

Computers / Hardware

Armando Montalban & Daniel Ellis

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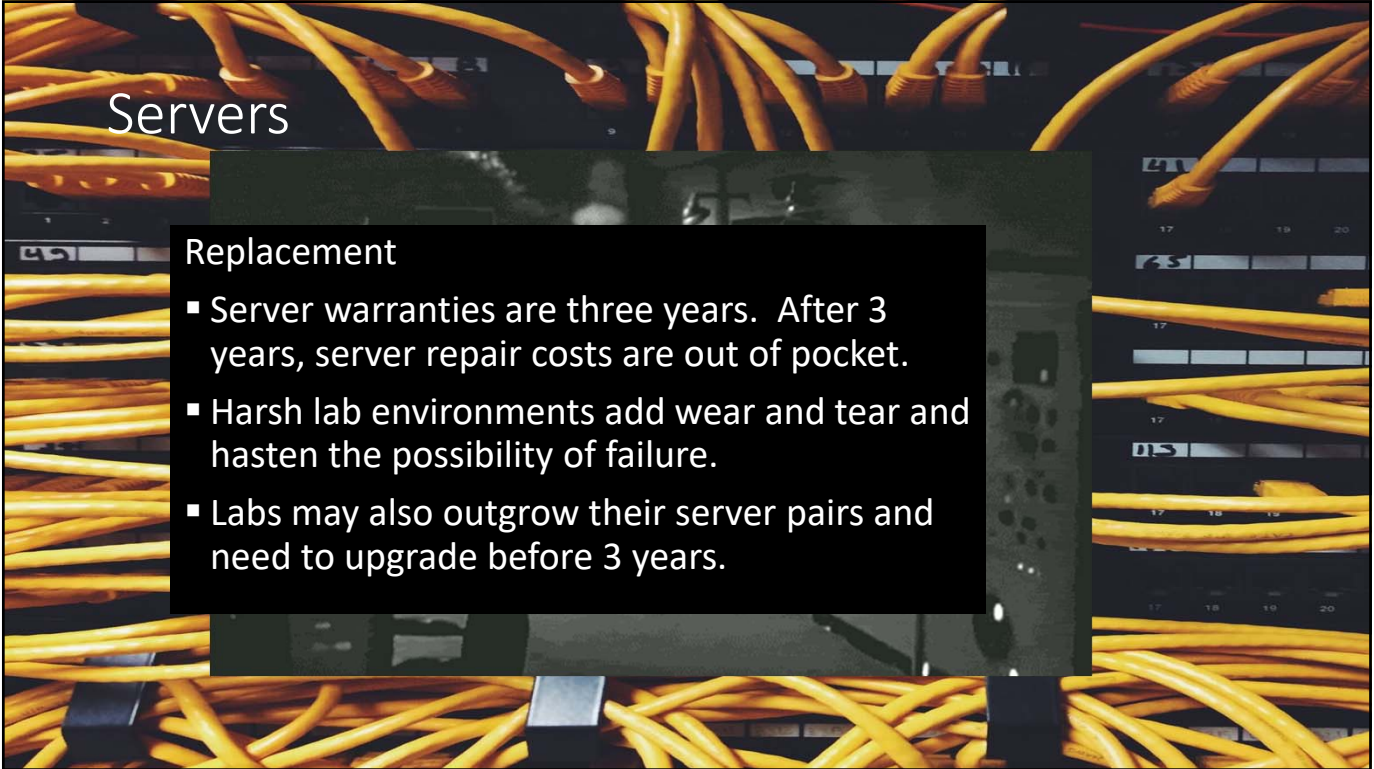
Servers

Server Builds

- Rack mounted / Tower
 - 1000 jobs or more a day
- Intermediate / Tower
 - Up to 1000 jobs/day
- Micro
 - Up to 250 jobs/day



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Servers

Replacement

- Server warranties are three years. After 3 years, server repair costs are out of pocket.
- Harsh lab environments add wear and tear and hasten the possibility of failure.
- Labs may also outgrow their server pairs and need to upgrade before 3 years.

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Server Operating Systems (OS)

- **2019**
Current OS used for VISION
 - Microsoft supported till January 9, 2029
 - Licensed per physical CPU cores. Client Access License (CAL) required.
- **2022**
Server / Essentials
 - Replacement for 2019.
 - Upgraded security features.
 - 2022 Essentials is designed for labs with fewer than 25 people and 50 devices.

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Legacy Server OS

Server 2016

- Still supported by VISION.
- Minimum OS required for new VISION database features.
- Mainstream Support concluded on January 1, 2022. Extended Support until January 12, 2027.

Server 2012/2012r2

- Still supported by VISION.
- Mainstream Support ended October 9, 2018. Extended Support ends October 10, 2023.

Server 2008/2008r2

- Mainstream Support ended January 13, 2015. Extended Support ended January 14, 2020.

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Legacy Server OS

Server 2008



Not supported by Microsoft

- Security issues will not be fixed.
- Not optimized for current server hardware.
- If you break it, you're on your own.

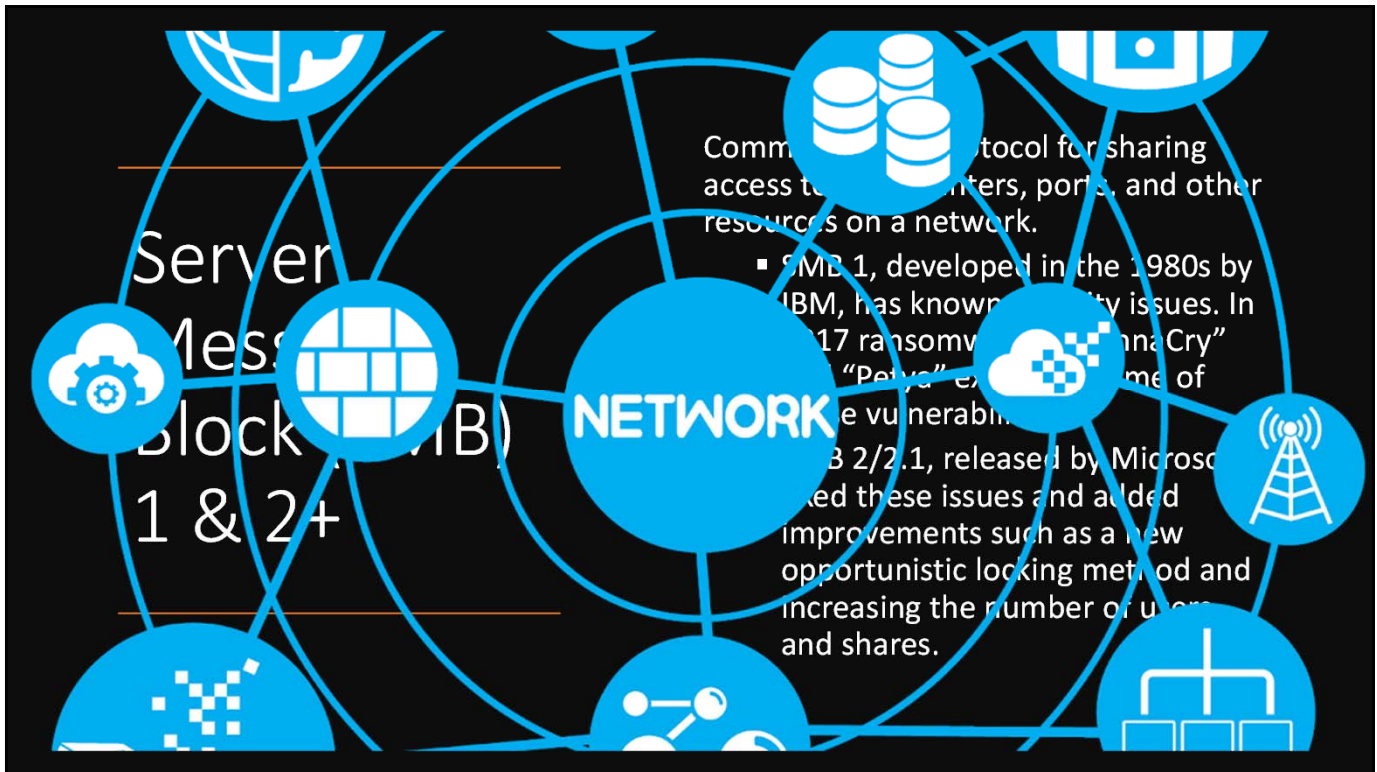


DVI has ceased programming for 2008.

- Current programming tools unable to program for Server 2008.
- VISION releases cannot be performed.
- VISION updates, new features, and patches will not be installed.



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SMB 1 & 2 (cont'd)

It's highly advised to disable SMB 1 because of known risks.

- Disabling SMB 1 without first transitioning to Server 2019 or the new VISION database system will result in data corruption or shutdown failures.
- Only labs with Server 2016 or newer can upgrade to the new database system.

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Windows 10

- Even though Microsoft support ends October 14, 2025, labs should start planning for the upgrade to Windows 11 now rather than later.
- Hardware requirements may force the purchase of newer systems.
 - Newly purchased retail PCs will have Windows 11 pre-installed.
- Windows 10 is a mature and stable. Windows 11 is **mostly** stable.

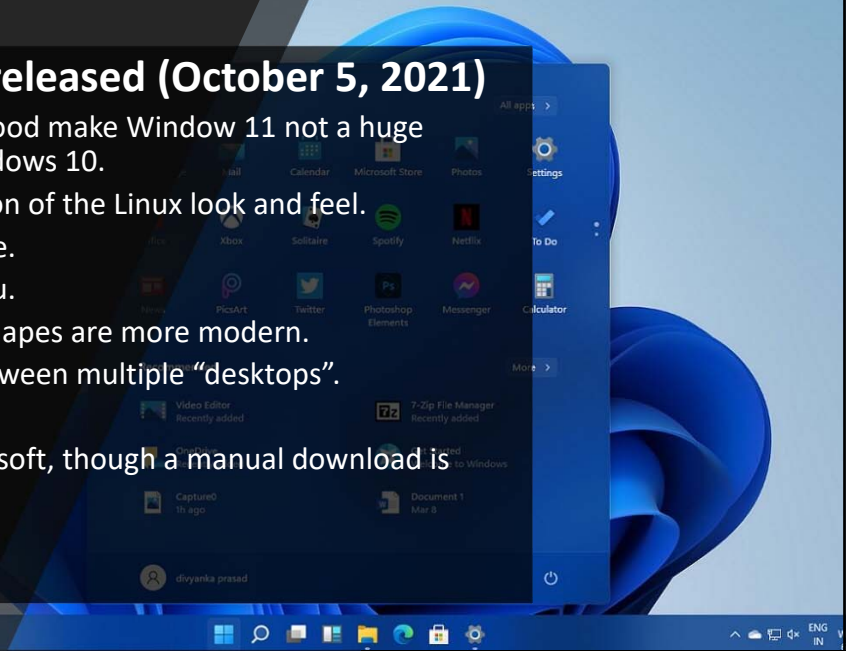


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Windows 11

Newest desktop OS released (October 5, 2021)

- Similarities under the hood make Window 11 not a huge improvement over Windows 10.
- Microsoft's best imitation of the Linux look and feel.
- New desktop experience.
 - Different Start Menu.
 - Colors, icons, and shapes are more modern.
 - Ability to switch between multiple "desktops".
 - Widgets are back.
- Phased rollout by Microsoft, though a manual download is available.



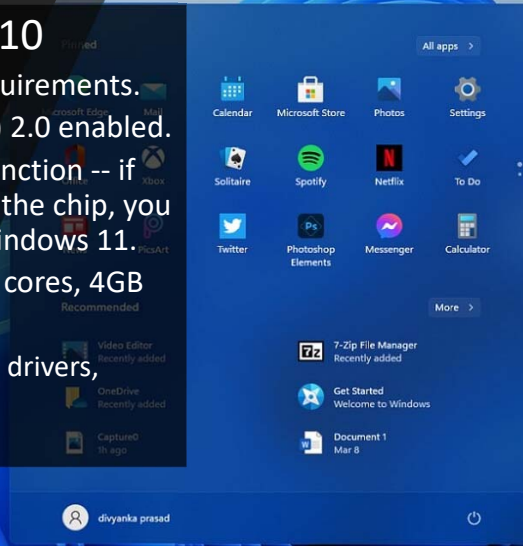
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Windows 11 (cont'd)

Free upgrade from Windows 10

- Must meet Microsoft minimum requirements.
 - Trusted Platform Module (TPM) 2.0 enabled.
 - Hardware-based security function -- if the computer doesn't have the chip, you will not be able to install Windows 11.
 - 64-bit CPU with more than two cores, 4GB RAM, 64GB storage for the OS.

Other than unavailable Windows 11 specific drivers, VISION software has been compatible.



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Legacy Desktop OS

Windows 7

- Still supported by VISION.
- Mainstream Support ended on January 13, 2015. Extended Support until January 14, 2020.

Windows 7

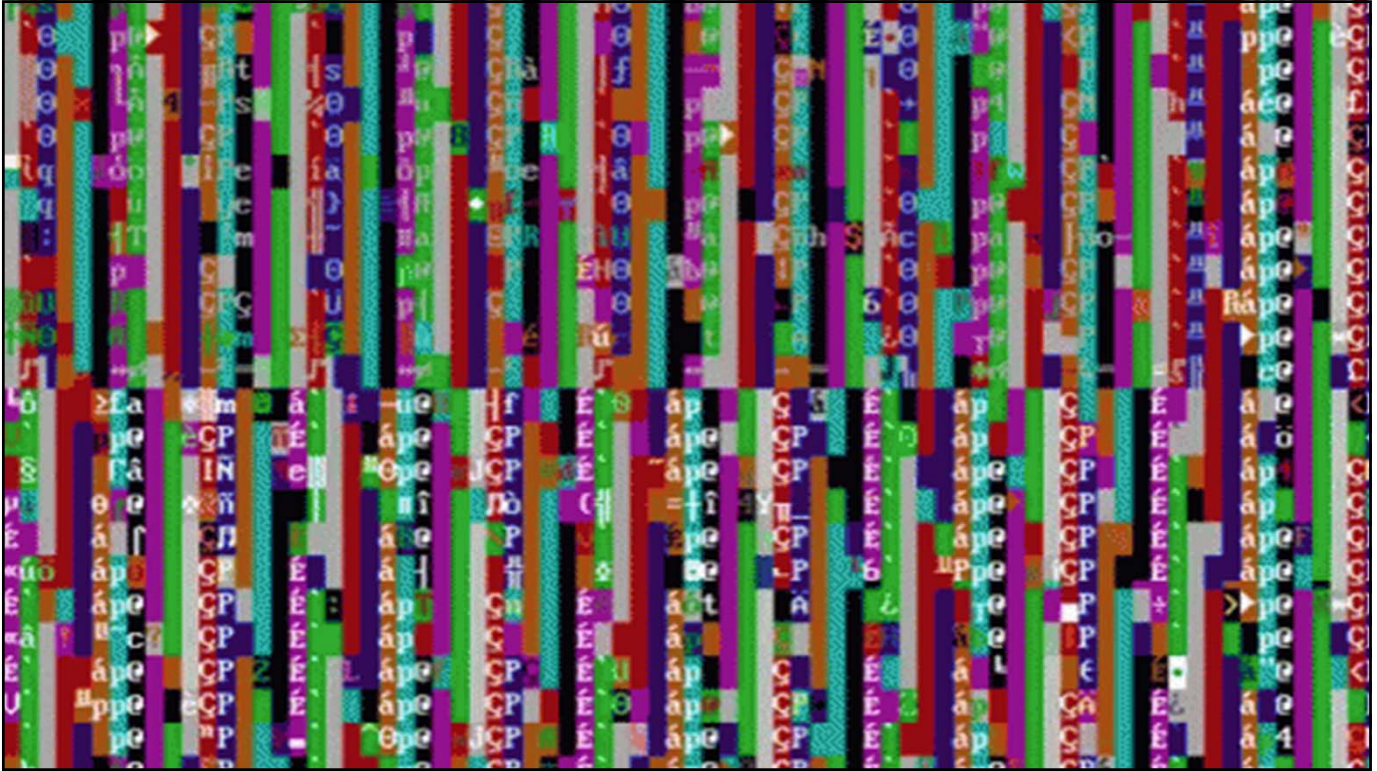
*Windows 7 &
Windows XP
Jan 14, 2020
Apr 8, 2014*

Let no one disturb!

XP

- Not supported by VISION.
- Extended Support ended April 8, 2014.

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Malware

What is Malware?

- A general description for a program that disrupts a system. The system can be anything from a personal phone to a globally spanning network of computers.
- Viruses and ransomware are examples of malware.

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Malware (cont'd)

DVI requires malware protection installed on all computers that use VISION software. Most well-known software packages are allowed.

- Examples include Symantec, Malwarebytes, Bitdefender, etc.
- Anti-malware software will occasionally give false positives when scanning VISION files. DVI will help you determine if the files are valid DVI files.
- Kaspersky and Zscaler have multiple instances of false positives.
- Eset is the DVI provided anti-malware solution.

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Malware (cont'd)

- Removable Backups are a **CRITICAL** frontline tool!
- Labs with backups have been able to recover from ransomware attack.
- The ability to isolate lab data from threats and restore as needed is an important safety measure.

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Document Printing

- There is no longer a set list of approved printers.
- Minimum suggested specifications:
 - B/W laser
 - Printer Control Language (PCL) 6 drivers
 - 256MB RAM
 - Ethernet enabled
 - PostScript requirement has been deprecated.
- New Redirector label printing method will soon be released.

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Document Printing

- Specs do matter!
- High volume printers should target specs above the minimums.
- A Good example:
 - Xerox VersaLink B400DN
 - 1.05 GHz Dual Core Processor
 - 2 GB Memory
 - 47 Pages Per Minute
 - Approx \$800

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ing (cont'd)

Label Printing

GK420d replaced by ZD420.

- Direct Thermal
- USB 2.0 -- \$577
- USB/Network -- \$613

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Thank You

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