



News & Insights

[News & Insights Home](#)

[Innovation](#)

[IT Careers & Skills](#)

[Cloud](#)

[Cyber Security](#)

[Future of Work](#)

[All Categories](#)

[Marketing](#)

[HR](#)

[Finance](#)

[Community](#)

[Ask question](#)

[Community Home](#)

[Spiceworks Originals](#)

[Cloud](#)

[Collaboration](#)

[Networking](#)

[Water Cooler](#)

[Windows](#)

[All forums](#)

[How-Tos](#)

[Scripts](#)

[Vendors](#)

[Meetups](#)

[Reviews](#)

[Online Events](#)

[Login](#) [Join](#)

[Login](#) [Join](#)



Home > Linux > General Linux

# Linux File Server in Windows Domain

Posted by **lanc3** on Jun 28th, 2012 at 5:20 AM

✓ Solved   [General Linux](#)

Hello,

I am planning to dive in to the linux world and build a linux file server. I have a HP Proliant DL 160 G6 with 3 500 GB Drives. I looking for suggestions on what Linux distro people would recommend, backup software, or anything else I should know before starting this journey. I have almost no experience with linux but I am excited to learn.

Thanks!

 Spice (9)

 Reply (15)

 Report



**lanc3**   
THAI PEPPER

## Popular Topics in General Linux

[user with superuser grants dont let me run commands unless using su...](#)

[/lib64/libc.so.6: version `GLIBC\\_2.26' not found](#)

[Linux PAM settings. What takes precedence?](#)

[whats a good internet/bandwidth speed tool](#)

[Streaming virtualized Windows applications to Linux Desktop Clients?](#)

[View all topics](#)



## ✓ Best Answer



Collin8612



CAYENNE

Jun 28th, 2012 at 8:07 AM

The start with CentOS. Don't install a GUI, it can be a crutch. You'll have to do the minimal install. The following list is my biased opinion, but my recommendation would be to do these things in this order:

- Pay close attention the partitioning during installation. Use LVM.
- Learn yum to install and update the OS
- Learn ssh for remote access (yum install openssh)
- Learn lvm (Logical Volume Management)
- Learn EXT2/3/4, XFS and BTRFS filesystems. You must decide which is appropriate for your environment. XFS and BTRFS require additional tools (yum install xfsprogs xfsdump btrfs-progs)
- Learn permissions (chmod & chown commands) and Access Control Lists (ACL)
- Install Samba and SWAT, learn it
- Join your computer to your domain, configure Samba and it the fun begin.

Then, when you've figured out that you didn't like the default configuration AT ALL, go back and reinstall it. By the way, looks like most people are installing the OS to a bootable USB key so that they can dedicate all of the hard drives to storage. You can also just unplug it, replace it with a new key and install a completely new test.

In answer to RoguePacket, FreeNAS has a fantastic user guide: [http://www.freenas.org/images/resources/freenas8.0.3/freenas8.0.3\\_guide.html](http://www.freenas.org/images/resources/freenas8.0.3/freenas8.0.3_guide.html)


[View Best Answer in replies below](#)

## 15 Replies





**mbrcomp**  
JALAPENO

Jun 28th, 2012 at 5:28 AM

Tried several distros, none came close to [FREENAS](#)   
. It is not linux, but freebsd. It is the best (by far)  
platform for AD-integrated file servers.

 Report

Was this post helpful?  



**BMoore**   
DATIL

Jun 28th, 2012 at 5:29 AM

FREENAS is an Operating system you can just install,  
configure a few options, and its good to go.

Check it out [www.freenas.org](http://www.freenas.org) 

 Spice (1)  
 Report

Was this post  
helpful?



**Collin8612**   
CAYENNE

Jun 28th, 2012 at 5:45 AM

It's already been recommended - FreeNAS.

I have file servers running Ubuntu and Fedora, and the  
learning curve is significant but rewarding. They take  
a beating and are extremely cheap. Using Ubuntu,





Debian, Fedora or CentOS you can install a full file server stack to do all kinds of things, like a SAMBA server with web-based configuration, iSCSI, nfs exports, afs shares, DRBD for remote mirroring, rsync (the best copy program on the planet IMHO), and monitoring clients like munin and nagios.

If you want to install something other than FreeNAS and you plan to use Redhat in the future, use CentOS (stable) or Fedora (cutting edge).

FreeNAS, however, has matured into a robust and full-featured system. Everything and more I mentioned above works on FreeNAS. I don't recommend Openfiler because it's not progressing as a software application. It's major detractors are that the kernel is old, it uses RPath which is not a well-understood underlying OS (for me anyway), and it has a serious problem with its iSCSI implementation.

Report

Was this post helpful?  



**RoguePacket**

MACE

Jun 28th, 2012 at 7:22 AM

**lhietpas wrote:**

....backup software, or anything else I should know before starting this journey. I have almost no experience with linux....

**Michael Lewinger wrote:**

....It is the best (by far) platform for AD-integrated file servers.

Got FAQ link(s) or guide(s)?

 Spice (1)

Report

Was this post helpful?







**OP lanc3**   
THAI PEPPER

Jun 28th, 2012 at 7:44 AM

I have used freenas before and it is a great product, but I am looking to learn some Linux skills.

 Report

Was this post helpful?  



**Collin8612**   
CAYENNE

Jun 28th, 2012 at 8:07 AM


✓ Best Answer

The start with CentOS. Don't install a GUI, it can be a crutch. You'll have to do the minimal install. The following list is my biased opinion, but my recommendation would be to do these things in this order:

- Pay close attention the partitioning during installation. Use LVM.
- Learn yum to install and update the OS
- Learn ssh for remote access (yum install openssh)
- Learn lvm (Logical Volume Management)
- Learn EXT2/3/4, XFS and BTRFS filesystems. You must decide which is appropriate for your environment. XFS and BTRFS require additional tools (yum install xfsprogs xfsdump btrfs-progs)
- Learn permissions (chmod & chown commands) and Access Control Lists (ACL)
- Install Samba and SWAT, learn it
- Join your computer to your domain, configure Samba and it the fun begin.

Then, when you've figured out that you didn't like the default configuration AT ALL, go back and reinstall it. By the way, looks like most people are installing the OS to a bootable USB key so that they can dedicate all of the hard drives to storage. You can also just unplug it, replace it with a new key and install a completely new test.



In answer to RoguePacket, FreeNAS has a fantastic user guide: [http://www.freenas.org/images/resources/freenas8.0.3/freenas8.0.3\\_guide.html](http://www.freenas.org/images/resources/freenas8.0.3/freenas8.0.3_guide.html) 

 Spice (4)  
 Report

Was this post helpful?





**jwsimpson**  
SERRANO

Jun 28th, 2012 at 9:01 AM

Was in the same boat a few months ago, I had a positive experience with ubuntu. as others have said freenas is a great option too

 Report

Was this post helpful?  



**Scott Alan Miller**  
PURE CAPSAICIN

Jun 28th, 2012 at 10:28 AM

**lhietpas wrote:**

I have used freenas before and it is a great product, but I am looking to learn some Linux skills.

CentOS is the server stand by for Linux. You really cannot go wrong with it. CentOS is a binary identical copy of RHEL which is THE Linux for business. If you need to learn something... this is what to learn.

If you want some additional flexibility for your fileserver and an OS still common in business, check out OpenSUSE.

 Spice (1)  
 Report

Was this post helpful?



**Scott Alan Miller**  
PURE CAPSAICIN

Jun 28th, 2012 at 10:29 AM



**Collin8612 wrote:**

The start with CentOS. Don't install a GUI, it can be a crutch.

^^ This

 Spice (3)

 Report

Was this post  
helpful?



**OP lanc3**   
THAI PEPPER

Jun 28th, 2012 at 10:42 AM

Thanks for the help everyone. I believe that I am going to go with CentOS and really dive into things and see how it goes.

 Spice (1)

 Report

Was this post  
helpful?



**Phil6683**  
JALAPENO

Jun 28th, 2012 at 10:18 PM

I've played with FreeNAS quite a bit and it has many strengths: but beware: its often very resistant to joining a windows domain properly. If you require this for management or monitoring purposes you may be better off avoiding it. Nexenta does not suffer these issues: but it seems to be moving into a more expensive area.

CentOS is a good place to start: if you do not have experience of linux I would differ from the advice





given out above re: not using a GUI. Trying to do everything from the command line if you are a bit of a newbie can just be too intimidating. Adding a GUI will not take away that much performance: and when you are starting out it can make life quite a bit easier. I would worry about you getting put off by battling the command line. In time, great, get rid of the GUI and go with the terminal: but starting out is hard enough as it is.....

 Spice (1)

 Report

Was this post helpful?





**Mark Carrara**

JALAPENO

Jul 3rd, 2012 at 11:08 AM

Once you decided on your distro you asked about backup. If you don't mind digging and I do mean digging Amanda has worked well for me as a backup solution. Not easy to configure, but once you understand how it thinks it will do all kinds of amazing backup stuff.

 Report

Was this post helpful?  



**PaulHend**


SONORA

Aug 4th, 2012 at 6:26 PM

Any Linux distro can be a NAS server. I would recommend a Debian-based distribution such as Ubuntu (because of the community support). The apt-get functionalities are unsurpassed. AS for NAS management, you can install a non-apt-get supported functionality if you want a GUI-based management feature. The GUI is called Webmin and you can ensure that everything is accessible on the fly and troubleshoot any share issue.

<http://www.webmin.com/download.html> 

 Report

Was this post helpful?  



**Scott Alan Miller**

PURE CAPSAICIN

Aug 5th, 2012 at 2:18 AM



**Somentity wrote:**

Any Linux distro can be a NAS server. I would recommend a Debian-based distribution such as Ubuntu (because of the community support).

It's the community support that makes us normally recommended CentOS. Far larger user base of business users. Smaller overall user base, but I see this as a big positive. When you get community support it is almost exclusively from big business professionals who are working on the assumption that you need business processes. Ubuntu is a great product but its community is mostly hobbyists, gamers and desktop users so their input often assumes that stable, reliable business servers are not your target.



Report

Was this post  
helpful?**OJB**   
SERRANO

Sep 9th, 2012 at 8:47 AM

**Collin8612 wrote:**

The start with CentOS. Don't install a GUI, it can be a crutch. You'll have to do the minimal install. The following list is my biased opinion, but my recommendation would be to do these things in this order:

- Pay close attention the partitioning during installation. Use LVM.
- Learn yum to install and update the OS
- Learn ssh for remote access (yum install openssh)
- Learn lvm (Logical Volume Management)
- Learn EXT2/3/4, XFS and BTRFS filesystems. You must decide which is appropriate for your



environment. XFS and BTRFS require additional tools (yum install xfsprogs xfsdump btrfs-progs)

- Learn permissions (chmod & chown commands) and Access Control Lists (ACL)

- Install Samba and SWAT, learn it

- Join your computer to your domain, configure Samba and it the fun begin.


Then, when you've figured out that you didn't like the default configuration AT ALL, go back and reinstall it. By the way, looks like most people are installing the OS to a bootable USB key so that they can dedicate all of the hard drives to storage. You can also just unplug it, replace it with a new key and install a completely new test.

In answer to RoguePacket, FreeNAS has a fantastic user guide: [http://www.freenas.org/images/resources/freenas8.0.3/freenas8.0.3\\_guide.html](http://www.freenas.org/images/resources/freenas8.0.3/freenas8.0.3_guide.html) 

All that and learn VIM.

<http://www.vim.org/docs.php> 

 Report

Was this post helpful?  



This topic has been locked by an administrator and is no longer open for commenting.

To continue this discussion, please [ask a new question](#).

---

## Read these next...



### Snap! -- Chromebook Lifespan, Lonely Parrot Video Calls, Giant Alaska Spiral

[Spiceworks Originals](#)

Your daily dose of tech news, in brief. Welcome to the Snap! Flashback: April 24, 1945: Larry Tesler, the inventor of copy and paste, was born (Read more [HERE](#).) Bonus Flashback: April 24, 1967: Cosmonaut dies in space crash (Read more [HE...](#))





## Spark! Pro series – 24th April 2023

Spiceworks Originals

Good morning, Happy Monday. And.. I must apologize for missing Friday's Spark! I was on vacation in California, staying at Camp Pendleton. At about 6am California time shortly before I was about to post, the i...





## Ideas for reboot reminder

### Software

Hey team, hope all is well with everyone. I got a request from my director to create a MECM application or job/package that targets a daily reboot time of 3AM ET but prompts logged on users to reboot now or postpone. Users may postpone for 1 hour as many ...



## Chat GPT generates insecure code

### Programming & Development

<https://www.theregister.com/2023/04>

/21/chatgpt\_insecure\_code/Now I know what you are thinking, so what, you don't actually use it to generate production code. You might use it as a framework, or to get a quick answer, or an idea that you then run with an...



## Need screen with plain back

### Hardware



Hello, This is an odd one, I need a 27" screen in white,  
VESA mount with a plain back with a minimal logo as this  
device will be at a front of house reception area and for  
the device to fit I need the back to be white and plain...  
Any ideas?

Press

/

About

Contact

Support

Media

Careers

SpiceWorld

Blog



· Privacy

· Terms

·

· Accessibility

· Do Not Sell My Personal © Copyright 2006 - 2023

SitemapPolicy

of Use

GuidelinesStatement

Information

Spiceworks Inc.

