Webserver

Component	Line Item / selection	justifications	costs	Assumptions
Base server	ThinkSystem SR530 2.5" 8 Bays	low cost 1U chassis - upscalable resources	$438	I'm assuming this is going to be a
Processor	2x 2nd genXeon Bronze 1.9GHz	redundant low-end processors will work for now	$447	publicly accessible webserver, that
memory	12x16GB 2666 MHz 2Rx8 RDIMM	fully stocked for performance, 16G leaves room to grow	$1,952	will serve as the face of the
Storage	5x 2.5" 480GB 6GB HotSwap SSD	Using 5/8 bays for raid6 with effective 1TB + 1 hot spare	$1,242	accompanying databse. I don't
Backplane	8-Bay Backplane	For the Drives	$51	expect it to see crazy traffic but it
Raid Controler	ThinkSystem 2GB Flash 12Gb Adapter	for managing the raid arrangement	$306	should be equipped to handle a
Riser card	SR530/SR570/SR630 x8/x16 PCIe LP+LP	to plug in the raid controller	$20	decent load just in case. I'm also
Riser Bracket	1U LP+LP BF Riser Bracket	Needed to mount the riser card - for the raid controller	$5	assuming this to be some kind of
OS	Windows Server 2019 Standard	Not doing anything special	$2,147	business application, as opposed to
Onboard LAN	2x 1GB RJ-45 ports	redundant management interfaces	$75	something commercial i.e. Amazon,
Network card	I350-T2 2port 1GB RJ45	redundant gigabit uplinks	$112	Ebay, Facebook, etc. meaning we
PSU	2x 550W Platinum Hot-Swap PSU	redundant Power Sources	$356	won't have a complex sitemap, or
Power Cables	2x default	need to get the power to the machine somehow	$10	loads of code for modeling pages
Remote Man.	Xclarity enterprise upgrade	remote management	$50	from user-provided data --- meaning
Rail kit	slide rail	convenience	$50	we don't need a crazy amount of
				storage to host the site. We will
				emphasize the resources for serving
				the site, and communicating with
				the database. End goal: budget
				server that meets business needs.

requirements:	**Damages:**		**$7,261**

> dual gigabit uplinks
> dual power sources
> rack server (for colo center)
> scalable
> Remotely manageable

note: the site reports a price of almost 8k... I added the sum of every part and came to around 7.25k
double triple checked.
Lenovo is Trying to rip us off Yo!

Database Server

Component	Line Item / selection	justifications	costs	Assumptions
Base server	ThinkSystem SR530 2.5" 8 Bays	low cost 1U chassis - upscalable resources	$438	For the database, I'm going to
Processor	2x 2nd genXeon Bronze 1.9GHz	redundant low-end processors will work for now	$447	modify the webserver config to
memory	12x16GB 2666 MHz 2Rx8 RDIMM	fully stocked for performance, 16G leaves room to grow	$1,952	meet expectations. I'm thinking the
Storage	8x 2.5" 800GB 12GB HotSwap SSD	Using 5/8 bays for raid6 with effective 1TB + 1 hot spare	$2,388	database will see less traffic than the
Backplane	8-Bay Backplane	For the Drives	$51	webserver, so we could probably
Raid Controler	ThinkSystem 2GB Flash 12Gb Adapter	for managing the raid arrangement	$306	turn down the ram and processor
Riser card	SR530/SR570/SR630 x8/x16 PCIe LP+LP	to plug in the raid controller	$20	one or two notches, but we are
Riser Bracket	1U LP+LP BF Riser Bracket	Needed to mount the riser card - for the raid controller	$5	already on the lower end of the
OS	Windows Server 2019 Standard	Not doing anything special	$2,147	spectrum with those resources so
Onboard LAN	2x 1GB RJ-45 ports	redundant management interfaces	$75	we'll just leave those where they
Network card	I350-T2 2port 1GB RJ45	redundant gigabit uplinks	$112	are. Since it's a DB what we want is
PSU	2x 550W Platinum Hot-Swap PSU	redundant Power Sources	$356	storage, but how much is
Power Cables	2x default	need to get the power to the machine somehow	$10	unspecified. I'm going to err on side
Remote Man.	Xclarity enterprise upgrade	remote management	$50	of caution and just load it. Gonna
Rail kit	slide rail	convenience	$50	Use 7 Bays with Big SSDs in RAID6
				with one hot spare.
				Noted that I can't seem to
				configure redundant raid
				controllers.
				that is a result
				of the 1U form factor
				Otherwise we have full
				redundancy

requirements:	Damages:		$8,407	

requirements:
dual gigabit uplinks
dual power sources
rack server (for colo center)
scalable
Remotely manageable

https://gyazo.com/845e96b5c0b9c351db28490028e94e88

note: Again reports a price of almost 10k… I added the sum of every part and came to around 8.4k
double triple checked.
Lenovo is Trying to rip us off Yo! Real Talk.

Part 2

<u>173.16.85.111:</u>

TSM Interface

FULL SCREEN

CTRL+ALT+DEL   OPTIONS

Lenovo ThinkServer System Manager Command Line Interface

```
Lenovo ThinkServer System Manager Command Line Interface
Copyright (C) 2014 Lenovo. All rights reserved.

PS C:\Users\DSU> .\Mount-ISO.ps1
Servers IP:: 172.16.85.111
Username:: cpglanzer57954
Password:: ***********************
No ISO is currently mounted, would you like to mount one? Y/N:
```

9:16 AM
6/5/2020
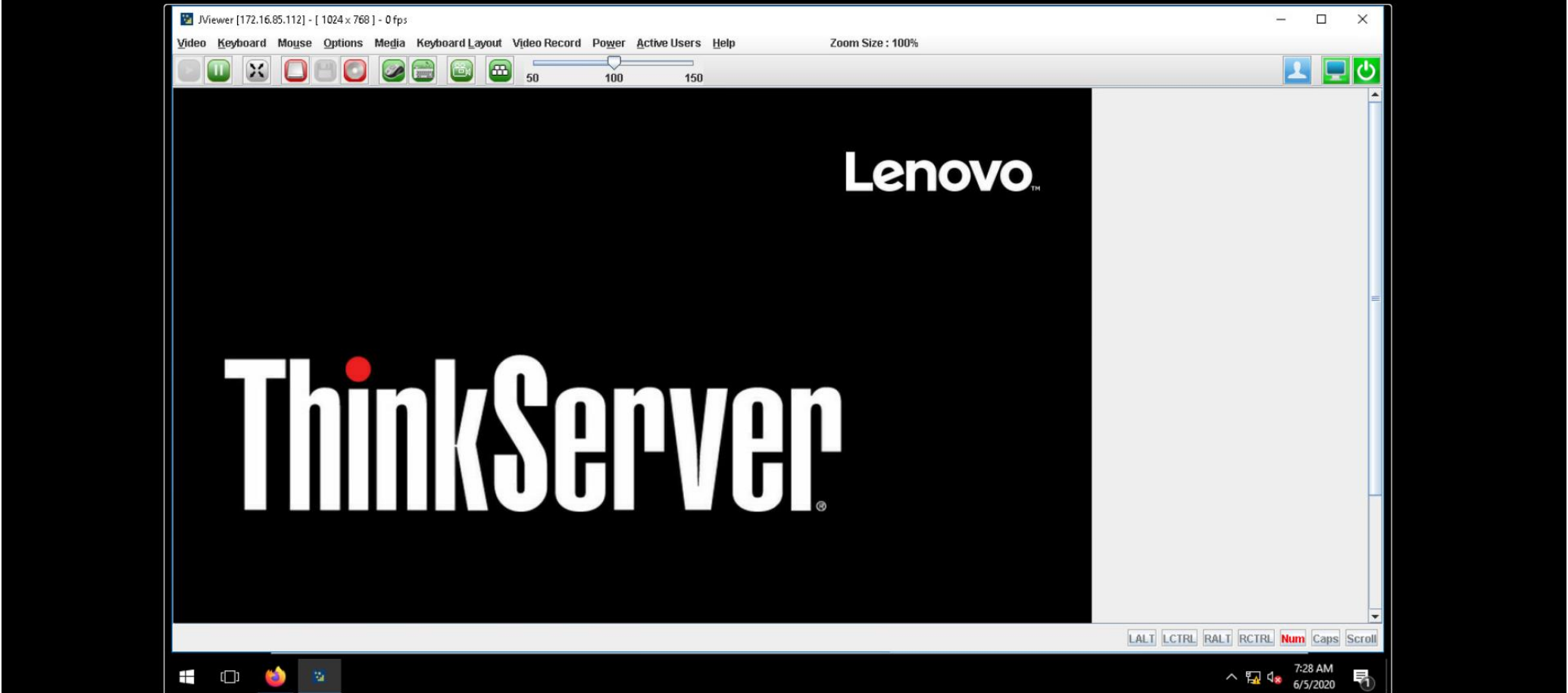
TSM Interface

FULL SCREEN

CTRL+ALT+DEL   OPTIONS

Lenovo ThinkServer System Manager Command Line Interface

```
PS C:\Users\DSU> .\Mount-ISO.ps1
Servers IP:: 172.16.85.112
Username:: cpglanzer57954
Password:: ***
PS C:\Users\DSU> .\Mount-ISO.ps1
Servers IP:: 172.16.85.112
Username:: cpglanzer57954
Password:: *************************
No ISO is currently mounted, would you like to mount one? Y/N: y
Enter the filename you'd like to mount:: ESXi_6.7.iso
Success
PS C:\Users\DSU>
```

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6/5/2020