

SCCM OSD

Richard Zuraff

General Mills

Richard.Zuraff@genmills.com

Task Sequence

- ▣ SCCM Task Sequence
 - Install Existing Image Package
 - Build and Capture OS
 - Custom Task Sequence
- ▣ MDT Integrated Task Sequence
 - Client Task Sequence
 - Client Replacement Task Sequence
 - OEM reload Task Sequence (Pre-OEM)
 - OEM reload Task Sequence (Post-OEM)
 - MDT Custom Task Sequence
 - Server Task Sequence

General Mills Image

- ▣ Three Images
 - Granite Image (Desktops & Laptops)
 - Developer Image (Granite Image + Developer Apps)
 - Citadel Image (Used for Plant Floor Forklifts)

- ▣ Three Step Build and Deploy method using SCCM
 - Base Image build
 - Granite or Developer Image Build
 - Deployment phase

**Build the Reference Machine**

- ✓ Partition Disk 0
- ✓ Apply Operating System
- ✓ Apply Windows Settings
- ✓ Apply Network Settings
- ✓ Setup windows and ConfigMgr

Install Software

- ✓ Windows Update Agent 3.0 [7.1.6001.65]
- ✓ Package Installer for Windows 6.1.22.4 (KB898461)
- ✓ Windows Installer 3.1
- ✓ Restart Computer
- ✓ Windows Installer 3.1 (KB927891)
- ✓ Restart Computer
- ✓ WinXP Common Updates
- ✓ WinXPSP2 Updates
- ✓ WinZip 9.0 SR-1
- ✓ Restart Computer
- ✓ InstallScriptMSIEngine 6-11.5
- ✓ Restart Computer
- ✓ Baseline Security Analyzer (MBSA) 2.1
- ✓ WSUS Client Diagnostics Tool
- ✓ Microsoft XML Parser 3.0 SP7
- ✓ Restart Computer
- ✓ MSXML 4.0 SP2 Parser and SDK
- ✓ Restart Computer
- ✓ MSXML 6.0 Parser
- ✓ Restart Computer
- ✓ Microsoft XML Parser 3.0 SP7 (KB955069)
- ✓ Restart Computer
- ✓ MSXML 4.0 SP2 Parser and SDK (KB954430)
- ✓ Restart Computer
- ✓ MSXML 6.0 Parser (KB954459)
- ✓ Restart Computer
- ✓ Visual Basic 6.0 SP6 run-time files
- ✓ Visual Basic 6.0 controls
- ✓ Restart Computer
- ✓ .NET Framework 1.1
- ✓ .NET Framework 1.1 SP1 (KB867460)
- ✓ Restart Computer
- ✓ .NET Framework 1.1 SP1 (KB928366)
- ✓ Restart Computer
- ✓ Configure .NET Framework 1.1 SP1
- ✓ .NET Framework 3.5 SP1+GDR
- ✓ Restart Computer
- ✓ .NET Framework 2.0 Security Policy

Base Image Continued

- ✓ ICMP Packet size hotfix KB816045
- ✓ J2SE Runtime Environment 6.0 Update 11
- ✓ Configure J2SE Runtime Environment 5.0 Update 6
- ✓ ClearType Tuning Control Panel Applet
- ✓ Configure ClearType Tuning
- ✓ Microsoft Windows Journal Viewer
- ✓ Malware Removal Tool
- ✓ Restart Computer
- ✓ BITS 2.5
- ✓ Restart Computer
- ✓ Endpoint Protection Client 11.0.3001.2224
- ✓ Restart Computer
- ✓ Symantec SEP/SAV AV Definition Update
- ✓ Restart Computer
- ✓ Run Live Update on Endpoint Protection Client

Capture the Reference Machine

- ✓ Install Deployment Tools
- ✓ Join Workgroup
- ✓ Prepare ConfigMgr Client
- ✓ Prepare OS
- ✓ Capture the Reference Machine

Add ▾


Remove








- 📁 **Build the Reference Machine**
 - ✔ Restart in Windows PE
 - ✔ Set Diskpart BIOS Compatibility Mode
 - ✔ Partition Disk 0
 - ✔ Apply Operating System ← Used Base Image
 - ✔ Apply Windows Settings
 - ✔ Apply Network Settings
 - ✔ Setup Windows and ConfigMgr
- 📁 **Install Windows Updates**
 - ✔ Install Software Updates
- 📁 **Install Software**
 - ✔ Symantec SEP/SAV AV Definition Update
 - ✔ Diskeeper2008
 - ✔ General Mills Common Controls
 - ✔ Windows Media Player 10
 - ✔ Windows Media Player 10 (923689)
 - ✔ Windows Media Player 10 (KB936782)
 - ✔ Windows Media Player 10 (KB941569)
 - ✔ Apple Quicktime Player 7.6
 - ✔ Restart Computer
 - ✔ Office 2007 SP1
 - ✔ Restart Computer
 - ✔ Microsoft CDO 1.2.1 English
 - ✔ Office Communicator 2007
 - ✔ Office Live Meeting 2007
 - ✔ Visio Viewer 2003
 - ✔ Adobe Reader 9
 - ✔ Restart Computer
 - ✔ Adobe Flash Player 10.0.22.87
 - ✔ Adobe Shockwave Player 11
 - ✔ WebEx Meeting Manager
 - ✔ BindView Password Self Service DirectLogin
 - ✔ Configure BindView Password DirectLogin
 - ✔ Computer Information Tool V3
 - ✔ Network Diagnostics Tool
 - ✔ Configure VBS Security Change
 - ✔ G-Dex icons
 - ✔ Expense Reporting Certificate
 - ✔ 1E SMS Wake up client 5.5
 - ✔ Restart Computer
- 📁 **Scripts**
 - ✔ Connect to Network Folder
 - ✔ Copy Granite OEM files
 - ✔ Copy sysoc.inf to c:\Windows\INF
 - ✔ Write image information to registry
 - ✔ Write image information to oeminfo.ini
 - ✔ Defrag machine
 - ✔ Restart Computer
- 📁 **Capture the Reference Machine**
 - ✔ Install Deployment Tools
 - ✔ Join Workgroup
 - ✔ Prepare ConfigMgr Client
 - ✔ Prepare OS
 - ✔ Capture the Reference Machine


Deployment Task Seq










- Initialization
 - ✓ Set Diskpart BIOS Compatibility Mode
 - ✓ Format and Partition Disk
 - ✓ Use Toolkit Package
 - ✓ Check Pre-reqs
 - ✓ Gather
- Validation
 - Non-Replace
 - ✓ Validate
 - ✓ Check Bios
- State Capture
 - Capture Groups
 - Capture Network Settings
 - ✓ Determine Local or Remote UserState
 - ✓ Request State Store
 - ✓ Release State Store
 - ✓ Capture User State
- Preinstall
 - New Computer Only
 - ✓ Validate
 - ✓ Set Diskpart BIOS Compatibility Mode
 - ✓ Format and Partition Disk
 - ✓ Use Toolkit Package
- Install
 - Refresh Only
 - ✓ Restart to Windows PE
 - ✓ Use Toolkit Package
 - ✓ Gather
 - ✓ Apply Operating System Image
- PostInstall
 - ✓ Gather
 - ✓ Apply Windows Settings
 - ✓ Apply Network Settings
 - ✓ Configure


 **Sata Hard Drive Install**


 **Desktop**

-  DC7100 Sata HD Driver
-  DC7600 Sata HD Driver
-  DC7700 Sata HD Driver
-  DC7800 Sata HD Driver
-  DC7900 Sata HD Driver






 **Laptop**


-  NC4400 Sata HD Driver
-  NC6400 Sata HD Driver
-  2510p Sata HD Driver
-  8510p Sata HD Driver
-  6910p Sata HD Driver
-  2530p Sata HD Driver
-  6930p Sata HD Driver
-  8750w Sata HD Driver
-  8730w Sata HD Driver













 **Driver Package Install**


-  VMWare


 **Desktop**


-  Apply Driver Package-DC7100
-  Apply Driver Package-DC7600
-  Apply Driver Package-DC7700
-  Apply Driver Package-DC7800
-  Apply Driver Package-DC7900




 **Laptop**


-  Apply Driver Package-NC6000
-  Apply Driver Package-NC6230
-  Apply Driver Package-NC4200
-  Apply Driver Package-NC4400
-  Apply Driver Package-NC6400
-  Apply Driver Package-2510p
-  Apply Driver Package-8510p
-  Apply Driver Package-6910p
-  Apply Driver Package-2530p
-  Apply Driver Package-6930p
-  Apply Driver Package-8530w
-  Apply Driver Package-8730w


-  Replace Hal


-  Setup Windows and ConfigMgr





 **HP Drivers**

-  Use Toolkit Package
-  Install Software Updates
-  Gather





 **HP Driver Install**


 **Desktop Software Driver Installs**

 **DC7100 Drivers**

-  DC7100 BIOS
-  Restart Computer
-  Bios Configuration Tool
-  Intel Graphics Driver for Microsoft Windows

 **DC7600 Drivers**


-  DC7600 BIOS
-  Restart Computer
-  Bios Configuration Tool
-  Intel Graphics Driver for Microsoft Windows

 **DC7700 Drivers**



- ✓ DC7700 BIOS
- ✓ Restart Computer
- ✓ Bios Configuration Tool
- ✓ Intel Graphics Driver for Microsoft Windows

 **DC7800 Drivers**


- ✓ DC7800 BIOS
- ✓ Restart Computer
- ✓ Bios Configuration Tool
- ✓ Intel Graphics Driver for Microsoft Windows

 **DC7900 Drivers**


- ✓ DC7900 BIOS
- ✓ Restart Computer
- ✓ Bios Configuration Tool
- ✓ Intel Graphics Driver for Microsoft Windows

 **Laptop Software Driver Installs** **NC4200 Drivers**


- ✓ nc4200 BIOS
- ✓ Restart Computer
- ✓ Bios Configuration Tool
- ✓ Intel 915GM Graphics Driver
- ✓ System Updates for XP SP2
- ✓ HP Quick Launch Buttons
- ✓ Intel PRO_Wireless Drivers
- ✓ HP Wireless Assistant
- ✓ Integrated Module with Bluetooth

 **NC6230 Drivers**

- ✓ nc6230 BIOS
- ✓ Restart Computer
- ✓ Bios Configuration Tool
- ✓ ATI Video Driver and Control Panel
- ✓ System Updates for XP SP2
- ✓ HP Quick Launch Buttons
- ✓ GMI Intel Wireless Driver XP 12.1.2.0
- ✓ HP Wireless Assistant
- ✓ Support for Integrated Module with Bluetooth
- ✓ High-Speed Secure Digital (SD) Card

 **NC4400 Drivers**

- ✓ nc4400 BIOS
- ✓ Restart Computer
- ✓ Bios Configuration Tool
- ✓ Intel 945GM Video Driver for XP
- ✓ System Updates for XP SP2
- ✓ HP Quick Launch Buttons
- ✓ GMI Intel Wireless Driver XP 12.1.2.0
- ✓ HP Wireless Assistant
- ✓ Support for Integrated Module with Bluetooth
- ✓ High-Speed Secure Digital (SD) Card

 **NC6400 Drivers**

- ✓ nc6400 BIOS
- ✓ Restart Computer
- ✓ Bios Configuration Tool
- ✓ ATI Video Driver and Control Panel
- ✓ System Updates for XP SP2
- ✓ HP Quick Launch Buttons
- ✓ GMI Intel Wireless Driver XP 12.1.2.0

- ✔ HP Wireless Assistant
- ✔ HP Mobile Data Protection System
- ✔ Support for Integrated Module with Bluetooth
- ✔ High-Speed Secure Digital (SD) Card
- ✔ Texas Instruments Media Card Driver

2510P Drivers

- ✔ 2510p BIOS
- ✔ Restart Computer
- ✔ Bios Configuration Tool
- ✔ Intel 965GM Graphic Drivers
- ✔ System Updates for XP SP2
- ✔ HP Quick Launch Buttons
- ✔ GMI Intel Wireless Driver XP 12.1.2.0
- ✔ HP Wireless Assistant
- ✔ Integrated Module with Bluetooth
- ✔ HP 3D DriveGuard for XP

6910P Drivers

- ✔ 6910p BIOS
- ✔ Restart Computer
- ✔ Bios Configuration Tool
- ✔ ATI Video Driver and Control Panel
- ✔ System Updates for XP SP2
- ✔ HP Quick Launch Buttons
- ✔ GMI Intel Wireless Driver XP 12.1.2.0
- ✔ HP Wireless Assistant
- ✔ Integrated Module with Bluetooth
- ✔ HP 3D DriveGuard for XP

8510P Drivers

- ✔ 2510p BIOS
- ✔ Restart Computer
- ✔ Bios Configuration Tool
- ✔ ATI Video Driver and Control Panel
- ✔ System Updates for XP SP2
- ✔ HP Quick Launch Buttons
- ✔ GMI Intel Wireless Driver XP 12.1.2.0
- ✔ HP Wireless Assistant
- ✔ Integrated Module with Bluetooth
- ✔ HP 3D DriveGuard for XP

2530P Drivers

- ✔ 2530p BIOS
- ✔ Restart Computer
- ✔ Bios Configuration Tool
- ✔ Intel Video Driver and Control Panel
- ✔ System Updates for XP SP2
- ✔ HP Quick Launch Buttons
- ✔ GMI Intel Wireless Driver XP 12.1.2.0
- ✔ HP Wireless Assistant
- ✔ Integrated Module with Bluetooth
- ✔ HP 3D DriveGuard for XP

6930P Drivers

- ✔ 6930p BIOS
- ✔ Restart Computer
- ✔ Bios Configuration Tool
- ✔ System Updates for XP SP2
- ✔ ATI Video Driver and Control Panel
- ✔ HP Quick Launch Buttons

- ✓ GMI Intel Wireless Driver XP 12.1.2.0
- ✓ HP Wireless Assistant
- ✓ Integrated Module with Bluetooth
- ✓ HP 3D DriveGuard for XP

8530w Drivers

- ✓ 8530p-w BIOS
- ✓ Restart Computer
- ✓ Bios Configuration Tool
- ✓ nVidia Graphics Driver for Microsoft
- ✓ System Updates for XP SP2
- ✓ HP Quick Launch Buttons
- ✓ GMI Intel Wireless Driver XP 12.1.2.0
- ✓ HP Wireless Assistant
- ✓ Integrated Module with Bluetooth
- ✓ HP 3D DriveGuard for XP

8730w Drivers

- ✓ 8730w BIOS
- ✓ Restart Computer
- ✓ Bios Configuration Tool
- ✓ nVidia Graphics Driver for Microsoft
- ✓ System Updates for XP SP2
- ✓ HP Quick Launch Buttons
- ✓ GMI Intel Wireless Driver XP 12.1.2.0
- ✓ HP Wireless Assistant
- ✓ Integrated Module with Bluetooth
- ✓ HP 3D DriveGuard for XP

- ✓ Restart Computer

GMI Scripts

- ✓ Post Deployment Scripts
- ✓ Remove AMT Privacy Icon
- ✓ Remove Intel Active Management Technology Status

GMI Applications

- ✓ WinDVD

Laptop Applications

- ✓ RAS North America
- ✓ Wireless Config MGO
- ✓ VPN 5.0
- ✓ Restart Computer

Restore USMT

- ⊖ Restore Groups
- ✓ Request State Store
- ✓ Restore User State
- ✓ Release State Store
- ✓ Move State Store

Copy Deployment Logs

- ✓ Copy Logs

Requirements for Task seq Program

Windows Installer		MOM Maintenance Mode	
General	Requirements	Environment	Advanced
<p>A program may require certain conditions to be true before it can run. Specify the conditions that must be met for the program to run.</p>			
Program can run:		<input type="text" value="Whether or not a user is logged on"/>	
Run mode			
<input type="radio"/> Run with user's rights			
<input checked="" type="radio"/> Run with administrative rights			
<input type="checkbox"/> Allow users to interact with this program			
Drive mode			
<input checked="" type="radio"/> Runs with UNC name			
<input type="radio"/> Requires drive letter			
<input type="radio"/> Requires specific drive letter (example: Z):			
<input type="checkbox"/> Reconnect to distribution point at logon			

Must run with Admin rights & have Allow user not checked

Windows Installer		MOM Maintenance Mode	
General	Requirements	Environment	Advanced
<p>You can specify additional criteria for installing and running this program. You can also temporarily disable the program.</p>			
<input type="checkbox"/> Run another program first:			
Package:		<input type="text"/>	<input <="" td="" type="button" value="Browse..."/>
Program:		<input type="text"/>	
<input type="checkbox"/> Always run this program first			
When this program is assigned to a computer:			
<input type="text" value="Run once for the computer"/>			
<input checked="" type="checkbox"/> Suppress program notifications			
A disabled program is not displayed or run on clients.			
<input type="checkbox"/> Disable this program on computers where it is advertised.			
<input checked="" type="checkbox"/> Allow this program to be installed from the Install Software task sequence without being advertised.			

This must be checked

WMI & Task Seq Variables

Task Sequence Variable

Enter the task sequence variable to evaluate.

Variable:

Condition:

Value:

OK Cancel

Task Sequence Variable

Enter the task sequence variable to evaluate.

Variable:

Condition:

Value:

OK Cancel

WMI Query Properties

Enter the WMI Query to evaluate.

WMI Namespace:

WQL Query:

Test query OK Cancel

WMI Query Properties

Enter the WMI Query to evaluate.

WMI Namespace:

WQL Query:

Test query OK Cancel

Force Auto Detect Site Code

- ▣ VBScript code below

```
Set oSMSClient = CreateObject ("Microsoft.SMS.Client")  
oSMSClient.SetAssignedSite oSMSClient.AutoDiscoverSite,0
```

Drivers

- ▣ Software Based
- ▣ INF Based
- ▣ Boot CD
- ▣ Importing drivers vs. not importing drivers

Injecting SATA HD Drivers

Type:	Apply Driver Package
Name:	DC7900 Sata HD Driver
Description:	

Select the driver package containing drivers to be made available during Windows setup.

Driver Package	Sata Driver Package	Browse...
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Select the mass storage driver within the package that needs to be installed before setup on Pre-Vista operating systems

Driver	Intel(R) ESB2 SATA AHCI Controller	▼
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This device is boot-critical for Pre-Vista operating systems.

Model	Intel(R) ICH10D/DO SATA AHCI Controller	▼
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Do unattended installation of unsigned drivers on versions of Windows where this is allowed

Applications

- ▣ Mapping table
- ▣ Role based
- ▣ User based

Good Places for help

- ▣ MYITFORUM.COM
 - command@lists.myitforum.com
 - ▣ Put [Subscribe mssms](#) in body of e-mail
- ▣ DeployVista.com
- ▣ Using Roles to deploy Applications based on previous Applications
 - <http://www.myitforum.com/articles/42/view.asp?id=12472>
- ▣ OSD App Chooser
 - <http://myitforum.com/cs2/blogs/jsandys/archive/2008/11/28/osd-application-chooser.aspx>
- ▣ <http://blogs.technet.com/mniehaus/>

- Hal Replacement Script
 - <http://www.myitforum.com/articles/15/view.asp?id=8997>
- Microsoft Deployment Toolkit Wizard Editor
 - <http://myitforum.com/cs2/blogs/hemsell/archive/2009/03/20/microsoft-deployment-toolkit-wizard-editor-part-1-introduction.aspx>
- **Sample Operating System Deployment Task Sequence Scenario**
- <http://technet.microsoft.com/en-us/library/bb633208.aspx>

- **MDT - quick start guide**
- <http://www.microsoft.com/downloads/details.aspx?FamilyId=3BD8561F-77AC-4400-A0C1-FE871C461A89&displaylang=en> - Getting Started with MDT 2008 Update 1.zip

- **MyItForum - Wiki on OSD**
- <http://www.myitforum.com/myITWiki/OSD.ashx>

- **Deployment Guys**
- <http://blogs.technet.com/deploymentguys/>

- **Michael Niehaus blog**
- <http://blogs.technet.com/mniehaus/>

- **Johan blog**
- <http://deployvista.com>

- **Deploymentforum**
- www.deploymentforum.com

- **Richard Scott - webcast demo**
- <http://www.deploymentforum.com/Library/Webcasts/tabid/202/articleType/ArticleView/articleId/18/Using-MDT-2008-and-SCCM-2007-for-ZTI.aspx>

- **Article on PXE Service Point**
- <http://technet.microsoft.com/en-us/library/bb680753.aspx>

- <http://technet.microsoft.com/en-us/library/bb632928.aspx>

- This blog talks about the difference between thick and thin images - <http://ihaveablog.wordpress.com/>

Things I've Learned along the way

- ▣ WMI issue with server 2003
 - Task seq will error when opening TS to edit due to many steps in TS
 - ▣ Set WMI like server 2008
- ▣ Task seq is ran as system account not local admin
 - Anything applied against local admin profile will not take due to running as system account.
- ▣ 90 sec delay between software install task seq
 - <http://support.microsoft.com/kb/955955>

- ▣ Getting error 256 in the log, but package installs or errors out.
 - Due to package trigger not reporting an exit code
 - ▣ Wrap the package or use batch\VBScript to trigger with exit code.
- ▣ Imported drivers into SCCM
 - You can only delete one driver at a time.