

USING IMAGING TO STREAMLINE SYSTEMS ADMINISTRATION



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Agenda Overview

- What is Imaging
- Why Use Imaging
- How to Use Imaging
- Tools to Use for Imaging
- Tips and Tricks
- Q&A

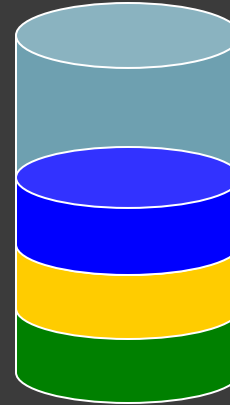


What is Imaging



Imaging is a process by which
you start with a model machine.

What is Imaging



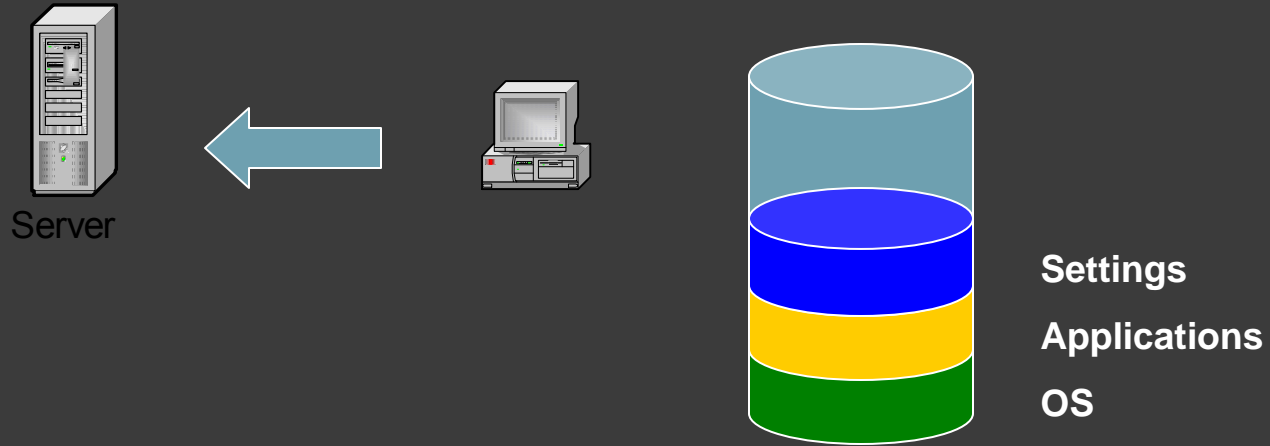
Settings

Applications

OS

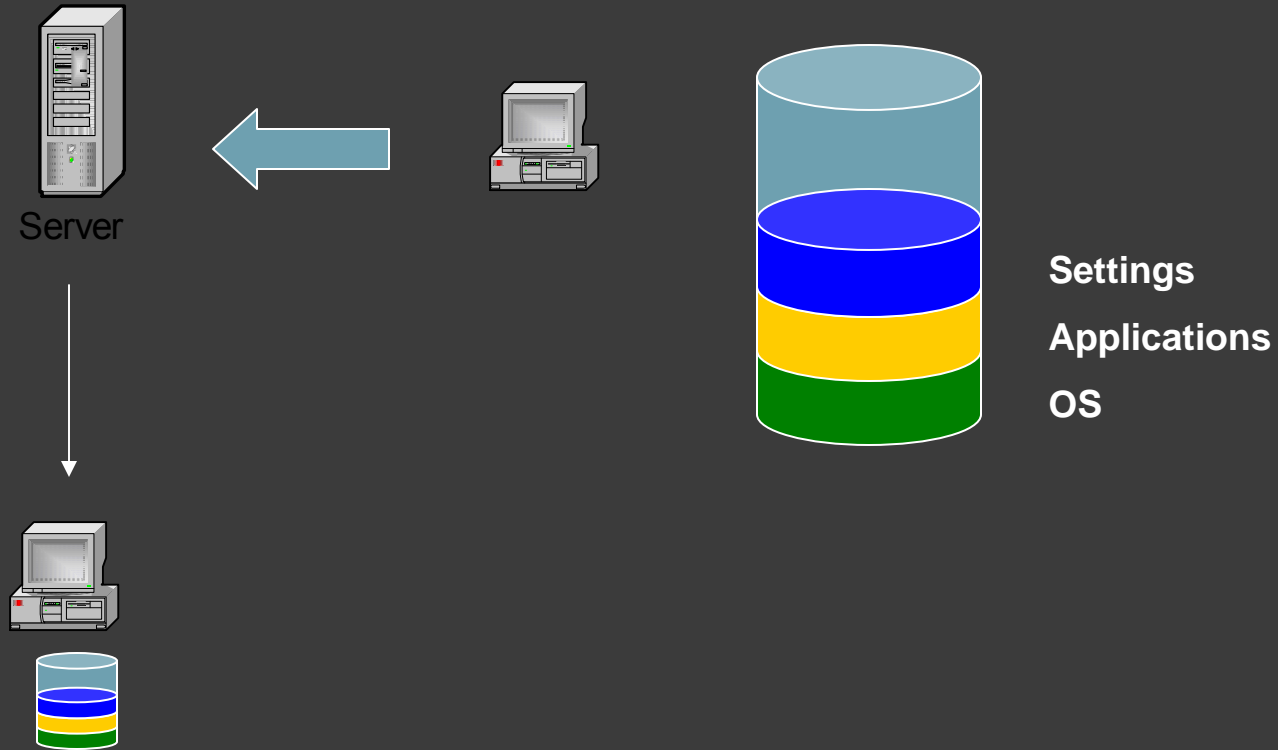
Prebuilt with all the software and settings you need to deliver a fully functional desktop computer to an end user.

What is Imaging



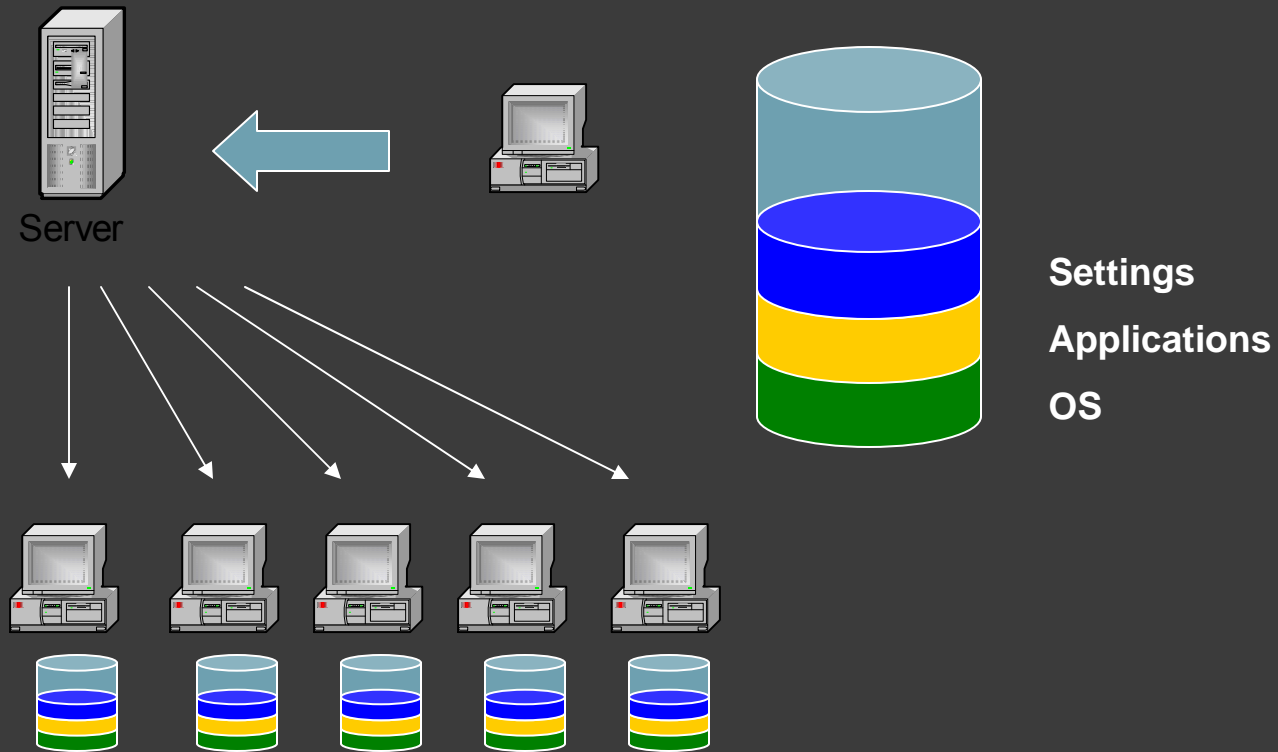
Imaging software captures a “snapshot” of the model’s hard disk, and saves it as a single file.

What is Imaging



Which can be installed from
either a server, CD/DVD, or
portable disk.

What is Imaging

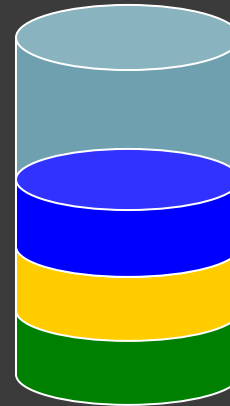


To create a carbon copy, or clone, of the original PC.

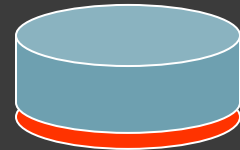
What is Imaging



C:



D:

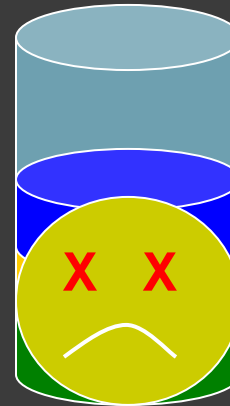


Images can also be used as a backup method

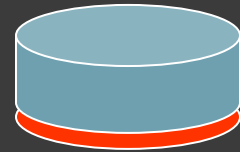
What is Imaging



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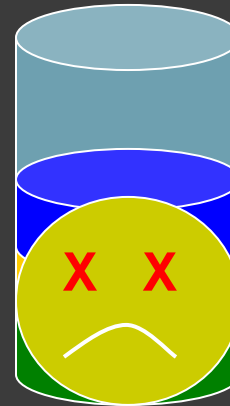


Where a damaged or deceased drive

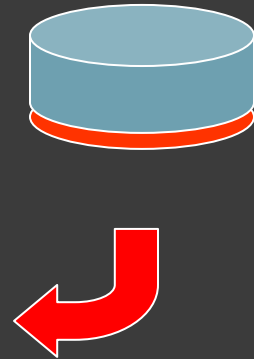
What is Imaging



C:



D:

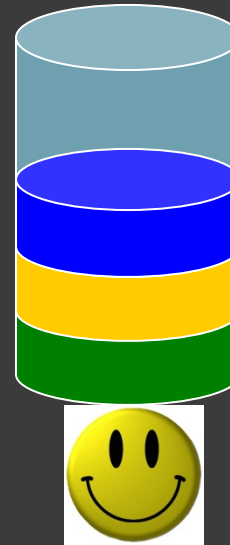


Can be restored back to health
by the reapplication of a
previous image.

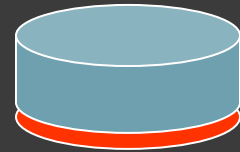
What is Imaging



C:



D:



Bringing a user back online in minutes.

Why Use Imaging



Do the math:

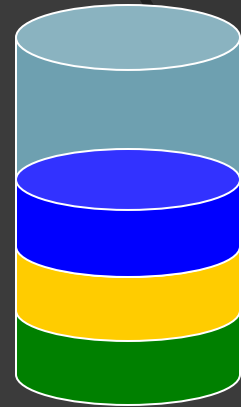
- Under the best conditions (no interruptions, fast Internet connectivity), building a PC from start to finish can take anywhere from 4 to 5 hours.
- Without Imaging, deployment of 40 workstations take approximately 200 hours.
- Using imaging, that time can be reduced to 10 hours.

Why Use Imaging

◎ Caveats:

- Best Used in Heterogeneous Environments
 - Imaging is most effective when used with single vendor equipment or similar model PCs
- Standardize Applications and Configurations
 - Too many post-image tweaks or additions defeats the purpose
 - Common settings (i.e., all users store files on a network)
- Choose a Reliable Hardware Vendor
 - Maintain consistency of internal parts and drivers
 - Minor hardware changes can cause big headaches
- Preserve Disk space to Store Images
 - Finalized images are large files, and will consume GB+ of storage space.
 - You may want to create multiple images (i.e., Basic PC, Accounting PC, etc.)

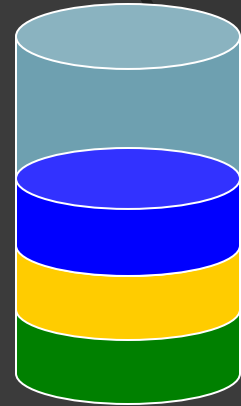
How to Use Imaging



◎ Build Your Base machine

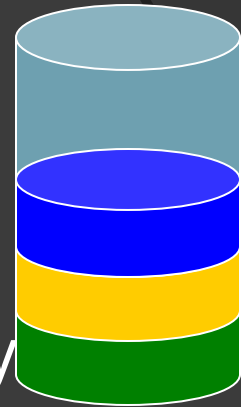
- Check your licenses
- Install OS, patches, tweaks and policies
- Install office suites and latest patches
 - Set your standard configuration
 - User Preferences
 - File locations
 - Document templates
- Install Utility Software
 - Adobe Acrobat, Zip, Image Viewers, Burner Utilities, Antivirus/Firewall.
 - Set preferences for these as well.

How to Use Imaging

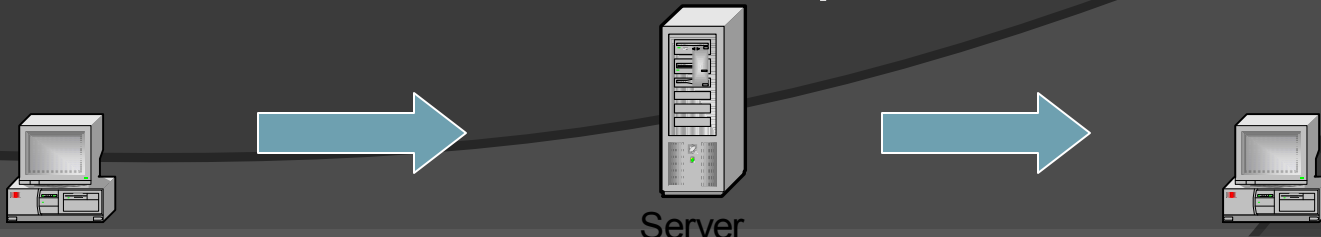


- ◎ Build a Base machine (cont.)
 - Add printers or copiers
 - Set browser homepage and add bookmarks
 - Add/remove any shortcuts to/from desktop
 - Create a “ToDo.txt” file containing post-imaging tweaks
 - Final Cleanup
 - Delete temp files, empty the Recycle bin, clear histories, etc.
 - Use Sysprep to Prepare the Image

How to Use Imaging



- Build a Base machine (cont.)
- Create the image and burn to CD or copy server
- Install the image onto the target PC
 - Using either a standalone utility such as Norton Ghost or Clonezilla
 - Or by using the PXE or BootP protocols to access a server that can push down and apply an image
- Use the ToDo.txt file to perform any post-imaging tweaks
 - Some of which may be possible via login scripting
- One last check for Windows Updates



What to Use for Imaging

- ⦿ Cloning Software

- Symantec Ghost
- Clonezilla

- ⦿ Other tools

- Group Policy Editor
- Microsoft Deployment Kit
- Microsoft User State Migration Tool
- Sysprep
- ScriptLogic
- WinInstall
- Windows Automated Installation Kit

Tips & Tricks

- ⦿ Hardware considerations (HAL)
- ⦿ Unicast v. Multicast
 - setting up a separate network segment
 - Transform files (.MST) to standardize installs within a machine for new users
- ⦿ Post Imaging concerns
 - Group policy redux
- ⦿ Windows Updates
 - WSUS, WPKG, OPSI
- ⦿ Managing Images

Q & A



Links and Resources

- Clonezilla - <http://clonezilla.org/>
- Clonezilla Step-by-Step guide - <http://clonezilla.org/clonezilla-live/doc/>
- MS Deployment Toolkit Tech Center - <http://technet.microsoft.com/en-us/desktopdeployment/default.aspx>
- MS Deployment Toolkit for Windows Vista, Windows7 and Windows Server 2003 and 2008 - <http://www.microsoft.com/downloads/details.aspx?familyid=3bd8561f-77ac-4400-a0c1-fe871c461a89&displaylang=en>
- MS Deployment Toolkit Team Blog - <http://blogs.technet.com/msdeployment/default.aspx>
- MS Office Resource Kit (ORK) with MST Viewer - <http://office.microsoft.com/en-us/ork2003/HA011401721033.aspx>
- MS User State Migration Tool homepage - [http://technet.microsoft.com/en-us/library/cc722032\(W.S.10\).aspx](http://technet.microsoft.com/en-us/library/cc722032(W.S.10).aspx)
- Symantec Ghost Solution Suite homepage - <http://www.symantec.com/business/ghost-solution-suite>
- What is Sysprep? - [http://technet.microsoft.com/en-us/library/cc783215\(W.S.10\).aspx](http://technet.microsoft.com/en-us/library/cc783215(W.S.10).aspx)
- WinInstall - <http://www.scalable.com/wininstall>
- Microsoft Desktop Imaging Center (TechNet) - <http://technet.microsoft.com/en-us/windows/cc500470.aspx>
- ScriptLogic - <http://www.scriptlogic.com/products/desktopauthority/?qclid=ClaatP-Ki58CFchn5Qod9D4KrQ>