



W-05: Windows Internals – Windows 7 Setup and Windows AIK 2.0

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Home...

Agenda

- The Windows 7 Setup Engine
 - Image Based Setup and Automation
- Device Drivers in Windows 7
 - Image Servicing & Device Driver Ranking
- Troubleshooting
 - Logfiles

Demo Environment

- Hyper-V R2, 8 GB RAM, 1 TB HDD



DC01
DC and DNS



DC02
DC and DNS



MDT01
MDT 2010
WDS, WSUS and DHCP
SQL 2008 Express SP1



CM01
MDT 2010
SQL 2008 SP1
WDS, WSUS and DHCP
ConfigMgr 2007 SP2

Windows 7 Setup

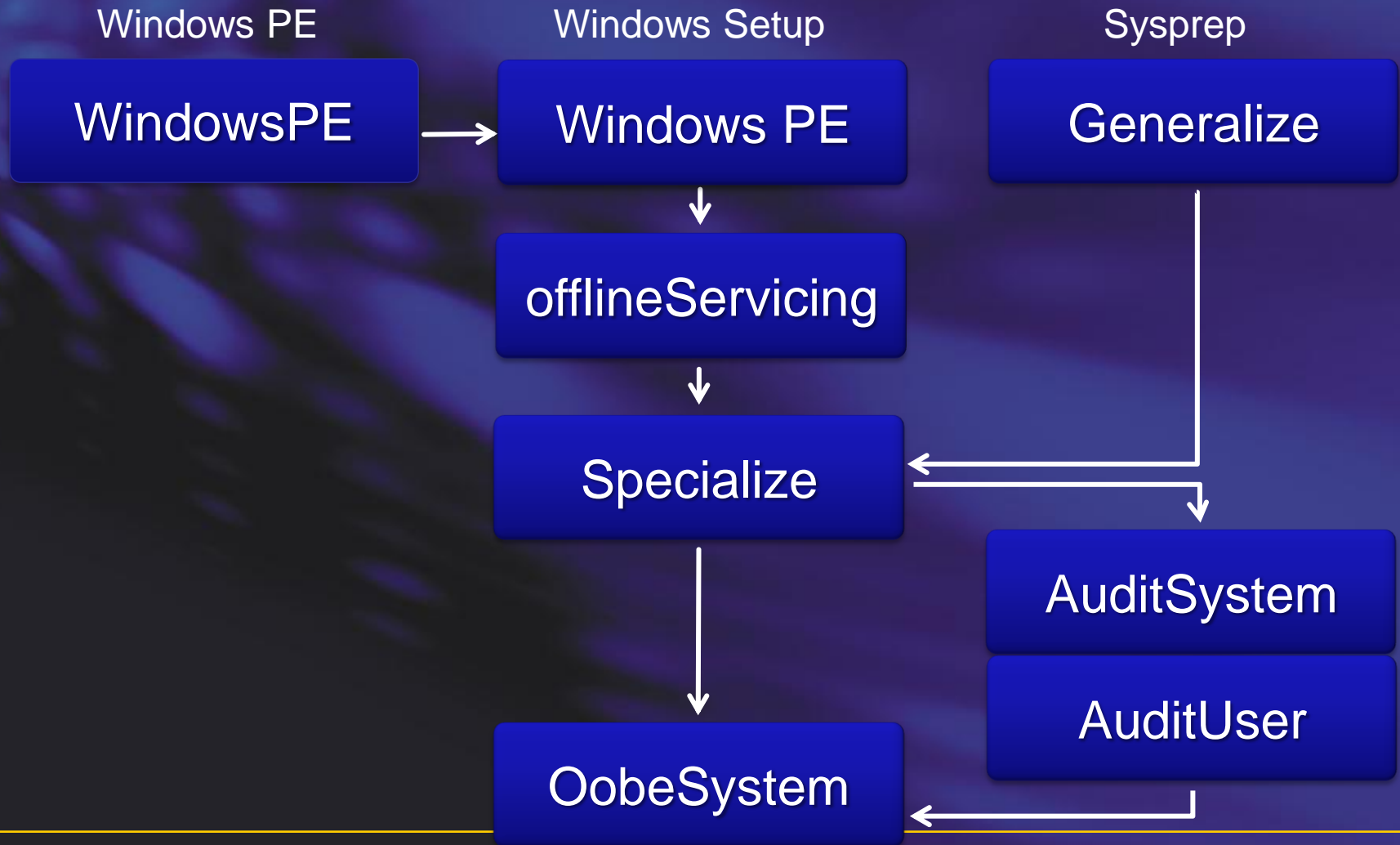
- Setup is exclusively image-based
 - 32- or 64-bit executable
 - Automated via unattend.xml
 - New boot from VHD option
 - One image can support all hardware
- WinPE 3.0 drives the Deployment

DEMO – FOLLOWING A WINDOWS 7 SETUP...

Automating the Setup

- Unattend.xml is the key...
- WSIM (from WAIK 2.0) it's creator...
 - WIM Files and Catalog Files
 - Distribution Share
 - Adding Packages
 - Adding Drivers

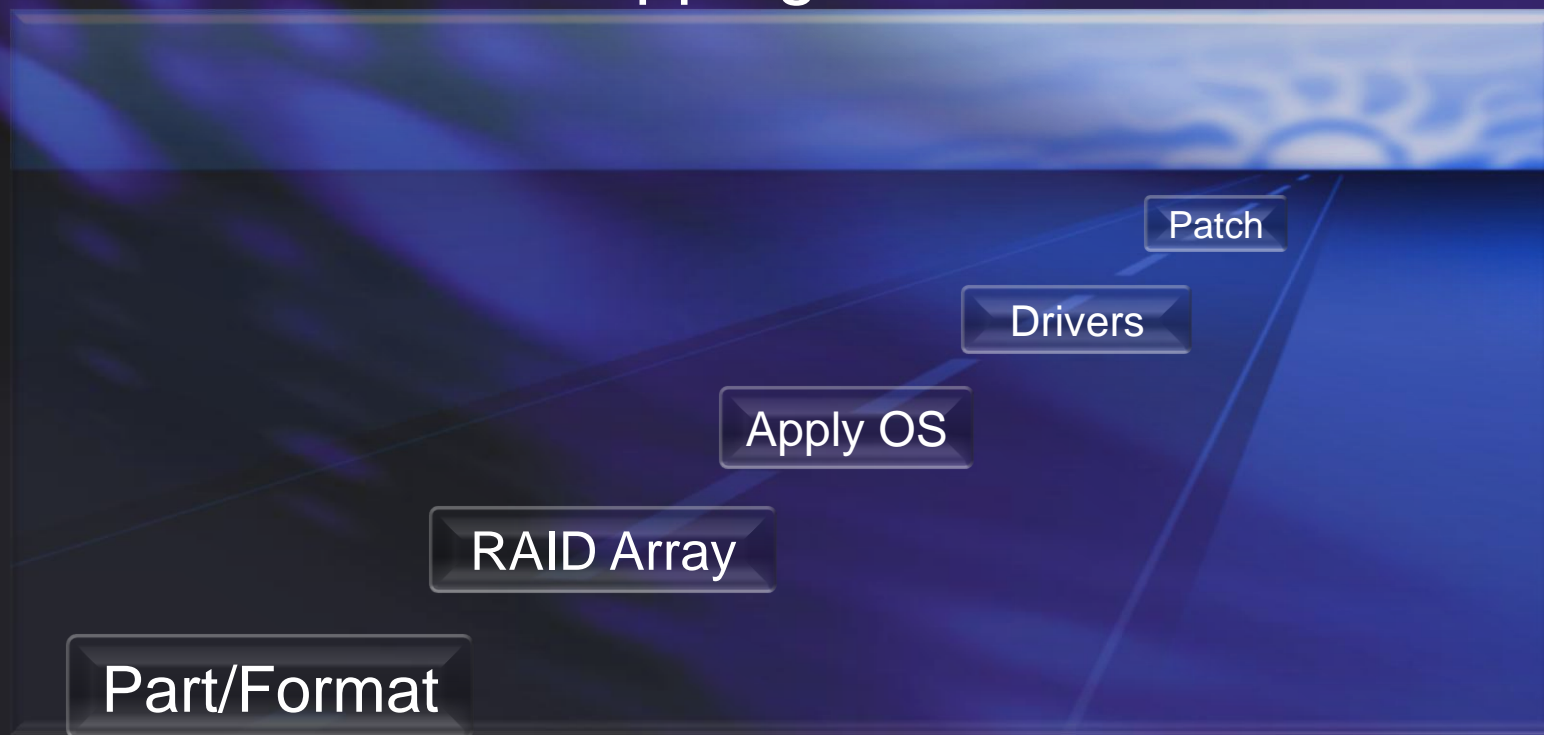
W7 Configuration Passes



DEMO – AUTOMATING THE SETUP

Setup and Modern Deployment

- Setup is only one of many actions
 - Sometimes overlapping



Offline Servicing

- Before or during Deployment
- Using Deployment Imaging and Servicing (DISM)
- Adding Packages
- Adding Drivers

DEMO – OFFLINE SERVICING

Component based servicing

Systems Management
Infrastructure (SMI)

Kernel Transaction
Manager (KTM)

Component Management
Infrastructure (CMI)

Driver Management
and Install (DMI)

Component Based
Servicing (CBS)

Component
Servicing
Infrastructure (CSI)

Setup Logfiles

- Locations depends... See KB 927521
 - C:\WINDOWS\
 - C:\WINDOWS\PANTHER
 - C:\WINDOWS\INF
 - C:\\$WINDOWS.~BT\Sources\Panther
 - X:\\$WINDOWS.~BT\Sources\Panther

Setup Logfiles, continued

- Key Logfiles
 - Setupact.log
 - setuperr.log
 - setupapi.dev.log
 - setupapi.app.log

DEMO – TROUBLESHOOTING WINDOWS 7 SETUP

Windows 7 Device Drivers

- DirectX
- The Windows 7 Driver Store
 - PNP Service
 - Driver ranking
 - Device Driver signing

DEMO – WINDOWS 7 DEVICE DRIVERS

Resources

- Free Tutorials and Training Videos
 - www.deploymentcd.com
- Blogs on Deployment
 - www.deployvista.com
 - www.myitforum.com
 - <http://blogs.technet.com/msdeployment>
 - <http://blogs.technet.com/deploymentguys>
 - <http://blogs.technet.com/mniehaus>

Campus Days
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THANK YOU!