

# Operating System Deployment

Central Texas Systems Management User Group

# Agenda

---

Why OSD

Images

Traditional Imaging

The OSD Way

Task Sequences

Hands-On

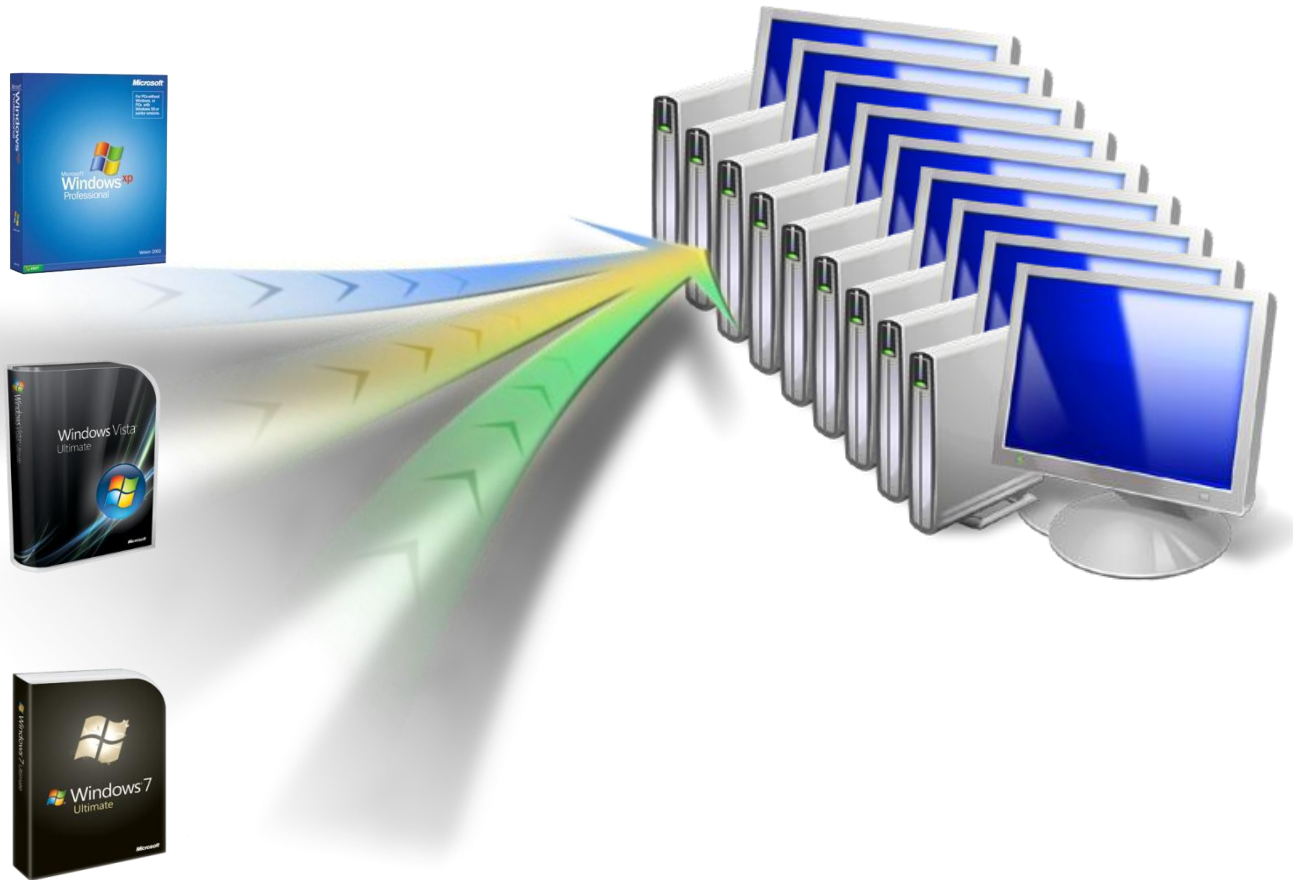
Best Practices

---



# Why OSD?

---



# Images

---

Build Image



Deploy Image




# Traditional Imaging

---

## Benefits

- Quicker
- Identical systems

## Problems

- It's all about the image
  - Manual labor
  - Silo
- 
- 

# The OSD Way

---

- ▶ Images are part of the process
- ▶ Task Sequences
  - ▶ 100% customizable using GUI editor
  - ▶ Repeatable
  - ▶ Self-documenting
  - ▶ Dynamic
  - ▶ Extensible
  - ▶ Hardware agnostic
  - ▶ Automated
- ▶ Single pane of glass



# Task Sequences

---

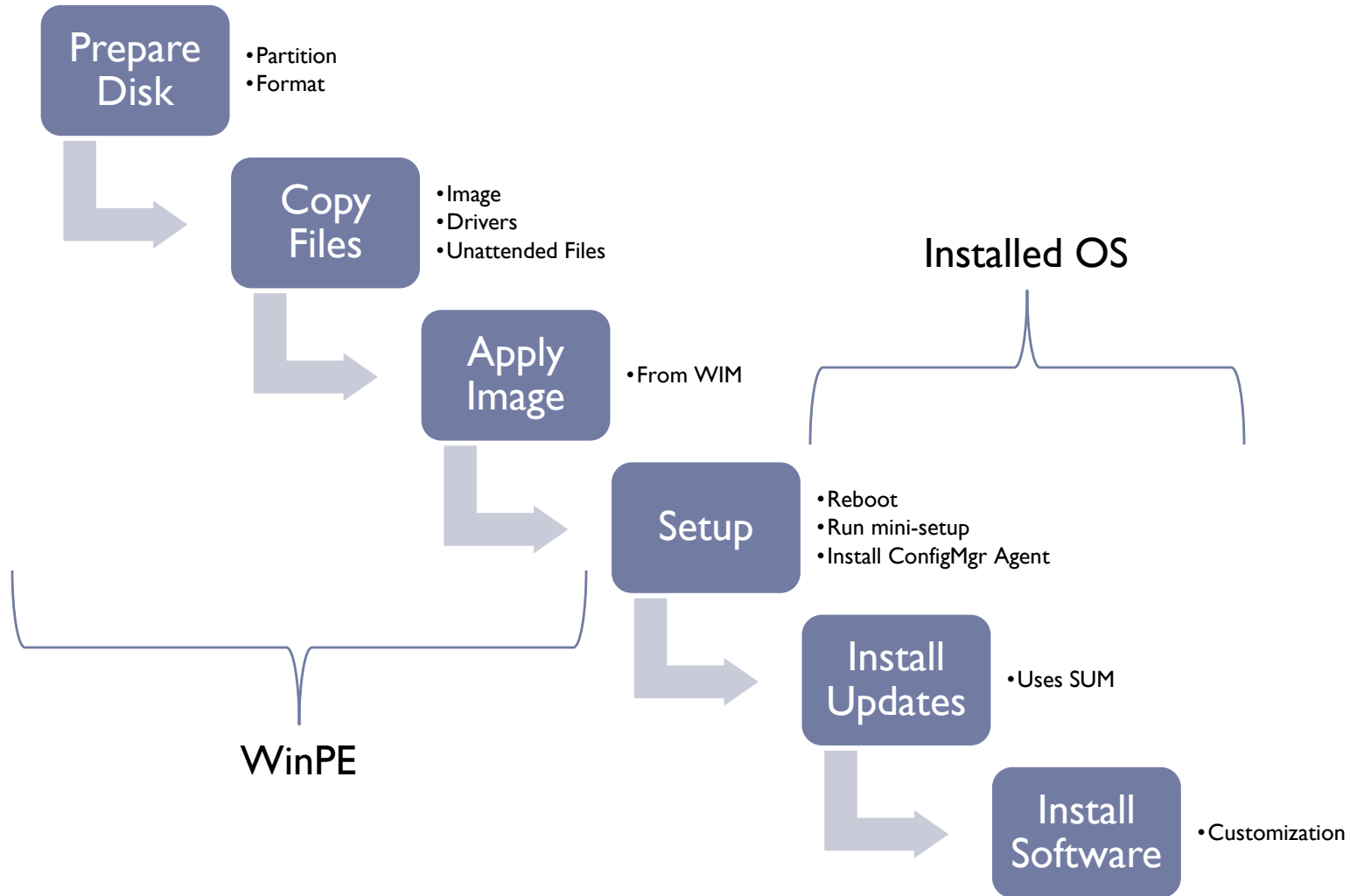
## Build and Capture

- Automated Image Creation
- End result is WIM file

## Deployment

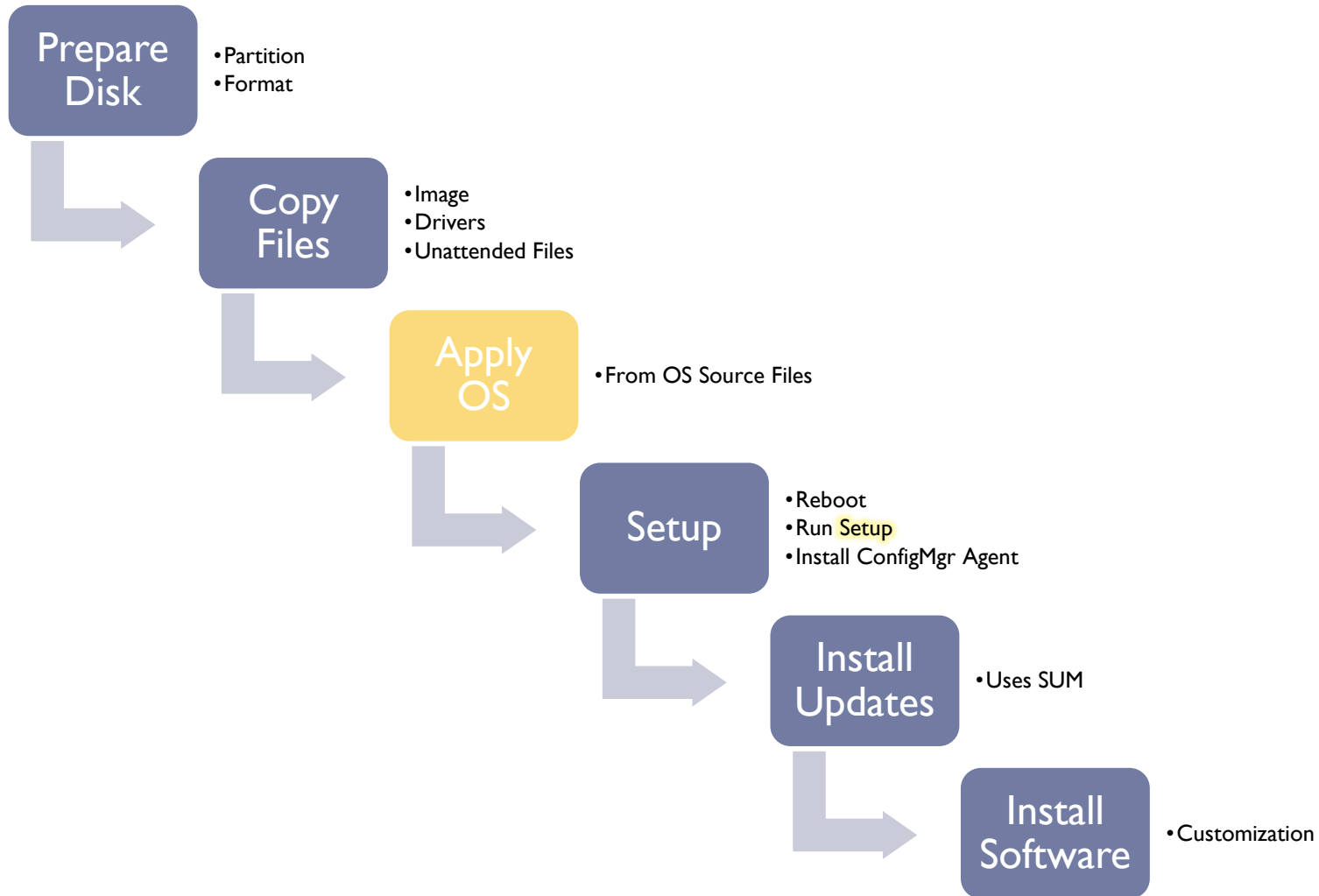
- Automated Image Deployment
  - End result is deployed system
-

# Deployment Task Sequences

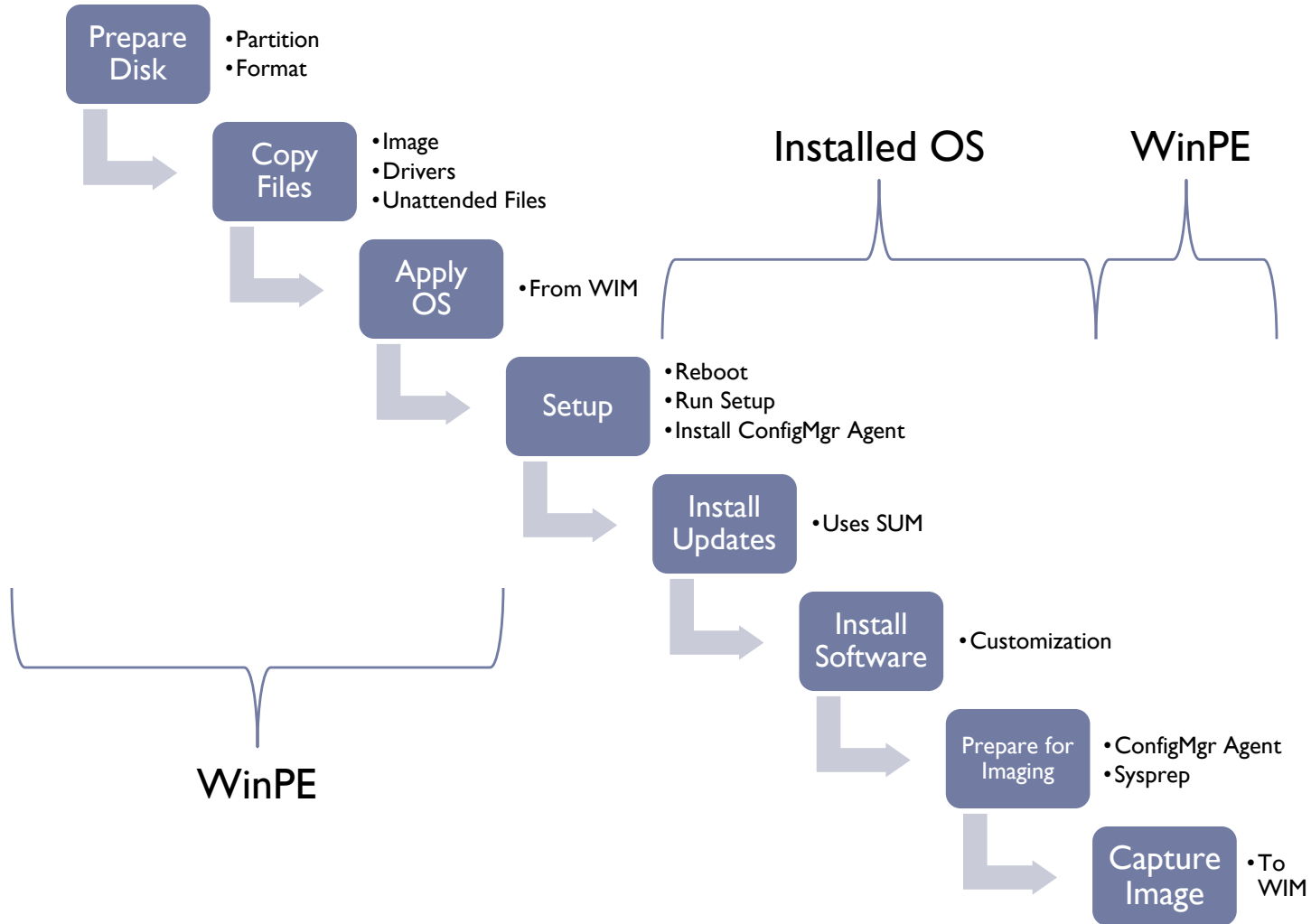


# Build and Capture Task Sequences

---



# Build and Capture Task Sequences

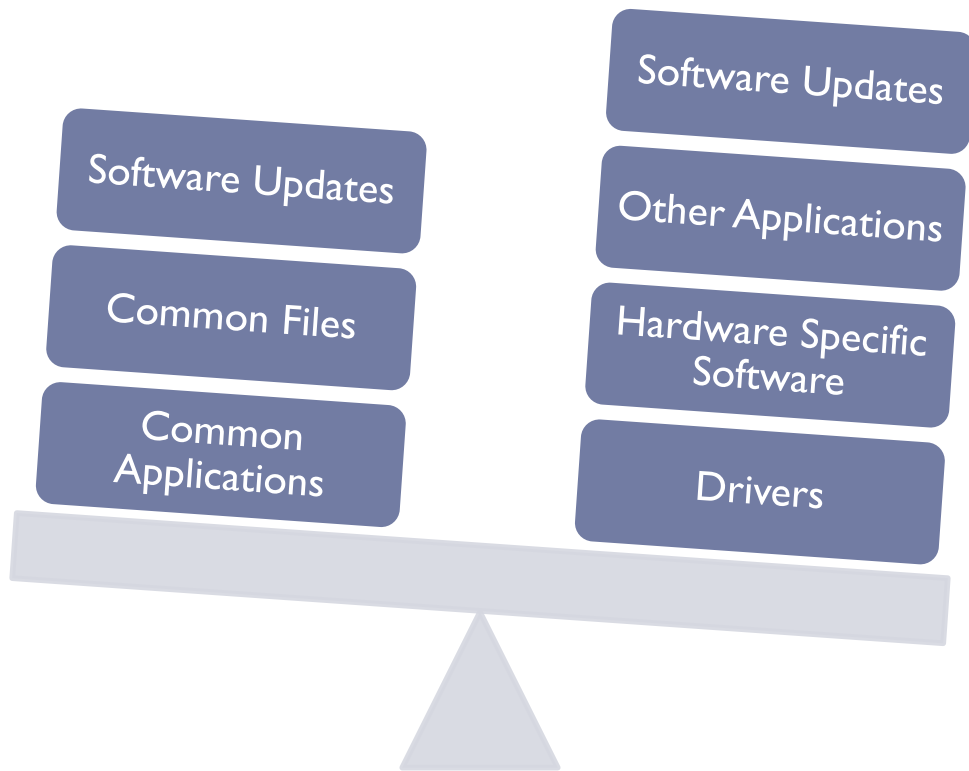


# Speed vs. Flexibility

---


In Image  
(Build and Capture)

After Image  
(Deployment)



# Image Capture

---



Full build and  
capture task  
sequence



Standard capture  
media



Create your  
own capture  
media



Outside of  
ConfigMgr  
(`imagex.exe`)



Use `install.wim`  
directly from  
Vista media



# Image Capture

---

## Use virtualization product

- Hyper-V ★★
- VMWare ESX ★★
- VMWare Workstation ★
- Virtual PC
- Sun VirtualBox

## Image should be hardware agnostic

- Drivers
- Mass-Storage Drivers
- HAL
- Intel vs. AMD



# Boot Images

---

## WinPE 3.0

- Windows 7
  - Explorer
- Same Driver Model
- Light-weight
  - 384 MB RAM
- Small - < 150 MB

## Delivery

- Media
- PXE
- Software Distribution

## Drivers

- Win 7
  - NIC
  - Storage
- 
- 

# Danger, Danger

---

▶ Mandatory Advertisement

▶ PXE Everywhere

▶ Use password protection



# Drivers

---



Auto Apply  
(chaos)

Apply Package  
(control freak)

---



# Drivers

---

	<i>Auto Apply Driver</i>	<i>Apply Driver Package</i>
<b>Runtime environment</b>	<b>WinPE only</b>	<b>WinPE only</b>
<b>Does PnP scan</b>	<b>Yes</b>	<b>No</b>
<b>Inserts only selected drivers</b>	<b>Yes</b>	<b>No</b>
<b>Which driver packages?</b>	<b>All</b>	<b>One selected</b>
<b>For network and USB devices</b>	<b>No</b>	<b>Yes</b>
<b>Works on stand-alone media</b>	<b>No</b>	<b>Yes</b>
<b>Filters based on categories</b>	<b>Yes</b>	<b>No</b>
<b>Installs boot critical drivers</b>	<b>No (pre-Vista)</b>	<b>Yes</b>

---



# EXE Drivers

1

- EXE may just be a bundling artifact -- run the executable to unpack and add the resulting files to the driver catalog

2

- Run the .EXE on a reference computer, and manually pull out the driver .INF and other files

3

- Treat the .EXE as a software distribution package and use the Install Software action to install the driver in the full OS

4

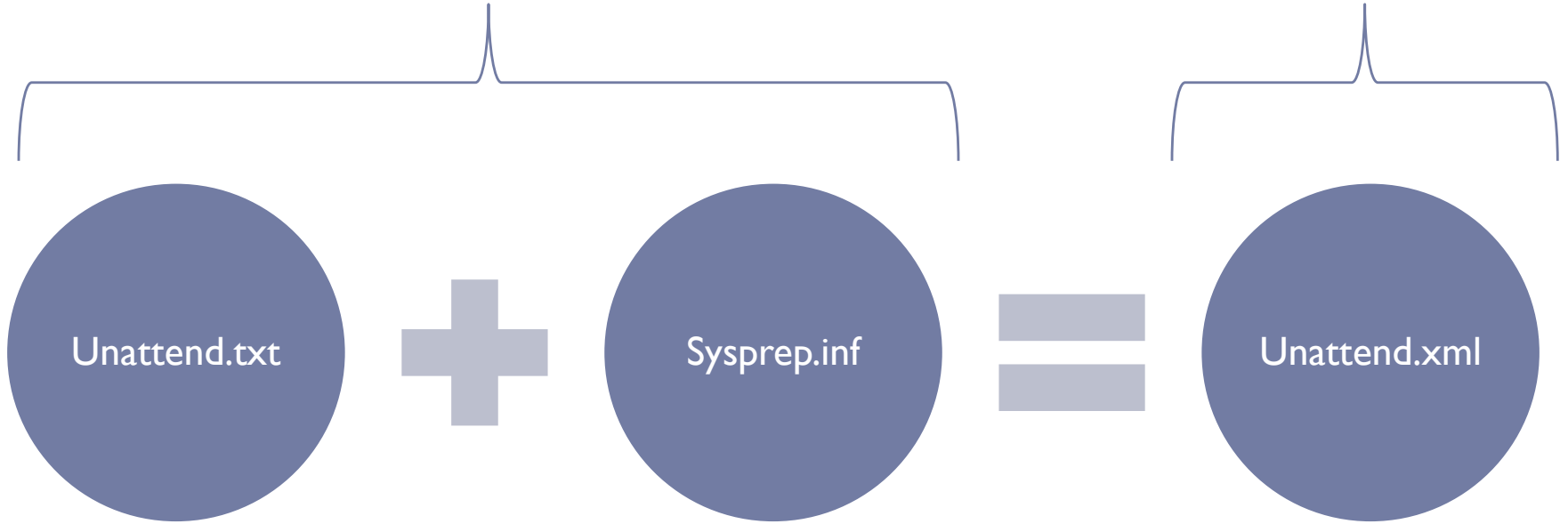
- Check your hardware vendor website for a non-.EXE driver download

# Unattended Files

---

XP/2003  
Setupmgr.exe

7/2008/2008 R2  
SIM



# Odds and Ends

---

Command Prompt via F8

KMS vs. MAK

Default Disk Format is Full

Don't specify default container for domain join

Use Group Policy to enforce customizations

Buy Software Assurance

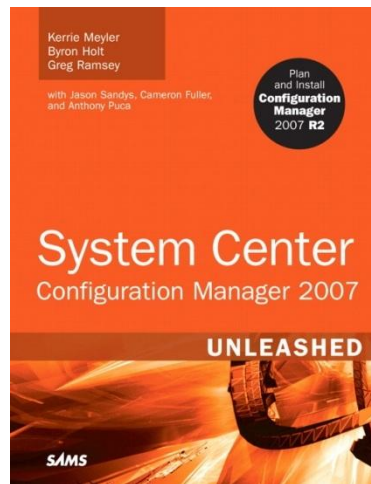
---



# Miscellaneous

---

- ▶ <http://myitforum.com/cs2/blogs/jsandys>



# Catapult Systems

---

