WolfTech Active Directory: SCCM 101

July 28th, 2011 2-5pm Daniels 201

August 5th, 2011 2-5pm Daniels 201

http://activedirectory.ncsu.edu/

What we are going to cover...

The Console The Client Concepts Inventory Collections Power Management Software Distribution OS Deployment



System Center Configuration Manager

Inventory **Application Deployment** Mandatory Self Service Patch Management Imaging Power Management Metering Mobile Device Management **Network Access Protection Forefront Client Security**



First: The Console

Install:<u>http://activedirectory.ncsu.edu/services/sccm/sccm-console/</u> Add-ons:

- Right-Click Tools
- 2007 Toolkit (specifically the log parser)
- Copy/Paste
- MDT 2010 (only for imaging)

Control panel applets:

- Run Advertised Programs
- Configuration Manager
- Program Download Monitor



Poking Clients

Requires firewall access/permissions for logged on account Start->

Windows Diagnostics

Remote Assistance

Remote Desktop

Client Tools->

Computer Management

Interactive Command Prompt

Re-Run Advertisement from List (and Collections)

Running Processes

Client Actions->

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Hardware/Software Inventory Scan Cycle (and Collections) Shutdown Tools->

Schedule Reboot



Next: The Client

Agent installation process:

- Included in certain WDS Images
- Group Policy

Issues:

- Use Trace32.exe for log files: ccmexec.log, execmgr.log
- x32: C:\Windows\System32\CCM\logs
- x64: C:\Windows\SysWOW64\CCM\logs
- Right-Click->Client Log Files
- Client Tools->Remove ConfigMgr Agent and Reboot (x32 only)

Client = Yes in the console means:

- 1. Computer meets Pre-Reqs: In AD, has Cert, in DNS
- 2. Agent installed and has performed first inventory
- 3. Agent contacted Management Point
- 4. Collection has updated membership (Right Click)



SCCM Roles

Site Server Management Point Distribution Point Fallback Status Point Reporting Services Point Software Update Point Asset Intelligence Point User State Migration Point PXE Point



Concepts

Computer Discovery: Systems, Groups, and System Group @ 12am, 1am, 2am and every 4 hours after

Computer Cleanup:

- Obsolete (its been replaced/reinstalled) 10 Days
- Inactive (its been off or never existed) 90 days
- Need to create a Collection to be able to delete computers
- If a computer is erroneously deleted:
 - It will come back, re-join SCCM and re-run advertisements

Resource -> Advertisement -> Collection -> Computer

Off Campus Support of App/OS installs -- Be Careful! NC STATE UNIVERSITY



Inventory

Resource Explorer:Right-click->Start->Resource Explorer

Reporting Services Point - Demo!

- https://oit100sccm-rp.oit.ncsu.edu/Reports/
- IE only and must be "Run as administrator"

Queries



Collections

Update intervals:

- 4 hours Initial OU Collections
- 2 hours Software Collections

Derivative Collections should target Initial OU Collections w/ "Limit To:" setting

Collections for:

- Hardware All Dells, specific NIC card, all VM's
- Software Old versions of an app,
- OU Faculty, Labs, across-the-board
- Groups Managed Software, exception-oriented
- Static Niche Apps



Collections

Specifics:

- If you rename something that is using the name it breaks
- Check the "dynamically update" checkbox
- Don't crank up the update interval faster except for testing

Advanced Collection Settings: Restart Notifications Polling Interval

Walkthrough: Create a OU-All Collection to enabling delete old computers



Collection Settings: Maintenance Windows

Set Windows for:

- Specific Dates
- Recurrence Pattern
- OS Deployment Only

Computers with multiple Windows will obey ALL of them

Can override on a per-Advertisement basis

Careful! Maintenance Window must be longer than: Program -> Maximum Allowed Run Time



Collection Settings: Power Management

Peak vs. Non-Peak Plans Wake on Lan - Multiple IPs (including AFS Client) muck it up

Reports:

- Power Computer Activity
- Power Consumption by Day
- Power Insomnia Report -> Power Insomnia Computer Details -> Power Computer Details

If multiple values for power settings are applied to a computer, the least restrictive value is used.



Software Distribution

Concepts: Package/Program/Task Sequence/Advertisements

Mandatory vs. Self Service Advertisements

Groups for NCSU-Level Packages in AD:

- Mandatory ASAP Advertisements
- No One Logged On
- Download and Installs as System
- Notification on Advertisement

Cache sizing Pre-requisites



Software Distribution

Custom advertisements of NCSU-Level Packages - why?

- Increase Cache size for installation of many apps
- Add MS pre-requisites en masse
- Set specific schedules for Mandatory installs
 Look @ Advertisement for Program or Task sequence
- "Rerun if successful on previous attempt" for broken installs
- ...And of Course: Self Service Advertisements
 - "Run Advertised Programs" Control Panel Applet
 - O Walkthrough!

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Advertisement/Package status



OS Deployment

Base Images - Windows 7/2008r2 Custom Images

Scheduled reinstallation times Self Service

NCSU-Level Groups for installing Win7 via Mandatory or Self Service Advertisement

If you need a different OS advertisement, you'll need an SCCM admin to create it and delegate permissions

User State Migration - Later!



Coming Soon!

Patching: WSUS Non-MS Metering Configuration Management



Where Can I Go for Help?

AD Site

http://activedirectory.ncsu.edu/services/sccm/

Mailing Lists

NC STATE UNIVERSITY

activedirectory@lists.ncsu.edu

Jabber

• "activedirectory" on conference.jabber.eos.ncsu.edu



Questions?

