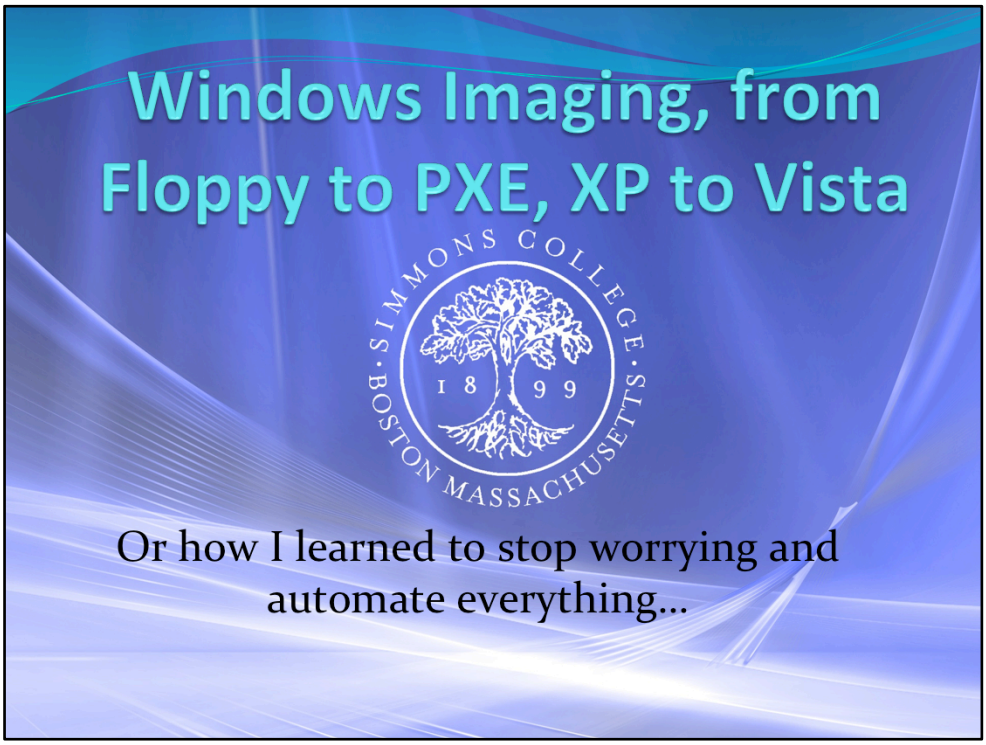
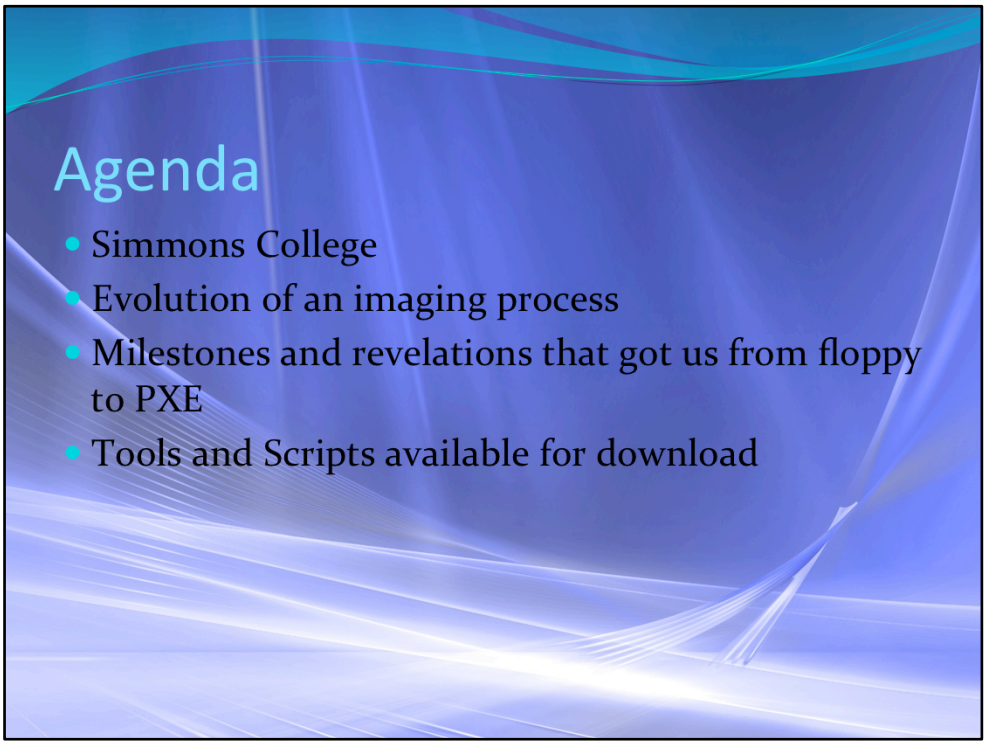


Aran:
Introduce yourself and Buzz

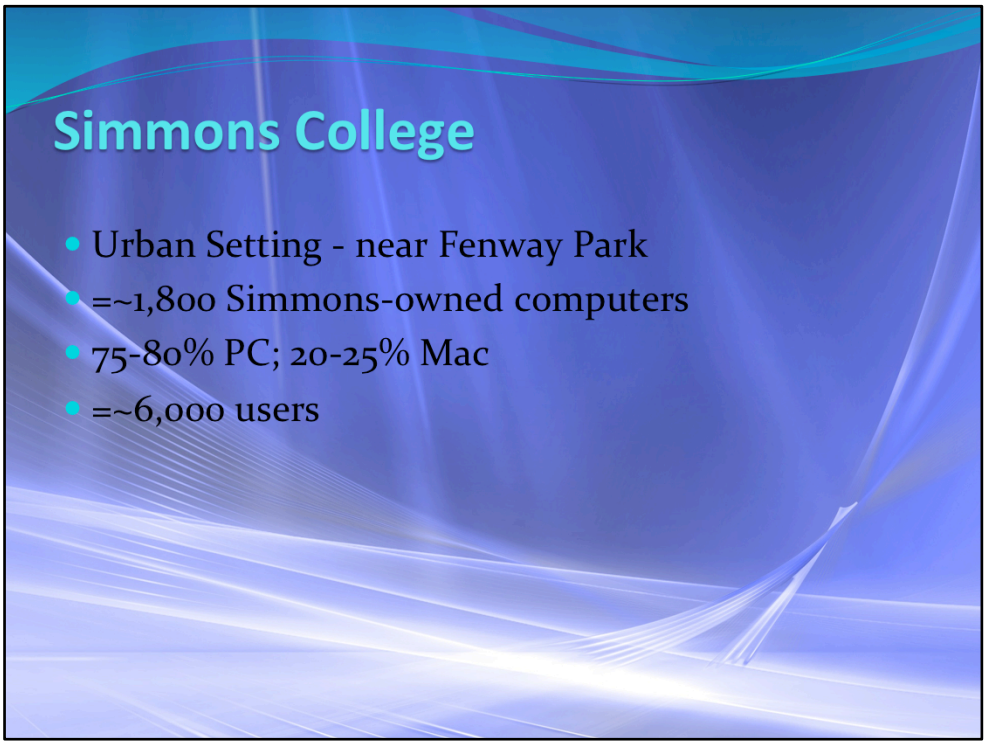
Imaging PC's has been a long road of changes and developments.

We've come up with an automated process to image computers that has saved our department in many ways. A manual process can allow for many mistakes, and loss of data.



Aran:

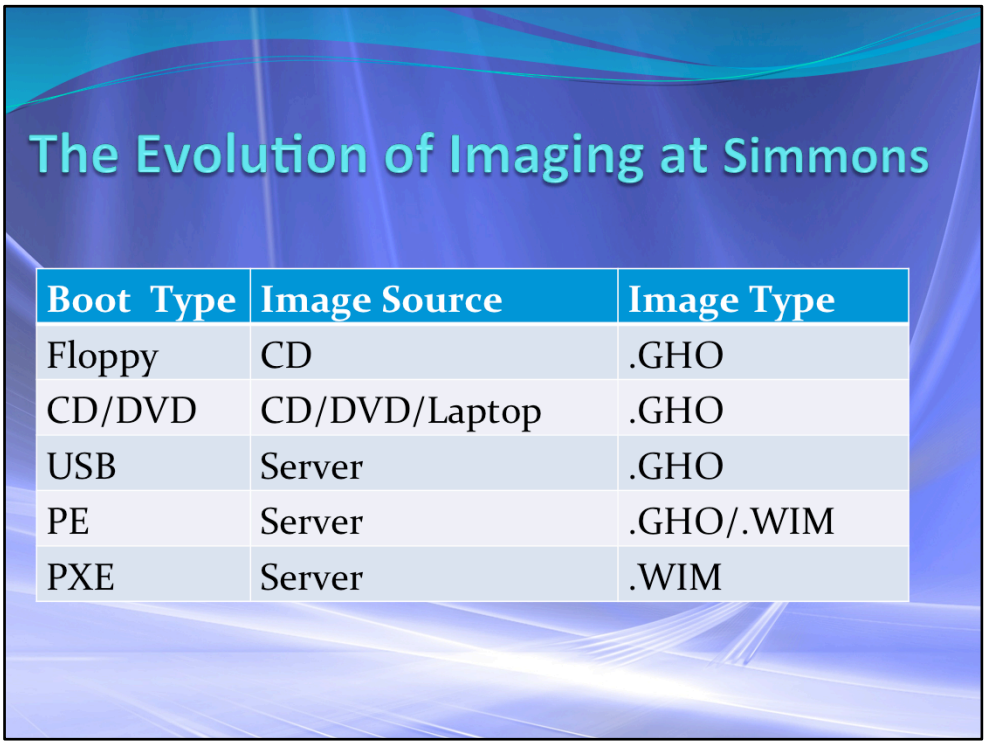
We'll be talking about Simmons College
A bit about how we progressed from floppies to PXE booting
The highlights, scripts and tools that helped us along the way
We will make available most if not all of the tools mentioned in this presentation



Buzz:

-Simmons is a small liberal arts grad/undergrad UNIVERSITY near Fenway Park surrounded by hospitals and museums

-Our inventory includes about 1800 computers; a fourth or a fifth or so are Macs and the rest PCs
-5000 students 1000 fac staff



Buzz:

When I started working at simmons we were using floppy disks to boot to Ghost and saved the images on a bunch of cd's

Then we improved to booting from cd/usb and dvd's for the images *no floppies.

We tried to multicast, but I kept getting in trouble for bringing down the network, so we decided to use a laptop , 16 port switch and a *lot* of network cables for the time being.

After a lot of pain, we discovered that we could enable IGMP on our switches.

This let us multicast without affecting the network. This allowed us to set up a dedicated ghost server to multicast from and house the images.

This worked well for us for a long time, but it had it's limitations.

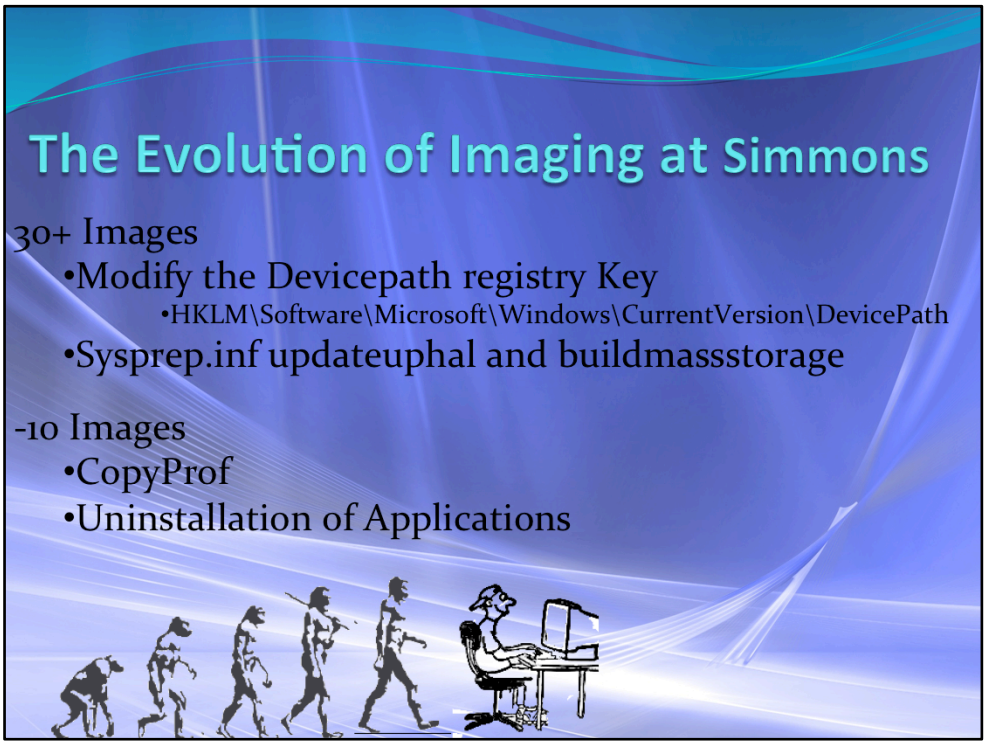
Only 2 technicians could be logged in simultaneously.

Terminal services licenses

forgetting to log out

The help desk tech would have to determine which image to use when.

Aran:
No UI = too many choices
UI = Fewer chances of mistakes/Take out of technicians hands
so we incorporated an HTA app with an xml file (*located on server) that stores the image names and locations.
Once we switched to Wim files, we could immediately leverage WinPE as both a boot method, and an interface to image with. We could load drivers into the boot image which allowed us to add network drivers and storage drivers as new devices came out.
PXE allowed us to leverage existing boot images from the Server, which meant that we could use the same boot image and process from a bootable CD, USB key, or network boot image.



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Terminal services licenses

Aran:

Startnet.cmd:

Like autoexec, or autorun.inf startnet.cmd is a text command list that automatically runs once WinPE is booted.

Auth.exe

which maps a network drive and runs a series of batch files and vb scripts. Diskpart to format the drive and configure the partition.

Imagex

is the command line tool in the Windows Automated Installation Kit used to apply a wim file image to a PC.

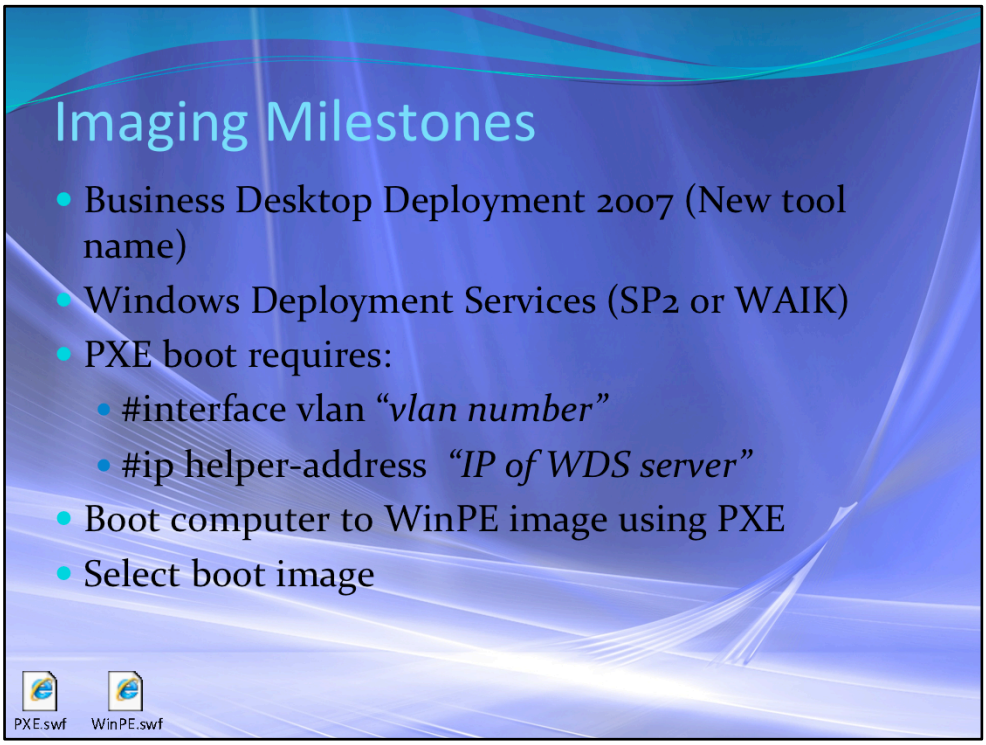
With the xml configuration files we can use a vbs script to modify the local xml file, name the computer, and join it to the domain in a specific OU

Modify the registry, anything you can do with a script you can do as part of the image process.

Run Synchronous Command

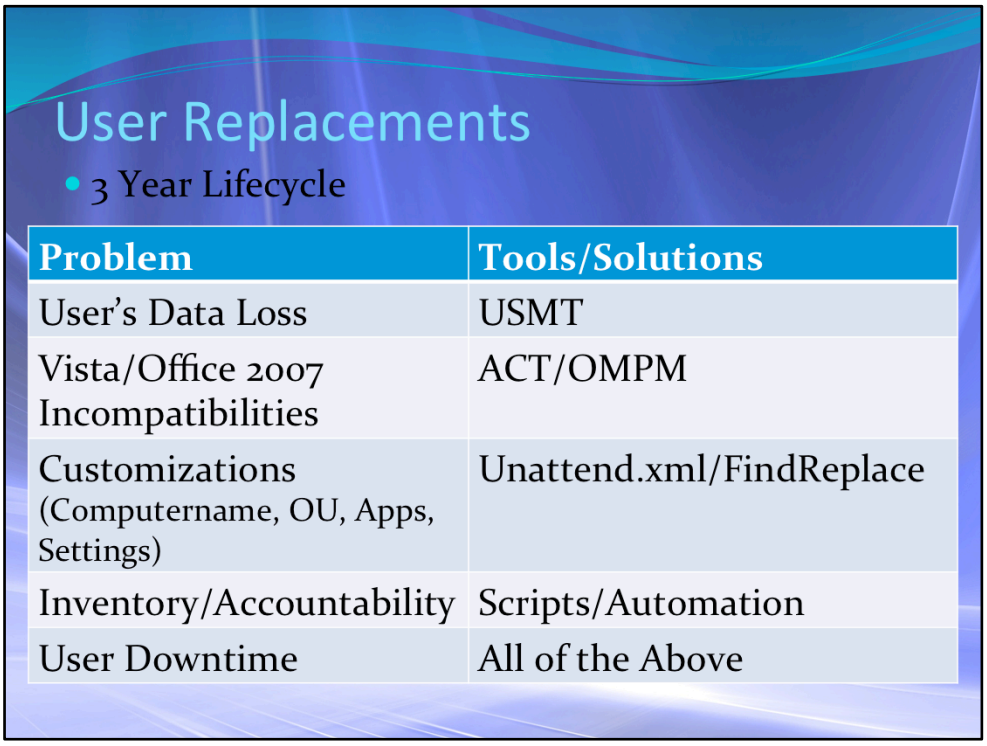
Allows you to run batch files or commands after the OS is installed, named and joined to the domain, eg. Add applications to the image offline by staging them to install on deployment.

When sysprepping a Vista machine, using the **/unattend:***answerfile* switch will create the Panther\Unattend.xml file regardless of what unattend files you'd used before.

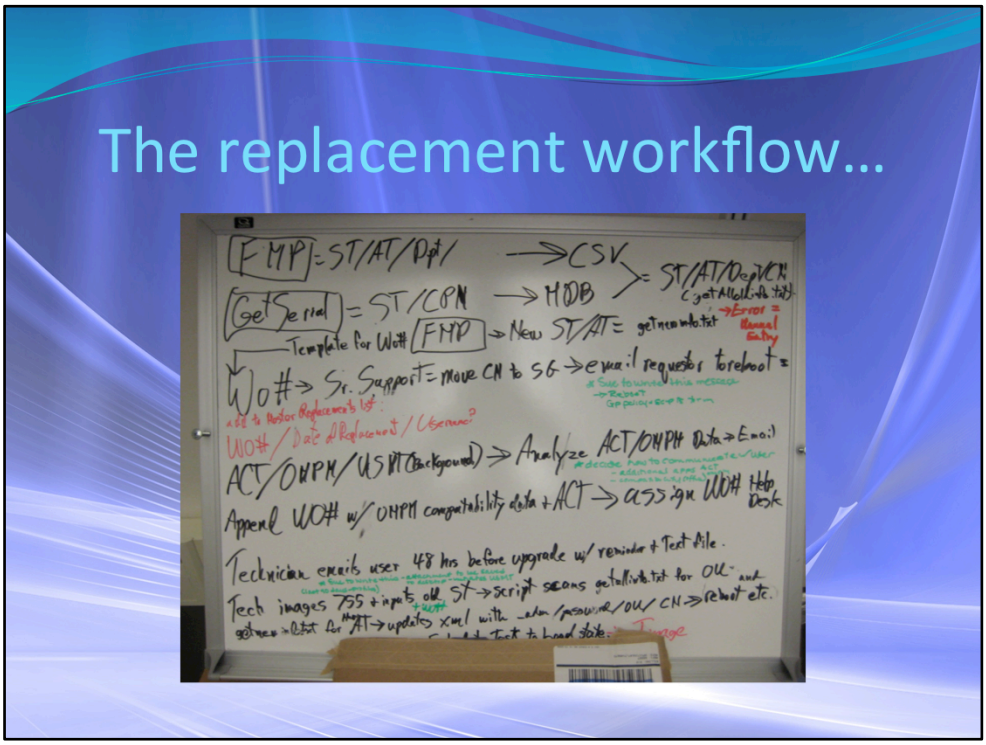


Aran:

The BDD is a package of tools and documents, that allow you to manage application installations, Drivers, Operating systems, and eventually inventory control using a SQL database.
WDS is an administrative tool in the WAIK or SP2 for Server 2003
WDS becomes a network bootable repository, that requires very little configuration, only the Port 67/UDP and the IP Helper if you're using VLANs

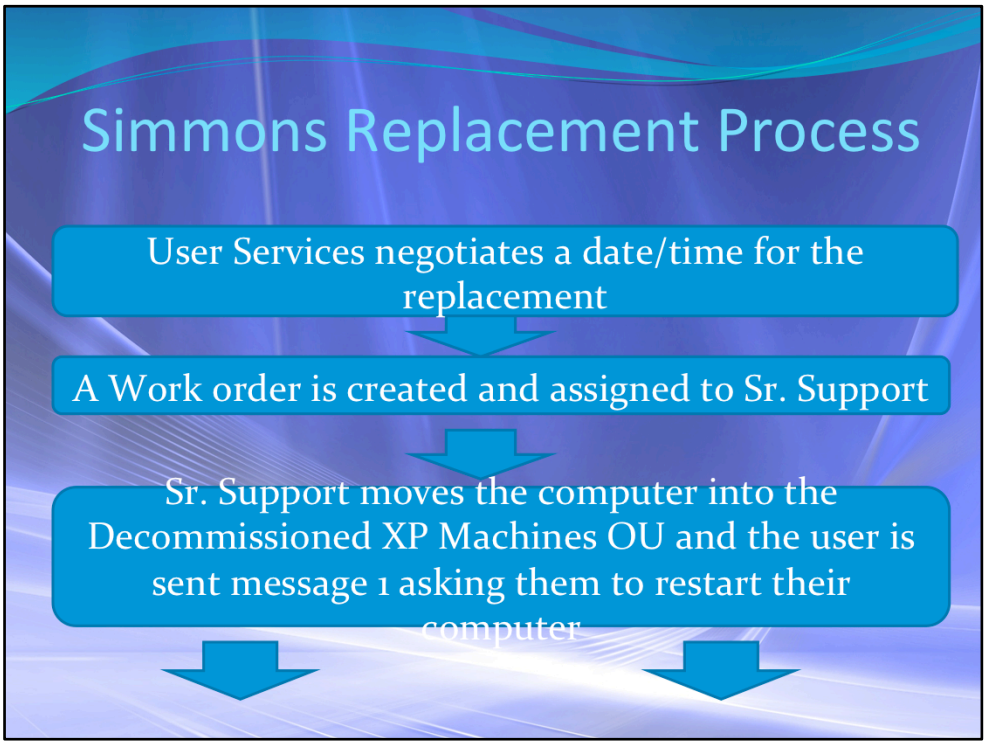

User Replacements
3 Year Lifecycle
Problem
Tools/Solutions
User's Data Loss
USMT
Vista/Office 2007 Incompatibilities
ACT/OMPM
Customizations (Computername, OU, Apps, Settings)
Unattend.xml/FindReplace
Inventory/Accountability
Scripts/Automation
User Downtime
All of the Above

Aran:



Aran:

This was the whiteboard version of the workflow we put together for the replacement process. Which then became the following slides.

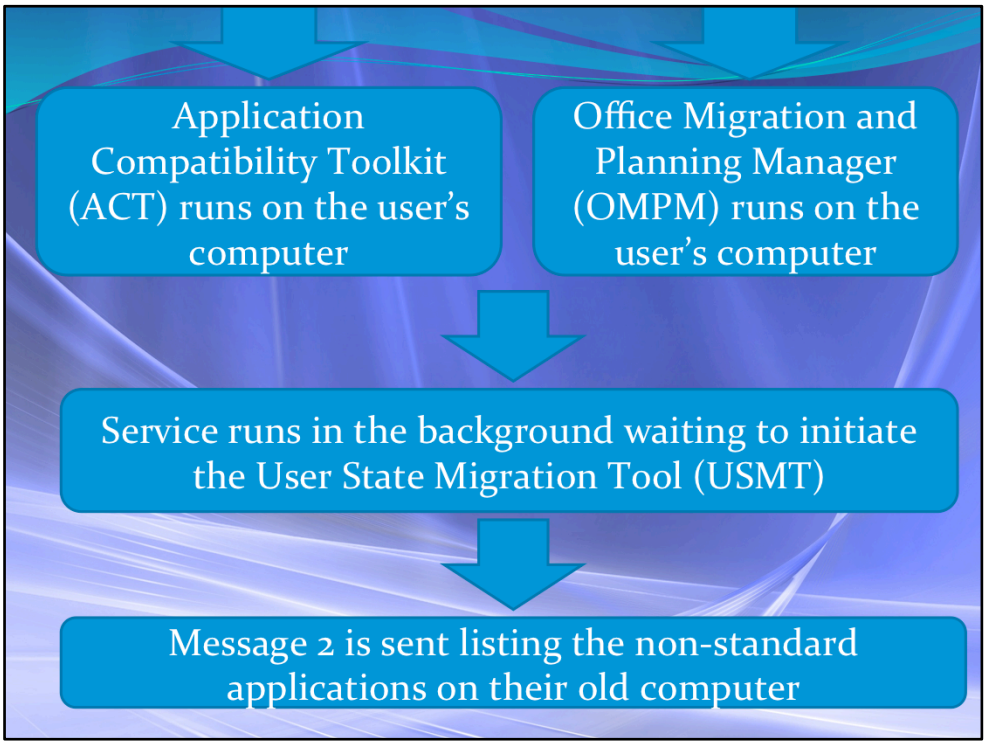


Aran:

User Services works with our Tech Liasons to arrange a time and date for the replacement

The work order is created from a template and assigned to our Sr. Support group

Using Active Directory Users and Computers we move the computer into a preconfigured OU for the replacement process



Buzz:

Once in this OU the Group Policy is applied initiating the ACT, OMPM, and USMT service

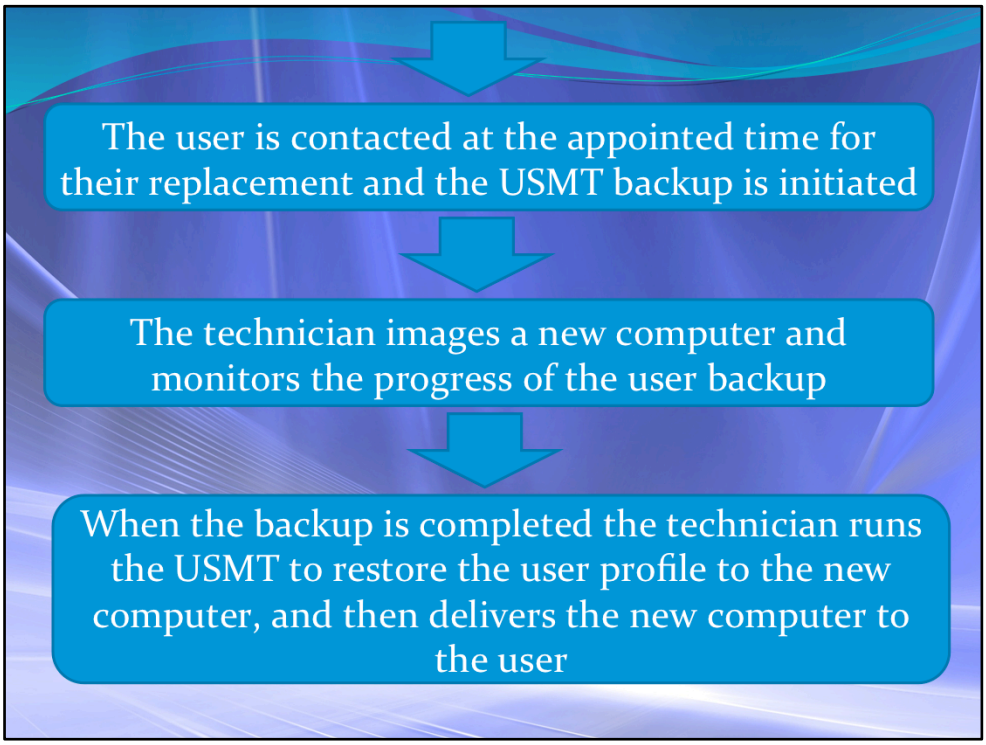
notes about the USMT.bat, and the System service thing

The ACT sends log info to the server which we then use a filter to process and list the non-standard software on the PC

The OMPM lists potential compatibility issues with Office documents on the user's computer

This information is sent in a preconfigured email using a vbs script to the user

We then assign the work order to the Front Line to complete the replacement



Aran:

The tech contacts the user at the appointed time and date to start the replacement. The user is instructed to create a text file named UPGnow.txt on their desktop, or the file can be emailed by the tech.

The service in the background scans the computer>User>Desktops for this file, and once it's found initiates the USMT backup. The USMT creates a backup of each network user profile, logged on in the last 90 days. This backup is created on the server and named according to the serial number of the computer.

during the backup, a logfile and progress file is created on the server indicating the stage in the process, and the estimated time remaining. Once completed, it reports:

"ScanState has successfully collected the files and settings."

At this point the tech can run the restore to the new computer from the server backup.

Once the restore is completed, the tech can deliver a fully working PC, that already has the suer's profile data, email, etc applied.


Available for download
During our presentation we mentioned various tools and scripts that helped us along the way.
Copy Profile
Registry settings
Find /Replace Script
Dell PXE Next Boot
Join Domain
Available for download at
Sysprep
Sample HTA w/XML
PickHal.bat
Dell Asset Tag
...and More
http://web.simmons.edu/~helpdesk

Aran:

Wrap up.


Wrap up
Questions?
Comments
Quad Boot iMac