php endif; ?>

<?php if ($this->countModules('bottom-09', true)) : ?>
```

```

        <div class="grid-child container-bottom-09 bottom09<?php
echo $bgimage_class['bottom09'];?>" <?php echo !
empty($bgimage['bottom09'])?style="background:url(
$bgimage['bottom09'].);"" ?>>

        <jdoc:include type="modules" name="bottom-09"
style="card" />

    </div>

    <?php endif; ?>

```

Save and close the index.php file. Then close the News 1 Child Template Edit screen.

#### **Step #4: Test the new positions to make sure they appear in the back end and display in the front end properly**

Go to **Content, Site Modules**. Duplicate an existing Custom Module or create a new one. Display it in the bottom-07 position. Then create a duplicate of this module and assign it to the bottom-08 position. Then create a duplicate of this module and assign it to the bottom-09 position and view it in the front end.

Note: If you plan on adding Advertising Banners to your Home page to promote local events and local businesses, then you should add three more rows to your user.css file, your XML file and your index.php file. Call these rows **bottom10**, **bottom11** and **bottom12**. We will leave this as a homework exercise.

#### **What's Next?**

We are done adding our nine new News 1 Module rows. In our next article, we will review the final two steps to creating our News 1 Child Template. These are editing the XML file fields and adding language and slideshow files and folders to our News 1 template.

## 7.2 Create a Child Template Part 2

The problem with customizing the appearance of our News Page Layouts is that our changes can get lost during Joomla updates and template updates. The solution to this problem is to use a **“Child” template** which preserves our Page Layout changes regardless of any updates to Joomla or to the Parent template.

Sadly, the Helix template we have been using until now does not yet have the child template feature. Equally bad, it is nearly impossible to alter the appearance of the Helix template to get the Page Layout on the Home page to match the layout of the Los Angeles Times. We have been using the Helix Template until now because it offered an easy way to introduce you to the layout of Joomla module rows and module positions.

The time has come to graduate to the default Joomla template, called **Cassiopeia**, which allows us to create child templates. In addition, the Casseopeia template comes with special “CSS classes” which give us the ability to match the page layout of the Los Angeles Times. However, the drawback of using a Cassiopeia child template is that it is much more difficult to create additional module rows with Cassiopeia than it was with the Helix template.

The good news is that **we only need to do this change process once**. We can then use copies of our modified Cassiopeia Child Template to create other Community News websites. Thus, while we will be going through some complex steps in this article, we are describing these steps mainly to explain how this is done – so that anyone who wants to create their own custom child templates will have a series of steps to follow.

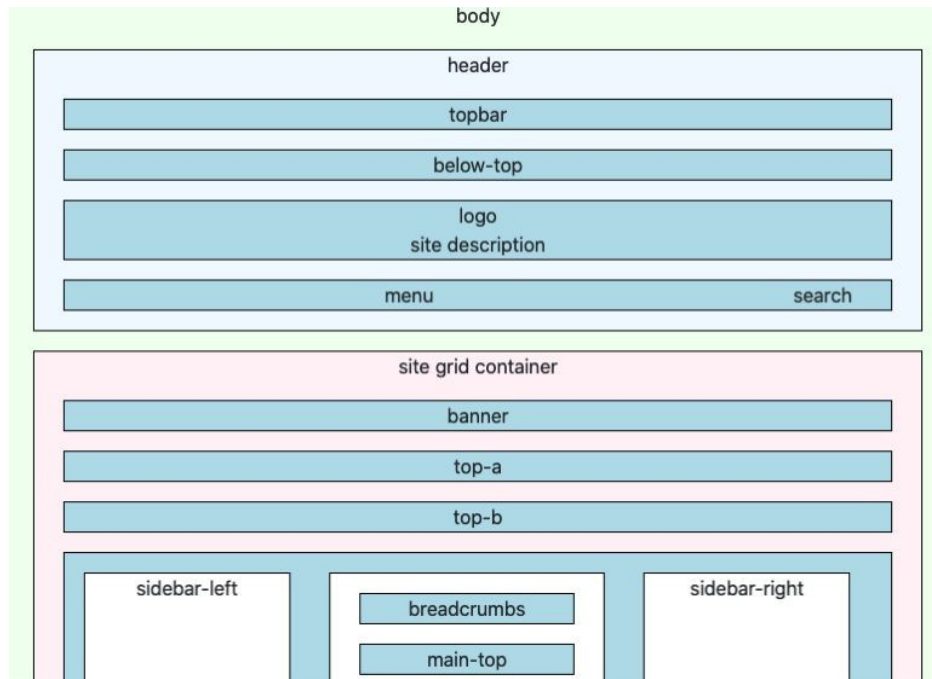
**You do not actually need to complete or even understand any of these steps we describe in this article as we will be offering our heavily modified Cassiopeia Child Template as a Free Download on our Create a Secure News Website Downloads page.**

Nevertheless, it is useful to give this a try as “practice” because it will give you a better idea of how the appearance of a Joomla News website is actually structured. Let’s begin by reviewing how module rows are structured in the Cassiopeia Template.

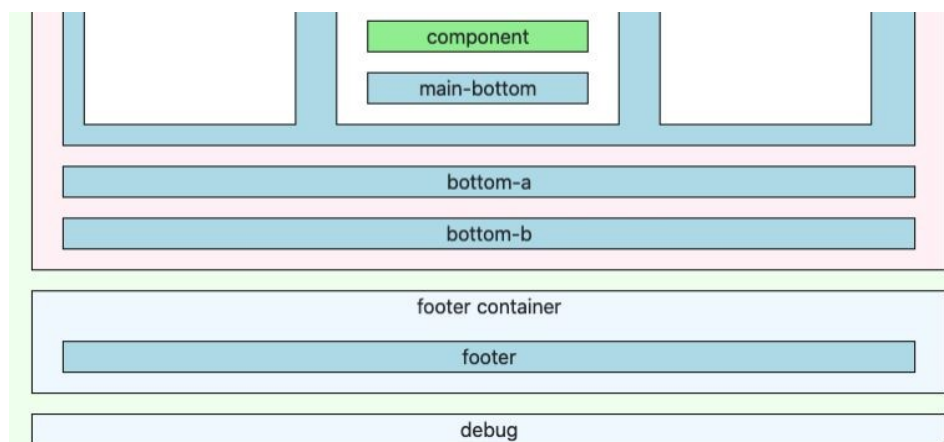


## Cassiopeia Template initial module rows

The Joomla default Cassiopeia Template only comes with a few module rows and positions. Here are the initial rows above the Component:



Here are the initial module rows below the Component area:



There are only two module rows above the footer. These are called **bottom-a** and **bottom-b**. We need at least **nine more module rows below the component** just to display our news topic categories. We will begin by creating a simple demo-1 child template and adding just one row below the bottom-b row to see if it displays properly. Once we confirm that it displays properly, we will then download a more complex child template to review the steps for adding a child template that has already been created. Finally, we will add module rows to this more complex child template to create our own news-1 child template.

## Six Steps to add Module Rows to our Child Template

There are basically six steps. The first step is to create a **child template** and make our code changes in the child template. When we create a child template, it will automatically create its own independent **templateDetails.xml** file which is not changed when Joomla updates.

The second step is to add some code to the child template **templateDetails.xml** file.

**The third step is to create a child template user.css file** and then use CSS Grid properties to add one or more “grid rows” to the child template by adding a few lines of CSS to our child template user.css file.

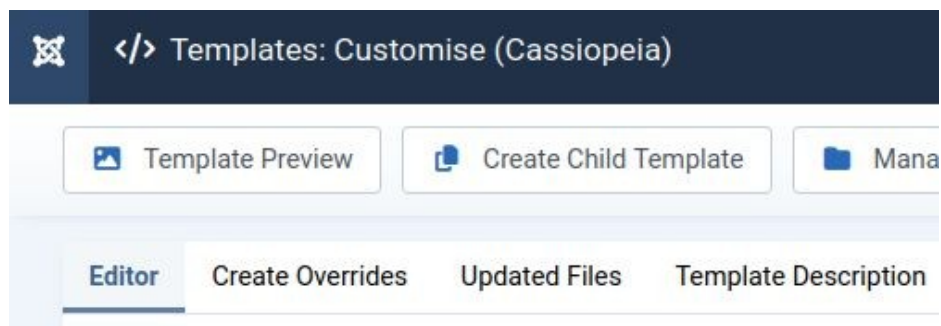
**The fourth step is to create a child template index.php file** and then copy and paste a few lines of code into our Child template index.php file.

**The fifth step is to create a new custom module** and assign it to the new row you created in your child template.

The last step is to change your default template from the Casseopeia parent template to the Child template and confirm that the new module displays properly in the new module row.

### Step #1 Create a Child Template

A child template is a “partial” version of a parent template in that the child template has only three files, the child **templateDetails.xml** file, the child **user.css** file and the child **index.php** file. Child templates must be associated with a parent template. To create a child template, from your administrator dashboard, go to **Templates Code <>** (which is not the same as Templates Styles). Click on **Cassiopeia Details and Files** to edit it.



Click **Create Child Template**. Give the Template a short name such as **demo1**. Then use the drop down arrow to select the **Cassiopeia Default** Template Styles. Then click Create Child Template.

Child Template

Child Template Name

demo1

Letters, numbers and underscore only.

Additional Template Styles

Cassiopeia - Default

Type or select some options



▼

Duplicate existing styles for the new child template.

Close

Create Child Template

Close the Template Edit screen. There are now two Cassiopeia templates:

Image	Template ▲	Version
	<a href="#">Cassiopeia Details and Files</a> <a href="#">Preview</a> <div>Parent</div>	1.0
	<a href="#">Cassiopeia_demo1 Details and Files</a> <a href="#">Preview</a> <div>Child of Cassiopeia</div>	1.0

Click the Child template Details and Files to open it.

Template Preview

Manage Folders

New File

Close

Editor

Create Overrides

Updated Files

Template Description

/templates

/cassiopeia\_demo1

html

templateDetails.xml

/media/templates

/site/cassiopeia\_demo1

css

images

js

scss

Select a File

You can select from a number of options to cus  
 Manager supports Source files, Image files, For  
 be performed on those files. Select a file and yc  
 to know more.

Documentation

Click the **templateDetails.xml** file to open it.

## Step #2 Edit the child template templateDetails.xml file

You will see all of the default module positions beginning on Line 11:

```
11 <position>topbar</position>
12 <position>below-top</position>
13 <position>menu</position>
14 <position>search</position>
15 <position>banner</position>
16 <position>top-a</position>
17 <position>top-b</position>
18 <position>main-top</position>
19 <position>main-bottom</position>
20 <position>breadcrumbs</position>
21 <position>sidebar-left</position>
22 <position>sidebar-right</position>
23 <position>bottom-a</position>
24 <position>bottom-b</position>
25 <position>footer</position>
26 <position>debug</position>
```

Scroll down to **Line 24** and use your keyboard to create a new blank line after the bottom-b module position. Copy Line 24 and paste it into the new row. Then change the row name on Line 25 from bottom-b to test-1.

```
<position>test-1</position>
```

Then click Save and Close to close the XML file.

## Step #3 Create and edit a child template user.css file

We will now create a **user.css** file and place our CSS Grid code in the user.css file. Note that our child template will use all of the files of their parent template except for any files **of the same name** you create in the child template. So while the Casseopeia template.css file has over 15,000 lines our child template will only have a few lines of CSS.

We will copy of the final part of the Cassiopeia template.css file and paste it in our child **user.css**. **We will then add the CSS for a new module row called test-1 in our child user.css file.**

In the child template code edit screen, click **New File** to bring up this screen :

Create or Upload a new file.



/templates

/cassiopeia\_demo1

html

/media/templates

/site/cassiopeia\_demo1

css

images

File Name

user

File Type

.css

Create

For File Name, type **user**. For File Type, click on the **css** option. Also click on the **css folder** in the left column to select it. Then click **Create**. This screen will appear:

Editor

Create Overrides

Updated Files

Template Description

Editing file "/media/templates/site/cassiopeia\_demo1/css/user.css" in template "cassiopeia\_demo1".

/templates

/cassiopeia\_demo1

html

templateDetails.xml

/media/templates

/site/cassiopeia\_demo1

css

user.css

images

js

scss

1

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Save but do not close this file. We next need to find the code we want to paste into this file to copy it into your computer clipboard. So in your Home computer file manager, unzip the Joomla zipped installation folder. Then click on the **media** folder to open it. Then click on **templates** folder. Then the **site** folder. Then the **cassiopeia** folder. Then the **css** folder. Then open the template.css file with your Bluefish HTML editor and scroll to the very end of the file. It is 15,643 lines long. Copy **Lines 14725 to 14765** into your computer clipboard. Here at these 40 lines:

```
.site-grid { margin-bottom: auto;}

@supports (display: grid) {
  .site-grid {
    grid-gap: 0 1em;

    grid-template-columns: [full-start] minmax(0, 1fr)[main-start] repeat(4,
minmax(0, 19.875rem))[main-end] minmax(0, 1fr)[full-end];
    grid-template-areas: ". banner banner banner ."
                        ". top-a top-a top-a top-a ."
                        ". top-b top-b top-b top-b ."
                        ". comp comp comp comp ."
                        ". side-r side-r side-r side-r ."
                        ". side-l side-l side-l side-l ."
                        ". bot-a bot-a bot-a bot-a ."
                        ". bot-b bot-b bot-b bot-b .";

    display: grid; }
.site-grid > [class^="container-"], .site-grid > [class*=" container-"] {
  column-gap: 1em;
  width: 100%;
  max-width: none; }
.site-grid > .full-width {
  grid-column: full-start / full-end; }
```

```

@media (width >= 992px) {
  .site-grid {
    grid-template-areas: ". banner banner banner banner ."
      ". top-a top-a top-a top-a ."
      ". top-b top-b top-b top-b ."
      ". side-l comp comp side-r ."
      ". bot-a bot-a bot-a bot-a ."
      ". bot-b bot-b bot-b bot-b .";

    } } }

```

Paste these 40 lines into your child template user.css file then save the file again but do not close it. We will add our new row just below the bottom-b row by copy pasting the following line:

**". test-1 test-1 test-1 test-1 .";**

```

11      ". side-l side-l side-l side-l ."
12      ". bot-a bot-a bot-a bot-a ."
13      ". bot-b bot-b bot-b bot-b ."
14      ". test-1 test-1 test-1 test-1 .";
15      display: grid; }

```

Then scroll down to Line 29 enter a new line and copy past the new row in again:

```

24      grid-template-areas: ". banner banner banner banner ."
25      ". top-a top-a top-a top-a ."
26      ". top-b top-b top-b top-b ."
27      ". side-l comp comp side-r ."
28      ". bot-a bot-a bot-a bot-a ."
29      ". bot-b bot-b bot-b bot-b ."
30      ". test-1 test-1 test-1 test-1 .";
31      } } }
32

```

Now that we have added our new module row, we also need to add some styling to the new row so it will appear properly. We will copy the styles used by the bottom-1 row. On your home computer, go back to the template.css file and scroll to **Line 13928 to 13947**, copy the following into your computer clipboard and then paste it to your user.css file.

```
.container-top-a, .container-top-b, .container-bottom-a, .container-bottom-b  
{ position: relative; }
```

```
.container-top-a > *, .container-top-b > *, .container-bottom-a >  
*, .container-bottom-b > * { flex: 1; margin: .5em 0; }
```

```
@media (width <= 991.98px) {
```

```
  .container-top-a, .container-top-b, .container-bottom-a, .container-bottom-  
  b { flex-direction: column; }
```

```
  .container-top-a > *, .container-top-b > *, .container-bottom-a >  
  *, .container-bottom-b > * { flex: 0 auto; } }
```

Add the test-1 container to each of the above lines so it appears like this in your user.css file:

```
.container-top-a, .container-top-b, .container-bottom-a, .container-bottom-b,  
.container-test-1 { position: relative; }
```

```
.container-top-a > *, .container-top-b > *, .container-bottom-a >  
*, .container-bottom-b > *, .container-test-1>* { flex: 1; margin: .5em 0; }
```

```
@media (width <= 991.98px) {
```

```
  .container-top-a, .container-top-b, .container-bottom-a, .container-bottom-  
  b, .container-test-1 { flex-direction: column; }
```

```
  .container-top-a > *, .container-top-b > *, .container-bottom-a >  
  *, .container-bottom-b > *, .container-test-1>* { flex: 0 auto; }
```

```
}
```

**Also copy and paste Line 14806:** .container-bottom-b { grid-area: bot-b; }

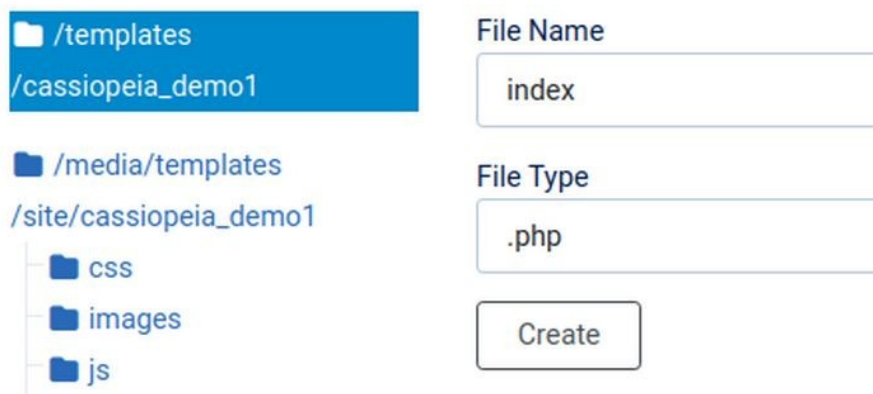
Then change the name from bottom-b to test-1 and the grid area from bot-b to test-1: **.container-test-1 { grid-area: test-1; }**

Then save and close the user.css file and close the child template edit screen.

## Step #4 Create and edit a child template index.php file

Click New File to add the index.php file. For File Name, type index. For File Type, select php. Also be sure to click the templates/cassiopeia\_demo1 folder to place this new file in this folder. Then click Create.

Create or Upload a new file.



The screenshot shows a file creation dialog. On the left, a file tree is visible with the following structure:

- /templates (selected)
- /cassiopeia\_demo1
- /media/templates
- /site/cassiopeia\_demo1
  - css
  - images
  - js

On the right, the 'File Name' field contains 'index' and the 'File Type' dropdown is set to '.php'. A 'Create' button is located at the bottom right of the dialog.

That will display this file edit screen:

Click Save but do not close this file. We next need to copy paste the entire index.php file into this file. In your Home computer file manager, open the Joomla installer folder and open the templates folder. Then open the cassiopeia folder and use your Bluefish editor to open the index.php file. Click Edit, Select All. Then Edit Copy to place it into your clipboard.

Then paste it into your child template index.php file and save but do not close the file. Scroll down to near the end of the file and copy paste this **just above the closing divide that is just above the footer**. Enter a new line at Line 238 and add this code:

```
<?php if ($this->countModules('test-1', true)) : ?>
    <div class="grid-child container-test-1">
        <jdoc:include type="modules" name="test-1" style="card" />
    </div>
<?php endif; ?>
```

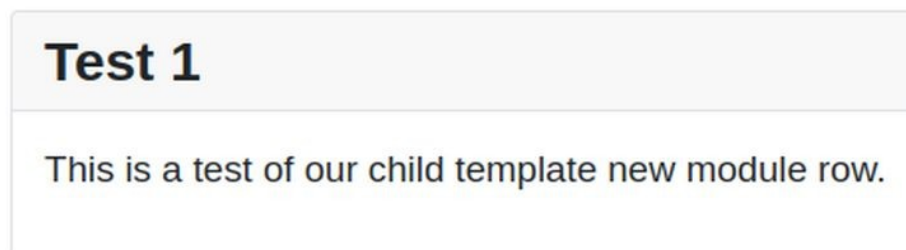
Then save and close your child template index.php file.

### **Step #5 Add a custom module and place it in the child template test-1 position**

Go to Content, Site Modules and click New. Select a custom module and name it Test 1. Place it in the child template (demo1) test-1 module position. Assign it to a page such as our Module Demo page.

### **Step #6 Assign the Module Demo Page to our Child Template**

From the Home Dashboard, click Templates, Styles. Then click on the Child **“copy of Cassiopeia Default”** template to open it. Click Menu Assignment and assign this template to our Module Demo page. Then click Save and Close. Then open a new browser window and clear the cache and view the page in the front end to confirm that it appears properly.



If there are problems, you can use the CSS Inspector to identify and fix them. Now that we understand the basic six-step process of adding a new module row to a Cassiopeia child template, we are ready to add a fully designed existing child template to our Community News website.

## Delete the demo1 child template

Before we can delete a child template, we first need to make sure that it is not assigned to any pages. Go to **Templates, Styles** and click on the child template to edit it. Click on Menu Assignment and uncheck the Module Demo Page. Then save and close the child template. Then in Templates, Styles, check the child template and click Delete. Then select the other child template and click Delete. Sadly a warning will appear explaining that you can not delete the last style of a child template. To delete the final child template style, go to **System, Manage, Extensions** and Filter Type for Templates. Select and uninstall the last child template.

## Use the Linelab child template to create our News1 Child Template

The Linelab child template has several benefits over the default Cassiopeia template. This child template addresses problems with the display of the hamburger menu and the main menu. It also includes additional styling options such as custom background and text color selections for each of the module rows. But its main advantage is that its user.css file is already made and is much shorter and therefore easier to work with than the Cassiopeia template.css file. Finally, once we make our own custom Community News child template, we can use these same steps to install a copu of our custom child template onto any News website. We will therefore describe how to install and customize the Linelab child template.

To download this child template, go to this page:

<https://www.linelab.org/support/joomla-4-template-cassiopeia-customization-child-template>

Download the template which is in a box called Attachments. Then transfer the zipped file from your Downloads folder to your website Extensions folder and extract it.



The Linelab Child template, called **demo**, has three folders. Click on the



templates folder which has a folder called **cassiopeia\_demo**. Click on this folder to see an html folder, an index.php file and a templateDetails.xml file.

cassiopeia_demo ▶	
Name	Size
▶ html	2 items
index.php	15.0 kB
templateDetails.xml	45.3 kB



Use the Bluefish Editor to open the the Linelab XML file. Select and delete the first seven lines to leave line beginning with copyright:

```
1
2 <copyright>(C) 2017 Open Source Matters, Inc.</copyright>
3 <description>TPL_CASSIOPEIA_XML_DESCRIPTION</description>
4 <positions>
5   <position>topbar</position>
6   <position>below-top</position>
7   <position>menu</position>
8   <position>cart</position>
9   <position>search</position>
10  <position>banner</position>
11  <position>top-a</position>
12  <position>top-b</position>
13  <position>top-c</position>
14  <position>main-top</position>
15  <position>main-bottom</position>
16  <position>breadcrumbs</position>
17  <position>sidebar-left</position>
18  <position>sidebar-right</position>
19  <position>bottom-a</position>
20  <position>bottom-b</position>
21  <position>footer</position>
22  <position>debug</position>
```

Leave this XML file open for a few minutes while we use our Joomla admin screen to create a new child template.

## Step #1 Create a news1 Child Template

From your administrator dashboard, go to **Templates Code**. Click on **Cassiopeia Details and Files** to edit it. Click **Create Child Template**. Give the Template a short name such as **news1**. Then use the drop down arrow to select the **Cassiopeia Default** Template Styles. Then click **Create Child Template**. Close the Template Edit screen. There are now two Cassiopeia templates:

Image	Template ▲	Version
	<a href="#">Cassiopeia Details and Files</a> <a href="#">Preview</a> <a href="#">Parent</a>	1.0
	<a href="#">Cassiopeia_news1 Details and Files</a> <a href="#">Preview</a> <a href="#">Child of Cassiopeia</a>	1.0

Click the Child template Details and Files to open it. Then click the **templateDetails.xml** file to open it.

## Step #2 Edit the child template templateDetails.xml file

Go back to your Bluefish editor and click Edit Select All, then Edit copy. This will place the Linelab XML file in your clipboard. In your new1 child template XML file edit screen, create a new line starting at Line 8. Then delete the rest of the default child XML file and paste the Linelab XML file into the workspace. Click Save but do not close this file.

You will see all of the default module positions beginning on Line 11. This includes two new module rows Linelab has added to their XML file. Scroll down to **Line 26** and use your keyboard to create a new blank line after the bottom-b module position. Copy Line 26 and paste it into the new row. Then change the row name on Line 27 from bottom-b to bottom-01.

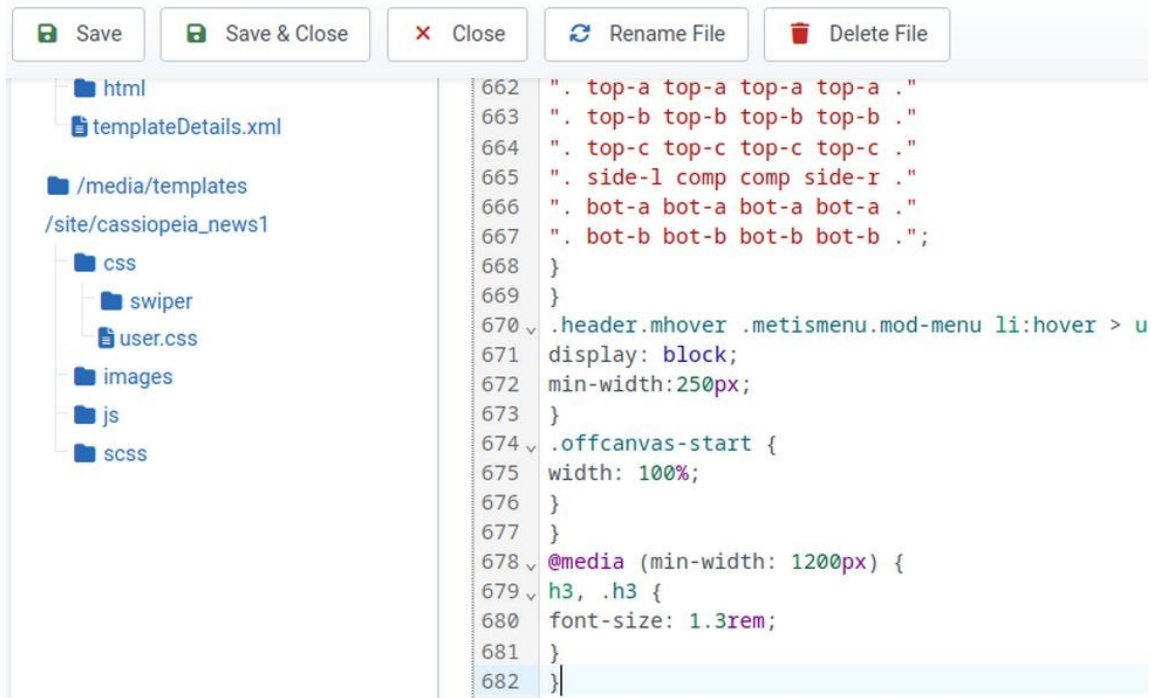
**<position>bottom-01</position>**

Then scroll to the end of the XML file and change the destination from **demo** to **news1**. Then save and close the XML file.

We will now create a **user.css** file. In the new1 child template code edit screen, click **New File** to bring up this screen :

For File Name, type **user**. For File Type, click on the **css** option. Also click on the **css folder** in the left column to select it. Then click **Create**. The user.css edit screen will appear. Save but do not close this file.

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Save the file but do not close it.

### Add our new bottom-01 row to both CSS grid layouts

Both grid layouts are near the end of our news1 child template user.css file. Copy and paste into the first grid on a new line below the bottom b row:

**". bottom-01 bottom-01 bottom-01 bottom-01 .";**

Then copy paste the same line into the second grid on a new line below the bottom b row (Line 668).

### Add styling to our new bottom-01 row

Linelab has added a new row called top-c which we will use to create our styles for our bottom-01 row. Scroll down to **Line 120 through 143** to copy and paste these 23 rows into a Writer document (I have condensed the lines to take less space and make them easier to read and copy:

```

.container-top-c > *{ flex: 1; margin: 0.5em 0;}
.container-top-c{ position: relative; grid-area: top-c;}
.topc{ position:relative; color: var(--cassiopeia-color-text-topc);
background-color: var(--cassiopeia-color-primary-topc);
/* background-image: linear-gradient(135deg, var(--cassiopeia-color-
primary-topc) 0%, var(--cassiopeia-color-hover-topc) 100%);*/

```

```

}

.topc:before{background-color: inherit; background-image: inherit;}

.topc a {color: var(--cassiopeia-color-link-topc);}

.topc a:hover,.topc a:focus { color: var(--cassiopeia-color-hover-topc);}

```

The lines in bold are just a comment which is not needed. We will therefore delete it and then copy and paste the other lines below, changing the top-c row names to bottom-01 row names.

```

.container-bottom-01 > *{ flex: 1; margin: 0.5em 0;}

.container-bottom-01{ position: relative; grid-area: bottom-01;}

.bottom01{ position:relative; color: var(--cassiopeia-color-text-bottom01);
background-color: var(--cassiopeia-color-primary-bottom01);}

.bottom01:before{background-color: inherit; background-image: inherit;}

.bottom01 a {color: var(--cassiopeia-color-link-bottom01);}

.bottom01 a:hover,.bottom01 a:focus {color: var(--cassiopeia-color-hover-bottom01); }

```

Make a new line starting at Line 177 to paste the 7 lines from above. Then **scroll down to Line 362** where you will find the following for the top-c row:

```

.container-top-c > .card{padding: 80px 30px 80px 0;}

.container-top-c > .card:last-child{padding: 80px 0 80px 30px;}

```

Create a new line at Line 363 and copy paste the above changing the top-c names to bottom-01. **Also reduce the padding as shown:**

```

.container-bottom-01 > .card {padding: 10px 10px 10px 10px;}

.container-bottom-01 > .card:last-child {padding: 10px 10px 10px 10px;}

```

Then scroll down to **Line 564** where you will see the following:

```

.bottoma .card-header{ text-align: center; padding: 20px 0;}

```

Create a new line at Line 568 and copy paste the above changing the bottoma names to bottom01. **Also reduce the padding as shown:**

```

.bottom01 .card-header{ text-align: center; padding: 10px 0;}

```

Next, scroll down to about **Line 620** where you will see this line:

```
.container-top-c > .card, .container-top-c > .card:last-child {  
padding: 80px 0; }
```

Enter a new line below this line and copy paste the above row then changing the top-c names to bottom-01. **Also reduce the padding:**

```
.container-bottom-01 > .card, .container-bottom-01 > .card:last-child {  
padding: 20px 0;}
```

Last, scroll down to about Line 650 where you will see:

```
.container-top-c { flex-direction: column; }  
.container-top-c > * { flex: 0 1 auto; }
```

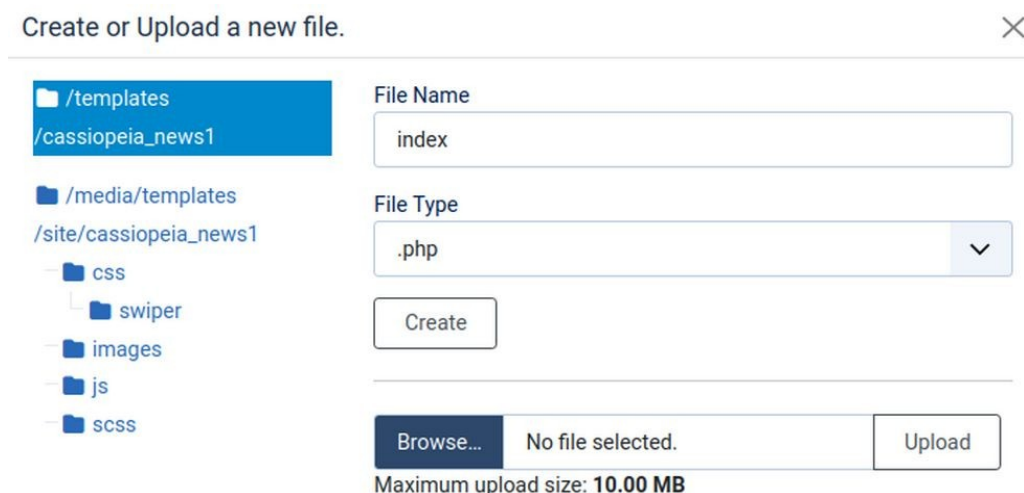
Enter a new line below this line and copy paste the above row then changing the top-c names to bottom-01.

```
.container-bottom-01 {flex-direction: column;}  
.container-bottom-01 > * {flex: 0 1 auto;}
```

Then save and close the user.css file.

#### Step #4 Create and edit the news1 child template index.php file

Click **New File** to add the index.php file. For File Name, type **index**. For File Type, select **php**. Also be sure to click the templates/cassiopeia\_news1 folder to place this new file in this folder.



The screenshot shows a file management window titled "Create or Upload a new file." with a close button (X) in the top right corner. On the left, a file tree shows the following structure:

- /templates (selected)
- /cassiopeia\_news1
- /media/templates
- /site/cassiopeia\_news1
  - css
  - swiper
  - images
  - js
  - scss

On the right, the "File Name" field contains "index". The "File Type" dropdown menu is set to ".php". Below these fields is a "Create" button. At the bottom, there is a "Browse..." button, a text field showing "No file selected.", and an "Upload" button. A note at the bottom states "Maximum upload size: 10.00 MB".



Then click Create. This will display the news1 index.php file edit screen. Click Save but do not close this file.

We next need to copy paste the entire **Linelab index.php file** into this news1 index.php file. In your Home computer file manager, open the Linelab folder and open the **templates** folder. Then open the **cassiopeia** folder and use your Bluefish editor to open the **index.php** file. Click Edit, Select All. Then Edit Copy to place it into your clipboard. Then paste it into your news1 child template index.php file and save but do not close the file. Scroll down to Line 87, make a new line and add the following just below bottomb: **'bottom01'**, Then scroll down to Line 331 and enter a new line. Copy paste this **just above the divide that is just above the footer**.

```
<?php if ($this->countModules('bottom-01', true)) : ?>

        <div class="grid-child container-bottom-01 bottom01">?php
echo $bgimage_class['bottom01'];?>" <?php echo !
empty($bgimage['bottom01'])?style="background:url('.
$bgimage['bottom01'].');"" : "" ?>>

<jdoc:include type="modules" name="bottom-01" style="card" />

        </div> <?php endif; ?>
```

Then save and close your news1 child template index.php file. Then save and close the child template.

### **Step #5 Add a custom module and place it in the bottom-01 position**

Go to **Content, Site Modules** and click New. Select a custom module and name it **News 1 Row Bottom 01**. Place it in the news1 child template **bottom-01** module position. Assign it to our Module Demo page.

### **Step #6 Assign the Module Demo Page to our Child Template**

From the Home Dashboard, click Templates, Styles. Then click on the Child **"copy of Cassiopeia Default"** template to open it. Click Menu Assignment and assign this template to our Module Demo page. Then click Save and Close. Then open a new browser window and clear the cache and view the page in the front end to confirm that it appears properly.



## Add the second and third module rows

Now that we have the first row of our News 1 Child Template made, we can copy and repeat this process to add the second and third rows. Because we have already created the child template, we only need 5 steps to add these two rows.

### Step #1 Edit the child template `templateDetails.xml` file

In your news1 child template XML file edit screen, scroll down to Line 27 and use your keyboard to create a new blank line after the bottom-01 module position. Copy Line 27 and paste it into the new row. Then change the row names to bottom-02 and bottom-03.

```
<position>bottom-02</position>
```

```
<position>bottom-03</position>
```

Then save and close the XML file.

### Step #2 Edit the news1 child template `user.css` file

We will open the news1 child template `user.css` file and scroll down to copy all the bottom01 row styles to create bottom02 and bottom03 row styles.

Scroll down to Line 174. Copy the 7 Bottom01 row lines:

```
.container-bottom-01 > *{ flex: 1; margin: 0.5em 0;}
```

```
.container-bottom-01{ position: relative; grid-area: bottom-01;} 
```

```
.bottom01{ position:relative; color: var(--cassiopeia-color-text-bottom01);  
background-color: var(--cassiopeia-color-primary-bottom01);}
```

```
.bottom01:before{background-color: inherit; background-image: inherit;}
```

```
.bottom01 a {color: var(--cassiopeia-color-link-bottom01);}
```

```
.bottom01 a:hover,.bottom01 a:focus {color: var(--cassiopeia-color-hover-  
bottom01); }
```

Make a new line at the end of the bottom01 lines and paste the 7 lines in. Change all of the bottom01 numbers to 02. Then make a new row at the end of the bottom 02 lines and paste the 7 lines in again. Change all of the bottom01 numbers to 03.

Then **scroll down to about Line 377** where you will find the following bottom01 row:

```
.container-bottom-01 > .card {padding: 10px 10px 10px 10px;}  
.container-bottom-01 > .card:last-child {padding: 10px 10px 10px 10px;}
```

Copy these two lines. Then create a new line and paste these lines in twice. Change the first two row numbers from 01 to 02 and the second two row numbers from 01 to 03.

Then scroll down to about Line 590 where you will see the following:

```
.bottom01 .card-header{ text-align: center; padding: 10px 0;}
```

Copy the bottom01 line. Then make a new line and paste the line in twice. Change the first row numbers from 01 to 02 and the second row numbers from 01 to 03.

Next, scroll down to about **Line 640** where you will see this line:

```
.container-bottom-01 > .card, .container-bottom-01 > .card:last-child  
{ padding: 20px 0;}
```

Copy the bottom01 line. Then make a new line and paste the line in twice. Change the first row numbers from 01 to 02 and the second row numbers from 01 to 03.

Last, scroll down to about Line 670 where you will see:

```
.container-bottom-01 {flex-direction: column;}  
.container-bottom-01 > * {flex: 0 1 auto;}
```

Copy these two lines. Then create a new line and paste these lines in twice. Change the first two row numbers from 01 to 02 and the second two row numbers from 01 to 03.

### **Add our new bottom-02 and bottom-03 rows to both CSS grid layouts**

Both grid layouts are near the end of our news1 child template user.css file. Copy and paste into the first grid on a new line below the bottom 01 row:

**". bottom-02 bottom-02 bottom-02 bottom-02 .";**

**". bottom-03 bottom-03 bottom-03 bottom-03 .";**

Then copy paste the same line into the second grid on a new line below the bottom 01 row. Then save and close the user.css file.

### **Step #3 Edit the news1 child template index.php file**

Open your news1 child template index.php file and scroll down to Line 88, make a new line and add the following just below bottom01:

**'bottom02',**

**'bottom03',**

Then scroll down to about Line 338 and enter a new line. Copy paste this **just above the divide that is just above the footer.**

```
<?php if ($this->countModules('bottom-01', true)) : ?>

    <div class="grid-child container-bottom-01 bottom01">?php
    echo $bgimage_class['bottom01'];?>" <?php echo !
    empty($bgimage['bottom01'])?style="background:url(
    $bgimage['bottom01'].');":" ?>>

<jdoc:include type="modules" name="bottom-01" style="card" />

    </div> <?php endif; ?>
```

Change all six of the numbers from 01 to 02. Then make a new line and paste it again. Change all six of the numbers from 01 to 03. Then save and close your news1 child template index.php file. Then save and close the child template.

### **Step #4 Add a custom module and place it in the bottom-02 position**

Go to **Content, Site Modules** and click New. Select a custom module and name it **News 1 Row Bottom 02**. Place it in the news1 child template **bottom-02** module position. Assign it to our Module Demo page.

Then duplicate the second module and name the third module News 1 Row Bottom 03. Place it in the news1 child template **bottom-03** module position. Assign it to our Module Demo page.

### **Step #6 Assign the Module Demo Page to our Child Template**

From the Home Dashboard, click Templates, Styles. Then click on the Child **"copy of Cassiopeia Default"** template to open it. Click Menu Assignment

and assign this template to our Module Demo page. Then click Save and Close. Then open a new browser window and clear the cache and view the page in the front end to confirm that all three modules appears properly in all three module rows.



### **Add module rows bottom04, bottom05 and bottom06**

We will add three more module rows and then check the result. Assuming it is OK, we will then repeat the process to add the final three rows.

#### **Step #1 Add Rows three at a time to the child template XML file**

Open the News Child template templateDetails.xml file. At Line 30, just above the footer position, create a new line. Then copy and paste the following three positions:

```
<position>bottom-04</position>
```

```
<position>bottom-05</position>
```

```
<position>bottom-06</position>
```

Then save and close the XML file.

#### **Step #2 Edit your child template user.css file**

Open your previous Writer document used to change line numbers in bold. Copy three row blocks of CSS into a new Write Document. Change the row numbers from 01, 02 and 03 to **04, 05 and 06**.

```

.container-bottom-04 > * {flex: 1; margin: 0.5em 0;}
.container-bottom-04 {position: relative; grid-area: bottom-04;}
.bottom04 {position:relative; z-index:0; color: var(--cassiopeia-color-text-bottom04); background-color: var(--cassiopeia-color-primary-bottom04);}
.bottom04:before{background-color: inherit; background-image: inherit;}
.bottom04 a {color: var(--cassiopeia-color-link-bottom04);}
.bottom04 a:hover,.bottom04 a:focus {color: var(--cassiopeia-color-hover-bottom04); }

.container-bottom-05 > * {flex: 1; margin: 0.5em 0;}
.container-bottom-05 {position: relative; grid-area: bottom-05;}
.bottom05 {position:relative; z-index:0; color: var(--cassiopeia-color-text-bottom05); background-color: var(--cassiopeia-color-primary-bottom05);}
.bottom05:before{background-color: inherit; background-image: inherit;}
.bottom05 a {color: var(--cassiopeia-color-link-bottom05);}
.bottom05 a:hover,.bottom05 a:focus {color: var(--cassiopeia-color-hover-bottom05);}

.container-bottom-06 > * {flex: 1; margin: 0.5em 0;}
.container-bottom-06 {position: relative; grid-area: bottom-06;}
.bottom06 {position:relative; z-index:0; color: var(--cassiopeia-color-text-bottom06); background-color: var(--cassiopeia-color-primary-bottom06);}
.bottom06:before{background-color: inherit;background-image: inherit;}
.bottom06 a {color: var(--cassiopeia-color-link-bottom06);}
.bottom06 a:hover,.bottom06 a:focus {color: var(--cassiopeia-color-hover-bottom06);}

```

**Paste these into your child template user.css file at Line 193 just above the footer.**

**Line 400 Add new lines:**

```

.container-bottom-04 > .card { padding: 10px 10px 10px 10px;}
.container-bottom-04 > .card:last-child{padding: 10px 10px 10px 10px;}

```



```
.container-bottom-05 > .card { padding: 10px 10px 10px 10px;}
.container-bottom-05 > .card:last-child{padding: 10px 10px 10px 10px;}
.container-bottom-06 > .card { padding: 10px 10px 10px 10px;}
.container-bottom-06 > .card:last-child{padding: 10px 10px 10px 10px;}
```

**Line 608 add new lines:**

```
.bottom04 .card-header{text-align: center;padding: 10px 0;}
.bottom05 .card-header{text-align: center;padding: 10px 0;}
.bottom06 .card-header{text-align: center;padding: 10px 0;}
```

**Line 660 add rows to the grid areas:**

```
". bottom-04 bottom-04 bottom-04 bottom-04 ."
". bottom-05 bottom-05 bottom-05 bottom-05 ."
". bottom-06 bottom-06 bottom-06 bottom-06 .";
```

**Line 679: add**

```
.container-bottom-04 > .card, .container-bottom-04 > .card:last-child{
padding: 20px 0;}
.container-bottom-05 > .card, .container-bottom-05 > .card:last-child{
padding: 20px 0;}
.container-bottom-06 > .card, .container-bottom-06 > .card:last-child{
padding: 20px 0;}
```

**Line 720: add**

```
.container-bottom-04 {flex-direction: column;}
.container-bottom-04 > * {flex: 0 1 auto;}
.container-bottom-05 {flex-direction: column;}
.container-bottom-05 > * {flex: 0 1 auto;}
.container-bottom-06 {flex-direction: column;}
.container-bottom-06 > * {flex: 0 1 auto;}
```

**Add to both grid layouts near the end of the user.css file. Note that**

**there is a semi-colon added to the last line only:**

```
". bottom-04 bottom-04 bottom-04 bottom-04 ."
```

```
". bottom-05 bottom-05 bottom-05 bottom-05 ."
```

```
". bottom-06 bottom-06 bottom-06 bottom-06 .";
```

Then save and close the user.css file.

### **Step #3 Add rows three at a time to the News1 Child Template index.php file**

Scroll down to line 88 and enter a new line to add the following three module rows just above the footer row:

```
'bottom04',
```

```
'bottom05',
```

```
'bottom06',
```

Then scroll down to Line 356 just above the closing divide and enter a new line to copy and paste the following three rows:

```
<?php if ($this->countModules('bottom-04', true)) : ?>
```

```
    <div class="grid-child container-bottom-04 bottom04"><?php  
echo $bgimage_class['bottom04'];?>" <?php echo !  
empty($bgimage['bottom04'])?style="background:url(  
$bgimage['bottom04'].');":?>>
```

```
        <jdoc:include type="modules" name="bottom-04"  
style="card" />
```

```
    </div>
```

```
<?php endif; ?>
```

```
<?php if ($this->countModules('bottom-05', true)) : ?>
```

```
    <div class="grid-child container-bottom-05 bottom05"><?php  
echo $bgimage_class['bottom05'];?>" <?php echo !  
empty($bgimage['bottom05'])?style="background:url(  
$bgimage['bottom05'].');":?>>
```

```
        <jdoc:include type="modules" name="bottom-05"  
style="card" />
```

```

        </div>

        <?php endif; ?>

    <?php if ($this->countModules('bottom-06', true)) : ?>

        <div class="grid-child container-bottom-06 bottom06">?php
echo $bgimage_class['bottom06'];?>" <?php echo !
empty($bgimage['bottom06'])?style="background:url(
$bgimage['bottom06'].);"";" ?>>

        <jdoc:include type="modules" name="bottom-06"
style="card" />

    </div>

    <?php endif; ?>

```

Save and close the index.php file.

#### **Step #4: Test the new positions to make sure they appear in the back end and display in the front end properly**

Go to **Content, Site Modules**. Duplicate an existing Custom Module or create a new one. Display it in the bottom-04 position. Then create a duplicate of this module and assign it to the bottom-05 position. Then create a duplicate of this module and assign it to the bottom-06 position and view it in the front end.

#### **Add module rows bottom07, bottom08 and bottom09**

We will repeat the above process to add the final three rows.

##### **Step #1 Add Rows three at a time to the child template XML file**

Open the News Child template templateDetails.xml file. At Line 33, just above the footer position, create a new line. Then copy and paste the following three positions:

```

<position>bottom-07</position>

<position>bottom-08</position>

<position>bottom-09</position>

```

Then save and close the XML file.

##### **Step #2 Edit your child template user.css file**

**Open your child template user.css file and add the final three rows at Line 215. Change row numbers from 04, 05 and 06 to 07, 08 and 09:**

```
.container-bottom-07 > * {flex: 1; margin: 0.5em 0;}

.container-bottom-07 {position: relative; grid-area: bottom-07;}

.bottom07 {position:relative; z-index:0; color: var(--cassiopeia-color-text-bottom07); background-color: var(--cassiopeia-color-primary-bottom07);}

.bottom07:before{background-color: inherit;background-image: inherit;}

.bottom07 a {color: var(--cassiopeia-color-link-bottom07);}

.bottom07 a:hover, .bottom07 a:focus {color: var(--cassiopeia-color-hover-bottom07); }

.container-bottom-08 > * {flex: 1; margin: 0.5em 0;}

.container-bottom-08 {position: relative; grid-area: bottom-08;}

.bottom08 {position:relative; z-index:0; color: var(--cassiopeia-color-text-bottom08); background-color: var(--cassiopeia-color-primary-bottom08);}

.bottom08:before{background-color: inherit;background-image: inherit;}

.bottom08 a {color: var(--cassiopeia-color-link-bottom08);}

.bottom08 a:hover,.bottom08 a:focus {color: var(--cassiopeia-color-hover-bottom08);}

.container-bottom-09 > * {flex: 1; margin: 0.5em 0;}

.container-bottom-09 {position: relative; grid-area: bottom-09;}

.bottom09 {position:relative; z-index:0; color: var(--cassiopeia-color-text-bottom09); background-color: var(--cassiopeia-color-primary-bottom09);}

.bottom09:before{background-color: inherit;background-image: inherit;}

.bottom09 a {color: var(--cassiopeia-color-link-bottom09);}

.bottom09 a:hover, .bottom09 a:focus {color: var(--cassiopeia-color-hover-bottom09);}
```

Scroll down to **Line 430 Add new lines:**

```
.container-bottom-07 > .card { padding: 10px 10px 10px 10px;}

.container-bottom-07 > .card:last-child{padding: 10px 10px 10px 10px;}
```

```
.container-bottom-08 > .card { padding: 10px 10px 10px 10px;}  
.container-bottom-08 > .card:last-child {padding: 10px 10px 10px 10px;}  
.container-bottom-09 > .card { padding: 10px 10px 10px 10px;}  
.container-bottom-09 > .card:last-child{padding: 10px 10px 10px 10px;}
```

#### **Line 640 add new lines**

```
.bottom07 .card-header{text-align: center;padding: 10px 0;}  
.bottom08 .card-header{text-align: center;padding: 10px 0;}  
.bottom09 .card-header{text-align: center;padding: 10px 0;}
```

#### **Line 693 add rows to the grid areas:**

```
". bottom-07 bottom-07 bottom-07 bottom-07 ."  
". bottom-08 bottom-08 bottom-08 bottom-08 ."  
". bottom-09 bottom-09 bottom-09 bottom-09 .";
```

#### **Line 720: add**

```
.container-bottom-07 > .card, .container-bottom-07 > .card:last-child{  
padding: 20px 0;}  
.container-bottom-08 > .card, .container-bottom-08 > .card:last-child{  
padding: 20px 0;}  
.container-bottom-09 > .card, .container-bottom-09 > .card:last-child{  
padding: 20px 0;}
```

#### **Line 767: add**

```
.container-bottom-07 {flex-direction: column;}  
.container-bottom-07 > * {flex: 0 1 auto;}  
.container-bottom-08 {flex-direction: column;}  
.container-bottom-08 > * {flex: 0 1 auo;}  
.container-bottom-09 {flex-direction: column;}  
.container-bottom-09 > * {flex: 0 1 auto;}
```

**Add to both grid layouts near the end of the user.css file. Note that**

**there is a semi-colon added to the last line only:**

". bottom-07 bottom-07 bottom-07 bottom-07 ."

". bottom-08 bottom-08 bottom-08 bottom-08 ."

". bottom-09 bottom-09 bottom-09 bottom-09 .";

Then save and close the user.css file.

### **Step #3 Add rows three at a time to the News1 Child Template index.php file**

Scroll down to line 88 and enter a new line to add the following three module rows just above the footer row:

'bottom07',

'bottom08',

'bottom09',

Then scroll down to Line 374 just above the closing divide and enter a new line to copy and paste the final three rows:

```
<?php if ($this->countModules('bottom-07', true)) : ?>
    <div class="grid-child container-bottom-07 bottom07">?php
echo $bgimage_class['bottom07'];?>" <?php echo !
empty($bgimage['bottom07'])?style="background:url(
$bgimage['bottom07'].);"" ?>>
    <jdoc:include type="modules" name="bottom-07"
style="card" />
    </div>
    <?php endif; ?>
<?php if ($this->countModules('bottom-08', true)) : ?>
    <div class="grid-child container-bottom-08 bottom08">?php
echo $bgimage_class['bottom08'];?>" <?php echo !
empty($bgimage['bottom08'])?style="background:url(
$bgimage['bottom08'].);"" ?>>
    <jdoc:include type="modules" name="bottom-08"
style="card" />
```



```

        </div>

        <?php endif; ?>

        <?php if ($this->countModules('bottom-09', true)) : ?>

            <div class="grid-child container-bottom-09 bottom09">?php
            echo $bgimage_class['bottom09'];?>" <?php echo !
            empty($bgimage['bottom09'])?style="background:url(
            $bgimage['bottom09'].');"' : ?>>

            <jdoc:include type="modules" name="bottom-09"
            style="card" />

        </div>

        <?php endif; ?>

```

Save and close the index.php file. Then close the News 1 Child Template Edit screen.

#### **Step #4: Test the new positions to make sure they appear in the back end and display in the front end properly**

Go to **Content, Site Modules**. Duplicate an existing Custom Module or create a new one. Display it in the bottom-07 position. Then create a duplicate of this module and assign it to the bottom-08 position. Then create a duplicate of this module and assign it to the bottom-09 position and view it in the front end.

Note: If you plan on adding Advertising Banners to your Home page to promote local events and local businesses, then you should add three more rows to your user.css file, your XML file and your index.php file. Call these rows **bottom10, bottom11 and bottom12**. We will leave this as a homework exercise.

#### **What's Next?**

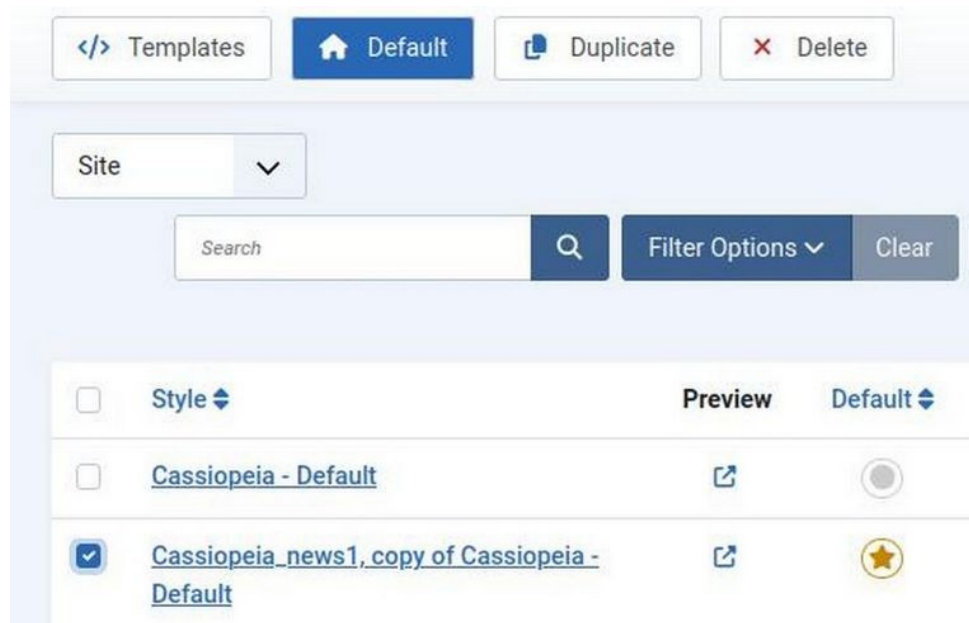
We are done adding our nine new News 1 Module rows. In our next article, we will review the final two steps to creating our News 1 Child Template. These are editing the XML file fields and adding language and slideshow files and folders to our News 1 template.

## 7.4 Customize our Child Template Layout

Until now, our News 1 child template has only been assigned to our Module Demo page. This allowed us to confirm the appearance of new module rows on our Module Demo page without affecting the rest of our website. Now that we have our module rows, it is time to assign our News 1 child template to our entire website in order to customize the layout of our News Home Page articles. In this article, we will review essential steps in converting our website from the Helix Template to the Cassiopeia based News 1 child template.

### Step #1 Convert our Community News website to the News 1 template

From the Home Dashboard, click **Template, Styles**. Then select the News 1 template version that includes “Copy of Cassiopeia”. Then click Default.



### Step #2 Create a News1 Header Module

Visit the front end. Unfortunately the Header module we used for our Helix template no longer displays because our News 1 template is using different module position names than our Helix template. In fact, the only thing that does display on our Home page are articles that have been assigned as Featured articles. These display in the Joomla Component area.

To fix the header module problem, first go to **Content Modules**. Click New to create a new Custom Module. Name it **Header News 1** and assign it to the **Top Bar** position.

The Top Bar position is one of four module rows that is included in the Cassiopeia Header area of our website. Importantly, it is outside of our Site Grid Container meaning that it is not affected by settings we apply to our site grid.



Hide the title and publish the module. Then click on the JCE Image Manager button to insert our News Header image we created earlier. Here is what our Module workspace looks like:

The screenshot shows the 'Module' workspace for a module titled 'Header News1'. The workspace has tabs for 'Module', 'Conditions', 'Notes', 'Options', 'Advanced', and 'Permissions'. The 'Module' tab is active, showing a 'Custom' section with a 'Site' button and a description: 'This module allows you to create your own Module using a WYSIWYG editor.' Below this is a WYSIWYG editor with a toolbar and a preview area. The preview area shows a header image with the text 'Washington Community News' and a tagline 'Serving our community by seeking the truth and speaking the truth'. To the right of the editor are settings for 'Title' (set to 'Hide'), 'Position' (set to 'topbar'), 'Status' (set to 'Published'), 'Ordering' (set to '1. Header News1'), and 'Description'.

Click on Conditions and add a condition to display the News 1 header image on all pages. Then click Save and Close.

### Step #3 Assign the Main Menu Module to the News 1 menu position

In **Content, Site Modules**, click on the Main Menu module to edit it. In the Position box, change the position to the **News 1 menu** module position and publish the main menu on all pages. Then click the Advanced Tab and change the Layout to **dropdown-metismenu**. In addition, change the Module Tag to **nav**. Then click Save and Close.

Module	Conditions	Notes	Advanced	Permissions
Advanced				
Menu Tag ID				
Menu Class				
Target Position <sup>?</sup>				
Layout			dropdown-metismenu	
Module Class				
Caching			Use Global	
Cache Time			900	
Module Tag			nav	

### Step #4 Hide the Cassiopeia Banner

Go to **Templates, Styles** and click the News 1 default template to edit it. Click the Advanced tab and change Brand from Yes to No. Then scroll down the screen and change Menu Hover from No to Yes. Menu Hover is an important feature added by Linelab that does not exist on the normal Cassiopeia Parent template.

Also click on the **Styles** tab to set background colors for each module row. Note that even our new module rows have background color settings.

Details
Advanced
**Styles**
Buttons and Card
Menu Assignment

Colour Theme

Color 1

#eeeeee

Color 2

#000033

Color 3

#88bbdd

Color 4

#dd99ff

Color 5

#aaffaa

Default

Background Color

Color 1

Color 2

Color 3

Color 4

Color 5

Text Color

Color 1

Color 2

Color 3

Color 4

Color 5

We will use Bottom Rows 1 through 10 to display our News Topic Categories. Each category takes two rows. The first row is for the Latest News articles in that category. The second row is to display a link to More News articles in that topic category. Both rows should have the same background color. We will use Color 3 for bottom rows 01 and 02 background colors. These are the **Community News** rows:

bottom-01

Background Image

☐ No

Background Color

Color 1

Color 2

Color 3

Color 4

Color 5

Default

Text Color

Color 1

Color 2

Color 3

Color 4

Color 5

Default

Link Color

Color 1

Color 2

Color 3

Color 4

Color 5

Default

Link Hover Color

Color 1

Color 2

Color 3

Color 4

Color 5

Default

bottom-02

Background Image

☐ No

Background Color

Color 1

Color 2

Color 3

Color 4

Color 5

Default

Then Color 4 for the Sports News Rows 3 and 4. Then Color 5 for the Business News Rows 5 and 6.

Below is a Table of all of our Topic Rows and Background colors:

Featured Articles (including Leading articles and Intro articles)	Module Row Background Color
Bottom A: Reserved for Banner ads and announcements	Color 1 Gray
Bottom B: Slider of all Latest articles from all categories	Color 1 Gray
Bottom 01: Latest Community News	Color 3 Blue
Bottom 02: More Community News Link	Color 3 Blue
Bottom 03: Latest Sports News	Color 4 Purple done
Bottom 04: More Sports News Link	Color 4 Purple done
Bottom 05: Latest Business News	Color 5 Green done
Bottom 06: More Business News Link	Color 5 Green done
Bottom 07: Latest School News	Color 3 Blue done
Bottom 08: More School News Link	Color 3 Blue done
Bottom 09 Coming Community Events	Color 4 Purple Need placeholder, then 3 articles and module
Bottom 10: More Community Events Link	Color 4 Purple now More News
Bottom 11: Latest Opinions	Color 1 Gray Need placehoolder, then 3 articles and module now use all slider
Bottom 12: Reserved for Banner ads	Color 1 Gray done

Then click Save and Close and view the result:





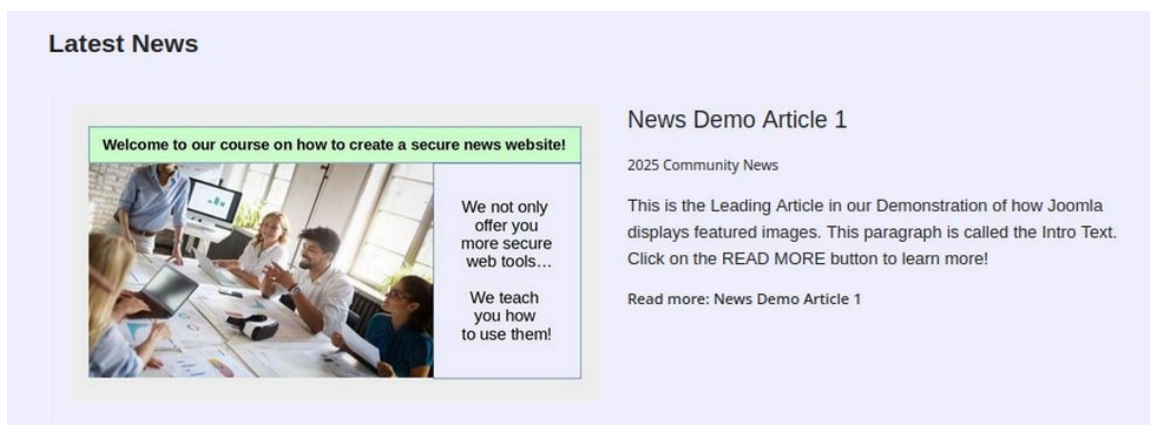
Hover over each of the top level menu items to confirm that the second level menu items appear without the need to click on the top level items. To change the width and the background color of our drop down menu items, add the following to our News 1 user.css file:

```
.header.mhover .metismenu.mod-menu li:hover > ul
```

```
{min-width: 250px; background-color: #AADDFF; font-size: 16px; font-weight: bold; }
```

## Step #5 Improve the Home Page Featured Articles Layout

In a previous article, we explained that with the Helix template, we could achieve a one column Float Left Leading Article Layout:



But we could not add any Intro articles. Now that we are using a child of the Casseopeia template, we are able to have both our one column, float left **Leading articles layout** and a two or three column, two or three article **Intro Article layout**. Go to the Menus, Main Menu and click on the Home Menu item to edit it. Then click the Blog Layout tab. Set it for 1 Leading article and 2 Intro articles with two columns for the Intro articles:

# Leading Articles

1

# Intro Articles

2

# Columns

2

# Links

3

Then view the result in the front end:



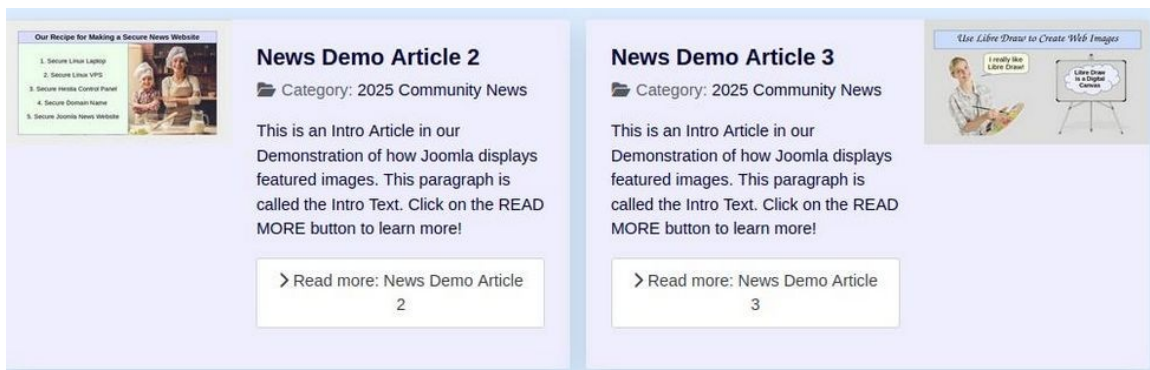
There is a lot of wasted space to the right of the Leading article. Use the following class for the leading article: **boxed image-left**

Here is the result:



The leading article is better but there is still a lot of wasted space in the Intro articles to the right of each image. Add this class to the Intro Articles:

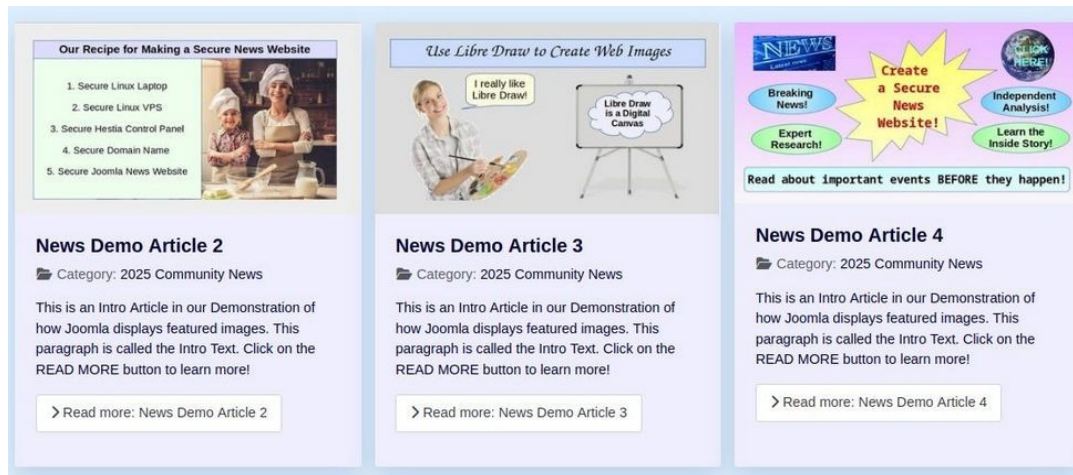
**boxed image-right image-alternate**



There is still a lot of wasted space below the Intro Images. Change the Intro articles to 1 column with alternating images to the right and left:



Here is what 3 articles in three columns looks like with no article classes added:



## Step #6 Fix the Leading article image display problem

There is still a problem with the Leading article image not displaying correctly:



The problem is that Cassiopeia CSS sets the text to take up 60% of the width and the image to only take up 40% of the width. We want just the opposite – for the image to take 60% and the article text to take 40%. We also want to change the background from white to light blue. These problems are solved by adding the following to our News 1 user.css file:

```
.image-left .blog-item .item-image {flex-grow: 1;flex-shrink: 0;flex-basis: 60%;}
```

```
.image-left .blog-item .item-content {flex-grow: 1; flex-shrink: 0; flex-basis: 40%;}
```

```
.boxed .blog-item {background-color: #eeeeff;}
```

```
.blog-items[class*=" columns-"] > div {background-color: #eeeeff;}
```



Here is the result:



## Step #7 Hide Pagination, Details and Parent Category

We want to eliminate anything on the Home page that will confuse readers with unclear navigation buttons or distract them from reading the articles they are most interested in. We will therefore hide the Pagination from the Featured articles area, and hide the word “Details” and hide the Parent categories from displaying – leaving only the child categories that our articles are actually in. We will also reduce the font size of our category titles.

### Hide pagination

When you have a lot of articles in a given category, a Pagination row is displayed below the Lead and Intro articles. We really just want to have a few Featured articles at any given time. But we also want to hide the box in case some past Featured articles have not been removed from the Featured area. In the Main Menu, click on the Home menu item to edit it. Then in the Blog Layout tab, scroll to the bottom of the page and Hide Pagination and Pagination Summary:

Pagination

Hide

Pagination Summary

Hide

## Hide the word Details

The word Details appears below the title and above the description. The problem is that it takes up vertical space. All we want is the child category to appear below the title and above the description. To hide the word Details, add this line to our News 1 user.css file:

```
dt { display:none !important; }
```

## Reduce the Category Blog Heading Font size

Add this line to our News 1 user.css file:

```
h2 {font-size: 22px; color: #000033;}
```

## Hide intro article details parent category

There are three places where options are set in Joomla. Global Options are set in the Content Articles screen by clicking on Options. You can modify the Global Options for each article by click on the Options tab in the Article Edit screen. However, both of these settings take a lower priority to Options set in the Menu Item Edit screen. Therefore, the best way to make sure the settings you want are applied is to edit the settings for each Menu Item. Here we want to hide the Parent category on the Home Menu item. So click on the Home menu item to edit it. Then click on the **Options** tab. We will **set the Parent Category to Hide** and set several other options to hide on this page but they will still appear on the Full Article page as long as they are set to appear in our Global Options settings:

Article Info Title	<input type="text" value="Hide"/>
Category	<input type="text" value="Show"/>
Link Category	<input type="text" value="Use Global (Yes)"/>
Parent Category	<input type="text" value="Hide"/>

Add the following to user.css to change the details area on our Full Article pages from a vertical to a horizontal display:

```
.article-info dd {padding: 0; display: inline-block; margin-right: 1em;}
```



This will change the area below the title from this:

## News Demo Article 3

Written by: David Spring

Category: 2025 Community News

Published: 03 December 2024

*Use Libre Draw to Create Web Images*



This is an Intro Article. This paragraph is called the Intro Text. Click on either the title or the image to learn more!

To insert a READ MORE button, place your cursor at the blank line just above this sentence. Then click on the READ MORE button at the bottom of this editor screen.

This is more content that is part of the Full Article but not visible on the Intro Article.

to this:

## News Demo Article 3

Written by: David Spring   Category: 2025 Community News   Published: 03 December 2024

*Use Libre Draw to Create Web Images*



This is an Intro Article. This paragraph is called the Intro Text. Click on either the title or the image to learn more!

To insert a READ MORE button, place your cursor at the blank line just above this sentence. Then click on the READ MORE button at the bottom of this editor screen.

This is more content that is part of the Full Article but not visible on the Intro Article.

### Step 8: Change the Cassiopeia template Standard Theme

Click on **Templates, Styles, News Template, Advanced tab** and you will see that the Cassiopeia template comes with two Color Themes. The Standard Theme is purple. The Alternative Theme is wine-red. If you want to change the standard theme to a different theme, you can add the following to your user.css file:

```
:root {  
    /* Make entire page background light blue. */  
    --body-bg: #eeeeff;
```

```

/* Make Text Black */
--body-color: #000000;

/* Adjust Cassiopeia Primary Color Scheme */
--cassiopeia-color-primary: #aaaacc;
--cassiopeia-color-link: #000055;
--cassiopeia-color-hover: #000099;
}

```

### Step 9: Change all article intro and full images to 400 pixels

The Cassiopeia template comes with the ability to float the Intro and Full article images to the left of the article description. This not only saves space, but improves readability. Click on each article to edit it. Then click on the **Images and Links** tab. Then in the Intro Image Image Class box, type **float-start**. Also type float-start in the Full Article Image Image class. Because the images will now float left, we can reduce the width of all of our full article images to 400 pixels as shown below:

Full Article Image

Full Article Image

l-secure-news-website-400.jpg

Select

Image Description (Alt Text)

No Description

☐

Image Class

float-start

We should also set all of our Intro article images to 400 pixels – with the exception of any articles we will use as Leading articles. Those should have an Intro Image set for 800 pixels as shown below so that they display correctly in our Leading article images box on our Home page:

Intro Image



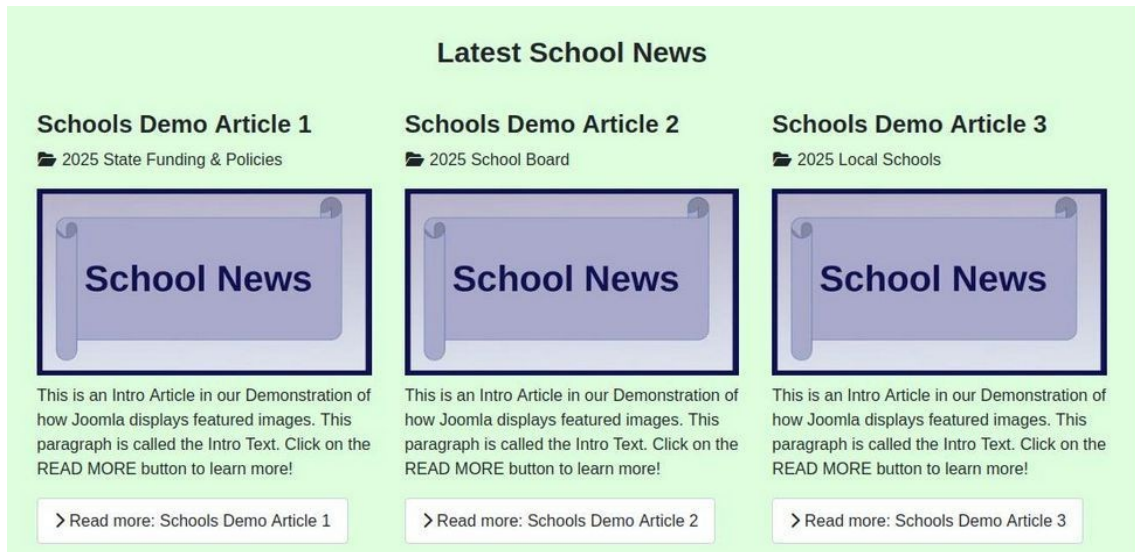
Here is what a 400 pixel full article image looks like on a Full Article page:



## Step 10 Move all of our existing Latest News modules from Helix to News 1 Module Positions

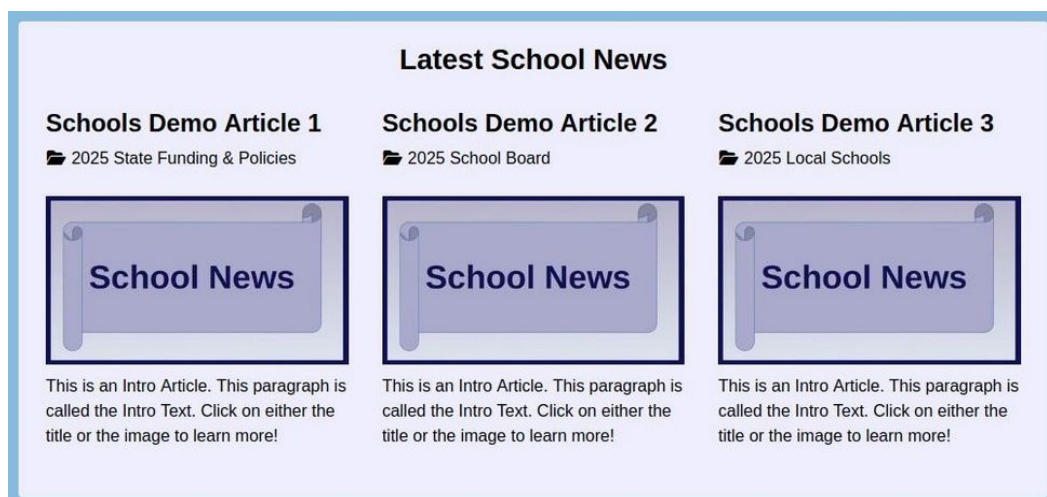
At the end of article 4.3, we used a special Joomla module called “**Articles**” to create several Latest News Topic Modules. These modules are listed in our Modules Table and include Latest Community News, Latest Sports News, Latest School News, Latest Business News and Coming Community Events. All of these News Topic category blogs are set to display in Helix module positions on our Home page. To change them to News 1 template module positions, go to **Content, Site Modules** and click on each one to change its module position.

Then view the result on our Home page:



## Step 11 Hide the READ MORE Links

Because most people know that they can click on either the image or the title to go to the actual article page, most News websites have opted to hide the READ MORE buttons. This reduces the amount of vertical space taken up by each article. To hide the READ MORE buttons globally for all articles, go to Content, Articles and click OPTIONS in the upper right corner. Then in the Articles tab, change the READ MORE link from Show to Hide. Then click Save and Close. In addition, click on each Demo article and change the text from "Click on the READ MORE button to learn more!" to "Click on either the title or the image to learn more!" Here is what the Latest School News topic row now looks like on our Home page:



## Step 12 Add Category Link Module Rows below each of our Topic



## Module Rows

Modules in different module positions in the Cassiopeia template get a “module position” class name in addition to the “card” class. For example, if you want to change the appearance of all modules in the bottom-b module position, then use the combination class: `.bottomb.card`. We will use this combination class to define background colors and font colors for each of our News Topic module rows displayed on the Home page of our News website and match the colors with Colors 3, 4 and 5 on our News Template Styles tab. Here is what we add to the end of our user.css file:

```
.bottom01.card .bottom02.card { background: #88bbdd; color: #000044;}  
.bottom03.card .bottom04.card { background: #dd99ff; color: #440044;}  
.bottom05.card .bottom06.card { background: #aaffaa; color: #004400;}  
.bottom07.card .bottom08.card { background: #88bbdd; color: #000044;}  
.bottom09.card .bottom10.card { background: #dd99ff; color: #440044;}  
.bottom11.card .bottom12.card { background: #eeeeee; color: #004400;}
```

Next go to Content, Site Modules and click New. Then click the Custom module type and name it **More School News**. Hide the title and assign it to the bottom-08 module position. In the JCE editor workspace, copy paste:

**CLICK HERE FOR MORE SCHOOL NEWS >>>>**

Select the text. Then click on the Link button to add a link to the School News menu item. Save the module. Then click the Conditions tab and click the Home page. Then save and close the Conditions screen and save and close the module. Make copies of the module to create Topic Link modules for More Community News, More Sports News, More Business News and Coming Community Events. Here is our Module table when we are done:


<a href="#">More Business News</a>	bottom-06
<a href="#">More Community Events</a>	bottom-10
<a href="#">More Community News</a>	bottom-02
<a href="#">More School News</a>	bottom-08
<a href="#">More Sports News</a>	bottom-04

Here is what the Topic Category link module row looks like below our Topic Category module row:

### Latest School News

#### Schools Demo Article 1


📁 2025 State Funding & Policies



This is an Intro Article. This paragraph is called the Intro Text. Click on either the title or the image to learn more!

#### Schools Demo Article 2


📁 2025 School Board



This is an Intro Article. This paragraph is called the Intro Text. Click on either the title or the image to learn more!

#### Schools Demo Article 3

📁 2025 Local Schools




This is an Intro Article. This paragraph is called the Intro Text. Click on either the title or the image to learn more!

[CLICK HERE FOR MORE SCHOOL NEWS >>>>](#)

### Step 13 Add a Leading article slideshow to the top of our Home Page


There are two problems with the current leading article display. The biggest is that only one or two leading articles can be placed at the top of our Home page at any given time. The second is that the display is static. It would be better if we can place a slideshow at the top of our Home page that can then rotate between several articles. We previously have added an **ALL NEWS slider** which is displayed near the bottom of the Home page and is rotating articles three at a time from several news categories:

### All News Slider




Sports Demo Article 3

This is an Intro Article. This paragraph is called the Intro Text. Click on either the title or the ...



Schools Demo Article 3

This is an Intro Article. This paragraph is called the Intro Text. Click on either the title or the ...



Business Demo Article 1

This is an Intro Article. This paragraph is called the Intro Text. Click on either the title or the ...



This slider is made with an excellent Joomla extension called JT Content Slider. We will make a new version of this slider and place it at the top of our Home page above the Main Component article. If we like the way it looks, we can use it to replace our single leading article area just by setting our Leading articles box to 0 articles.

Go to **Content, Site Modules** and click **New**. Then click on the **JT Content Slider**. For Title, type **Breaking News**. For position, select **Top C**. Then click Save. Then click on the Conditions tab and set it to only appear on our Home page. Then click on the **General Settings** tab. For Source Category, we can later create a category for articles to appear in this slideshow called Breaking News. For now, we will just use our four news categories. Change articles to display to four. Leave Featured articles to show. Set the width for 900, number of columns to one and number of rows to one. Show the Dots and Navigation arrows. Set Slide by to 4. Change Auto Transition to Yes. Reduce the **Dots bottom position** to 0 px. Increase Pause to 6000 (6 seconds). Set the right and left module padding to 10px.

Then click the **Article Properties** tab and hide the author and date. Increase the Title Limit to 25 words and increase the Word Limit to 600 characters. Hide the Show More category links. Then click on the **Thumbnail** tab and increase the Thumbnail width to 600 and change Keep Aspect Ratio to Yes. Change link image to Yes. Click the **Mobile** settings tab and change the columns for small screens to 1. Then click Save and close and view the result.

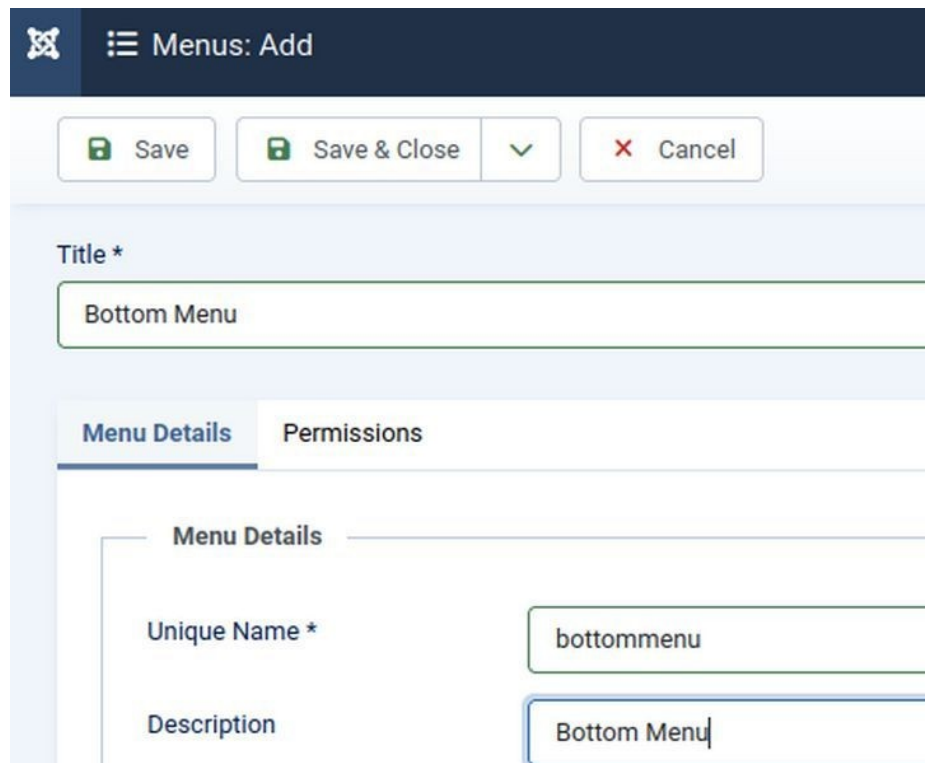


Add the following to the user.css file to improve the appearance:

```
.container-top-c > .card:last-child {  
padding: 20px 20px 0px 20px; margin: 0px;}  
.jt-cs .jt-introtext { font-size: 20px;}  
.jt-cs .jt-imagecover img { margin-right: 20px;}
```

### Step 14: Add a Bottom Menu

It is common to create a header at the bottom of your Home Page website. Layout with links to various pages related to your Community News such as an About Us page or an Advertise with us page. While this menu is created using the Joomla menu manager, the easiest way to style this bottom menu is with a separate menu extension. To create a new menu, go to **Menus, Manage, New:**



The screenshot shows the Joomla! Menu Manager interface for adding a new menu. At the top, there's a dark blue header with a Joomla logo and the text 'Menus: Add'. Below this is a light blue bar containing four buttons: 'Save' (with a green disk icon), 'Save & Close' (with a green disk icon and a checkmark), 'Cancel' (with a red X icon), and a small green checkmark icon. The main form area has a light blue background. It starts with a 'Title \*' label followed by a text input field containing 'Bottom Menu'. Below this is a tabbed interface with two tabs: 'Menu Details' (which is active and highlighted with a blue underline) and 'Permissions'. Under the 'Menu Details' tab, there's a section titled 'Menu Details' with a thin border. Inside this section, there are two labels: 'Unique Name \*' and 'Description'. The 'Unique Name \*' label is followed by a text input field containing 'bottommenu'. The 'Description' label is followed by a text input field containing 'Bottom Menu'.

Give the new menu a title, a unique name and a description. Then click Save and Close. Then in the right side of the Bottom Menu row, click **Add Module**. Name the module Bottom Menu. Hide the title and assign it to the News 1 footer module position. Leave the menu unpublished. Assign the module to all pages. Click the Advanced Tab and set the Layout for **dropdown-metismenu** and the Module Tag for nav. Then save and close the Bottom Menu module.

Create a few new articles such as an **About Us** page and an **Advertise with Us** page. Then go to Menus, Bottom Menu and create menu items for these articles.

Now we need a Menu Module extension to help us set up the appearance of our new menu. This is a simple module that will allow us to create and style one or more new menus on any page.

<https://extensions.joomla.org/extension/structure-a-navigation/menu-systems/ext-menu-reloaded/>

Here is the download page:

[https://github.com/Jefferson49/Joomla\\_module\\_ext\\_menu\\_reloaded/releases](https://github.com/Jefferson49/Joomla_module_ext_menu_reloaded/releases)

Download the module and install it by going to **System, Install, Extensions**. Once installed, go to **Content, Site Modules** and open the **Ext Menu Reloaded** module. Change the name from Ext Menu Reloaded to **Community News Links** and place it in the News 1 footer position. And assign the Bottom Menu to this module. Below we added a Module Class Suffix of **fullsquareblue**.

The screenshot shows the Joomla! administrator interface for the 'Ext Menu Reloaded' module. The 'Module' tab is selected, displaying the configuration form. The title 'Community News Links' is entered in the 'Title' field. The 'Menu name' is set to 'Bottom Menu', 'Menu direction' is 'Horizontal', 'Start level' is '1', and 'End level' is '-1'. The 'Show only active sub-menus' is set to 'No', and 'Highlight current menu item' is set to 'Yes'. The 'Module class suffix' is set to 'fullsquareblue'. On the right, the 'Title' is checked, 'Position' is 'footer', 'Status' is 'Published', and 'Ordering' is '1. Bottom Menu'. The 'Description' and 'Category' fields are empty.

Title *	
Community News Links	

Module	Conditions	Notes	Advanced	Permissions
<b>Ext Menu Reloaded</b>				
<b>Site</b>				
*Ext Menu Reloaded is a multi-tiered Joomla menu module. It's very customizable and supports horizontal and vertical direction.				
Menu name	Bottom Menu			
Menu direction	Horizontal			
Start level	1			
End level	-1			
Show only active sub-menus	No			
Highlight current menu item	Yes			
Module class suffix	fullsquareblue			
Title	<input checked="" type="checkbox"/> Show			
Position	footer			
Status	Published			
Ordering	1. Bottom Menu			
Description				
Category	- None -			

Click the **Conditions** tab and assign it to all pages. Then click Save and close and view the result.

Unfortunately, the module title does not display in the footer. The reason no module titles display in the Cassiopeia footer module row is that near the end of the cassiopeia index.php file, in the footer module row, is the following line which ends in style none:

```
<jdoc:include type="modules" name="footer" style="none" />
```

Meanwhile, all of the module rows that do display the title (for example, bottom-b) have this line which ends in style card:

```
<jdoc:include type="modules" name="bottom-b" style="card" />
```

So, go to Templates, Code and click on the child template to edit it. Then click on the index.php file and scroll down to the footer area to change footer style from **none** to **card**. Click Save and Close. Then view the result:



## Step 15 Keep Cassiopeia main menu from collapsing into hamburger menu

To prevent the Cassiopeia main menu from collapsing into a hamburger menu on smaller screens, we need to go to Content, Site Modules and open the main menu module. Then click on the Advanced tab and in the Layout box, choose the "**Dropdown-metismenu**" option instead of "Collapsible Dropdown." Then click Save and Close. The word collapse means that it will trigger the hamburger to appear too early. By contrast, the simple Dropdown option will display the menu items vertically on mobile devices without collapsing it into a hamburger icon. As we narrow the screen width, the main menu collapses into a Hamburger menu at 992 pixels. We would like to continue displaying the main menu to a smaller screen. Add the following to our user.css file:

```
@media (width >= 692px) {  
  .metismenu.mod-menu {display: flex;}  
  .container-header .mod-menu {flex-direction: row; flex: 1; }}
```

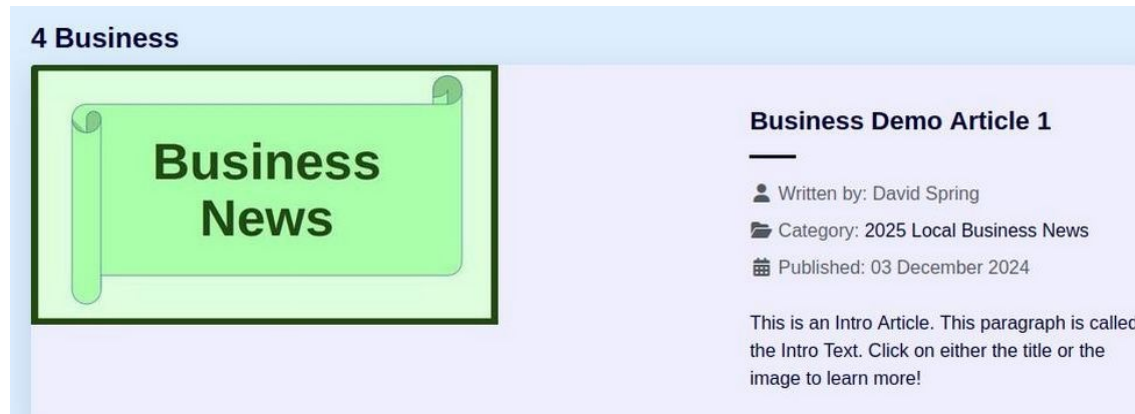
## Step 16 Remove the Government Topic Category

As the main menu continues to display on narrow screens, it becomes obvious that there are too many categories in the top menu. We will therefore eliminate the Government Topic Category and its sub categories from the Main Menu and simply include government news and election news as part of our Community News topics. This also includes removing the Government category and sub categories from our Content, Categories Table. Before we can delete a Category, we need to delete any articles we have placed in this category and then renumber the remaining Topic categories. We should also delete the government folders from our website images folder and from our Home Computer Article categories and Images categories and renumber the remaining folders.



## Step 17 Customize the Topic Category Main Page Headings

If you go to any top level Topic Category page, you will see that by default, it includes its category number:



We can customize the title of the Topic Category pages by editing its menu item. Click the **Page Display** tab and type in the title you want to appear in the browser tab and the Page Heading:

Details   Category   Blog Layout   Options   Integration   Link Type   **Page Display**

---

**Page Display**

Browser Page Title  

Show Page Heading  

Page Heading  

Then go to the **Menu Item Category** tab and hide the category name. Save and close the menu item and view the result:



Repeat for all Top 7 Level categories.

## Step 18: Prevent News Topic Modules from Collapsing into 2 columns



By default, the Cassiopeia template collapses our three News Topic modules into two columns at a screen width of about 1100 pixels. Using the browser CSS inspector, we learn that this collapse is caused by the following default CSS:

```
mod-articles.min.css
@container (width >= 768px) {
  .mod-articles-grid {
    grid-template-columns: 1fr 1fr;
  }
}
```

**1fr 1fr** means to collapse the page layout into two columns at any screen width above 768 px and below the next breakpoint which occurs at 1200px.

The solution to this problem is to add a third column to the CSS by adding the following to our user.css file.

```
@container (width >= 768px) {
.mod-articles-grid { grid-template-columns: 1fr 1fr 1fr; }}
```

### **Step 19: Reduce Margins and Padding of modules displayed on our News website Home page as much as possible**

Every pixel of space on our Home Page is very important. Padding refers to space between or content (words and images) and the module box they are in. Margins refer to the spaced between modules or boxes of content. We can use our web browser inspector to seek out and remove unnecessary margins and padding. For example, change ul to:

```
ul {margin-bottom: .1rem;}
```

### **What's Next?**

This concludes our customization of the News 1 Child Template Page Layout. In the next series of articles, we will review how to combine Reader Comments and Author Submissions with the Joomla User Group and Access Levels.

## **8 Author Submissions and Reader Comments**

For security reasons, it is important to control who has access to various areas in the backend of our News website. Joomla comes with User Groups and Access Levels to determine what each News Team member can see and do on our Community News website. It is therefore essential to understand how the Joomla User Management System works in order to create your own custom community news team. To help us understand this process, this chapter is divided into the following four sections.

8.1 Create a Community News Team

8.2 Joomla Access Levels

8.3 Finish and Test our Custom User Groups

8.4 Create a Reader Comments System

## 8.1 Create a Community News Team

For security reasons, it is important to control who has access to various areas in the backend of our News website. Initially, one person might take on the responsibility of creating a Community News website. However, as the Community News website grows, your News website team should eventually include several members. These include an **Editor** in charge of all content, **Reporters** who submit content to the Editor, a **Newsletter Coordinator** who run the Email Newsletters, an **Events Coordinator** who handles community events, and a **Tech Coordinator** who handles editing and updating the website. In addition, you may have two groups of readers. These might include featured authors who submit articles and readers who register so they can submit comments on articles and editorials on issues .

The purpose of creating a custom access control system is to allow different members of our network to access different parts of our website. To see how Joomla User Groups can be set up to manage a news team, we will create a Demo Community News team.

### #1 Define our Demo Community News Team Members

A typical community news team consists of at least three groups:



Only a small group of people should have access to the back end of the website – and even then, they should only have access to the specific tools in the back end that they need to administer the website. We will cover

these administration tools, such as the newsletter and events components, in a later chapter. These administrators will be added directly as Joomla administrators using the Joomla Administrator Control Panel User Manager.

The remaining two groups are normal members and special members.

**Normal members** merely need to register in order to post comments, submit editorials, submit events and receive Newsletters.

**Special Members** register with the same Member Registration form as Normal Members. However, they are given access to a Special Members menu which allows them to submit and edit their own articles. Both Special and Normal Members access their group functions by logging into the front end of the website. But they see different menu items when they log into the front end of the website. Neither Special Members or Normal Members ever need to log into the back end of the website. They therefore do not need to be using a Linux computer.

### **Administrators added via the Joomla Back End User Manager**

Those with access to the back end of the website should get training in website security. In particular, they should only use a Linux computer to log into the back end of the website and never use a Windows or Apple computer – as using these insecure computers might allow hackers to access the back end of our website. It is also best to have more than one person able to perform the same task in the back end – in case a task needs to be done right away. This is why each of the following positions should be regarded as the leader of a team rather than the sole person responsible for carrying out the needed tasks.

Our Demo Community News Team will be led by a five members. These are an Editor and a Tech Coordinator – both of whom will have access to the entire backend of the website. The Events Coordinator, Newsletter Coordinator and Reporters will each have limited access to just a few areas of the backend of our website.

Here is a brief summary of the roles of these five positions and how the areas of the website each position needs access to.

**Managing Editor...** The Managing Editor will not only oversee all articles and editors but also manage all Banner Ad funds and Community Event Banner ads as well as making payments to any reporters or Tech team members. They also manage the community news bank account and

submit taxes and other forms as needed.

**Events Coordinator...** The Events Coordinator is the contact person for all community events. This person will **post all events on the website community events calendar** and provide a list of all coming events to the Newsletter Coordinator. The Events Coordinator will need access to the Events section of our News website.

**Newsletter Coordinator...** The Newsletter Coordinator will write and email newsletters about new articles and coming events. The Newsletter Coordinator will also update the list of subscribers and **need access to the Newsletter section of our News website.**

**Tech Coordinator...** The Tech Coordinator will be responsible for building and running the community news website. This will include the Membership Registration System, the Newsletter system and the Events Calendar system. The Tech Team Coordinator will also lead the Tech Team which will train group members on how to run various sections of the community network website. **The Tech Coordinator will need access to all areas of the website.**

**Reporter(s)...** Each reporter can submit and edit articles on the backend of the website. Reporters might be allowed to approve posting of articles submitted by featured authors. Eventually, there may be different reporters for different topics such as a Sports Reporter, a Schools Reporter and a Business Reporter.

## **#2 Create a Table of Our Demo Network Members**

This table provides a summary of all members including the 5 administrator members, 2 Featured Authors and 2 General Members. To register on our website, each of these people will need a Name, a Username, a Password and an Email Address.

While we could use dummy email addresses such as Chair1 at example dot com, it is better to use actual email addresses, all associated with our community network domain name so we can see how the actual process works. In a moment, we will explain how to create Demo Domain Related Email addresses. For now, we will use the example

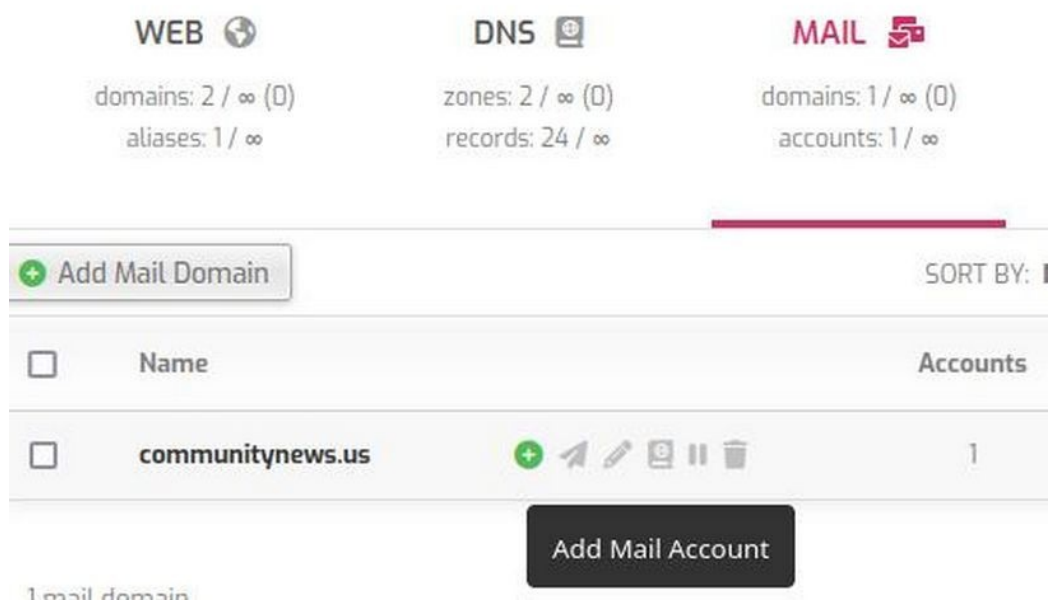
[editor@communitynews.us](mailto:editor@communitynews.us)

ID	Name	Username	Demo Email
01	Editor	editor	editor@communitynews.us

02	EventsCo	eventsco	events@communitynews.us
03	NewsletterCo	newsletterco	newsletter@communitynews.us
04	TechCo	techco	tech@communitynews.us
05	Reporter	reporter1	reporter1@communitynews.us
06	Author1	author1	author1@communitynews.us
07	Author2	author2	author2@communitynews.us
08	Member1	member1	member1@communitynews.us
09	Member2	member2	member2@communitynews.us

### #3 Create Demo Domain Related Email addresses

Before we create these accounts in our News website database, we need to first set up their domain related email addresses. To do this, log into your Hestia Admin panel and go to the Community News website User panel. Then click Mail.



Community News dot us currently has one email address account. Click on the plus sign to create another one:



## Add Mail Account

Domain

communitynews.us

Account

editor

Password 

|













Your password must have at least:

- 8 characters long
- 1 uppercase & 1 lowercase character
- 1 number

Advanced Options

In the Account box, type **editor**. Then add a password you will remember. Note: Hestia passwords must have at least 8 characters and at least 1 upper and lower case letter, at least 1 digit and at least 1 non-alphanumeric character such as \*. Create your own passwords. These passwords should be changed by the actual user.

Click **Advanced Options**. In the **Forward To** box, type in your normal email address so that all mail sent to this user is forwarded to you. Then click Save, Back and Back again. Then click Add Mail Account. Repeat this process until all 9 email accounts are created.

<a href="#">Add Mail Account</a>	<a href="#">Edit Mail Domain</a>	SORT BY: NAME 			Apply to selected 	
Name	Disk	Quota	Aliases	Forwarding		
author1@communitynews.us	0.00 mb	∞				
author2@communitynews.us	0.00 mb	∞				
david@communitynews.us	1.00 mb	∞				
editor@communitynews.us	0.00 mb	∞				
events@communitynews.us	0.00 mb	∞				

Then in the upper right corner, click on the arrow to go back to the admin panel. Then click on it again to log out.

**#4 Use the Joomla Control Panel User screen to create new Joomla User accounts for our 5 Demo board members.**

Log into your Joomla control panel and click Users, Manage. Then click **Options** in the upper right corner. Then click **Password Options** and reduce the Minimum Password Length from 12 to 8. Then click Save and Close. Then click New.

Type in the Name, Username, Password and Email address of the Editor and then click Save and New. Repeat for the other 4 News Admin Team members. Each new member will receive an email letting them know that they are now a registered member of our network. Here is our list of our Demo News Team Joomla Users:









Name ▲	Username ▲	Enabled ▲	Activated ▲	User Groups
<a href="#">Editor</a> <a href="#">+ Add Note</a>	editor	✓	✓	Registered <a href="#">Permissions</a>
<a href="#">EventsCo</a> <a href="#">+ Add Note</a>	eventsco	✓	✓	Registered <a href="#">Permissions</a>
<a href="#">NewsletterCo</a> <a href="#">+ Add Note</a>	newsletterc o	✓	✓	Registered <a href="#">Permissions</a>
<a href="#">Reporter1</a> <a href="#">+ Add Note</a>	reporter1	✓	✓	Registered <a href="#">Permissions</a>
<a href="#">TechCo</a> <a href="#">+ Add Note</a>	techco	✓	✓	Registered <a href="#">Permissions</a>

Note that all of these Demo Members have been assigned to a User Group called **Registered**.

The Registered User Group is allowed to log into the front end of the website and see any menu items assigned to the Registered group. But the Registered Group is not allowed to log into the back.

## #5 Look at the List of Default Joomla User Groups

Click on **Users, User Groups** in the Top Menu.

Group Title ↕	Permissions	✓ Enabled Users
<a href="#">Public</a>		0
- <a href="#">Guest</a>		0
- <a href="#">Manager</a>		0
: - <a href="#">Administrator</a>		0
- <a href="#">Registered</a>		5
: - <a href="#">Author</a>		0
: : - <a href="#">Editor</a>		0
: : : - <a href="#">Publisher</a>		0
- <a href="#">Super Users</a>		1

By default, there are 9 Joomla User groups. Currently, there are 5 members in the Registered group and 1 member in the Super Users group. Before we add our custom News Team User Groups, let's look at what each of these existing groups can do.

## #6 Review the Default Joomla User Groups

Joomla uses groups as a way to assign different sets of permissions to different group members to view different pages and do different tasks on those pages . Put another way, **a group is a collection of users who all share the same set of permissions.** As a super user, you can assign any member to any number of User Groups.

### Groups control what you can see and what you can do

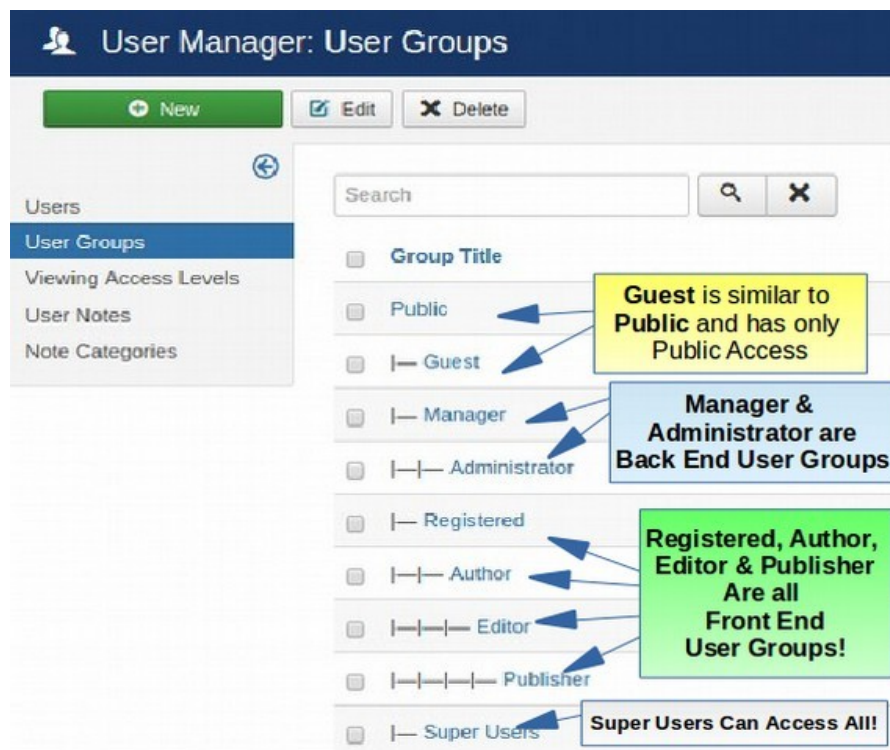
The Joomla User Management system is actually two separate systems. One is an **Access** system that controls what website pages group members can see. The other is a **Permissions** system that controls what actions group members can do.

### Back End versus Front End Groups

In addition to viewing certain pages and taking certain actions, access control for viewing and doing can be divided into the **front end** viewing and doing versus **back end** viewing and doing.

<b>View Pages in the Front End</b> (Such as public pages versus pages only for registered users)	<b>Take Actions in the Front End</b> (Such as creating an article in the front end)
<b>View Pages in the Back End</b> (Viewing the Article Manager)	<b>Take Actions in the Back End</b> (Create an article in the back end)

Some people think of access control as simply limiting what pages a person can see on the front end of a website. The public sees only some of the pages. Registered Users see more pages in the front end. The Super User sees all the pages in the front end and back end of our site. But what a person can do matters just as much as what they can see. Joomla has one set of User groups for the Back End and another set of User groups for the front end:



Note that Manager and Administrator are back end user groups while Registered Author, Editor, and Published are Front End User Groups.

## Back End User Groups

These two groups are followed by two groups, called Manager and Administrator with (limited) access to parts of the back end of our website. Back end groups can log into the back end of our website via the sitename/administrator URL for our website.

**Managers** can create, edit, publish and delete all articles on the back end of our site. This makes them similar to the Publisher (Front End) Group. Managers also have access to the Media Manager and Contacts components in the back end of our website.

**Administrators** can do everything managers can plus they can create new users, manage group privileges and install extensions. They have access to nearly every part of our website except Global Configurations and the Template Custom Edit screen. The only group that can do more than Administrators is the Super User group.

### **Four Front End User Groups**

The remaining six user groups only have access to the front end of our site.

**Registered Users** can view menu items and articles that are set for Registered User access – but only after they have logged in. Registered means pages that can be viewed by anyone who has filled out the Registration form for our website – and therefore become a member of our community network. Members of this group need to log in to our website after registering in order to see pages on the website intended only for Registered members. All one needs to become a Registered Member is to fill out the registration form with a unique email address and then be approved by an administrator.

**Authors** have all the permissions of Registered Users. Plus they can create new articles and edit the articles they have written (after they have logged in to the front end of the website). Authors and all other groups except Public and Registered are assigned by the Super User of the website.

**Editors** have all the permissions of Authors. Plus they can edit all articles written by anyone – even unpublished articles.

**Publishers** have all the permissions of editors. Plus they can publish articles. However, they cannot create menu items. So unless an article has been assigned to a category, it will not be viewable even after it is published – until a super user creates a menu item for it.

**Super Users** can create menu items and control any part of the website including adding or deleting any other Super User! The first super user was created when our Joomla website was created. The first super user is considered the Site Owner.

## Parent and Child Groups

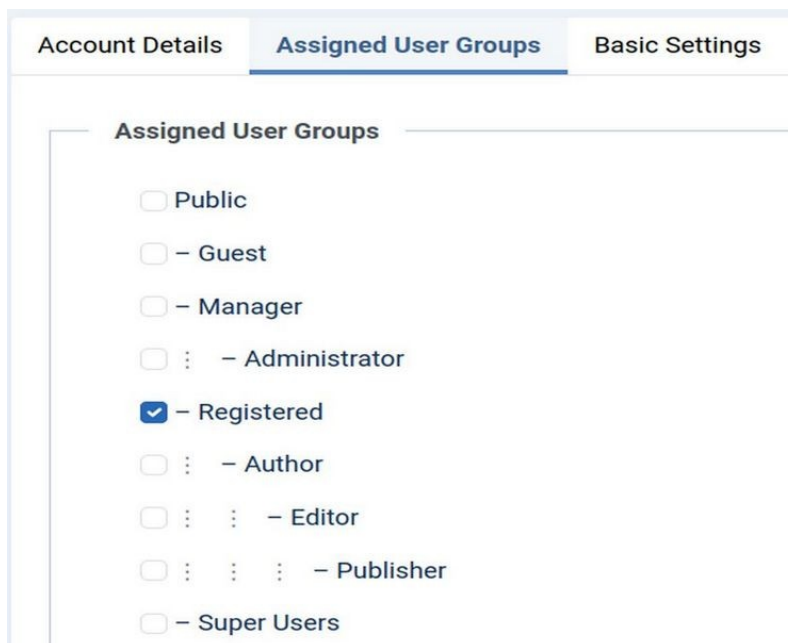
Note that there is only one group which does not have a dash in front of its name. This group is called Public. Public is the group with the least amount of Permissions. By default, any menu item or article we create can be viewed by the public. Groups with a single dash to the left of their name are called a “child” of the Public group. The four groups with a single dash are called Guest, Manager, Registered and Super User. These groups can see and do everything the Public group can do. Plus they can see and do more. Children can always do more than their parents.

## #7 Assign News Team Members to User Groups

We created email addresses for 9 News Team Members and registered 5 Members. We will now assign one of these 5 members to an additional default user group to see how the default Joomla User Management system works. Then in the next article, we will review how to use Joomla Access Levels in combination with Joomla User groups. We will then create a new custom user group called **Featured Authors** which we will use to give special permissions to our Featured Author News Team members.

## #8 Assign the Newsletter Coordinator to the Author User Group

To better understand how the default Joomla User Management system works, log in as a Super User and click on the Users menu item. Then click on the **Newsletter Coordinator** to open the Edit screen. Then click on the **Assigned User Groups** tab:



The screenshot shows the Joomla! User Management interface. At the top, there are three tabs: 'Account Details', 'Assigned User Groups' (which is selected and highlighted with a blue underline), and 'Basic Settings'. Below the tabs, the 'Assigned User Groups' section is displayed. It contains a list of user groups with checkboxes next to them. The groups are: Public, - Guest, - Manager, - Administrator, - Registered (which is checked with a blue checkmark), - Author, - Editor, - Publisher, and - Super Users.

Group Name	Assigned
Public	<input type="checkbox"/>
- Guest	<input type="checkbox"/>
- Manager	<input type="checkbox"/>
- Administrator	<input type="checkbox"/>
- Registered	<input checked="" type="checkbox"/>
- Author	<input type="checkbox"/>
- Editor	<input type="checkbox"/>
- Publisher	<input type="checkbox"/>
- Super Users	<input type="checkbox"/>



We can see that any registered user is automatically placed in the Registered User group. Check the box for **Author**. Then click Save and Close. This person now belongs to two groups – the Registered group and the Author group.



### #9 Make a Member Log In Article and Menu Item

Next go to **Content, Articles** to create a new article called **Community News Member Log In**. Type:

*If you are already a Community News member, use the form below to log into our Community News Member area. If you are not yet a member of our group, and you would like to be able to post comments and submit events or editorials, go to our Member Sign Up page to join our group!*

Then click Save and Close. Then go to **Menu, Bottom Menu, New** to create a new menu item for this article.

Then go to **Content, Site Modules** and click on the Log In Module to edit it. Change the title to Member Login. Put it in the News1 template Bottom 01 position. Click Publish. Then click on the Conditions tab. Then click the Member Log In Menu item. Then click Save and Close.

### Also make a Member Logout Menu Item

We need a way for logged in Members to log out. Go to Menu, Bottom Menu, New. For Type, select **Users, Logout**. For Title, type Member Logout. For Access, click **Registered**. Click Save and Close.

### #10 Make a Create Article Menu Item

Before this person can create any articles, we need to create a new special menu item for the front end of our website that is only visible to those above the rank of registered user. Click on the **Menus, Bottom Menu, New**. For Menu Item type, select **Articles, Create Article**. For title, type **Create Article**. For access, go to the lower right corner of the screen and assign this menu item to the “**Special**” Access group (which we will review later). Then click Save and Close.

### #11 Create a Featured Authors Information Category

We need to write an instructional article to help our featured authors create

their articles. So go to **Content Categories** and create a category called Featured Author Information. Here is the description: *This category includes articles to help our Featured Authors learn how to create and submit their own articles, events and editorials.*

## #12 Create a New article called Features Authors First Steps

We will eventually add our Featured Authors tutorial to this article. Assign the article to the Features Authors Information category.

## #13 Create a new Menu Items for our Featured Authors Category

Go to Menus, Bottom Menu and create new menu items of the type **Category Blog** for the Featured Authors Information category with Access to this menu item **only viewable by Registered Members**.

## #14 Adjust the JCE Editor to provide Front End Authors with their own Media Folders

Go to Components, JCE Editor, **Profiles**. Then click **Default, Setup tab, and scroll down to User Group**.

Add **Registered Users** to the list of permitted users. But delete **Managers, Administrators and Super Users** as we will soon give them a different JCE Editor. See image below.



Click Save. Then click on the **Editor Parameters** tab. We will leave URL Conversion set for relative URLs in order to make it easier to copy. But we will need to change it to Absolute URLs for the Administrator Editor for editing the Newsletter component we will be installing later. Then click Save and Close. We now have the default JCE Editor set up as a normal editor.

## Create a Second JCE Editor for Administrators

Next click on JCE Editor Profiles. Select the Default Editor and click Copy. This will add another editor called **Copy of Default** that is exactly like the Default Editor. Click Copy of Default to open it. Change its name to **Super User Editor**. Change Status to Published. Scroll down to User Group, **uncheck all groups except Manager, Administrator and Super Users**. See image below.

User Group

- Manager ✕

- Administrator ✕

- Super Users ✕

Then click Save and Close. We now have two published Editors.

Status	Title	Description
<input checked="" type="checkbox"/>	Default	Default Profile for all users
<input checked="" type="checkbox"/>	Super User Editor	Default Profile for all users

### Create a Personal Document Folder for each Registered Member

Next, click on the **JCE Default editor** to open it. Click on the **Editor Parameters** tab. Then click on the **File System** tab. At the top of this screen is the "File Directory Path". Set this box for **members/\$username**. (this is read members slash \$ user name).

Editor Parameters

Plugin Parameters

Filesystem

File Directory Path

members/\$username

Then click Save and Close. The Default Editor will become the editor for the entire community and will give each person their own uploads folder with their username on it. This folder will be in the root folder for the website. Meanwhile, the Super Admin will retain the normal upload folder called **Images** which is accessed in the Joomla back end via Content, Media Manager.

### Set the JCE Editor as the Default editor for your website

In Users, User Manager, click on your Super User name to edit the settings. Then click on **Basic Settings** tab and set the Editor to JCE Editor.

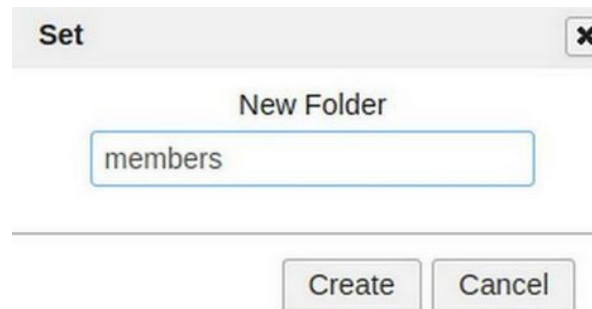
Also set the Help Site and Time Zone. Then click Save and Close. While both the Global Configurations and the Super User appear to be pointing towards the same JCE Editor, the Editor will direct Back End Administrators to the Super User Editor and Front End Members to the Default Editor.

### Install the Phoca Commander File Manager to Create a Community Folder

We need to add a File Manager to the Joomla Control Panel to make File Changes without the need to log into our server. To download Phoca Commander, go to this web page and click Download:

<https://www.phoca.cz/download/category/96-phoca-commander-component>

Then install Phoca Commander by going to **Systems, Install, Extensions**. Then go to Components, Phoca Commander. Then read the Warning and click OK. The Phoca Commander File Manager now appears. We will use Phoca Commander to create the **members** folder which will hold the images folders of all of our members. This file manager allows you to quickly create and edit files and folders without needing to log into your Hestia VPS. The File Manager opens at the website root folder. Click **F7 New Folder** to add a new folder. Then type the word **members** with all lower case letters in the empty box.



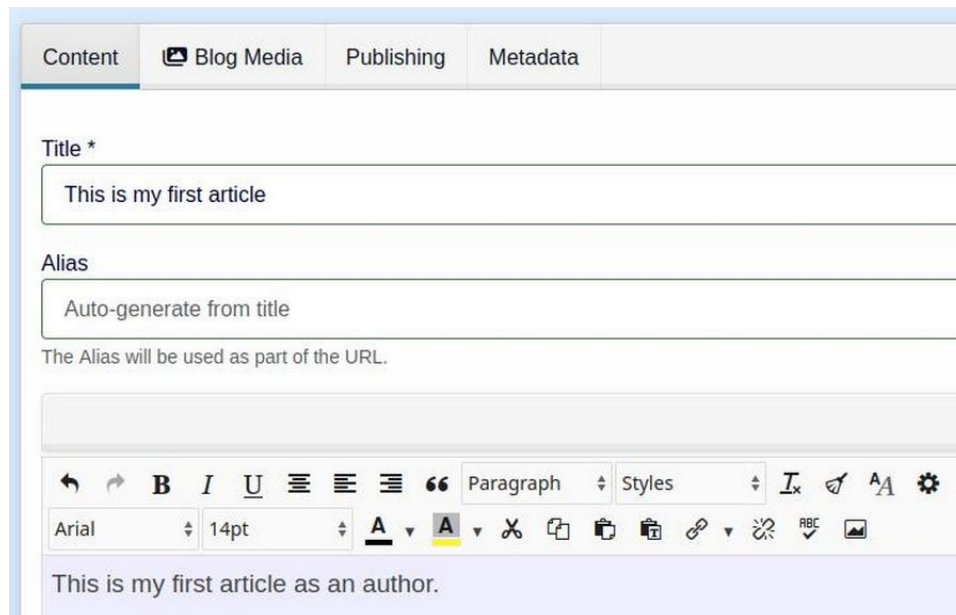
Click **Create**. Then exit the file manager by clicking on any menu item in the top menu. Now, when a member adds an image to their profile page, the JCE Editor will automatically add a new folder in the members folder using the username of the group member.

### #15 Log in as the Newsletter Coordinator to create a new article

Open a new browser tab, go to our Community News Home page and click on the Log In menu item in the Bottom Menu. Then log in as the Newsletter Coordinator. Their username is newsletterco.

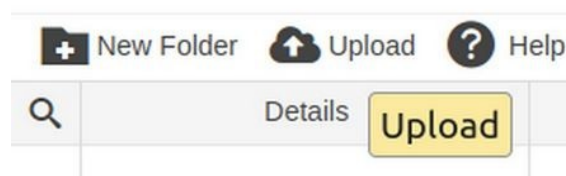
You will now see a Menu Item on the Bottom Menu that says **Create**

**Article.** Click on it to bring up the Article New screen. Give the article a Title such as **This is my first article**. Then type some text into the Editor screen such as This is my first article as an author.

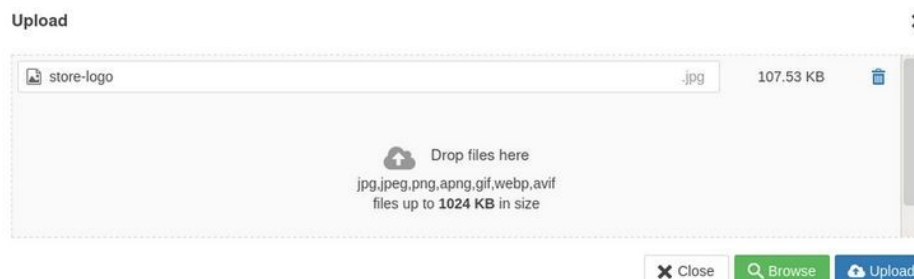


The screenshot shows the 'Content' tab of the JCE editor. It has a title field containing 'This is my first article' and an alias field set to 'Auto-generate from title'. Below these is a rich text editor with a toolbar and the text 'This is my first article as an author.' The tabs at the top are 'Content', 'Blog Media', 'Publishing', and 'Metadata'.

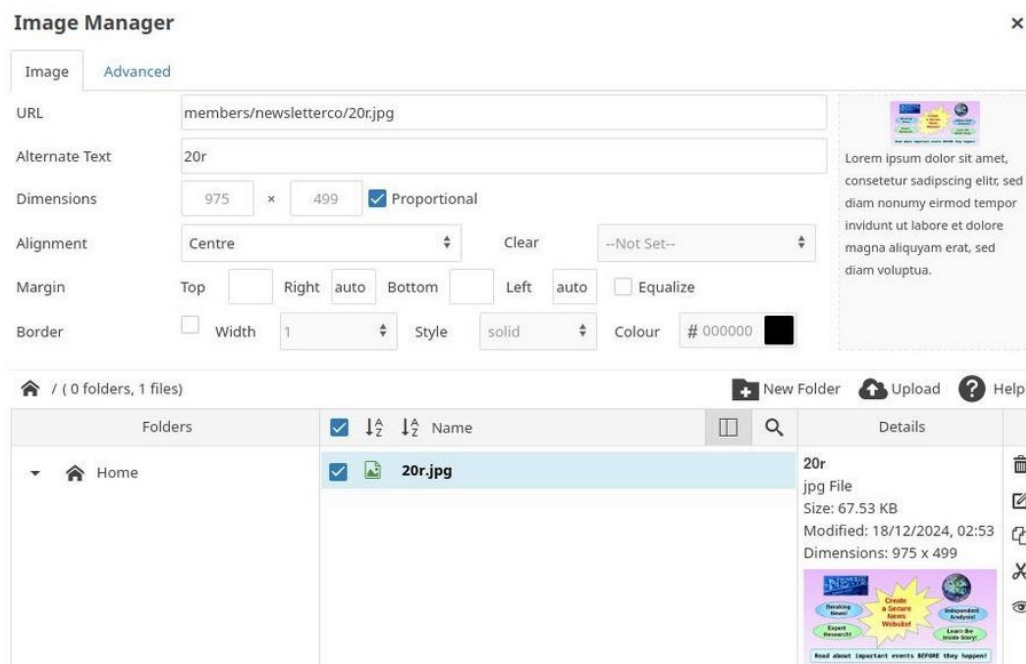
Let's see how well the JCE editor Media folder creation function works. First type two or three sentences. Then create a new line between the sentences and place your cursor at the beginning of this new line. Then, to add an image to the article, click on the JCE editor Picture icon. If the JCE editor is set up properly, you will not see any images or image folders. The only folder you will see is called Home. In the JCE Images Manager, click on the **Upload** icon which is just above the Details area:



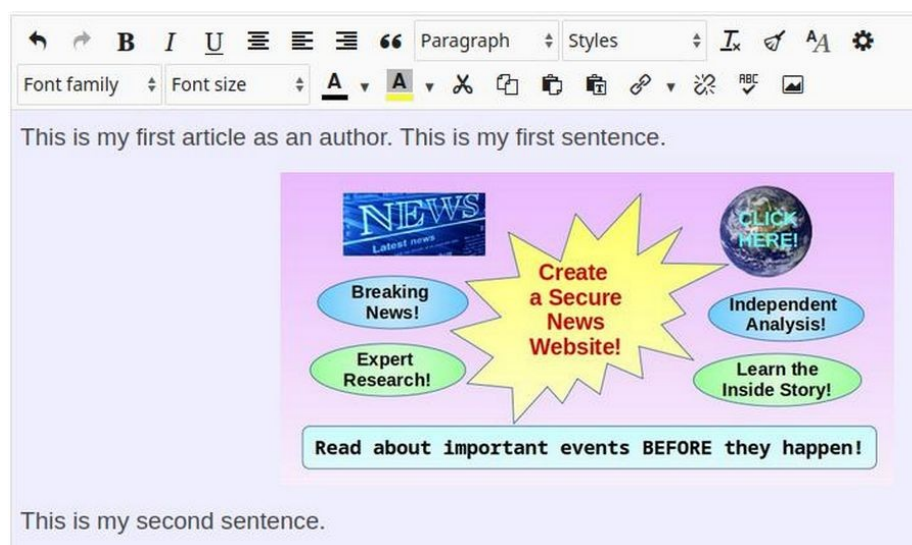
Then open your Home computer file manager and select an image which is under 100 kb and drag it into the JCE Upload box.



Then click Upload. Then click on the file to the right of the checkmark to see and adjust its properties:



In the Dimensions box, reduce its width from 975 to 500 pixels. Then click the **Insert** button in the lower right corner of the screen.



Click Save and Close at the bottom of the screen. This will close your article and return you to the Home page. A popup will appear that says: **Article Submitted.**

In addition, an email will be sent to the Site Administrator letting them know that an article was submitted and is waiting for approval:



## [Washington Community News] - New Article



### #14 How to Edit Submitted Articles

Let's say you want to add more information, images, videos or links to your article. Sadly, if you go back to Create Article, Publishing tab and select your category, the article is not shown. This is because it has not yet been published. Log into the control panel as the super user and click on **Content Articles** where you will see the unpublished new article. Click it to review it to make sure the content is OK. Then select it and click Publish. Then log into the front end as the person who created the article (in this case, the newsletter coordinator). Go to the category where you placed the article and you will see the article with an Edit button to the right of it. Click on the Edit button to open the article to editing.

Title	Author	Edit Article
This is my first article	Written by: NewsletterCo	<a href="#">Edit</a>

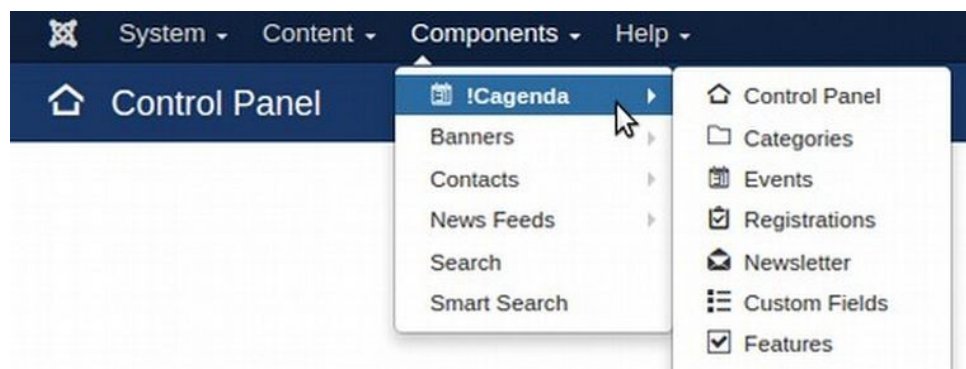
Next, assign a different member such as the Events Coordinator to be an author. Then log in as this member. When they go to the same category, they can see the article but not edit it. Sadly, an author can not delete an article. To delete your article, you will need to contact someone who is a super user or was the person who published the article.

Next, log in as a super user and assign a user to the Publisher user group. Then click on Create Article in the Bottom Menu. Then give the new article a Title and some text. Then click on the Publishing tab. We can assign this article to a category, set the Status to Published and select the Start and End dates for this article. Click Save. Then click on the Menu Item for the category the two articles were assigned to.



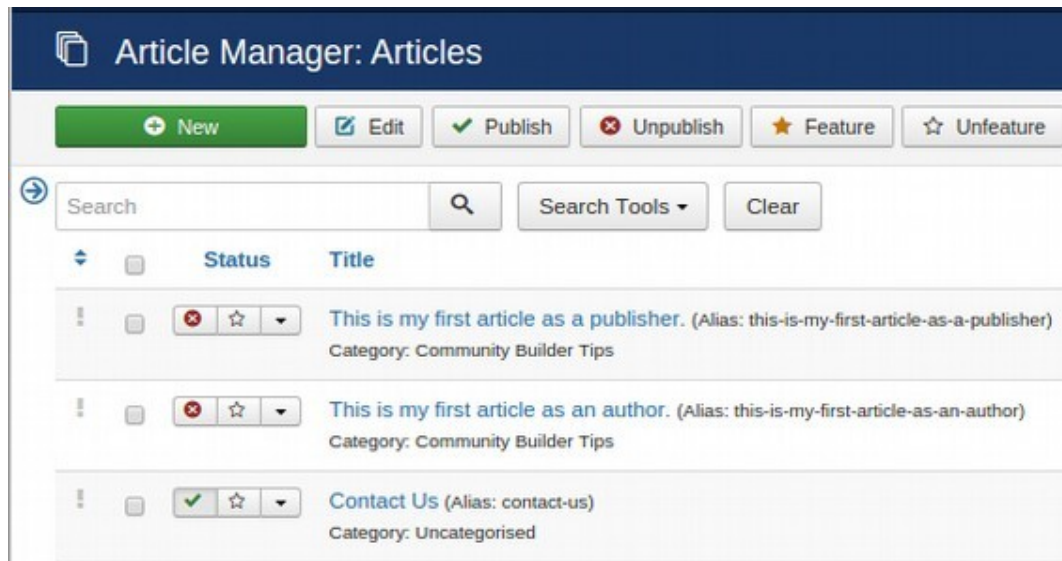
**#15 A person assigned to the Publisher group can edit either their own articles or anyone else's articles.** Click on the Edit button for the unpublished article. Then change the status of the article from Unpublished to Published. Then click Save. Then click on the Category Menu Item to view the article again. Both articles are now published. Click on the article to edit it again. This time click on Cancel. However, **members of the Published group cannot cancel articles.** Click on Edit again. This time, unpublish and then save both articles. Next log in as a super user and assign a user to the role of a Manager. Then log into the front end of our website. Then click on Create Article. Then click the Publishing tab. You will see that a member of the Manager group has the same publishing rights as a Publisher. Click on the Category for the two unpublished articles and note that the Manager can publish either one of these articles. But more important, a Manager can log into the back end of our website by first going to the site administrator log in page. Then logging in with their user name and password.

In addition to accessing the Article Manager, Category Manager and Media Manager, the Manager has access to a few components:



If you wanted the Manager to only access the Article Manager, this would

require changing their access to each of the above components on the Global Configurations Permissions page as we discuss in a minute. For now, click **Content, Article Manager**.



**A member of the Manager Group can not just publish articles, but can also delete them.** Select the two unpublished articles. Then click Trash. Then click Search Tools, Status, Trashed and select the two articles again. Then click Empty Trash. Next log out as a manager, log in as a Super Administrator and assign a very trusted user to the role of Administrator. Log out, clear the cache, then log back into to the Administrator log in page as this administrator. You will note that you can access every part of our website except Global Configurations and the Template Edit Customization screen.

## #16 Viewing and Changing Joomla Group Permissions

Permissions define and control what a group can see and do. Permissions are assigned to a group, not to an individual user. Users get permissions to see and do things by being assigned to a group. There are four places where Permissions can be viewed and changed for each Joomla group. These are **default configurations, component options, category settings and article settings**.

To better understand how the default permissions have been set for our default Joomla groups, we will briefly look at the default settings in the Global Configurations settings table. The remaining three areas by default are set to "inherit" the settings from Global Configurations unless they are changed at these more precise locations.

## Global Configurations Sets Permission for our entire Website

Default Permissions for the entire website can be changed by going to **System, Global Configurations**. Click on the Permissions tab:

SYSTEM

Global Configuration

COMPONENT

- AcyMailing
- Banners
- Cache Manager
- Check-in
- Community Builder
- Contacts
- Articles
- Smart Search
- iCagenda
- Installation Manager
- JCE Administration
- Joomla! Update
- Kunena Forum

Site System Server **Permissions** Text Filters

### Permission Settings

Manage the permission settings for the user groups below. See notes at the bottom.

Public

- Guest
- Manager
- Administrator
- Registered
- Author

Action	Select New Setting <sup>1</sup>
Site Login	Not Set ▼
Admin Login	Not Set ▼
Offline Access	Not Set ▼
Super User	Not Set ▼

This screen shows that there are no special permissions set for members of the Public group. There is also a side menu for the various Components (or major parts) of the website where permissions can be set for access to each Component. Permissions can also be set for various menu items and for each page of the website that will over-ride the Default Permissions set for the entire website. Click on the **Registered** tab and you will see that all Registered Members are allowed to do in the Default settings is Log Into the website. Menu items will have to also be set for Registered in order for Registered Users to see these pages.

Click on **Authors** to see what pages this group is allowed to see.

Permission Settings

Manage the permission settings for the user groups below. See notes at the bottom.

Public

- Guest
- Manager
- Administrator
- Registered
- Author
- Editor
- Publisher
- Super Users

Action	Select New Setting <sup>1</sup>	Calculated Setting <sup>2</sup>
Site Login	Inherited ▼	Allowed
Admin Login	Inherited ▼	Not Allowed.
Offline Access	Inherited ▼	Not Allowed.
Super User	Inherited ▼	Not Allowed.
Access Administration Interface	Inherited ▼	Not Allowed.
Create	Allowed ▼	Allowed

The **Select New Settings** Column can either be Not Set, Inherit, Allow or Deny. The Calculated Setting column shows you the setting in effect. It is either Not Allowed (the default), Allowed, or Denied.

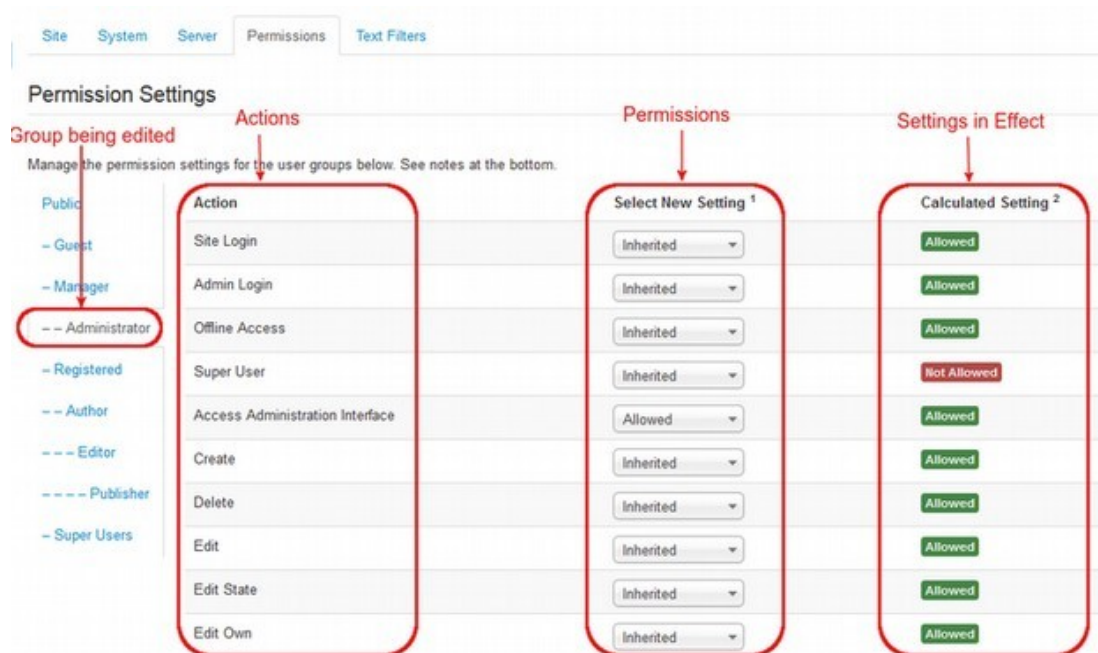
Here is a table of the default settings for all default Joomla groups:

ACCESS LEVEL >>	Public	Registered	SPECIAL					Super User
Can See and Do	Public	Registered	Author	Editor	Publisher	Manager	Administrator	Super User
View public pages	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
View Registered pages		Yes	Yes	Yes	Yes	Yes	Yes	Yes
View Special pages			Yes	Yes	Yes	Yes	Yes	Yes
Edit Own Content			Yes	Yes	Yes	Yes	Yes	Yes
Edit All Content				Yes	Yes	Yes	Yes	Yes
Publish New Content					Yes	Yes	Yes	Yes
Access Admin page						Yes	Yes	Yes
Create New Users							Yes	Yes
Install Extensions							Yes	Yes
Access Global Configurations								Yes

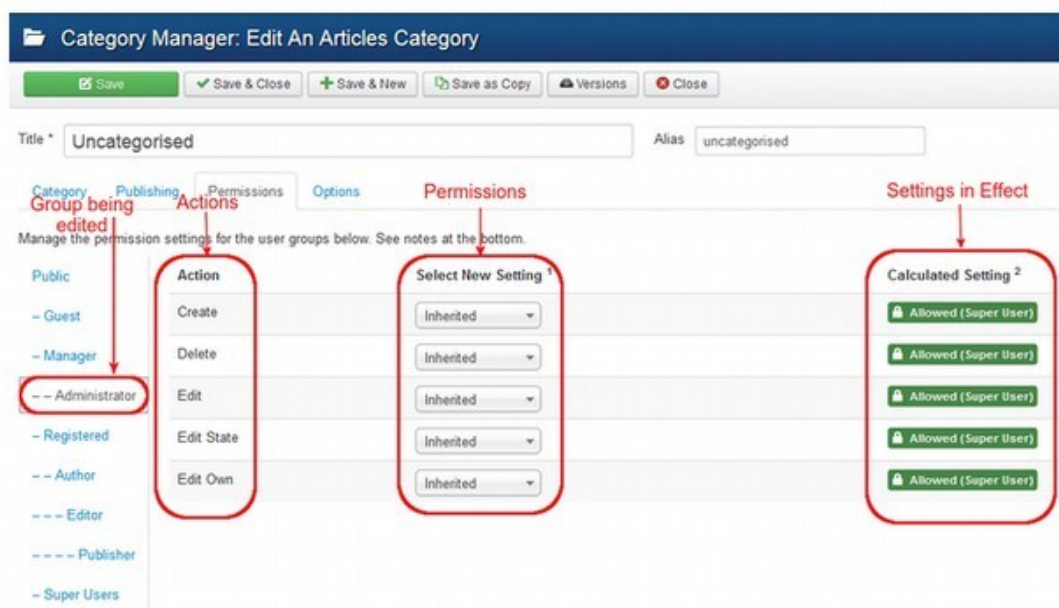
## How a Super User can change Global Permissions for the Administrator group:

In Global Configurations, Permissions, select the **Administrator** group. Then change the settings in the **Select New Settings** column for any Action (what the group can see or do) from Inherited to Allowed or Deny (Not Allowed). Select one Group at a time by opening the tab for that group. Change the permissions in the Select New Settings drop-down list boxes. Note that the Calculated Setting column is not updated until you press the Save button. To check that the settings are what you want, press the Save button and check the Calculated Settings column.





Go to **Content, Categories, Uncategorized, Permissions** . Then click **Administrator**. We can create any number of categories in which to place our pages or articles. Then we can assign categories to particular groups. The Permissions System for the Category Manager and Article Manager work much the same way as the Permissions for the Menu items. Here are the Permissions system for an **Administrator for the Uncategorized Category**.



**#17 Why We Should Avoid Setting Permissions to Deny (IMPORTANT!)** There is a problem if you change settings to “Deny” in



Global Configurations. Once a setting is changed to Deny, it cannot be changed back to Allow at a more precise level such as at the Category or Article Permissions screens. Also, setting Deny for a higher level group such as the Public or Registered Group will force the same settings to apply to all child groups. Since the Super User group is a child of the Public group, **setting the public group to Deny could actually lock the Super Users (and everyone else) out of our website!** There is a way to get back into your website. But it is very time consuming. So simply avoid setting Permissions to Deny in Global Configurations. The way we avoid setting a custom group that denies permissions is by **always choosing a parent group that has permissions LESS THAN we actually need.** Then add the permissions we want until we have the group just the way we want it.

### **What's Next?**

Now that we know more about Joomla Groups and Permissions, in the next article, we will see how to use Joomla Access Levels to give us even more control over what different groups can see and do.

## 8.2 Joomla Access Levels

For security reasons, it is important to control who has access to various areas in the backend of our News website. Initially, one person might take on the responsibility of creating a Community News website. However, as the Community News website grows, your News website team should eventually include several members. These include an **Editor** in charge of all content, **Reporters** who submit content to the Editor, a **Newsletter Coordinator** who run the Email Newsletters, an **Events Coordinator** who handles community events, and a **Tech Coordinator** who handles editing and updating the website. In addition, you may have two groups of readers. These might include featured authors who submit articles and readers who register so they can submit comments on articles and editorials on issues .

The purpose of creating a custom access control system is to allow different members of our network to access different parts of our website. To see how Joomla User Groups can be set up to manage a news team, we will create a Demo Community News team.

### #1 Define our Demo Community News Team Members

A typical community news team consists of at least three groups:



Only a small group of people should have access to the back end of the

website – and even then, they should only have access to the specific tools in the back end that they need to administer the website. We will cover these administration tools, such as the newsletter and events components, in a later chapter. These administrators will be added directly as Joomla administrators using the Joomla Administrator Control Panel User Manager.

The remaining two groups are normal members and special members.

**Normal members** merely need to register in order to post comments, submit editorials, submit events and receive Newsletters.

**Special Members** register with the same Member Registration form as Normal Members. However, they are given access to a Special Members menu which allows them to submit and edit their own articles. Both Special and Normal Members access their group functions by logging into the front end of the website. But they see different menu items when they log into the front end of the website. Neither Special Members or Normal Members ever need to log into the back end of the website. They therefore do not need to be using a Linux computer.

### **Administrators added via the Joomla Back End User Manager**

Those with access to the back end of the website should get training in website security. In particular, they should only use a Linux computer to log into the back end of the website and never use a Windows or Apple computer – as using these insecure computers might allow hackers to access the back end of our website. It is also best to have more than one person able to perform the same task in the back end – in case a task needs to be done right away. This is why each of the following positions should be regarded as the leader of a team rather than the sole person responsible for carrying out the needed tasks.

Our Demo Community News Team will be led by a five members. These are an Editor and a Tech Coordinator – both of whom will have access to the entire backend of the website. The Events Coordinator, Newsletter Coordinator and Reporters will each have limited access to just a few areas of the backend of our website.

Here is a brief summary of the roles of these five positions and how the areas of the website each position needs access to.

**Managing Editor...** The Managing Editor will not only oversee all articles and editors but also manage all Banner Ad funds and Community Event

Banner ads as well as making payments to any reporters or Tech team members. They also manage the community news bank account and submit taxes and other forms as needed.

**Events Coordinator...** The Events Coordinator is the contact person for all community events. This person will **post all events on the website community events calendar** and provide a list of all coming events to the Newsletter Coordinator. The Events Coordinator will need access to the Events section of our News website.

**Newsletter Coordinator...** The Newsletter Coordinator will write and email newsletters about new articles and coming events. The Newsletter Coordinator will also update the list of subscribers and **need access to the Newsletter section of our News website.**

**Tech Coordinator...** The Tech Coordinator will be responsible for building and running the community news website. This will include the Membership Registration System, the Newsletter system and the Events Calendar system. The Tech Team Coordinator will also lead the Tech Team which will train group members on how to run various sections of the community network website. **The Tech Coordinator will need access to all areas of the website.**

**Reporter(s)...** Each reporter can submit and edit articles on the backend of the website. Reporters might be allowed to approve posting of articles submitted by featured authors. Eventually, there may be different reporters for different topics such as a Sports Reporter, a Schools Reporter and a Business Reporter.

## **#2 Create a Table of Our Demo Network Members**

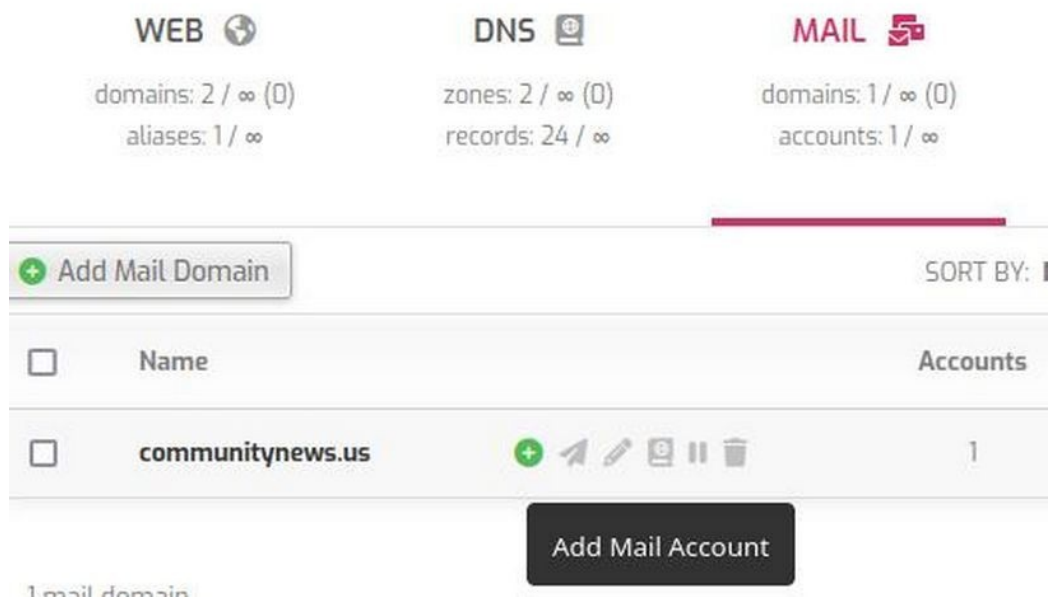
This table provides a summary of all members including the 5 administrator members, 2 Featured Authors and 2 General Members. To register on our website, each of these people will need a Name, a Username, a Password and an Email Address.

While we could use dummy email addresses such as Chair1 at example dot com, it is better to use actual email addresses, all associated with our community network domain name so we can see how the actual process works. In a moment, we will explain how to create Demo Domain Related Email addresses. For now, we will use the example [editor@communitynews.us](mailto:editor@communitynews.us)

ID	Name	Username	Demo Email
01	Editor	editor	editor@communitynews.us
02	EventsCo	eventsco	events@communitynews.us
03	NewsletterCo	newsletterco	newsletter@communitynews.us
04	TechCo	techco	tech@communitynews.us
05	Reporter	reporter1	reporter1@communitynews.us
06	Author1	author1	author1@communitynews.us
07	Author2	author2	author2@communitynews.us
08	Member1	member1	member1@communitynews.us
09	Member2	member2	member2@communitynews.us

### #3 Create Demo Domain Related Email addresses

Before we create these accounts in our News website database, we need to first set up their domain related email addresses. To do this, log into your Hestia Admin panel and go to the Community News website User panel. Then click Mail.




Community News dot us currently has one email address account. Click on the plus sign to create another one:

## Add Mail Account

Domain  
communitynews.us

Account  
editor

Password 

Your password must have at least:

- 8 characters long
- 1 uppercase & 1 lowercase character
- 1 number

Advanced Options

In the Account box, type **editor**. Then add a password you will remember. Note: Hestia passwords must have at least 8 characters and at least 1 upper and lower case letter, at least 1 digit and at least 1 non-alphanumeric character such as \*. Create your own passwords. These passwords should be changed by the actual user.

Click **Advanced Options**. In the **Forward To** box, type in your normal email address so that all mail sent to this user is forwarded to you. Then click Save, Back and Back again. Then click Add Mail Account. Repeat this process until all 9 email accounts are created.

Add Mail Account

Edit Mail Domain

SORT BY: NAME

Apply to selected

Name	Disk	Quota	Aliases	Forwarding
author1@communitynews.us	0.00 mb	∞	<div></div>	<div></div>
author2@communitynews.us	0.00 mb	∞	<div></div>	<div></div>
david@communitynews.us	1.00 mb	∞	<div></div>	<div></div>
editor@communitynews.us	0.00 mb	∞	<div></div>	<div></div>
events@communitynews.us	0.00 mb	∞	<div></div>	<div></div>

Then in the upper right corner, click on the arrow to go back to the admin panel. Then click on it again to log out.

**#4 Use the Joomla Control Panel User screen to create new Joomla User accounts for our 5 Demo board members.**



Log into your Joomla control panel and click Users, Manage. Then click **Options** in the upper right corner. Then click **Password Options** and reduce the Minimum Password Length from 12 to 8. Then click Save and Close. Then click New.

Type in the Name, Username, Password and Email address of the Editor and then click Save and New. Repeat for the other 4 News Admin Team members. Each new member will receive an email letting them know that they are now a registered member of our network. Here is our list of our Demo News Team Joomla Users:








Name ▲	Username ▲	Enabled ▲	Activated ▲	User Groups
<a href="#">Editor</a> <a href="#">+ Add Note</a>	editor	✓	✓	Registered <a href="#">Permissions</a>
<a href="#">EventsCo</a> <a href="#">+ Add Note</a>	eventsco	✓	✓	Registered <a href="#">Permissions</a>
<a href="#">NewsletterCo</a> <a href="#">+ Add Note</a>	newsletterc o	✓	✓	Registered <a href="#">Permissions</a>
<a href="#">Reporter1</a> <a href="#">+ Add Note</a>	reporter1	✓	✓	Registered <a href="#">Permissions</a>
<a href="#">TechCo</a> <a href="#">+ Add Note</a>	techco	✓	✓	Registered <a href="#">Permissions</a>

Note that all of these Demo Members have been assigned to a User Group called **Registered**.

The Registered User Group is allowed to log into the front end of the website and see any menu items assigned to the Registered group. But the Registered Group is not allowed to log into the back.

## #5 Look at the List of Default Joomla User Groups

Click on **Users, User Groups** in the Top Menu.

Group Title ↕	Permissions	✓ Enabled Users
<a href="#">Public</a>		0
- <a href="#">Guest</a>		0
- <a href="#">Manager</a>		0
: - <a href="#">Administrator</a>		0
- <a href="#">Registered</a>		5
: - <a href="#">Author</a>		0
: : - <a href="#">Editor</a>		0
: : : - <a href="#">Publisher</a>		0
- <a href="#">Super Users</a>		1

By default, there are 9 Joomla User groups. Currently, there are 5 members in the Registered group and 1 member in the Super Users group. Before we add our custom News Team User Groups, let's look at what each of these existing groups can do.

## #6 Review the Default Joomla User Groups

Joomla uses groups as a way to assign different sets of permissions to different group members to view different pages and do different tasks on those pages . Put another way, **a group is a collection of users who all share the same set of permissions.** As a super user, you can assign any member to any number of User Groups.

### Groups control what you can see and what you can do

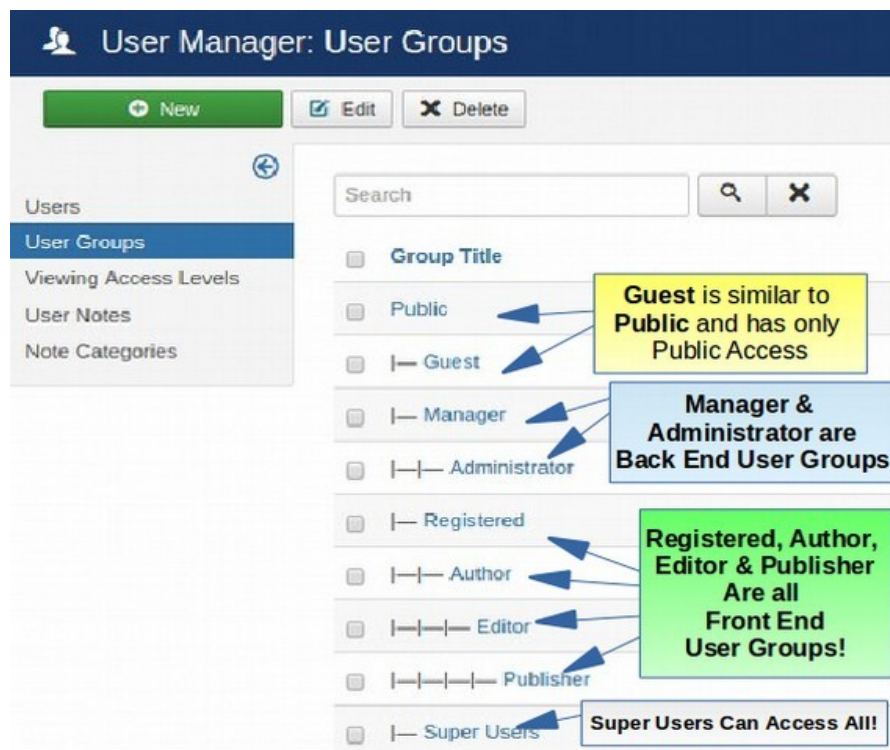
The Joomla User Management system is actually two separate systems. One is an **Access** system that controls what website pages group members can see. The other is a **Permissions** system that controls what actions group members can do.

### Back End versus Front End Groups

In addition to viewing certain pages and taking certain actions, access control for viewing and doing can be divided into the **front end** viewing and doing versus **back end** viewing and doing.

<b>View Pages in the Front End</b> (Such as public pages versus pages only for registered users)	<b>Take Actions in the Front End</b> (Such as creating an article in the front end)
<b>View Pages in the Back End</b> (Viewing the Article Manager)	<b>Take Actions in the Back End</b> (Create an article in the back end)

Some people think of access control as simply limiting what pages a person can see on the front end of a website. The public sees only some of the pages. Registered Users see more pages in the front end. The Super User sees all the pages in the front end and back end of our site. But what a person can do matters just as much as what they can see. Joomla has one set of User groups for the Back End and another set of User groups for the front end:



Note that Manager and Administrator are back end user groups while Registered Author, Editor, and Published are Front End User Groups.

### Back End User Groups

These two groups are followed by two groups, called Manager and Administrator with (limited) access to parts of the back end of our website. Back end groups can log into the back end of our website via the sitename/administrator URL for our website.

**Managers** can create, edit, publish and delete all articles on the back end of our site. This makes them similar to the Publisher (Front End) Group. Managers also have access to the Media Manager and Contacts components in the back end of our website.

**Administrators** can do everything managers can plus they can create new users, manage group privileges and install extensions. They have access to nearly every part of our website except Global Configurations and the Template Custom Edit screen. The only group that can do more than Administrators is the Super User group.

### **Four Front End User Groups**

The remaining six user groups all only have access to the front end of our website.

**Registered Users** can view menu items and articles that are set for Registered User access – but only after they have logged in. Registered means pages that can be viewed by anyone who has filled out the Registration form for our website – and therefore become a member of our community network. Members of this group need to log in to our website after registering in order to see pages on the website intended only for Registered members. All one needs to become a Registered Member is to fill out the registration form with a unique email address and then be approved by an administrator.

**Authors** have all the permissions of Registered Users. Plus they can create new articles and edit the articles they have written (after they have logged in to the front end of the website). Authors and all other groups except Public and Registered are assigned by the Super User of the website.

**Editors** have all the permissions of Authors. Plus they can edit all articles written by anyone – even unpublished articles.

**Publishers** have all the permissions of editors. Plus they can publish articles. However, they cannot create menu items. So unless an article has been assigned to a category, it will not be viewable even after it is published – until a super user creates a menu item for it.

**Super Users** can create menu items and control any part of the website including adding or deleting any other Super User! The first super user was created when our Joomla website was created. The first super user is

considered the Site Owner.

## **Parent and Child Groups**

Note that there is only one group which does not have a dash in front of its name. This group is called Public. Public is the group with the least amount of Permissions. By default, any menu item or article we create can be viewed by the public. Groups with a single dash to the left of their name are called a “child” of the Public group. The four groups with a single dash are called Guest, Manager, Registered and Super User. These groups can see and do everything the Public group can do. Plus they can see and do more. Children can always do more than their parents.

## **#7 Assign News Team Members to User Groups**

We created email addresses for 9 News Team Members and registered 5 Members. We will now assign one of these 5 members to an additional default user group to see how the default Joomla User Management system works. Then in the next article, we will review how to use Joomla Access Levels in combination with Joomla User groups. We will then create a new custom user group called **Featured Authors** which we will use to give special permissions to our Featured Author News Team members.

## **#8 Assign the Newsletter Coordinator to the Author User Group**

To better understand how the default Joomla User Management system works, log in as a Super User and click on the Users menu item. Then click on the **Newsletter Coordinator** to open the Edit screen. Then click on the **Assigned User Groups** tab:

Account Details	Assigned User Groups	Basic Settings
<h3>Assigned User Groups</h3> <div> <input type="checkbox"/> Public             <input type="checkbox"/> – Guest             <input type="checkbox"/> – Manager             <input type="checkbox"/> : – Administrator             <input checked="" type="checkbox"/> – Registered             <input type="checkbox"/> : – Author             <input type="checkbox"/> : : – Editor             <input type="checkbox"/> : : : – Publisher             <input type="checkbox"/> – Super Users         </div>		

We can see that any registered user is automatically placed in the Registered User group. Check the box for **Author**. Then click Save and Close. This person now belongs to two groups – the Registered group and the Author group.

<a href="#">NewsletterCo</a> <input type="button" value="+ Add Note"/>	newsletterc o	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Registered Author <input type="button" value="Permissions"/>
---	------------------	-------------------------------------	-------------------------------------	--

## #9 Make a Member Log In Article and Menu Item

Next go to **Content, Articles** to create a new article called **Community News Member Log In**. Type:

*If you are already a Community News member, use the form below to log into our Community News Member area. If you are not yet a member of our group, and you would like to be able to post comments and submit events or editorials, go to our Member Sign Up page to join our group!*

Then click Save and Close. Then go to **Menu, Bottom Menu, New** to create a new menu item for this article.

Then go to **Content, Site Modules** and click on the Log In Module to edit it. Change the title to Member Login. Put it in the News1 template Bottom 01 position. Click Publish. Then click on the Conditions tab. Then click the



Member Log In Menu item. Then click Save and Close.

### **Also make a Member Logout Menu Item**

We need a way for logged in Members to log out. Go to Menu, Bottom Menu, New. For Type, select **Users, Logout**. For Title, type Member Logout. For Access, click **Registered**. Click Save and Close.

### **#10 Make a Create Article Menu Item**

Before this person can create any articles, we need to create a new special menu item for the front end of our website that is only visible to those above the rank of registered user. Click on the **Menus, Bottom Menu, New**. For Menu Item type, select **Articles, Create Article**. For title, type **Create Article**. For access, go to the lower right corner of the screen and assign this menu item to the “**Special**” Access group (which we will review later). Then click Save and Close.

### **#11 Create a Featured Authors Information Category**

We need to write an instructional article to help our featured authors create their articles. So go to **Content Categories** and create a category called Featured Author Information. Here is the description: *This category includes articles to help our Featured Authors learn how to create and submit their own articles, events and editorials.*

### **#12 Create a New article called Features Authors First Steps**

We will eventually add our Featured Authors tutorial to this article. Assign the article to the Features Authors Information category.

### **#13 Create a new Menu Items for our Featured Authors Category**

Go to Menus, Bottom Menu and create new menu items of the type **Category Blog** for the Featured Authors Information category with Access to this menu item **only viewable by Registered Members**.

### **#14 Adjust the JCE Editor to provide Front End Authors with their own Media Folders**

Go to Components, JCE Editor, **Profiles**. Then click **Default, Setup tab, and scroll down to User Group**.

Add **Registered Users** to the list of permitted users. But delete **Managers, Administrators and Super Users** as we will soon give them a different JCE Editor. See image below.

User Group



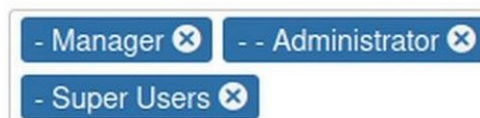
A screenshot of a user group selection interface. It features a light blue box with a thin border. Inside, there are four blue buttons with white text and a close icon (an 'X' in a circle). The buttons are arranged in two rows: the top row contains '- - Author' and '- - - Editor'; the bottom row contains '- - - - Publisher' and '- Registered'. Below the buttons is a small vertical line indicating a scrollable list.

Click Save. Then click on the **Editor Parameters** tab. We will leave URL Conversion set for relative URLs in order to make it easier to copy. But we will need to change it to Absolute URLs for the Administrator Editor for editing the Newsletter component we will be installing later. Then click Save and Close. We now have the default JCE Editor set up as a normal editor.

### Create a Second JCE Editor for Administrators

Next click on JCE Editor Profiles. Select the Default Editor and click Copy. This will add another editor called **Copy of Default** that is exactly like the Default Editor. Click Copy of Default to open it. Change its name to **Super User Editor**. Change Status to Published. Scroll down to User Group, **uncheck all groups except Manager, Administrator and Super Users**. See image below.

User Group



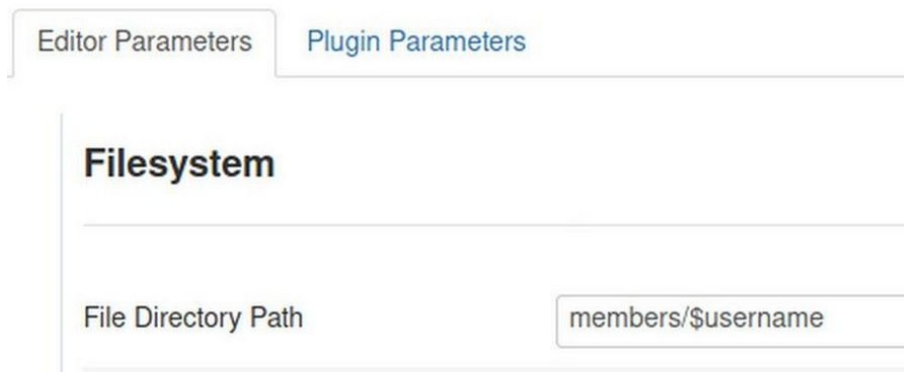
A screenshot of a user group selection interface. It features a light blue box with a thin border. Inside, there are three blue buttons with white text and a close icon (an 'X' in a circle). The buttons are arranged in two rows: the top row contains '- Manager' and '- - Administrator'; the bottom row contains '- Super Users'.

Then click Save and Close. We now have two published Editors.

Status	Title	Description
<input checked="" type="checkbox"/>	Default	Default Profile for all users
<input checked="" type="checkbox"/>	Super User Editor	Default Profile for all users

### Create a Personal Document Folder for each Registered Member

Next, click on the **JCE Default editor** to open it. Click on the **Editor Parameters** tab. Then click on the **File System** tab. At the top of this screen is the "File Directory Path". Set this box for **members/\$username**. **(this is read members slash \$ user name)**.

A screenshot of the Joomla! configuration interface. At the top, there are two tabs: 'Editor Parameters' (active) and 'Plugin Parameters'. Below the tabs, the 'Filesystem' section is expanded. Under 'Filesystem', there is a label 'File Directory Path' and a text input field containing the value 'members/\$username'.

Then click Save and Close. The Default Editor will become the editor for the entire community and will give each person their own uploads folder with their username on it. This folder will be in the root folder for the website. Meanwhile, the Super Admin will retain the normal upload folder called **Images** which is accessed in the Joomla back end via Content, Media Manager.

### **Set the JCE Editor as the Default editor for your website**

In Users, User Manager, click on your Super User name to edit the settings. Then click on **Basic Settings** tab and set the Editor to JCE Editor. Also set the Help Site and Time Zone. Then click Save and Close. While both the Global Configurations and the Super User appear to be pointing towards the same JCE Editor, the Editor will direct Back End Administrators to the Super User Editor and Front End Members to the Default Editor.

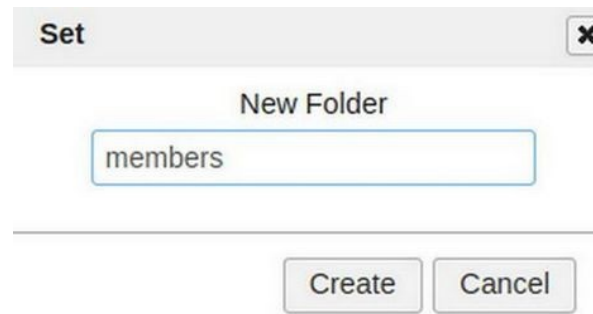
### **Install the Phoca Commander File Manager to Create a Community Folder**

We need to add a File Manager to the Joomla Control Panel to make File Changes without the need to log into our server. To download Phoca Commander, go to this web page and click Download:

<https://www.phoca.cz/download/category/96-phoca-commander-component>

Then install Phoca Commander by going to **Systems, Install, Extensions**. Then go to Components, Phoca Commander. Then read the Warning and click OK. The Phoca Commander File Manager now appears. We will use Phoca Commander to create the **members** folder which will hold the images folders of all of our members. This file manager allows you to quickly create and edit files and folders without needing to log into your Hestia VPS. The File Manager opens at the website root folder. Click **F7 New Folder** to add a new folder. Then type the word **members** with all

lower case letters in the empty box.

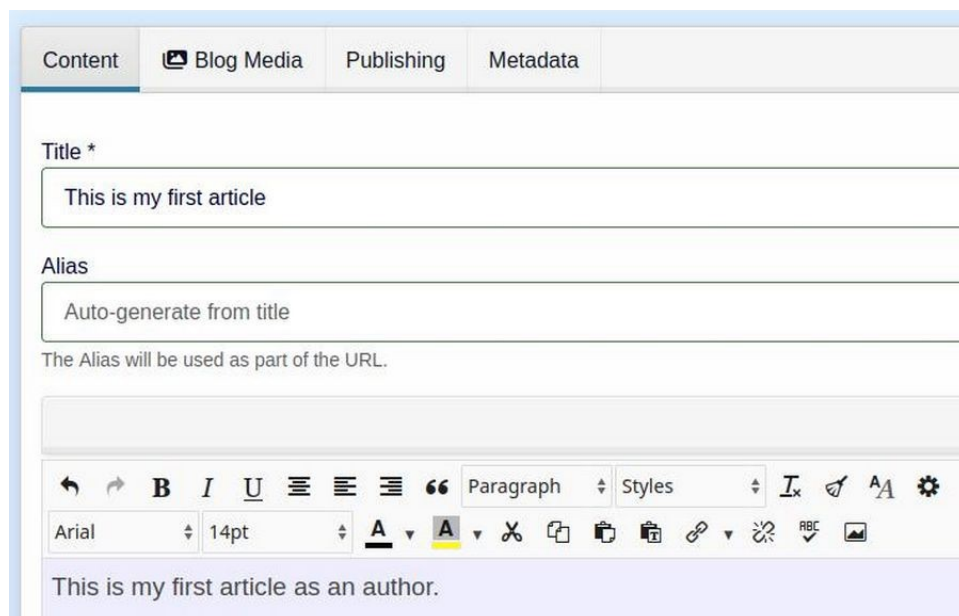


Click **Create**. Then exit the file manager by clicking on any menu item in the top menu. Now, when a member adds an image to their profile page, the JCE Editor will automatically add a new folder in the members folder using the username of the group member.

### #15 Log in as the Newsletter Coordinator to create a new article

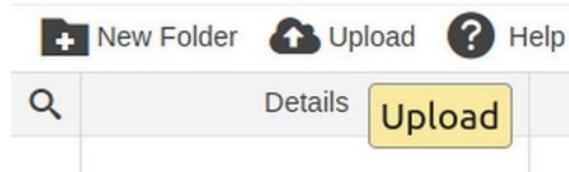
Open a new browser tab, go to our Community News Home page and click on the Log In menu item in the Bottom Menu. Then log in as the Newsletter Coordinator. Their username is newsletterco.

You will now see a Menu Item on the Bottom Menu that says **Create Article**. Click on it to bring up the Article New screen. Give the article a Title such as **This is my first article**. Then type some text into the Editor screen such as This is my first article as an author.

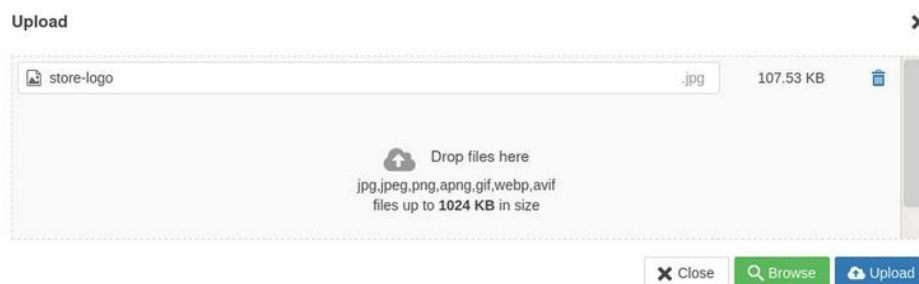


Let's see how well the JCE editor Media folder creation function works. First type two or three sentences. Then create a new line between the

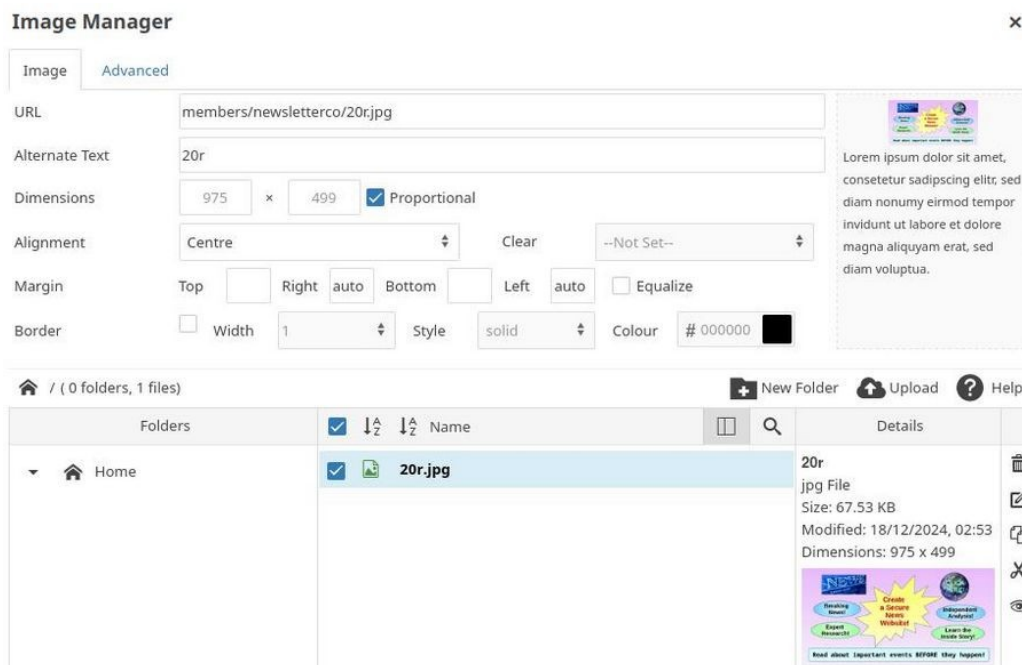
sentences and place your cursor at the beginning of this new line. Then, to add an image to the article, click on the JCE editor Picture icon. If the JCE editor is set up properly, you will not see any images or image folders. The only folder you will see is called Home. In the JCE Images Manager, click on the **Upload** icon which is just above the Details area:



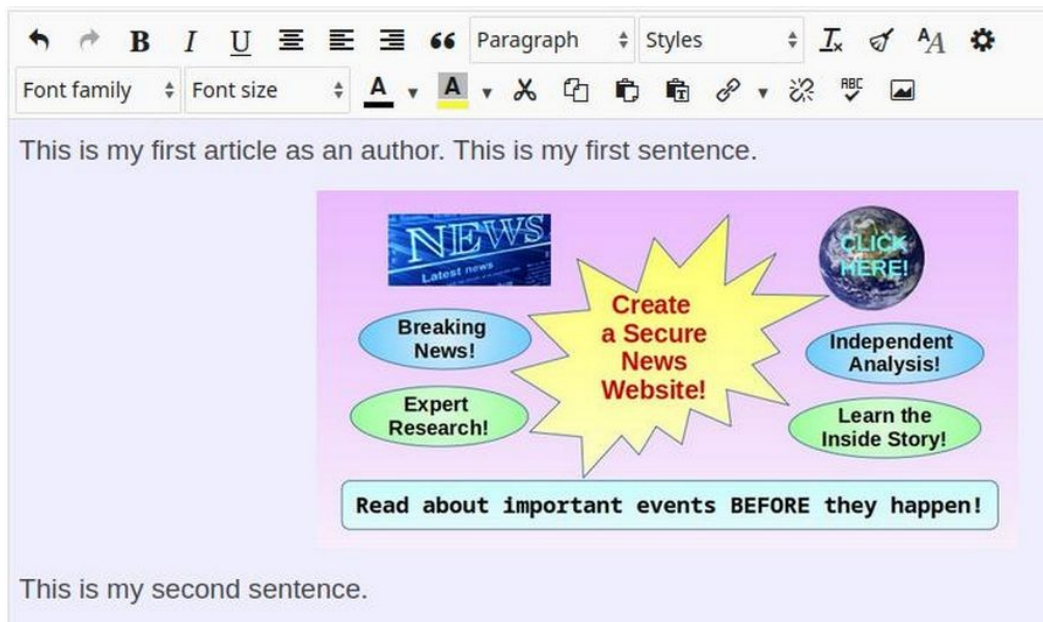
Then open your Home computer file manager and select an image which is under 100 kb and drag it into the JCE Upload box.



Then click Upload. Then click on the file to the right of the checkmark to see and adjust its properties:



In the Dimensions box, reduce its width from 975 to 500 pixels. Then click the **Insert** button in the lower right corner of the screen.



Click Save and Close at the bottom of the screen. This will close your article and return you to the Home page. A popup will appear that says: **Article Submitted**. In addition, an email will be sent to the Site Administrator letting them know that an article was submitted and is waiting for approval:

#### [Washington Community News] - New Article



### #14 How to Edit Submitted Articles

Let's say you want to add more information, images, videos or links to your article. Sadly, if you go back to Create Article, Publishing tab and select your category, the article is not shown. This is because it has not yet been published. Log into the control panel as the super user and click on **Content Articles** where you will see the unpublished new article. Click it to review it to make sure the content is OK. Then select it and click Publish. Then log into the front end as the person who created the article (in this case, the newsletter coordinator). Go to the category where you placed the



article and you will see the article with an Edit button to the right of it. Click on the Edit button to open the article to editing.

Title	Author	Edit Article
This is my first article	Written by: NewsletterCo	 Edit

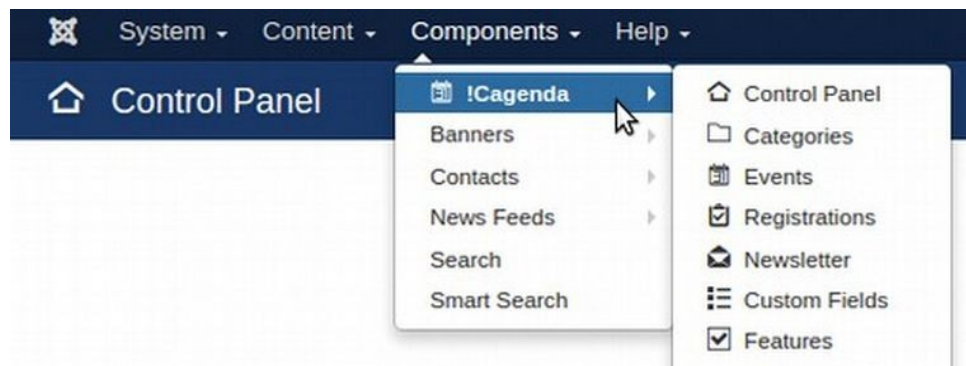
Next, assign a different member such as the Events Coordinator to be an author. Then log in as this member. When they go to the same category, they can see the article but not edit it. Sadly, an author can not delete an article. To delete your article, you will need to contact someone who is a super user or was the person who published the article.

Next, log in as a super user and assign a user to the Publisher user group. Then click on Create Article in the Bottom Menu. Then give the new article a Title and some text. Then click on the Publishing tab. We can assign this article to a category, set the Status to Published and select the Start and End dates for this article. Click Save. Then click on the Menu Item for the category the two articles were assigned to.

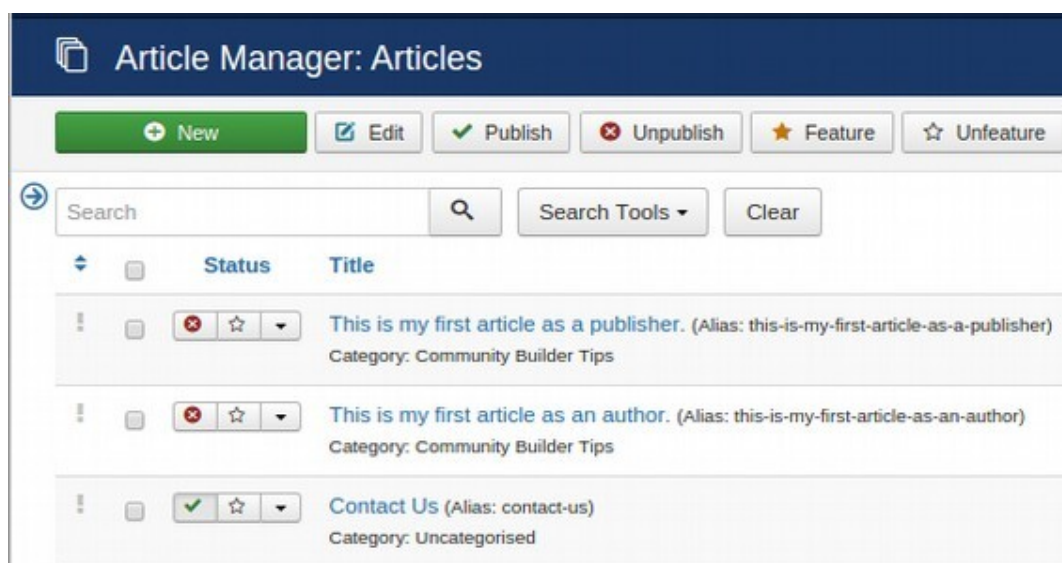


**#15 A person assigned to the Publisher group can edit either their own articles or anyone else's articles.** Click on the Edit button for the unpublished article. Then change the status of the article from Unpublished to Published. Then click Save. Then click on the Category Menu Item to view the article again. Both articles are now published. Click on the article to edit it again. This time click on Cancel. However, **members of the Published group cannot cancel articles.** Click on Edit again. This time, unpublish and then save both articles. Next log in as a super user and assign a user to the role of a Manager. Then log into the front end of our website. Then click on Create Article. Then click the Publishing tab. You will

see that a member of the Manager group has the same publishing rights as a Publisher. Click on the Category for the two unpublished articles and note that the Manager can publish either one of these articles. But more important, a Manager can log into the back end of our website by first going to the site administrator log in page. Then logging in with their user name and password. In addition to accessing the Article Manager, Category Manager and Media Manager, the Manager has access to a few components:



If you wanted the Manager to only access the Article Manager, this would require changing their access to each of the above components on the Global Configurations Permissions page as we discuss in a minute. For now, click **Content, Article Manager**.



**A member of the Manager Group can not just publish articles, but can also delete them.** Select the two unpublished articles. Then click Trash. Then click Search Tools, Status, Trashed and select the two articles again. Then click Empty Trash. Next log out as a manager, log in as a Super Administrator and assign a very trusted user to the role of Administrator.

Log out, clear the cache, then log back into to the Administrator log in page as this administrator. Note that you can access every part of our website except Global Configurations and the Template Edit Customization screen.

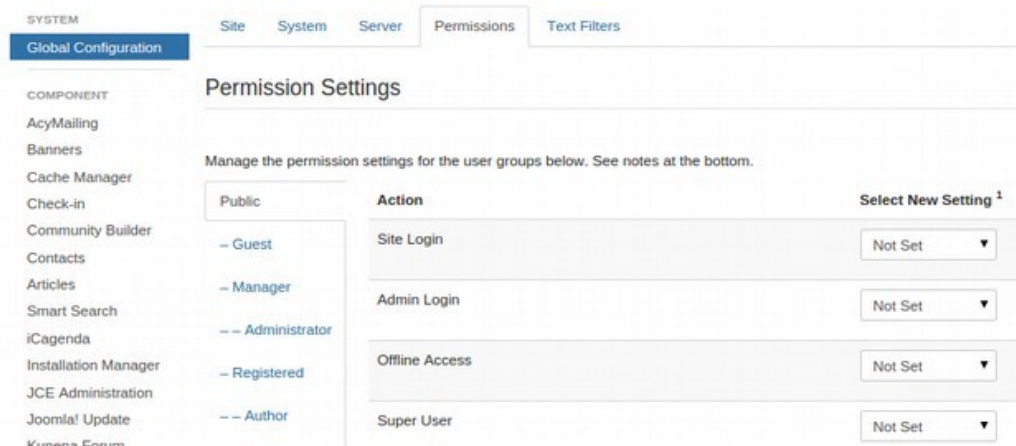
## #16 Viewing and Changing Joomla Group Permissions

Permissions define and control what a group can see and do. Permissions are assigned to a group, not to an individual user. Users get permissions to see and do things by being assigned to a group. There are four places where Permissions can be viewed and changed for each Joomla group. These are **default configurations, component options, category settings and article settings**.

To better understand how the default permissions have been set for our default Joomla groups, we will briefly look at the default settings in the Global Configurations settings table. The remaining three areas by default are set to “inherit” the settings from Global Configurations unless they are changed at these more precise locations.

### Global Configurations Sets Permission for our entire Website

Default Permissions for the entire website can be changed by going to **System, Global Configurations**. Click on the Permissions tab:



This screen shows that there are no special permissions set for members of the Public group. There is also a side menu for the various Components (or major parts) of the website where permissions can be set for access to each Component. Permissions can also be set for various menu items and for each page of the website that will over-ride the Default Permissions set for the entire website. Click on the **Registered** tab and you will see that all Registered Members are allowed to do in the Default settings is Log Into the website. Menu items will have to also be set for Registered in order for

Registered Users to see these pages.

Click on **Authors** to see what pages this group is allowed to see.

Permission Settings

Manage the permission settings for the user groups below. See notes at the bottom.

Public	Action	Select New Setting <sup>1</sup>	Calculated Setting <sup>2</sup>
– Guest	Site Login	Inherited ▼	Allowed
– Manager	Admin Login	Inherited ▼	Not Allowed.
– – Administrator	Offline Access	Inherited ▼	Not Allowed.
– Registered	Super User	Inherited ▼	Not Allowed.
– – Author	Access Administration Interface	Inherited ▼	Not Allowed.
– – – Editor	Create	Allowed ▼	Allowed
– – – – Publisher			
– Super Users			

The **Select New Settings** Column can either be Not Set, Inherit, Allow or Deny. The Calculated Setting column shows you the setting in effect. It is either Not Allowed (the default), Allowed, or Denied.

Here is a table of the default settings for all default Joomla groups:

ACCESS LEVEL >>	Public	Registered	SPECIAL					Super User
Can See and Do	Public	Registered	Author	Editor	Publisher	Manager	Administrator	Super User
View public pages	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
View Registered pages		Yes	Yes	Yes	Yes	Yes	Yes	Yes
View Special pages			Yes	Yes	Yes	Yes	Yes	Yes
Edit Own Content			Yes	Yes	Yes	Yes	Yes	Yes
Edit All Content				Yes	Yes	Yes	Yes	Yes
Publish New Content					Yes	Yes	Yes	Yes
Access Admin page						Yes	Yes	Yes
Create New Users							Yes	Yes
Install Extensions							Yes	Yes
Access Global Configurations								Yes

## How a Super User can change Global Permissions for the Administrator group:

In Global Configurations, Permissions, select the **Administrator** group. Then change the settings in the **Select New Settings** column for any Action (what the group can see or do) from Inherited to Allowed or Deny (Not Allowed). Select one Group at a time by opening the tab for that group. Change the permissions in the Select New Settings drop-down list boxes. Note that the Calculated Setting column is not updated until you press the Save button. To check that the settings are what you want, press the Save button and check the Calculated Settings column.

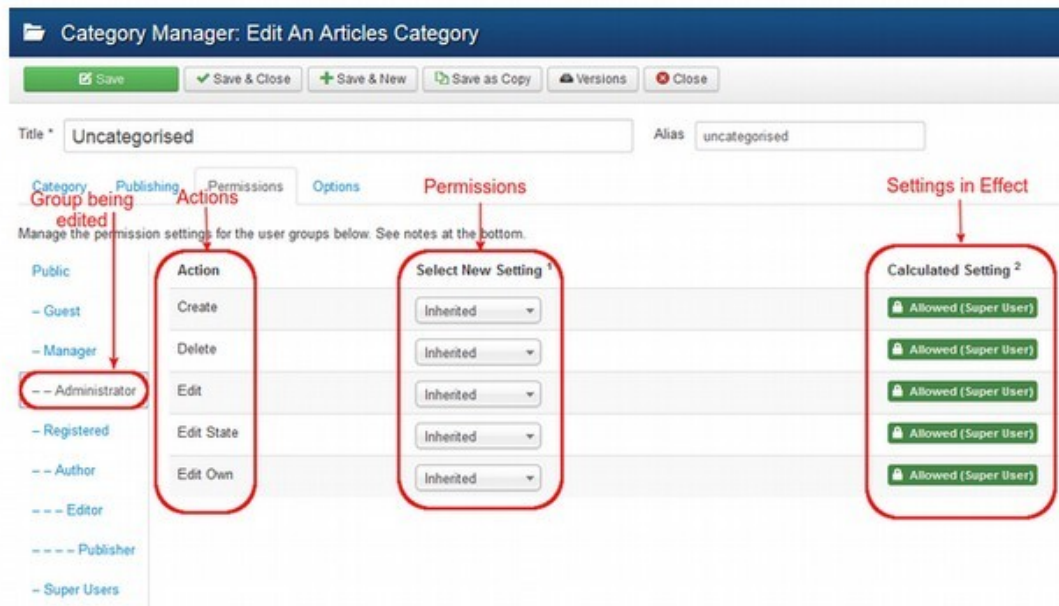
The screenshot shows the 'Permission Settings' interface for the 'Administrator' group. The interface is divided into three main columns: 'Actions', 'Permissions', and 'Settings in Effect'. The 'Actions' column lists various actions like 'Site Login', 'Admin Login', 'Offline Access', 'Super User', 'Access Administration Interface', 'Create', 'Delete', 'Edit', 'Edit State', and 'Edit Own'. The 'Permissions' column shows the 'Select New Setting' dropdown for each action, with 'Inherited' selected for most and 'Allowed' for 'Access Administration Interface'. The 'Settings in Effect' column shows the 'Calculated Setting' for each action, with 'Allowed' for most and 'Not Allowed' for 'Super User'. Red arrows and boxes highlight the 'Administrator' group in the left sidebar, the 'Select New Setting' dropdowns, and the 'Calculated Setting' column.

Group being edited	Actions	Permissions	Settings in Effect
Public			
- Guest			
- Manager			
- Administrator			
- Registered			
- Author			
- Editor			
- Publisher			
- Super Users			

Action	Select New Setting <sup>1</sup>	Calculated Setting <sup>2</sup>
Site Login	Inherited	Allowed
Admin Login	Inherited	Allowed
Offline Access	Inherited	Allowed
Super User	Inherited	Not Allowed
Access Administration Interface	Allowed	Allowed
Create	Inherited	Allowed
Delete	Inherited	Allowed
Edit	Inherited	Allowed
Edit State	Inherited	Allowed
Edit Own	Inherited	Allowed

Go to **Content, Categories, Uncategorized, Permissions** . Then click **Administrator**. We can create any number of categories in which to place our pages or articles. Then we can assign categories to particular groups. The Permissions System for the Category Manager and Article Manager work much the same way as the Permissions for the Menu items. Here are the Permissions system for an **Administrator for the Uncategorized Category**.





## #17 Why We Should Avoid Setting Permissions to Deny

**(IMPORTANT!)** There is a problem if you change settings to “Deny” in Global Configurations. Once a setting is changed to Deny, it cannot be changed back to Allow at a more precise level such as at the Category or Article Permissions screens. Also, setting Deny for a higher level group such as the Public or Registered Group will force the same settings to apply to all child groups. Since the Super User group is a child of the Public group, **setting the public group to Deny could actually lock the Super Users (and everyone else) out of our website!** There is a way to get back into your website. But it is very time consuming. So simply avoid setting Permissions to Deny in Global Configurations. The way we avoid setting a custom group that denies permissions is by **always choosing a parent group that has permissions LESS THAN we actually need.** Then add the permissions we want until we have the group just the way we want it.

### What's Next?

Now that we know more about Joomla Groups and Permissions, in the next article, we will see how to use Joomla Access Levels to give us even more control over what different groups can see and do.

## 8.3 Finish and Test our News Member Groups

Previously, we use the Joomla User Management system to create several



News groups and connected them to Access Levels. In this article, we will review steps 5, 6, 7, 8 and 9 of the Custom Group creation process and then test the back end of our Community News Demo website. But before we dive into the details, we will take a step back and look at the hidden structure involved in building an Community News team. As we outlined earlier, a Community News team includes several groups. These groups include:

**Public visitors** to our Community News website.

**Registered Members** of our Community News website who have access to view or see areas of the website that are not accessible to the general public.

**Special Registered Members such as Featured Authors** who have the ability to create articles and post events on the front end of our website.

**Front End Administrators** have the ability to approve and post articles without the need to log into the back end of the website.

**Back End Administrators** who can log into the back end of the website in order to moderate reader comments, send newsletter, as well as create events and publish articles written by them or submitted by other members of the community.

Each of these groups needs their own place to post and share knowledge. Each of these posts consists of an article which is made visible by creating a menu item linked to the article. While all of these menu items could be placed on a single Main Menu, it is better to create separate menus for each of these groups.

In our example, this means having a **Main Menu for the Public**, a **Members Menu** for Registered Users, a **Featured Authors Menu** for Featured Authors, and an **Administrator Menu** for Back End Administrators who want to approve articles and events without logging into the backend of our News website. Each menu will only be visible to members who log into the front end of the website as a member of the associated group.

To make these three new menus more visible, we will place them near the top of the website. The Administrator Menu will go just below the header image and above the Main Menu in the Below Top position. We will place

the Members Menu in the Banner row just below the Main Menu and the Featured Authors Menu in the same row. Here is what it will look like:

Top Bar = Community News Website Header Image	
Below Top = Administrator Menu	
Menu = Main Menu	
Banner = Members Menu	Banner = Featured Authors Menu

Below is what these menus will look like to an administrator who logs into the front end of our site. Thanks to Joomla Access Levels, Registered Members only see the Members Menu and the Main Menu. Featured Authors see the Main Menu, the Members Menu and the Featured Authors Menu. The public only sees the Main Menu.



Now that we understand the eventual goal, let's dive into the details on how to create these 3 menus and their associated menu items.

## #5 Create an Administrator Menu to appear on the top row of the Front End whenever an administrator logs in

Several new menu items will be needed for the Back End Administrators of our website to be accessed by various levels of both of our new

administrator groups. We could just add these menu items to the main menu. But it is better to **leave the Main Menu for links needed by the General Public**. We will therefore create a new Administrator Menu and place it on the hidden “**below-top**” row of our home page. This way whenever an administrator logs into the front end of our website, there will be an obvious new administrator menu that pops up with the links they need to use to go to their particular areas on our website.

To create a new Administrator Menu, log in as a Super User and click on **Menus, Manage, New**. For Title, type in Administrator Menu. For Unique Name, type in **administratormenu** (no spaces). For Description, type in Administrator Menu.

The screenshot shows a form for creating a new menu. At the top, the 'Title' field is filled with 'Administrator Menu'. Below this, there are two tabs: 'Menu Details' and 'Permissions'. The 'Menu Details' tab is selected, showing a 'Unique Name' field with 'administratormenu' and a 'Description' field with 'Administrator Menu'.

Then click Save and Close. This will bring us back to the Menu Manager where our new menu now appears in the table of menus:

<input type="checkbox"/> Title ^	<input checked="" type="checkbox"/> Published	<input checked="" type="checkbox"/> Unpublished	<input checked="" type="checkbox"/> Trashed	<input checked="" type="checkbox"/> Linked Modules
<input type="checkbox"/> Administrator Menu Menu Type: administratormenu	0	0	0	<button>Add a module for this menu</button>
<input type="checkbox"/> Main Menu Menu Type: mainmenu	27	0	3	<button>Modules ▾</button>

Click “Add a module for this menu.” For Module Title, type Administrator Menu. Leave Title at Show. For Position, click on **News 1 below top** position. For Access, change the access to the **Special Admin** Access Level. This will allow all administrators access to the Administrator Menu – even though the actual menu items each group sees will depend on the access level of each menu item.

**Title \***  
Administrator Menu

**Module** | Menu Assignment | Advanced | Permissions

**Menu**  
Site  
This module displays a menu on the Frontend.

Select Menu: Administrator Menu

Base Item: Current [Select] + Create

Start Level: 1

End Level: All

Sub-menu Items: ☒ Show

Title: ☒ Show

Position: slide

Status: Published

Start Publishing:  [Calendar]

Finish Publishing:  [Calendar]

Access: Special Admin

Click Save and Close.

## Create Menu Items in the Administrator Menu to Display the Categories and Articles for each custom Group

Now we need to display our new categories and articles on our website. Click **Menus, Administrator Menu** and click Add New Menu Item. For type, select Category Blog. Use the Drop Down arrow to select the **Featured Author Tips** category. For title, call it Featured Author Tips. For Access, click on the **Special Access Level** (so all Administrator groups can see it). Then click Save and New. For the remaining 3 groups, also use category blogs assigned to their categories. But for access, click on their precise access group. For example, the **Newsletter Team Tips** Menu Item would be assigned to the Newsletter Team Access Group. Also go the **Create Article** Menu Item in the Bottom Menu and edit it to change its location to the Administrator Menu. Then click Save and Close. Then log into the front end of your News website as the News site administrator to view the new Administrator Menu.

By default, the News 1 template does not show the title of any modules in the Bottom Top, Cart or Brand module rows:



To show the titles of our three new menus, go to Templates, Code and click on the News 1 template to edit it. Then click on the index.php file and scroll down to Line 259 (which is the below-top module row) and replace the word “none” with the word “**card**”. Then go to Line 296 (which is the banner module position) and replace the word “none” with the word “**card**”. Then Line 301 (which is the top-a module position) and replace the word “none” with the word “**card**”. Then Line 306 (which is the top-b module position) and replace the word “none” with the word “**card**”. Save and close the index.php file.

### Change the Background color of the Administrator Menu

Currently, the Administrator Menu has the News 1 template default background color. To change the background color to make the administrator menu more noticeable, go to Templates Styles and assign the below top row to Styles Color 4 or 5:



If the row line appears after logging out, add the following to user.css:

```
.container-header .grid-child {padding: 0;}
```

### #6 Create a Members Menu

To create a new Members Menu, click on **Menus, Manage, New**. For Title, type in Members Menu. For Unique Name, type **membersmenu** (no spaces). For Description, type in Members Menu. Then click Save and Close.

This will bring us back to the Menu Manager where our new menu now

appears in the table of menus. Click on “Add a module for this menu.” For Module Title, type in Members Menu. For Title, leave it at Show. For Position, click on News 1 **banner** position. For Access, change the access to the **Registered Access Level**. Then click the Conditions tab and set it to appear on all Pages. Then click Save and Close to close the Conditions tab and Save and Close to close the Member module. Then go to Templates, Styles and edit the News 1 template so that the Banner Row background color is color 5.

### Create Members Menu Items

Go to **Content, Articles** to create a new article called **First Steps for New Members**. Here is the text: *This is the page where we will post instructions for new Members of our Community News network. It will include tips on how to submit events and or articles. To log out, and return to our Home page, click the member log out button.*

Then click Save and Close. Next, go to **Menus, Members Menu** and click New. For Menu Item Type, select Articles, Single Article. Then select First Steps for New Members. Change access level to Registered. Then click Save and Close.

Next go to the Bottom Menu and click the Log Out Menu Item to edit it. Change the Log Out menu item location from the bottom menu to the members menu. Then click Save and Close.

### Set Up a Registration Captcha tool

To allow new members and authors to register on the front end of our website, we first need to add a captcha tool to cut down on spam registrations. This is a simple captcha:

<https://extensions.joomla.org/extension/access-a-security/site-security/qlcaptcha/>

Here is the direct link to the Downloads page.

[https://github.com/hoochicken/plg\\_captcha\\_qlcaptcha/releases](https://github.com/hoochicken/plg_captcha_qlcaptcha/releases)

Click System, Install, Extensions to install the captcha. Then go to Systems, Manage, Plugins. Click **Captcha – qlcaptcha**. Click Enable. Then click the Styles tab and change the background color to light blue and the angle to 12. Then click Save and Close.

Click Global Configurations and set the Default Captcha. Then go to **Users, Manage** and click Options. Change Allow User Registration to Yes. Then



click Save and Close.

After registering, this notice will appear: *Your account has been created and a verification link has been sent to the email address you entered. Note that you must verify the account by selecting the verification link when you get the email and then an administrator will activate your account before you can login.*

After opening your email and clicking on the link, the following notice will appear: *Your email address has been verified. Once an administrator approves your account you will be notified by email and you can login to the site.*

You will then receive an email as the site administrator. To approve the account, click the link provided. You will then need to log in as a Super User. You will get this notice: *The user's account has been activated and the user has been notified about it.*

Log out of the front end. Alternately, you can register the remaining new members by logging into the backend. Then click Users, Manage, New. Once you have registered your new members, go your News website front end and click Member Login. Here is what our Members menu looks like:



We can change the order of these two menu items by going to Menus, Member Menu. We will leave the items vertically displayed as we will be putting the Featured Authors Menu on the same row.

## **#7 Create a Featured Authors Menu**

To create a new Featured Authors Menu, click on **Menus, Manage, New**. For Title, type Featured Authors Menu. For Unique Name, type in **featuredauthorsmenu** (no spaces). For Description, type Featured Authors Menu. Then click Save and Close.

This will bring us back to the Menu Manager where our new menu now appears in the table of menus. Click on “Add a module for this menu.” For

Module Title, type Featured Authors Menu. For Title, leave it at Show. For Position, click the News 1 **banner** position. For Access, change the access to the **Featured Authors Access Level**. Click the Conditions tab and set the menu to display on all pages. Then click Save and Close.

### **Create Featured Author Menu Items**

Go to Content, Articles and click New. For Title, type How to Create a News Article. Here is the initial text of this article:

*In this article, we will explain the steps for creating and submitting a news article. To create your News article, open a Libre Writer new document. Then type or copy paste your text and images into a Libre Writer document. Then right click on each image and click **Compress**. Change the resolution to 150 dpi. Then click OK. Then right click on the image again and click Save to save the image to your images folder in your file manager. The image file name should be lower case with no spaces. To Resize and Crop images, Debian has a free tool called Gthumb. But any graphic editing tool will do. Finally, rename and Save your finished image to your File Manager.*

*To submit your News article, log into our News website and click on Create an Article in the Featured Authors Menu. See this article for more information about writing a new article:*

*<https://createasecurennewswebsite.com/first-steps/3-news-topics-and-articles/3-3-how-to-write-and-post-news-articles>*

*If you have any questions, feel free to email us!*

Assign the article to the **Featured Author Tips category**. Change the access level to **Featured Authors**. Then click Save and Close. Next go to Menus, Service Provider Menu, New. For Menu Item Type, select Articles, Category Blog. Then select the **Featured Authors Information** category. For title, call it Service Provider Information. For Access, click on the **Featured Authors Access Level**. Then click Save and Close.

Then click New. For Menu Item Type, select Articles, Single Article. Then select the How to Create a News article article. For title, type **How to Create a News Article**. For Access, click on the **Featured Author Access Level**. Then click Save and Close.

**#10 Assign at least one User to each custom group so we can test our system.**

The power of Joomla Groups, Permissions and Access Levels is that we can define what different groups see when they log into the front end of our website. To test our new system, we will need at least one user assigned to each of the new custom groups in addition to our super user. Earlier, we created email addresses for 9 demo group members, We then added 4 of these members using the back end control panel rather than having them register on the front end. Here we will add the Author1 member to the Featured Author group. Go to Users Manage and click on the Author1 to edit this member. Then click Assigned User Groups. Then check the Featured Author box.



Repeat for Author2 and Reporter1. Then add the Events Coordinator to the Events group. Add the Newsletter Coordinator to the Newsletter Group. Add the Tech Team Coordinator to the Tech Team group.

Go to Global Configurations to turn off front end editing. To get the menus to appear side by side, add to user.css:

```
.container-banner {display: flex; padding: 0px 15px;}
```

Then log in to the front end of our News website as author1 to view the Featured Authors menu which will also show the Members menu:



## #11 Simplify the Joomla Login form

Go to System, Manage, Plugins and disable "Multi-factor Authentication – Passkeys." and disable "System - Passkey (Passwordless) Login. Also disable the System Remember Me plugin.

## #12 Define Precise Permissions for Each Custom Group

We are nearly ready to set Global Permissions for each custom group. But first we need to install the **BW Postman Newsletter**. We will explain how to use this later. For now, find it in the Extensions Directory. Then download them and install it. Then go to **System, Global Configurations** and click on the **Permissions tab**. The Permission Setting screen opens at the Public Table which has all permissions set in Red for Not Allowed:

#### Permission Settings

Manage the permission settings for the user groups below. See notes at the bottom.






Public	Action	Select New Setting	Calculated Setting
– Guest	Site Login	Not Set	Not Allowed (Default)
– Manager	Administrator Login	Not Set	Not Allowed (Default)
– Administrator	Offline Access	Not Set	Not Allowed (Default)
– Tech Team	Super User	Not Set	Not Allowed (Default)
– Information Team	Configure Options Only	Not Set	Not Allowed (Default)
– Newsletter Team	Access Administration Interface	Not Set	Not Allowed (Default)
– Membership Team			
– Events Team			

Scroll down and click on the **Registered** tab to display the Registered Permissions Table. All they are allowed to do is log into the front end of our website. Click on the **Featured Authors** Permissions Table:

Create	Inherited	Allowed (Inherited)
Delete	Inherited	Not Allowed (Inherited)
Edit	Inherited	Not Allowed (Inherited)
Edit State	Inherited	Not Allowed (Inherited)
Edit Own	Inherited	Allowed (Inherited)

Click on the **Author** Group Permissions table and you will see that they have the same permissions as the Featured Authors group.

We will next set the Permissions for the Newsletter Team. Click on the **Newsletter Team** group Permissions Table. Then click on **BW Postman** in the side menu. Then click on the Permissions tab:

Action	Select New Setting	Calculated Setting
Administrate BwPostman	Inherited 	Not Allowed (Inherited)
Admin Login	Inherited 	Allowed (Inherited)
Configure	Inherited 	Allowed (Inherited)
Create	Inherited 	Allowed (Inherited)
edit	Inherited 	Allowed (Inherited)

Unfortunately, the Newsletter Team is not allowed to administrate the BW Postment Newsletter Component. Change Inherited to Allowed:

Action	Select New Setting	Calculated Setting
Administrate BwPostman	Allowed  ✓	Allowed
Admin Login	Inherited 	Allowed (Inherited)

Then click Save. We will eventually install an Events Calendar. But for now, we will simply give the **Events Team** access to the entire back end except Global Configurations. So click on **Global Configurations** at the top of the left side menu. Then click on Events Team. Change **Access Administration Interface** from Inherited (not allowed) to Allowed. Then click Save.

Finally, click on the **Tech Team**. This group has the same permissions at the Administrator group which means they have access to all Administration

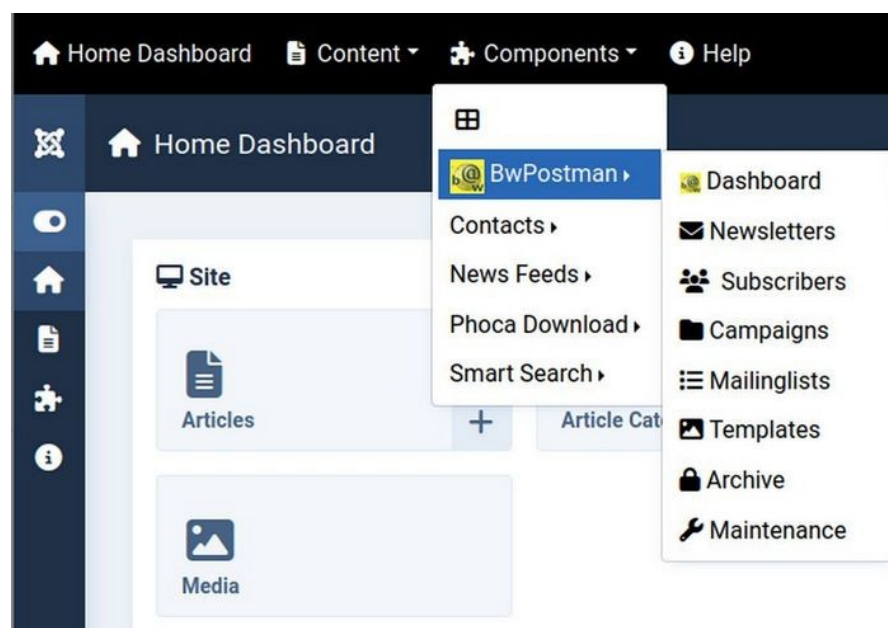


Interfaces (and everything else) EXCEPT they do not have access to Super User settings which means that they cannot access Global Configurations. They also do not have access to Configure Options. Change **Configure Options** from Inherited not allowed to Allowed. Then click Save and Close. Note that we accomplished all of these Global Configuration settings without using the Deny Option for any action and without changing the settings of the Super User group.

### #9 Test our New Access Control System...

Our last step is to test our new access control system. We need to test the back end access control to make sure that each administrator group has the correct access to the back end of the website and to the correct tools on the back end of the website. Try to log into the back end as the **Editor** who is a Backend Administrator. The Administrator sees almost everything except Global Configurations.

Next, log into the back end as the Newsletter Coordinator. This time there is access to the back end and to Content and the Newsletter.



Next, log into the back end as the Events Team Coordinator. This group should see the same menu as the Editor. Next, log into the back end as the Tech Team Coordinator. This group should also see all of the tools in the back end with the exception of Global Configurations which is only displayed for members of the Super User group.

### Front End Menu Tests

In addition to verifying the back end access, we should verify that the front



end access has been correctly set. Try to log into the front end as the Editor who is a Registered User and Publisher You should see the Member Menu and the Featured Author Menu.

Next, log into the front end as the Newsletter Team Coordinator. This time there is also access to the Admin menu and the Newsletter Team Tips.

Next, log into the front end as the Events Team Coordinator. This group should see the same menus as the Newsletter Coordinator and the Events Team Tips. Last, log into the front end as the Tech Team Coordinator. This group should see all the menus.

### **What's Next?**

Now that we have a better understanding of the Joomla Access Control System, in the article, we will explain how to add a process for allowing and approving reader comments.

## 8.4 Set Up a Reader Comments System

A Comments system will allow us and our authors to get feedback from our readers. But it is important that it also come with a spam captcha filter, nested comments, category filters, an email subscription system and a moderation function. Currently, the top rated free comment system in the Joomla extension directory is called Akeeba Engage. This tool allows our visitors to enter comments using a simple version of the JCE editor. All comments are securely stored in our site's database. We can choose which categories should have comments. We can also auto-close comments after a specific period of time such as 30 days after the article's publish date. We can also manage comments from either the frontend or backend. We can optionally require CAPTCHA for guest comments, non-special users' comments or for all comments. Notifications about comments can be sent to managers and optionally the participants of a conversation using customizable email templates. We can also send email notifications to article authors and to people when their comment receives a reply. Anyone but comment managers can unsubscribe from the notifications. Here is the link:

<https://extensions.joomla.org/extension/contacts-and-feedback/articles-comments/akeeba-engage/>

Click on Download to download the extension. Then go to System, Install, Extensions to install the extension.

### Step 1 Publish five of the Comments Plugins

Go to **System, Manage, Plugins** and enter **Akeeba Engage** in the **search box** to review each of the following ten plugins.

5 plugins were automatically published when we installed Akeeba Engage:

**Console – Akeeba Engage.** This plugin adds Akeeba Engage commands to the Joomla console application. It must remain enabled.

**Content – Akeeba Engage.** This displays the comments interface in articles and tells Joomla to show you the Comments options when editing categories and articles. It must remain enabled. This plugin is responsible for the following:

Display comments in articles in the public frontend.

Display comment options in categories and articles.

Display the article title in the backend comments management list.

Clear the comments cache when the article cache is being cleared.

**Akeeba Engage – Emails.** Sends emails to comment managers and subscribed users. This plugin makes email sending possible. It needs to be enabled for any emails to be sent at all. If you disable it no emails will be sent. Click on it to open it. There are two questions set for No. It is recommended to leave both at No. By default, comment managers are only notified when an unpublished comment is submitted. Enabling this option will notify comment managers about all comments, including those which get immediately published. **This option is highly discouraged on most sites.** Even on personal blog sites it's typically best to **use the Author notification option in the Component options or the category options instead.**

**User – Akeeba Engage.** This deletes comments when you delete a user account which was used to comment on articles. If you unpublish this plugin you will see a lot of "User not found" errors popping up in your site's frontend. It must remain enabled.

**Akeeba Engage Gravatar Integration.** Displays avatar for comments using the free, third party Gravatar service. It is enabled by default. But **at least initially, we will disable it.** Akeeba Engage ships with a default configuration that lets it display user avatars using the third party, free of charge Gravatar service. You can configure Gravatar options by editing the plugin "Akeeba Engage – Gravatar integration". If you disable this plugin no avatars will be displayed. Initially, we will start with the Avatar plugin disabled. You can always add avatars later.

**System – Akeeba Engage cache support.** This tells Joomla to take into consideration Akeeba Engage's pagination when caching pages in the frontend. If you unpublish this plugin and you have caching turned on your site, guest users will only be able to see the first page of comments and think that the comments' pagination broke. When installed, this plugin is disabled. **We will enable it.**

## **Step 2 Choose where you want to make your configurations.**

As with Joomla Configurations, there are three places to set configurations:

**Global Configurations** are set by going to Components, Akeeba Engage and clicking the Options button.

**Category Configurations** can be set for each Topic Category by going to the Category Settings.

**Article Configurations** can be set for each article by going to Article Option settings in the Article Edit screen.

Akeeba Engage first looks at the parameters in the article being displayed. If any parameter is set to anything other than “Use Global” (that's the default setting for all options in categories and articles) this is the setting that will be used.

If there are any parameters left with the “Use Global” setting, Akeeba Engage will look into the article's category. The same thing happens there; if there's a value other than “Use Global” it's used.

If there are still any parameters left with the “Use Global” setting, Akeeba Engage will look into the parent category. This will keep going until there is no parameter left in the “Use Global” setting OR we reach the topmost category.

If at this point there are still any parameters set to “Use Global” we will use the values specified here, in the component's configuration. This configuration concept mirrors how Joomla works with article, category and the Articles component's parameters.

### **Step 3 Begin by setting options in Global Configurations.**

Go to Components, Akeeba Engage and click on the Options button.

**Maximum Comment Nesting:** Comments can be nested as a a reply to another comment. By default, the maximum level is 3 levels. This means that you can have top level comments, replies to top level comments and replies to the replies. With the default maximum of 3 levels: if you try to reply to a reply of a reply (3rd level comment) your comment will also be a 3rd level comment. Its parent, i.e. the comment you are seemingly replying to, will be the reply to the top-level comment (the 2nd level comment). To avoid confusion, we will change Maximum Nesting to **2 to only allow replies to top level comments.**

**Number of Comments per page:** By default, Akeeba Engage uses

Joomla's pagination limits, as set in the Global Configuration, for comments. This option allows you to change that limit. If an article has more comments than this limit then the comments will be paginated. A pagination navigation element is shown at the bottom of the comments.

It is recommended that you set this limit at **20 comments per page**. Do remember that all comments appearing on the page need to be loaded from the database first. If you select a very high number (100 or more) or "All" you may run out of PHP memory which will result in your site showing an error or a blank page.

**CAPTCHA for Comments:** Having comments on your site is a wonderful way to engage your audience but it also opens your site to abuse by comment spammers. Left unchecked, a comment section can rapidly descend into chaos and possibly hurt your search engine rankings. The first line of defence is a CAPTCHA. Akeeba Engage supports all CAPTCHA plugins which are compatible with Joomla. This option allows you to select which CAPTCHA plugin Akeeba Engage should use. We have already set up a Captcha tool which is shown already in this option.

**Use CAPTCHA for these users:** While a CAPTCHA is a powerful way to prevent comment spam it can also hinder legitimate users from submitting a comment. Akeeba Engage lets you determine which users should be shown a CAPTCHA when filing a new comment. Your options are:

Guests. This is the most lax setting. Only users who are not already logged in will be shown a CAPTCHA. We do not recommend this option.

**Anyone but comment administrators.** This is a balanced setting. Everyone except comment managers (users with the Edit State privilege for Akeeba Engage) will be asked to solve a CAPTCHA when submitting a comment. **This is the recommended setting.** This requires everyone to solve a CAPTCHA to submit a comment, unless they are a comments administrator. The idea is that the most determined spammers use bots to register user accounts and even follow the email validation link. Putting a CAPTCHA in front of them increases their cost and they are more likely to leave you alone.

**Guests must accept terms.** Do not enable.

**Terms checkbox text.** We will leave it at no for now. If it is set for yes, then enter the text which will be displayed in the checkbox the users will be

required to check to post a comment. You can use full HTML. If left blank a generic text will be used (see the COM\_ENGAGE\_COMMENTS\_FORM\_LBL\_ACCEPT language key).

**Comment area hidden by default.** Leave it set for No.

**Show Please Wait.** Leave it set for No. Minimum comment length. Leave it set for 0.

**Maximum comment length.** Leave it set for 0. This will allow any length.

**New Comments:** Should new comments be published by default for all topic categories? It is best to turn off publishing new comments globally as this will allow us to set which Topic categories we want to allow comments on. So set Allow new comments to No.

**Comments interface.** Should comments be shown at all? Set this to Hide in the component and Show only on specific categories where comments are relevant. Setting Comments interface to Hide tells Akeeba Engage to not show the comments and not allow filing any new comments unless we explicitly allow comments for a specific Category . Please note that merely hiding the comments interface does not make it impossible for comments to be filed. An advanced user can in many cases guess the correct URL to submit a comment.

### Text Filtering Tab Options

Akeeba Engage comes with a well-established, independently audited library called [HTML Purifier](#). Akeeba Engage uses HTML Purifier by default using the configuration you have set up in Joomla's Text Filters. **HTML Purifier (allow minimal HTML). Strongly recommended.** Only the following tags and attributes are permitted: p, b, a (with the href attribute), i, u, strong, em, small, big, span (with the style attribute), font (with the size and/or color attributes), ul, ol, li, br, img (with a combination of the src, width and height attributes), code, pre, blockquote. No other tags or attributes are permitted. So Leave the HTML purifier uses Joomla Text Filters set for No.

### Step 4 Advanced Tab Options

**Login Module:** If you do not enable guest comments, your users will need to log in to submit a comment. Without an obvious way to do so they may assume that submitting comments is impossible. By default, Akeeba Engage will display Joomla's Login module in the comment area to prompt



users to log in. You can select a different module here. The downside is that you can not configure the Login module you include here. So we will **set this to “( Do not display )” and publish a custom login module in the engage - login position.**

To clarify: If you select “( Do not display )” but *at the same time* you have also not published any custom module in the engage - login position then the default Joomla! login module will be displayed instead. You cannot simply not display any module at all. Another option besides the ugly Login Module is to **publish a Custom module with text “To submit a comment , please go to our bottom menu and register and log into our site first.”** where the “register” part has a link to our site's login page. We will call the custom module **Comment Notice. Hide the title.** Leave it published.

Then assign it to the special module position called **engage-login** by typing this into the position box then press enter on your keyboard.

Other engage module positions include:

#### **engage-before-comments**

Displayed below the comments header, before the list of comments.

#### **engage-after-comments**

Displayed after the list of comments but before the pagination links (if any).

**Maximum spam age.** Comments marked as spam posted this many days ago will be automatically deleted. This is a convenience option so you don't have to delete spam manually. The default is 15 days. We will leave it at that.

**Load custom CSS.** By default, Akeeba Engage uses Bootstrap 5 CSS classes to style the comments in the frontend of your site. This setting is for sites that do not have Bootstrap 5 loaded. Since we do, leave it set for No. If and when Joomla gets rid of Bootstrap 5, then we will change it to yes.

**HTML Purifier inclusion.** Do not change

### **Step 5 Set your Comments PERMISSIONS TAB OPTIONS**

#### **Set Joomla Permissions to Control who submits comments**

Akeeba Engage uses Joomla's permissions system to determine who can

comment on articles, who gets to edit their own or other people's comments, change their publish status, manage spam and delete existing comments. You can manage these permissions by going into Akeeba Engage and clicking the **Options** button. Click on the **Permissions** tab. It opens at the Permissions allowed to the Public. They are not allowed to post comments.

Public	Action	Select New Setting	Calculated Setting
– BwPostmanAdmin	Configure ACL & Options	Inherited <input type="button" value="v"/>	Not Allowed (Inherited)
: – BwPostmanMa	Configure Options	Inherited <input type="button" value="v"/>	Not Allowed (Inherited)
: : – BwPostma	Access Administration Interface	Inherited <input type="button" value="v"/>	Not Allowed (Inherited)
: : : – Bw	Comment	Inherited <input type="button" value="v"/>	Not Allowed (Inherited)
: : : : – Bw	Delete	Inherited <input type="button" value="v"/>	Not Allowed (Inherited)
: : : : : – Bw	Edit	Inherited <input type="button" value="v"/>	Not Allowed (Inherited)
: : : : : – Bw	Edit Own	Inherited <input type="button" value="v"/>	Not Allowed (Inherited)
: : : : : : – Bw	Edit State	Inherited <input type="button" value="v"/>	Not Allowed (Inherited)

The following permissions are provided for each user group:

**Configure ACL & Options.** Gives access to make changes on the Permissions tab of the Options page of Akeeba Engage.

**Configure Options Only.** Gives access to the Options page of Akeeba Engage.

**Access Administration Interface.** Gives access to the backend administrator interface of Akeeba Engage.

**Comment.** User can submit new comments or replies to existing comments.

**Delete.** User can delete comments filed by anyone.

**Edit.** User can edit comments submitted by anyone.

**Edit Own.** User can edit their own comment.




**Edit State.** User can publish, unpublish, mark as spam, or mark as non spam and publish any comment. Users with this privilege are comment managers and enjoy a special status in Akeeba Engage. Do not give readers permission to use the Edit state. Users with that privilege can mark as spam, mark as not spam, publish and unpublish any comment. Essentially, **users with this privilege are *comment managers*.**

By default, Joomla! allows creation of new items – including comments – only to users in the Author, Editor, Publisher, Manager, Administrator, and Super Administrator groups. We also want people who are Registered and logged in to submit comments. So we will set the Comment privilege to Allowed for registered members. Requiring registration leads to readers posting more polite comments. It also allows us to unregister anyone whose comments are not polite. **Select who can submit and manage comments. Click on the Registered group and set the Comment privilege to Allowed. Also allow them to edit their own comments:**






Comment	Allowed ▾ ✓	Allowed
Delete	Inherited ▾	Not Allowed (Inherited)
Edit	Inherited ▾	Not Allowed (Inherited)
Edit Own	Allowed ▾ ✓	Allowed

Because any user with more permissions than a registered user automatically inherit the registered group permissions, the above means that all groups including authors, editors and publishers will be able to edit and post comments.






Click on the Author group to see their permissions to see they are now allowed to comment and edit their own comments. Click on the Editors group to see that they can edit their own comments and the comments of others:

Comment	Inherited 	Allowed (Inherited)
Delete	Inherited 	Not Allowed (Inherited)
Edit	Inherited 	Allowed (Inherited)
Edit Own	Inherited 	Allowed (Inherited)





Click on the Publishers (front end) group to see they can do everything but delete comments.

Comment	Inherited 	Allowed (Inherited)
Delete	Inherited 	Not Allowed (Inherited)
Edit	Inherited 	Allowed (Inherited)
Edit Own	Inherited 	Allowed (Inherited)
Edit State	Inherited 	Allowed (Inherited)

Click on the Manager (backend) group to see that they can delete comments:

Comment	Inherited 	Allowed (Inherited)
Delete	Inherited 	Allowed (Inherited)
Edit	Inherited 	Allowed (Inherited)
Edit Own	Inherited 	Allowed (Inherited)
Edit State	Inherited 	Allowed (Inherited)

Click on the (backend) Administrator group to see that they can access the backend administrative interface.

Action	Select New Setting	Calculated Setting
Configure ACL & Options	Inherited 	Not Allowed (Inherited)
Configure Options	Inherited 	Not Allowed (Inherited)
Access Administration Interface	Inherited 	Allowed (Inherited)
Comment	Inherited 	Allowed (Inherited)

Click on Tech team to see they can do everything except change the access control levels (ACL) which is something only the Super User can do:

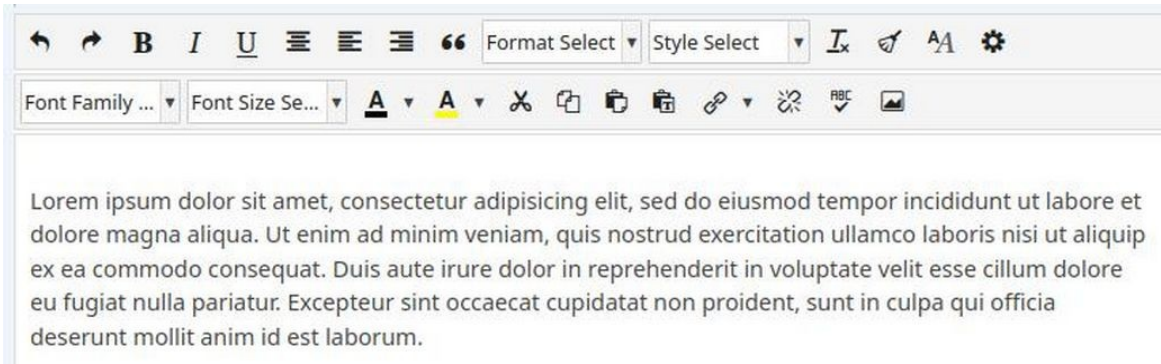
Action	Select New Setting	Calculated Setting
Configure ACL & Options	Inherited ▼	Not Allowed (Inherited)
Configure Options	Inherited ▼	Allowed (Inherited)
Access Administration Interface	Inherited ▼	Allowed (Inherited)
Comment	Inherited ▼	Allowed (Inherited)

We don't have to specify who can manage comments. Comment management is granted to users who are allowed the **Edit State** privilege. By default, this is **Publisher, Manager, Administrator and Super Users**. We have also given this right to the Tech Team, the Newsletter team and the Events team. But Featured Authors do not have this right. They can only post comments and edit their own comments. Click on Save & Close to close the Permissions screen.

## Step 6 Create a JCE Comments Editor

We have previously configured a “Super User” version of our JCE editor for those with access to the backend of our website to create and edit articles and modules. We have also created a “default” version of our JCE editor for authors posting articles on the front end of our website. Click on the Default editor and in the Setup tab, scroll down the page to see that we have already added “registered “ users to the allowed User Groups. Because this editor will now be used for Comments, we will simplify the editing tools that these users see. Click Features and Layout. Then scroll down to the Current Editor Layout.





We will drag several buttons out of this layout and down to the Available Buttons bar. Here is the simple version:



Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

Click on Save & Close. We have already set the JCE editor as our editor in Joomla Global Configurations. The JCE editor will first look to see who wants to use this editor. If they are a registered user they will get the simple version. If the person is a backend administrator, they will get the more complete version.

## Step 7 Set Up Email Notifications

Akeeba Engage is able to send notification emails to comments administrators when their action is required and to users when they receive a reply to their comments. You can control these features by going to System, Manage, Plugins and entering Akeeba Engage in the Search box.

Then edit the “Akeeba Engage – Emails” plugin. We have previously set both of these options for no. But there are still a lot of emails that will be sent. Options about when emails are sent can be defined both in the Component options and the respective option overrides in each category and article.

Akeeba Engage comes with a default configuration which will send emails

under certain conditions. For example, comment managers will receive an email when a user files a comment that is either unpublished by default or detected as spam (see Spam protection below). Moreover, when a user submits a comment in reply to another comment the author of the comment being replied to will receive an email notification. The emails are sent with rich HTML templates. You can edit the email templates by going to Components, Akeeba Engage and clicking on the Email Templates tab.

The screenshot shows a Joomla! interface for managing email templates. At the top, a blue header bar contains the text "Where are the Email Templates?". Below this, a paragraph explains that email templates for core and third-party extensions like Akeeba Engage are managed centrally by Joomla! in the System, Mail Templates page. It notes that third-party extensions need to implement their own code to install and update templates. A blue button with an envelope icon and the text "Mail Templates" is provided. Below this is a dark blue header bar with the text "Email Template management". Underneath, there are two main sections. The left section has a green button with a checkmark icon and the text "Install or Update". Below the button, it states: "Installs new email templates for Akeeba Engage and updates existing ones if they've changed. The user-modified email templates for Akeeba Engage are left intact." The right section has a red button with a circular arrow icon and the text "Reset". Below the button, it states: "Resets the email templates. This removes all of the email templates for Akeeba Engage, including any user-modified email templates. Then it installs all of the Akeeba Engage email templates afresh. Only use this button if you think you've damaged something in your database. Otherwise use the Joomla! Email Templates manager to reset each email's subject and body to the default using the buttons provided in Joomla!'s interface."

There are three buttons on this page.

**Mail Templates** takes you directly to Joomla's Mail Templates page.

**Install or Update** installs new email templates and updates existing ones if they've changed. User-modified email templates for are left intact.

**Reset** will reset the email templates to factory defaults. This is the nuclear option. It removes all of the email templates for Akeeba Engage, including any user-modified email templates. Then it installs all of the Akeeba Engage email templates afresh. Only use this button if you think you've damaged something in your database. Otherwise use Joomla's Mail Templates page to reset each email's subject and body to the default using the buttons provided in Joomla's interface.

**Click on the Mail Templates Blue button:** This takes you to the Joomla Email Templates page. You can reach this same page by going to **Systems, Templates, Mail Templates**. Here you will see five Akeeba Engage default email templates:

<a href="#">Moderate: Ask comment managers to moderate a new, unpublished comment</a>	Akeeba Engage	Sent to comment managers when an unpublished comment awaits moderation.
<a href="#">Notify Users: Notify users of a reply to their comment</a>	Akeeba Engage	Sent to people who have commented on an article when they receive a comment in reply to theirs.
<a href="#">Notify Author: Notify author about a new, published comment on their content</a>	Akeeba Engage	Sent to the article's author when their content receives a new comment
<a href="#">Notify Managers: Notify managers about a new, published comment</a>	Akeeba Engage	Sent to comment managers when a comment is submitted and automatically published.
<a href="#">Spam: Ask comment managers to moderate a new comment marked as possible spam</a>	Akeeba Engage	Sent to comment managers when a comment is marked as being possibly spam

Click on the first email template which asks comment managers to moderate a new unpublished comment.

Moderate: Ask comment managers to moderate a new, unpublished comment - en-GB

com\_engage.manage

Sent to comment managers when an unpublished comment awaits moderation.

Subject

A new comment on "{CONTENT\_TITLE}" awaits your mode

Reset To Default  
Subject

Body

Hello {RECIPIENT\_NAME},

A new comment was filed on "{CONTENT\_TITLE}". The comment is currently unpublished and awaits your moderation.

Please find the comment details below.

{NAME} <{EMAIL}>  
From {IP}, on {DATE\_LOCAL}  
User Agent: {USER\_AGENT}

{COMMENT\_SANITIZED}

Comment URL: {COMMENT\_LINK}

Reset To Default  
Body

#### Insert Tags

SITEURL

SITENAME

RECIPIENT\_NAME

RECIPIENT\_EMAIL

CONTENT\_LINK

CONTENT\_TITLE

You can see that these are relatively easy to customize. Click Close.

## Step 8 Configure a Category to allow comments

We currently have our Comments Component to not allow any comments.

We will now override this setting by changing these settings for a single category. We recommend starting with a single category and testing it for awhile. Go to Content, Categories. We will set up comments for our Business category. Click the Comments tab.

Set Comments Interface to Show.

Set New Comments to Published.

Summary on Featured display. For now, set it to Hide.

Summary on Blog display. For now, set it to Hide.

Summary on Newsflash module. For now, set it to Hide.

Comments ordering. Comments are ordered by date and nesting level, in this order. This option determines how the comments should be ordered by date. Ascending means that the oldest comment is first. Descending means that the newest comment is first. It's strongly recommended that you **use Ascending**.

Close comments after this many days. If this is 0 comments are never close automatically. Any non-zero setting means that comments will be automatically closed this many days after an article was first published. A setting of 365 means that comments are allowed only during the first year since the comment was published.

Allow new comments. Set it for Yes.

Close Comments after this many days. Set it for 30 days.

Notify author. Set it for yes.

Notify users. Set it for yes.

Click on Save & Close to apply your changes.

### **Step 9 Log into the front end of your site and make a comment**

Also log in again as a different member and reply to the comment. We want to see if the author of the article is notified and if the reader making the comment is notified of a reply to their comment. We also want to see if setting up comments for a parent category provide the comments area for child categories. In our case, the answer was yes.

Here is what the comment area looks like below the article.



## Business Demo Article 2

Written by: David Spring
 Category: 2025 State Business News
 Published: 03 December 2024



This is an Intro Article. This paragraph is called the Intro Text. Click on either the title or the image to learn more!

To insert a READ MORE button, place your cursor at the blank line just above this sentence. Then click on the READ MORE button at the bottom of this editor screen.

This is more content that is part of the Full Article but not visible on the Intro Article.

**No comments**

### Leave your comment

Editor Code Preview

↶ ↷ **B** *I* U
Font family ▾ Font size ▾
 🔗 ▼ ✖ 🖼

Type in a comment. Then fill in the Captcha. Then click Save. The reply was Your comment was posted successfully.

### One comment

Member1

Thursday, 19 December 2024 23:53

Edit

This article is really short.

Reply

Log out and then log in as a different person to make a reply.

### 2 comments

Member1

Thursday, 19 December 2024 23:53

This article is really short.

Reply

Member2

Thursday, 19 December 2024 23:56

Edit

It is short because this is just an example of an article.

Reply

I got emails notifying me of the comment and the reply because I am the author. However, I did not get an email about the reply to my first comment as a reader.

## Step 10 Comment Management

Go to **Components, Akeeba Engage**. You should see a couple of

comments listed with the newest comment first. The list includes all comments filed by all users in all categories. Click Filter Options to see three different filters. You will also see a Sort Table by drop down with lots of options:

The screenshot shows the top of the comment list interface. At the top, there is a search bar with the text "Search" and a magnifying glass icon. To its right is a "Filter Options" dropdown menu and a "Clear" button. Below the search bar, there is a "- Select Status -" dropdown menu, a "Since" date field with a calendar icon, and a "To" date field. The main content area displays a list of comments. The first comment is from "Member2" (member2) with the text "It is short because this is just an example of an article." and a link to "Business Demo Article 2". The second comment is from "Member1" (member1) with the text "This article is really short." and a link to "Business Demo Article 2". To the right of the comments, there is a "Sort Table By:" dropdown menu with the following options: ID ascending, ID descending, Author ascending, Author descending, Status ascending, Status descending, Date ascending, and Date descending.

Select an article and then click on the Actions drop down:

The screenshot shows the comment list interface with the "Actions" dropdown menu open. The menu options are: Publish (checked), Unpublish, Possible Spam, Spam and Delete, and Not Spam and Publish (checked). The background shows the same comment list as the previous screenshot, with the first comment from "Member2" and the second from "Member1".

## Comment List Toolbar buttons

The toolbar at the top of the page offers the following administrative



functions. Each function applies to *all* comments selected in the list below.

**Actions.** The actions drop-down menu offers the following 5 options:

**Publish.** Publishes the comment. The comment will be visible to everyone. Note that we have set comments to be automatically published.

**Unpublish.** Unpublishes the comment. The comment will be hidden for everyone except comment managers.

**Possible spam.** Marks the comment as spam. The comment is hidden for everyone except comment managers.

**Spam and Delete:** This will delete the comment from the database.

**Not Spam and Publish.** Only applies for comments already marked as possible spam. It publishes the comment. Moreover, it informs the Akeeba Engage anti-spam plugins that this comment is definitely not spam.

There are also three standalone toolbar buttons

**Delete.** Deletes the comment.

**WARNING!** Deleting a comment, either directly or with the Spam and Delete button, will delete the selected comment and all of its replies and their replies etc. Basically, it deletes the entire comment thread under the comment you are deleting. Akeeba Engage will warn you before doing so. Once a comment thread is deleted it cannot be restored!

**Email templates.** Displays information about the [Email templates](#) used by Akeeba Engage when sending email messages to comment administrators and people who have submitted comments.

**Options.** Redirects you to the component's [Options](#) page.

## **FILTER OPTIONS**

Right above the list there's the standard Joomla! filters button. This allows us to limit the comments displayed. Use the filters to narrow down a search for specific comments. As shown in the image above, there are three filters:

— Select Status — is a drop down. You can limit the display by the status of the comment: published, unpublished or (possible) spam.

The two date fields, Since and To allow you to narrow down your search using specific limits for the Posted On date and time (when a comment was submitted). If both Since and To are set: display all matching comments

submitted between Since and To, inclusive. If only Since is set: display all matching comments submitted on or after the Since date and time. If only To is set: display all matching comments submitted on or before the To date and time.

## SEARCH BOX

To the left of the Filter button is the Search box. Search will match the comment text or the name or email address of the person submitting a comment. You can prefix your search string to look for specific information instead:

**user:** Display the comments submitted by someone whose name or email address partially matches the text entered after the prefix.

**title:** Display the comments submitted for a content item whose title partially matches the text entered after the prefix.

## LIST ELEMENTS

Each row of the list represents a comment. The checkmark at the leftmost column allows you to select comments. The Author column shows information about the user who submitted the comment. You can see their avatar, if available. Next to the avatar there might be an icon. An icon of two people represents a guest comment. An icon of a single person represents a comment submitted by a logged in user. A star represents a comment submitted by a comments administrator. Next to the icon you can see the full name of the person who submitted the comment. Below that you will see their email address. Below that you can see if they filed the comment from a mobile or desktop device. Below that is the IP address from which the comment was filed. If you see something that looks like junk characters select the comment and click on Spam and Delete. Finally there is a magnifying glass button on that last line. Clicking on it will filter the comments by that IP address.

The **Comment** column shows you a summary of the submitted comment. If the comment is a reply to another comment the top line will show which comment it is in reply to. If you click the name of the person the comment is in reply to a new tab will open in your browser showing the comment in its full context in the public frontend of your site. On the same line there's an Edit link which shows you the Edit page for that comment.

Below this you can find the comment text. There's a button to display the

entire comment in a modal dialog. Right below you can see the title of the article the comment was submitted on. The line below shows you how many comments in total have been submitted on that content item.

Next to it there's the "Filter by content" button which lets you display only the comments submitted on this article. If filtering is already enabled this changes to "Remove filter by Content"; clicking it removes the article filter and you will see comments from all articles again.

Finally, the View content link will display the article in the frontend of your site.

The **Posted on** column shows you the date and time the comment was submitted.

Finally, the **Enabled** column shows you the publish status of the comment (published, unpublished or spam).

## Editing a comment

Editing a comment allows you to change the following fields:

- **Enabled.** The publish state of the comment.
- **Name.** The name of the person submitting the comment. Only applies for guest comments.
- **Email address.** The email address of the person submitting the comment. Only applies for guest comments.
- **Posted on.** When was the comment posted.
- **IP address.** The IP address of the person submitting the comment.
- **User Agent string.** The User Agent string of the browser used to submit the comment.
- **Modified Date.** Not editable. The date and time someone edited the comment.
- **Modified By.** Not editable. The user who last edited the comment.
- **Comment.** The comment itself, using your preferred HTML editor.

Please note that the IP address and User Agent string are saved with the comment for spam prevention reasons.

## Comment System Security Precautions

Any user-submitted HTML document can be a security problem. A

malicious user may try to embed malicious content (e.g. an SVG crafted in a way to cause JavaScript to be executed on the victim's computer. It, therefore, imperative that you do NOT allow untrusted users to submit potentially malicious content. **Our commenting system has several tools to protect against malicious code. The first tool is the filtering tool supplied by Akeeba. It will strip nearly all bad code.** Second, the Joomla comes with filtering functions to prevent most malicious code. Joomla text filters prevent Guests and Registered users from inserting HTML or other code in their comments. All comments for these two groups are automatically converted into plain text. Third, the JCE editor not only strips bad code but also is set with with limited functionality for commenters. Fourth, it is easy to monitor comments – for example by limiting comments to just a short period of time after an article is published. Together, this tools do a good job of protecting our News website from hackers.

### **Customize the appearance of our Comments area:**

The term “Leave your comment” has a font size that is way too big. To fix this, add the following to your user.css file:

```
.my-3 {margin-top: 2rem !important;}
```

```
.h1 {font-size: 20px !important; color: #000055;}
```

Now that we have fixed up the initial problems, feel free to add comments to more categories of articles on your News website.

Congratulations! Your Community News website now has a secure and easy to use commenting system.

### **What's Next?**

This concludes are articles on Author Submissions and Reader Comments. In our next series of articles, we will review how to promote your Community News website using tools such as a **Newsletter component and Events calendar.**