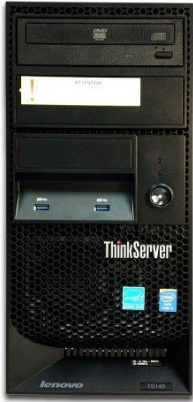


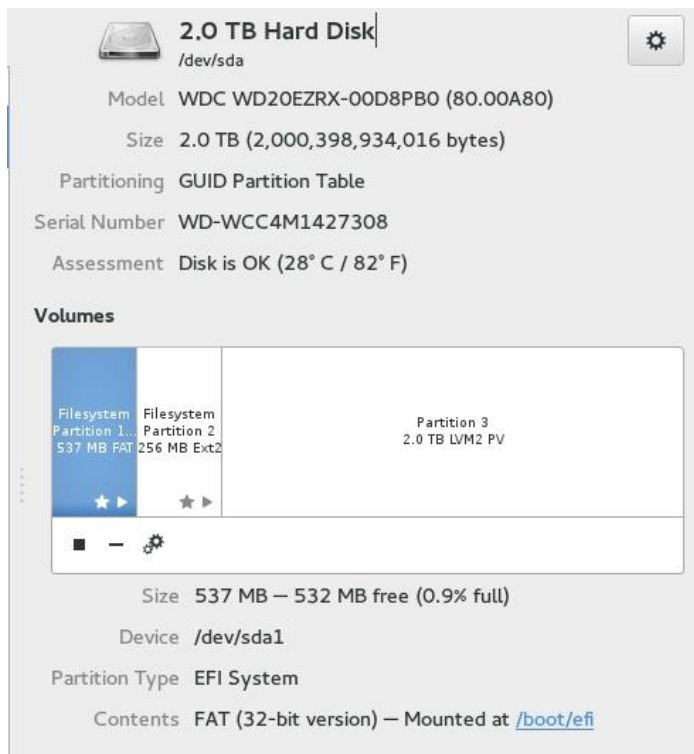
Setup of Ubuntu Server 14.04.1



Lenovo TS140 ThinkServer

Purchased from [Computer Upgrade King](#) (\$230 with 1 stick of RAM)
Processor: Intel® Core i3-4130 processor 3.4 GHz, 2C, 4M Cache, 1.00 GT/s, 65W
RAM: 2 x 4 GB PC3-12800E 1600MHz DDR3 ECC-UDIMM UDIMM / 4 Slots Total
Hard Drive: NONE installed with 3 vacant 3.5" bays / RAID: Software supporting 0, 1, 5 Levels
Optical Drive: DVD-ROM / Power Supply: 280W Fixed / Networking: Gigabit Ethernet (Integrated)

I added a 2TB WD Hard Drive



The screenshot shows the disk utility interface for a 2.0 TB Hard Disk. The disk is identified as /dev/sda and is a WDC WD20EZR-00D8PB0 (80.00A80) model. It is partitioned using a GUID Partition Table. The disk is healthy, with an assessment of "Disk is OK (28° C / 82° F)".

Volumes

Filesystem	Filesystem	Partition 3
Partition 1, 537 MB FAT	Partition 2, 256 MB Ext2	2.0 TB LVM2 PV




Size: 537 MB — 532 MB free (0.9% full)
Device: /dev/sda1
Partition Type: EFI System
Contents: FAT (32-bit version) — Mounted at [/boot/efi](#)

I then installed **Ubuntu Server 14.04.1 LTS**; <http://www.ubuntu.com/download/server>

I followed **David Goguda's** extremely detailed **YouTube** video, **How to Make an Ubuntu File Server**; <https://www.youtube.com/watch?v=ndAYZ0DJ-U4> ([Preview video](#))

In order to have a graphical interface, I added a stripped down **Gnome** desktop graphical user interface. From the terminal:

```
sudo apt-get install xorg gnome-core gnome-system-tools gnome-app-install
```

 Download Speed 3212 Kb/s	 Upload Speed 558 Kb/s	 Latency 35ms
--	---	--

Network Upgrade: I connect to the Internet via an **AT&T DSL** connection

I replaced my [Netgear N300 Wireless Gigabit ADSL2+ modem/router DGN3500](#) with a stand-alone modem.

I chose a [Netgear Broadband ADSL2+ modem model DM11PSP](#) and an [Asus RT-AC66R wireless AC-1750](#) router.



In order to improve the wireless range of the Asus router, I mounted it near the ceiling and ran a cable from it to a, [TP-Link TL-SG1005D 5 port Gigabit Desktop switch](#) I have a second identical switch on my desktop

I also use a [Netgear model WN2500RP Dual Band WiFi Range Extender](#); an Apple Airport Extreme, a [Netgear Wireless N access point model WN802T](#) and several generic Ethernet switches

Here is a screen shot of my Local Area Network

Name	Category	Workgroup	Network location
Computer (5)			
BRN30055C0795F1	Computer	WORKGROUP	NETGEAR_2GEXT 3
CSUTTER-DESK	Computer	WORKGROUP	NETGEAR_2GEXT 3
NETGEAR49DB0E	Computer	WORKGROUP	NETGEAR_2GEXT 3
THINKSERVER	Computer	WORKGROUP	NETGEAR_2GEXT 3
ZT-DESKTOP	Computer	WORKGROUP	NETGEAR_2GEXT 3
Media Devices (5)			
CSUTTER-DESK: Connie:	Media Devices		NETGEAR_2GEXT 3
ZT-DESKTOP: Administrator:	Media Devices		NETGEAR_2GEXT 3
ZT-DESKTOP: rsutter:	Media Devices		NETGEAR_2GEXT 3
ZT-DESKTOP: rsutter-admin:	Media Devices		NETGEAR_2GEXT 3
RX-A2020 94C27E	Media Devices; Other Devices		NETGEAR_2GEXT 3
Multifunction Devices (1)			
Brother MFC-J870DW [30055c37811f]	Multifunction Devices; Printers; Scanners		NETGEAR_2GEXT 3
Network Infrastructure (1)			
RT-AC66R	Network Infrastructure		NETGEAR_2GEXT 3
Other Devices (3)			
RX-A2020 94C27E	Media Devices; Other Devices		NETGEAR_2GEXT 3
Roku Streaming Player	Other Devices		NETGEAR_2GEXT 3
Roku Streaming Player	Other Devices		NETGEAR_2GEXT 3
Printers (2)			
Brother MFC-J870DW [30055c37811f]	Multifunction Devices; Printers; Scanners		NETGEAR_2GEXT 3
Brother HL-2270DW series [30055c...	Printers		NETGEAR_2GEXT 3
Scanners (1)			
Brother MFC-J870DW [30055c37811f]	Multifunction Devices; Printers; Scanners		NETGEAR_2GEXT 3

Here are screen shots of the details shown by my Asus router

Internet status:
Connected
WAN IP: 192.168.0.2
DDNS: [GO](#)

Security level:
WPA2-Personal

Clients: 22

Client status

Online Wired (19) Wireless (3)

Search

	MB-Roku 192.168.1.5 00:0D:4B:D3:C9:74	
	ZT-Desktop 192.168.1.62 90:2B:34:9F:6D:79	
	HP-Laptop 192.168.1.199 44:6D:57:FA:27:85	
	CSUTTER-DESK 192.168.1.215 00:26:18:32:5C:03	
	Lastreto-Family 192.168.1.63 14:2D:27:15:10:1F	
	csutter-desk 192.168.1.99 00:21:00:F4:6B:8F	

Refresh

	THINKSERVER 192.168.1.61 FC:4D:D4:F4:82:D9	
	Sutter-Apple-TV2 192.168.1.124 02:0F:B5:E5:99:DA	
	Ralphs-MacBook-Pro	
	Den-Roku 192.168.1.168 B8:3E:59:22:0B:78	
	Brother-HL2270DW-Printer 192.168.1.154 30:05:5C:07:95:F1	
	Brother-MFC-J870DW-Printer 192.168.1.171 30:05:5C:37:81:1F	

	Ralph-Sutters-MBP	
	Yamaha-RX-A2020-Receiver 192.168.1.222 00:A0:DF:94:C2:7E	
	Ralph-Sutters-MBP 192.168.1.234 00:1E:C2:C0:41:6E	
	Netgear-WAP 192.168.1.233 8C:58:77:43:4C:55	
	Netgear-Range-Extender 192.168.1.250 02:0F:B5:A1:8F:D6	
	Ralph-Sutters-iPad	

	csutters-iPad	
	Erins-iPad 192.168.1.176 98:B8:E3:A1:43:B9	
	iPhone	
	Francos-iPhone 192.168.1.241 F8:27:93:0D:4E:54	

Linux Newbie Resources

Linux commands tutorial

<http://lowfatlinux.com/linux-tutorial.html>

The useful content begins at

<http://lowfatlinux.com/linux-basics.html>

Newbie Server Questions

1. I'm running the **ThinkServer** box from the **Gnome** GUI. If I check for updates and upgrades, will it just check for files on the **Gnome** desktop or will it also check for **Ubuntu 14.04.1 Server**?
2. Currently, when I try to access **ThinkServer** from my Yamaha receiver, I don't see it. I see other computers on the network but not **ThinkServer**. I suspect that the other computers are being seen as media servers. What do I do to see **ThinkServer** from my **Yamaha RX-A2020**? Do I install [MediaTomb](#)?

MediaTomb how to video at <https://www.youtube.com/watch?v=qic11JxRbN8>

Does **MediaTomb** replace **Ubuntu** server or does it run on top of **Ubuntu** server?