

Active Directory

SCCM 202

OS Deployment



Topics

- Creating the image
- Capture the image
- Importing into SCCM
- Creating the task sequence
- USMT
- Default NCSU deployments



Creating the Image

- Use any hardware
- OS can be installed using any method
 - DVD, WDS, SCCM
 - Do not recommend using existing image that you have already run SYSPREP on
- Apps can be installed using any method
- Never login or run installed applications as administrator
- Try to build the image in the OU it will be used in
- Install Windows Updates
- Make sure all drivers are installed



Creating the Image

- Clean up
 - Delete User Profiles
 - Trend Micro
 - Re-GUID tool
 - <http://help.ncsu.edu/solutions/all/3655.php>
 - SCCM
 - Delete download cache through Control Panel
 - Stop SMS Host Agent service
 - Delete C:\Windows\SMSCFG.ini



Creating the Image

- **SYSPREP**
 - C:\Windows\System32\sysprep
 - Enter System Out-of-Box Experience (OOBE)
 - Generalize
 - Shutdown



Capturing the Image

- WINPE
 - [\\wolftech.ad.ncsu.edu/engr/coedean/ou_admins/winpe](http://wolftech.ad.ncsu.edu/engr/coedean/ou_admins/winpe)
 - USB or ISO
- Boot into WINPE
 - Imagex
 - Can capture image locally or to the network
 - Diskpart
 - list volume
 - `Imagex.exe /compress fast /capture D:\ S:\itecs_spring_lab.wim "ITECS Spring Lab Gold" /scroll /verify`
 - Copy to `\\wolftech.ad.ncsu.edu\deployment\Staging\Images`



SCCM

- Operating System Deployment
 - Operating System Images
 - Custom images
 - Operating System Install Packages
 - DVD
 - Task Sequence
 - Ordered set of instructions
 - OU admins have permission to edit but not create
 - Drivers
 - If drivers are missing send us the driver from the computer manufacturer and from the hardware vendor
 - MDT – Microsoft Deployment Toolkit



SCCM

- USMT
 - Three XML files
 - ncsuuser
 - Defines what user files to take
 - Only taking files inside of C:\users\>
 - Does not take anything from root of profile just things inside of folders
 - Does not capture .lnk files from the Public profile
 - Added downloads folder
 - ncsuapp
 - Defines what apps to migrate
 - Only taking Microsoft products forward
 - In order for the tool to migrate application settings the application must be installed BEFORE the profile is restored
 - ncsucustom
 - Add custom folders to move
 - C:\Temp
 - \\wolftech.ad.ncsu.edu\engr\coedean\ou_admins\USMT Custom
 - Computer Associations
 - In-place
 - Side-by-Side
 - Migrates
 - x86 to x86
 - x64 to x64
 - x86 to x64



SCCM

- NCSU Task Sequences
 - Windows 7
 - X86
 - X64
 - Capture
 - Restore
 - Install images
 - Suspends Bitlocker
 - Reboot into WinPE
 - Formats drives
 - Two partitions
 - 100 MB
 - Remaining
 - Applies OS
 - Joins the domain
 - Installs drivers
 - Installs SCCM agent
 - Restores Profiles
 - If laptop enables bitlocker and starts to encrypt drive



When things go wrong...

- Drivers
 - no. 1 reason things go wrong
- Hard drive space
 - need space for the .wim and to expand it
- Logs
 - must boot into winpe
 - C:_SMSTaskSequence
 - Normal log location
- Command line recovery



Questions?

To get help:

activedirectory@list.ncsu.edu

wds@list.ncsu.edu

Jabber.eos.ncsu.edu chatroom:
activedirectory

