

MANAGEFUSION.



Ghost Solution Suite 2.5 and Hardware Independent Imaging

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Description

New features of GSS 2.5 are designed to drastically reduce the time it takes to Deploy and Decommission your Windows clients. Learn about Hardware Independent imaging, Secure Decommissioning, Virtual Machine support, Hot Image Creation and other features of the new version of GSS.

Ghost Solution Suite 2.5 and Hardware Independent Imaging

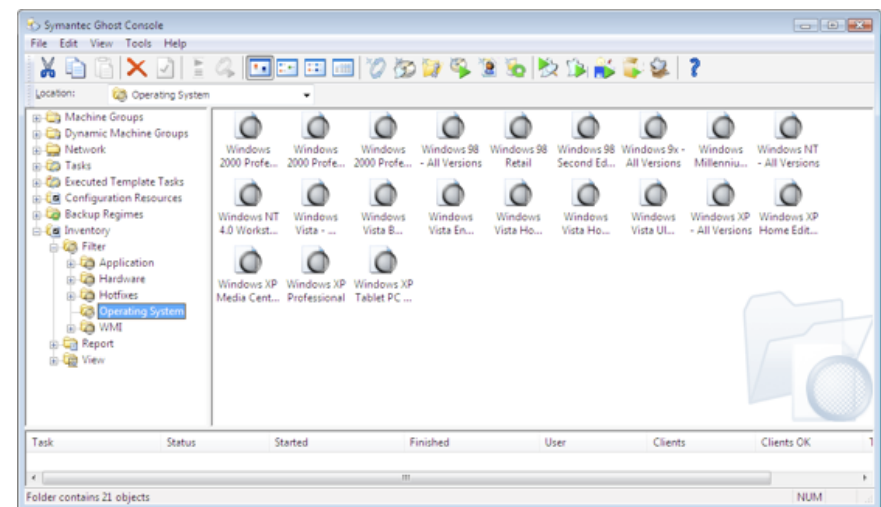
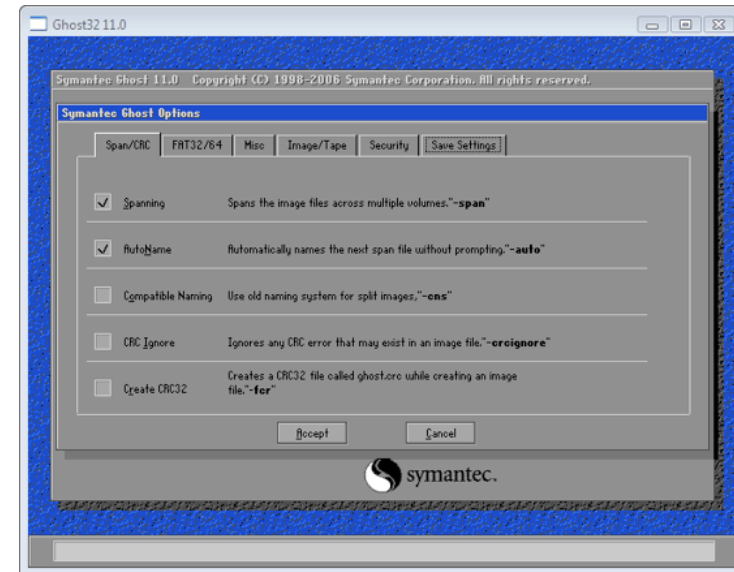
Agenda

- Two Ghosts
- What's New ?
- New Feature Details

Two Ghosts

- Ghost Imaging Foundation
 - Disk Cloning tools
 - Multicast Server
 - Ghost Explorer
 - Utilities

- Ghost Console
 - SMB Management Console
 - Managed Deployment
 - Managed User Migration
 - Inventory



What's New? Main features

- Win PE is now bundled
 - And the primary Pre-OS
- DeployAnywhere
 - Hardware Independence
- Hot Image Creation (Windows & Linux)
 - Requires LVM in Linux
- Secure Decommissioning
- VMDK Support
 - Create & Restore
- Native Linux versions of Tools

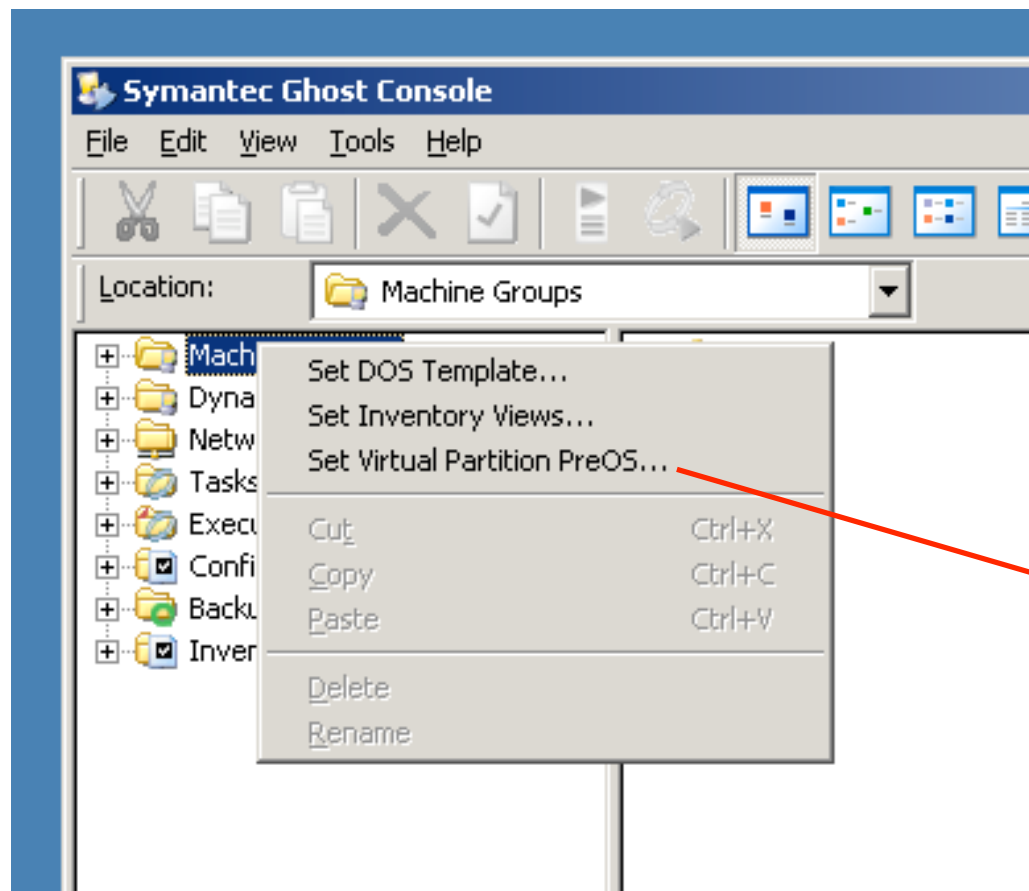
What's New? – other features

- Bundled Linux Pre OS
 - Thinstation 2.2.1
- PQi & V2i Support
- Re-orderable task actions
- Better support for running scripts
- Better support for Sysprep

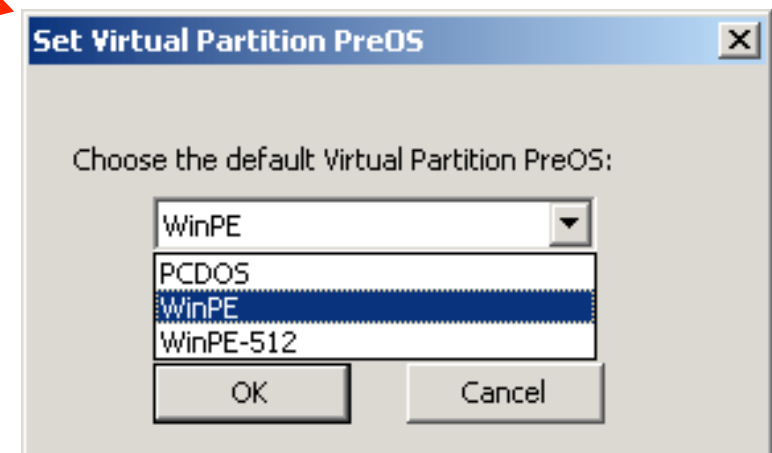
New PreOS's provided

- Win PE is Bundled – two builds
 - A “lite” version for 256MB machines
 - A version that needs at least 512MB
 - The “512” version has more drivers, plus the language packs, plus WMI
- Linux Thinstation distro is bundled
 - Is an Unmanaged PreOS
 - Linux Ghost Tools are supplied
- PC DOS is still there if you need it

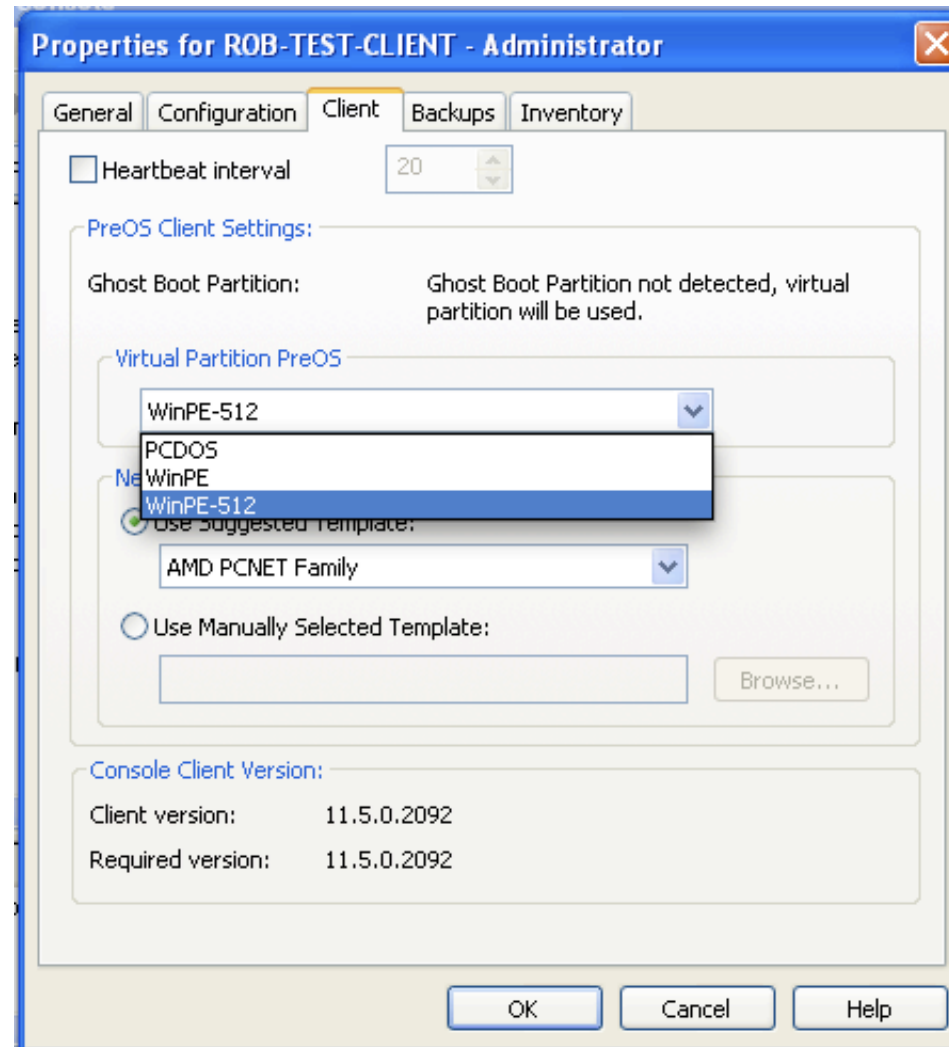
Win PE – Setting this as the default



Can be set per group
or per client



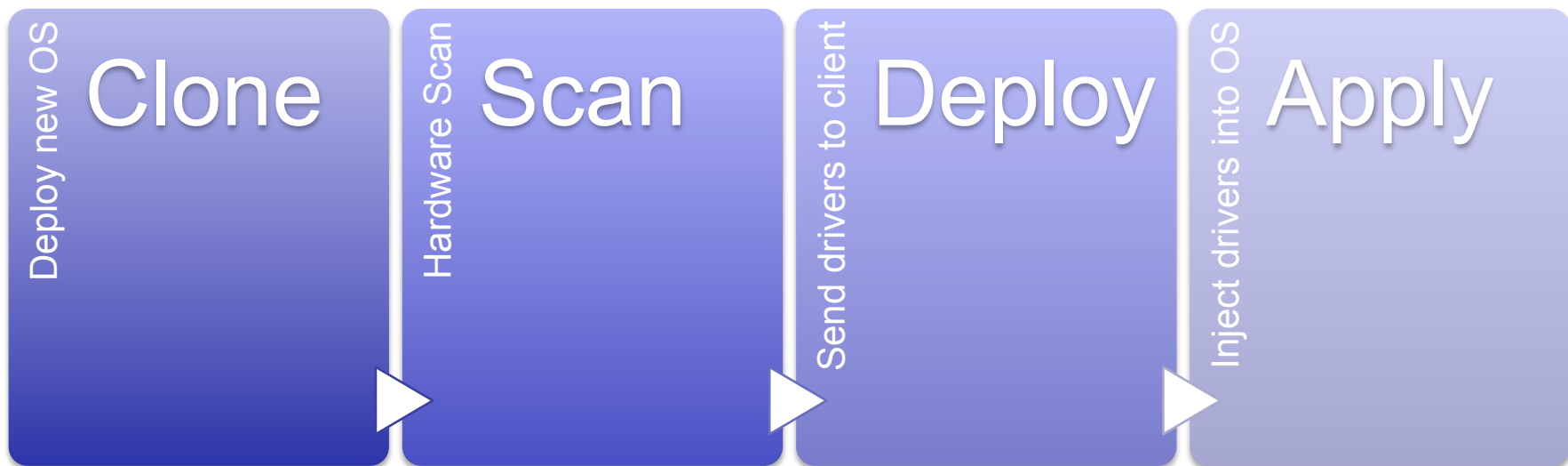
Win PE – per client configuration



DeployAnywhere

- DeployAnywhere installs & configures:
 - HALs
 - Mass Storage drivers
 - NIC drivers
- Configures the mini-setup wizard to run unattended.

DeployAnywhere – Managed Process



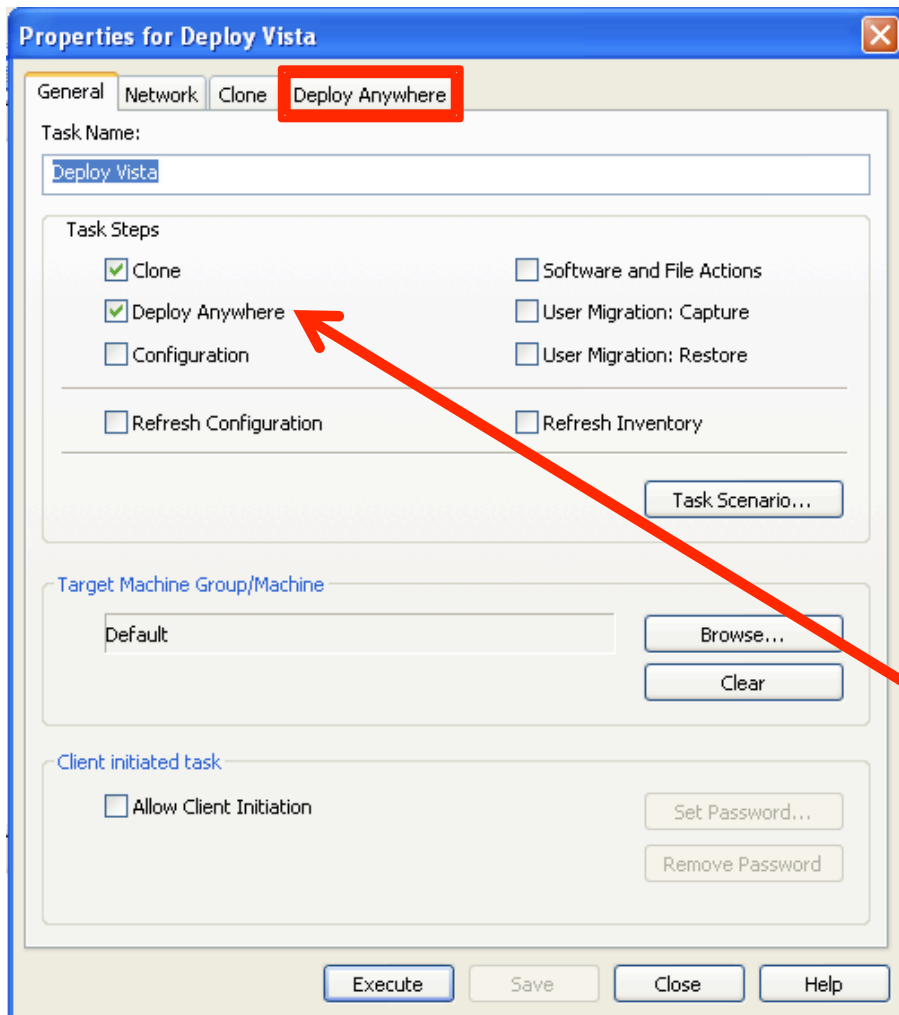
Deploy OS to new hardware – physical or virtual.

Perform scan & evaluate drivers in Target OS & DDB. Send deficit list to server.

Server delivers driver package from the Server driver DB to the client.

Drivers are copied and system is re-configured. Mini-setup wizard set to run (in unattend mode).

DeployAnywhere - Managed



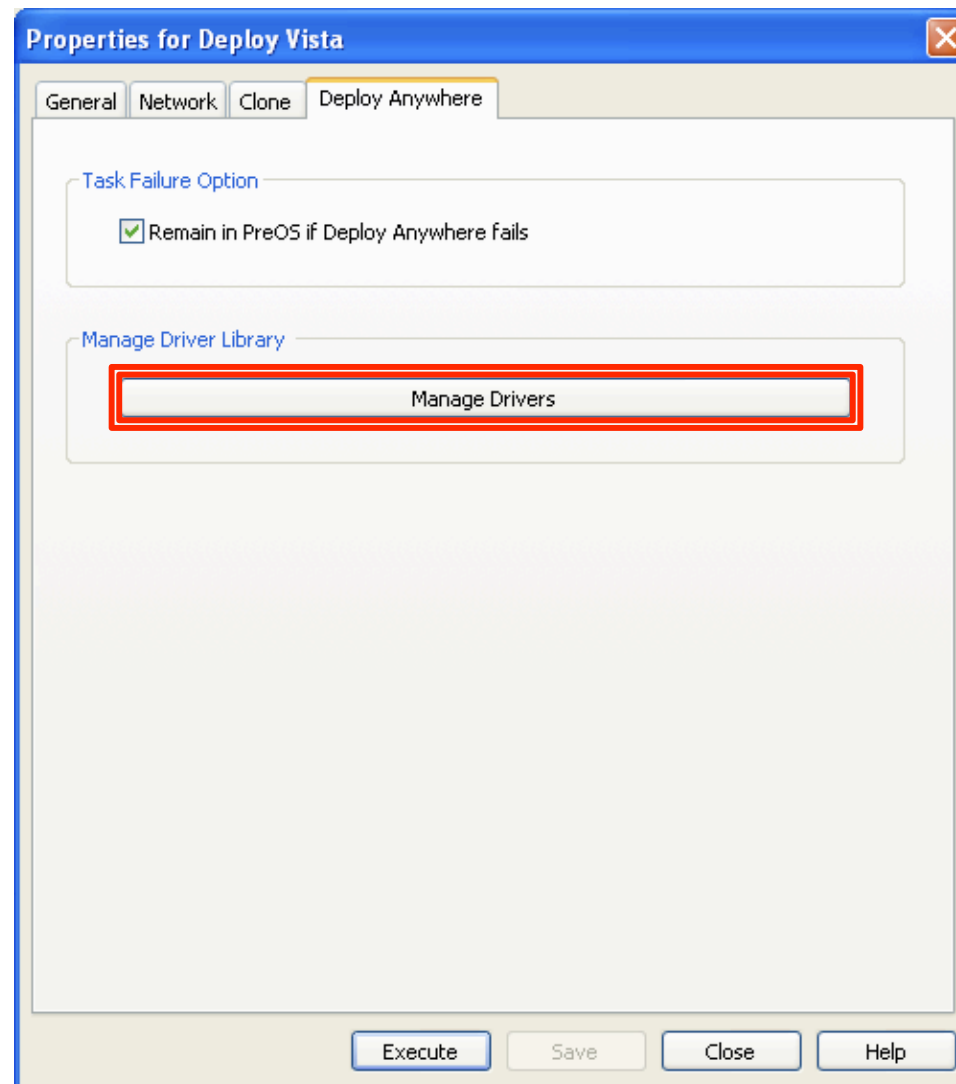
The screenshot shows the 'Properties for Deploy Vista' dialog box with the 'Deploy Anywhere' tab selected. The 'Task Steps' section contains the following options:

- Clone
- Deploy Anywhere
- Configuration
- Refresh Configuration
- Software and File Actions
- User Migration: Capture
- User Migration: Restore
- Refresh Inventory

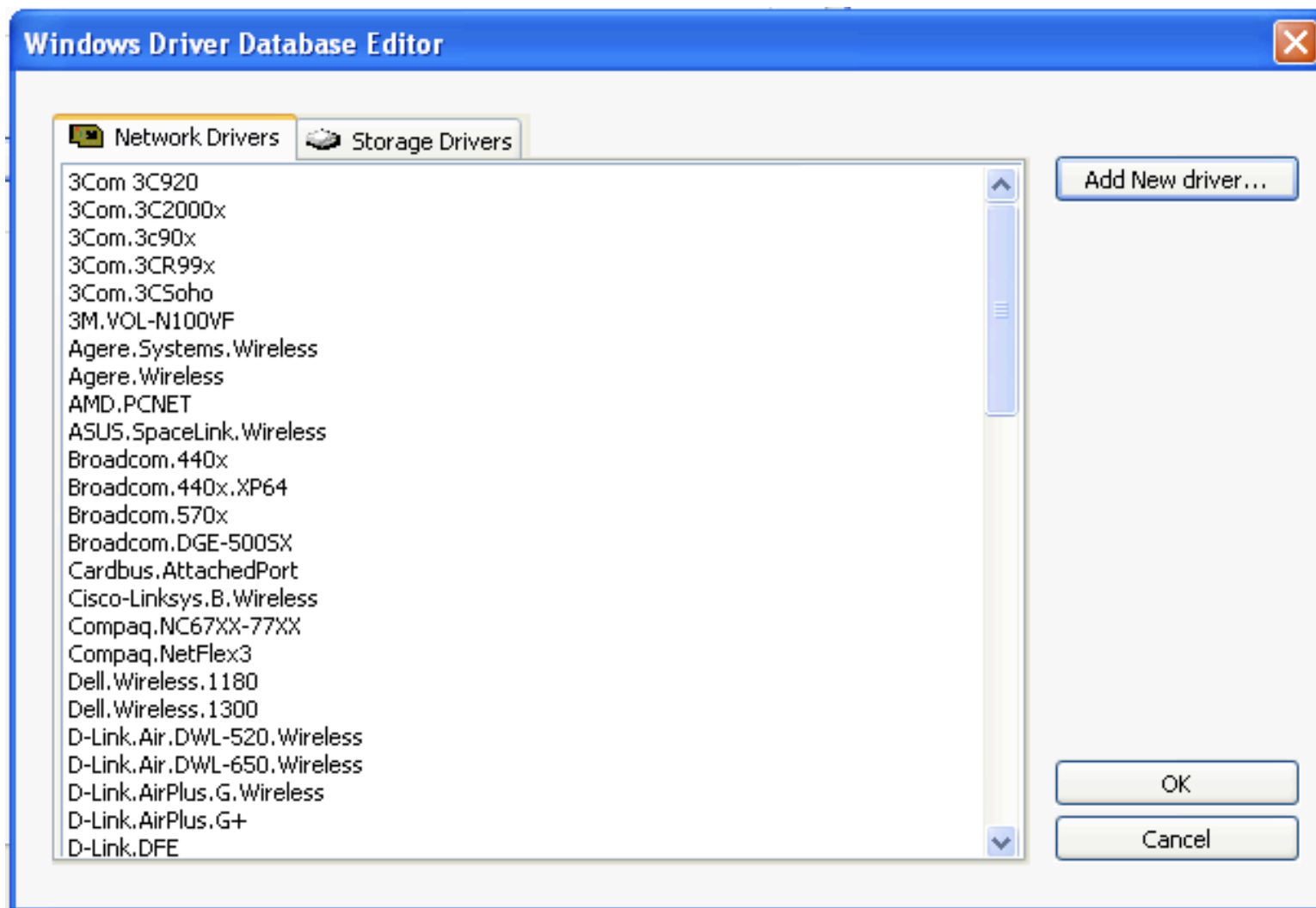
The 'Target Machine Group/Machine' section shows 'Default' in the text box, with 'Browse...' and 'Clear' buttons. The 'Client initiated task' section has 'Allow Client Initiation' unchecked, with 'Set Password...' and 'Remove Password' buttons. At the bottom are 'Execute', 'Save', 'Close', and 'Help' buttons.

Just check the DeployAnywhere box

DeployAnywhere - Settings



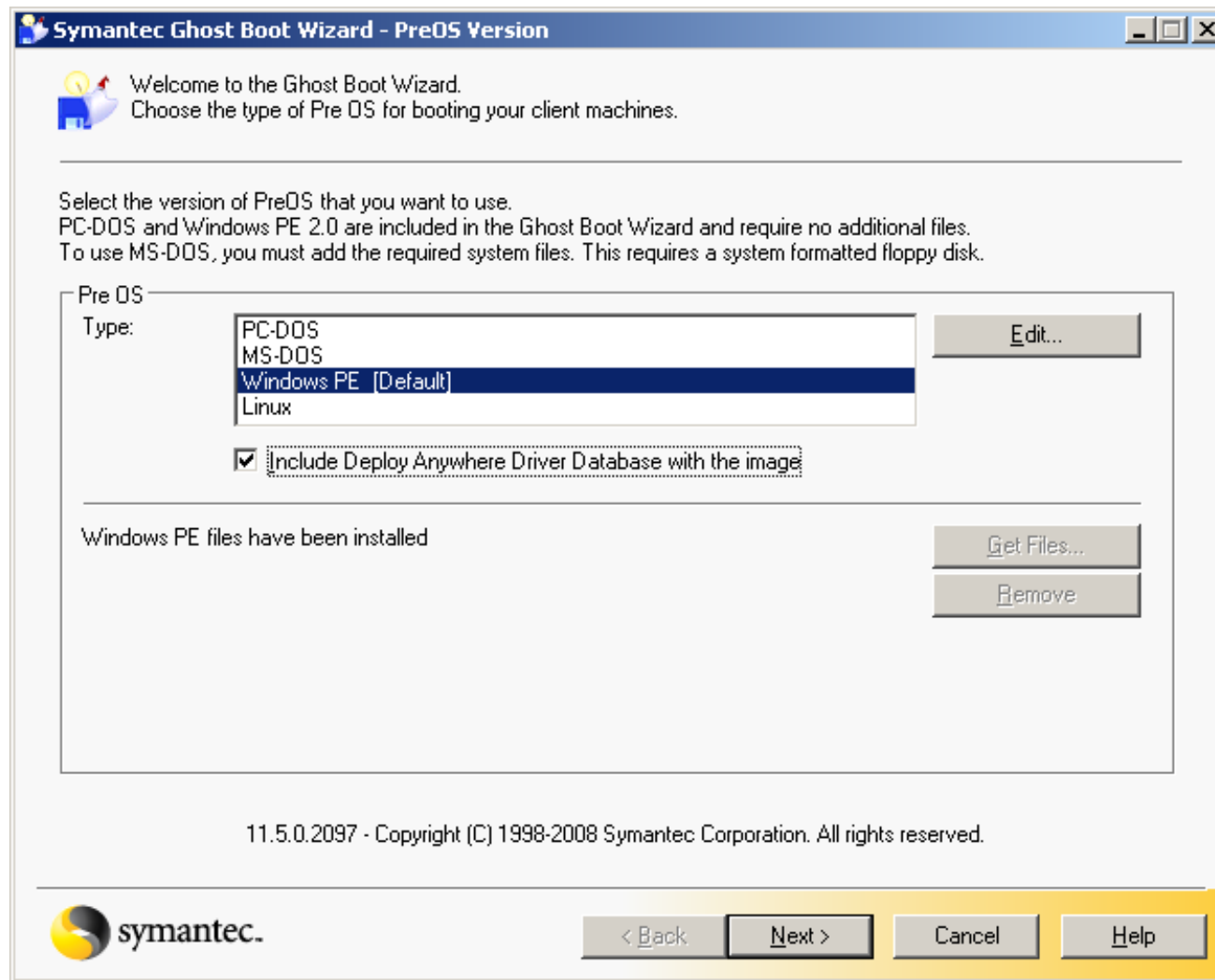
DeployAnywhere - Drivers



DeployAnywhere - Unmanaged

- DeployAnywhere can also be run as a standalone tool.
- Available from the Ghost Boot Wizard
 - Create a Win PE boot package
 - May select option to include driver database.
 - The DeployAnywhere tool – along with all the other Ghost tools – is automatically included in the boot package
- Available in the Ghost install folder

DeployAnywhere - Unmanaged



Ghost Boot Wizard

DeployAnywhere - Unmanaged

- DeployAnywhere looks in 2 places for drivers
 - In the target Windows system
 - In a user-supplied location (optional)
- Can be run in Evaluation mode
 - Makes no changes
 - Reports success or failure
 - Optionally outputs a file with a description of devices for which drivers are needed

DeployAnywhere - Unmanaged

- The driver database may reside on the CD, within the image that has just been deployed, or on a mapped network drive.
- Example command line:

```
GhDplyAw32 /target=c:\windows /ddb=\windrivers
```

Hot Image Creation

- Uses Volume Snapshot capability of Windows
- Uses Logical Volume Manager in Linux
- Creates images while OS is up & running
- Incompatible with Sysprep

Hot Image Creation - Managed

Properties for New Task

General Network Sysprep

Name:
Image Capture

Source machine
ROB-TEST-CLIENT - Administrator Browse...
Source drive: 1 Clear
Source partition: Partition operation

Image
Name:
GHO Image Browse...
Compression:
 None Fast High Clear

Client Initiated Task
 Allow Client Initiation Set Password...
Remove Password

Extra options
 Remove machine from Domain before taking a backup. Advanced...
 Clone using Volume Snapshot (Hot Imaging)
 Fallback to PreOS cloning if Volume Snapshot cloning failed

Execute Save Cancel Help

Just check the Volume Snapshot
(Hot Imaging) box

Hot Image Creation - Unmanaged

- Happens automatically if Ghost can't get an exclusive lock on the volume being imaged.
- Behavior can be changed with command line switches

`-forcevolumesnapshot`

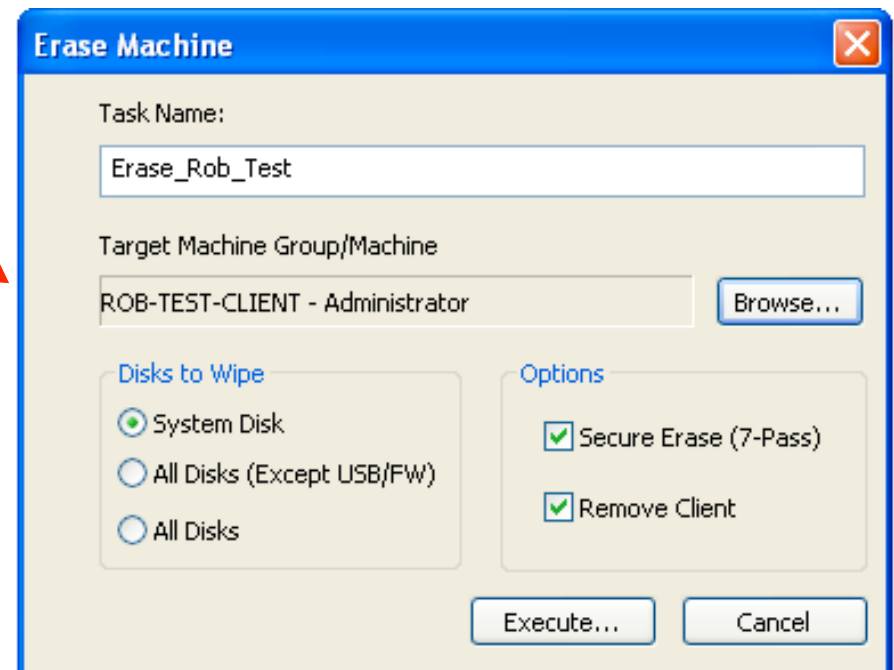
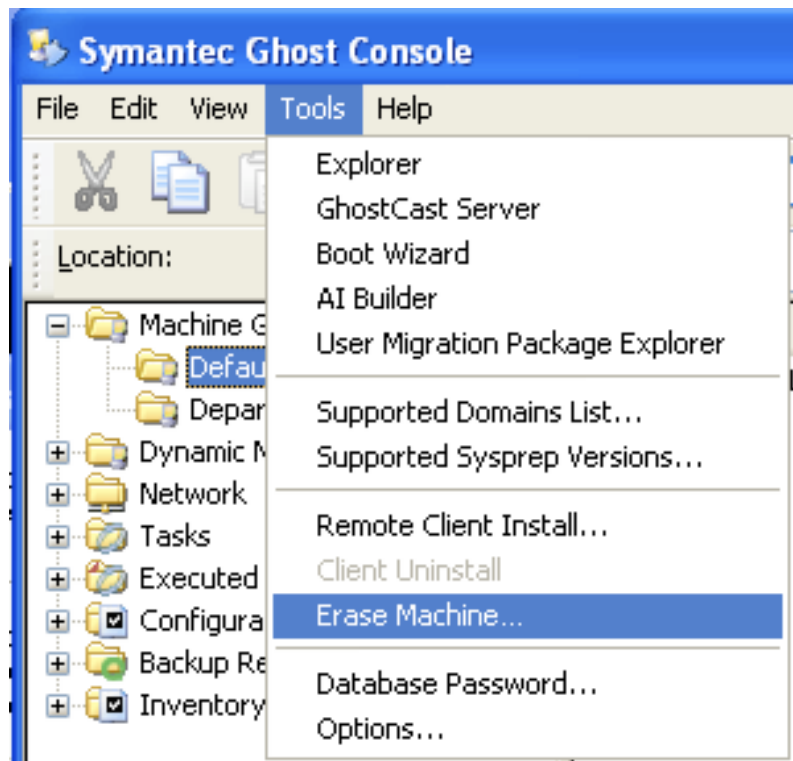
`-novolumesnapshot`

- Can be used on Windows or Linux

Secure Decommissioning

- Performs DoD compliant disk wipe
- Managed operation is new for GSS 2.5
- Managed operation allows for license harvesting
- Unmanaged has been available for many years

Secure Decommissioning – Managed



Secure Decommissioning - Unmanaged

- Examples

```
Gdisk32 /diskwipe /disk:all /dodwipe
```

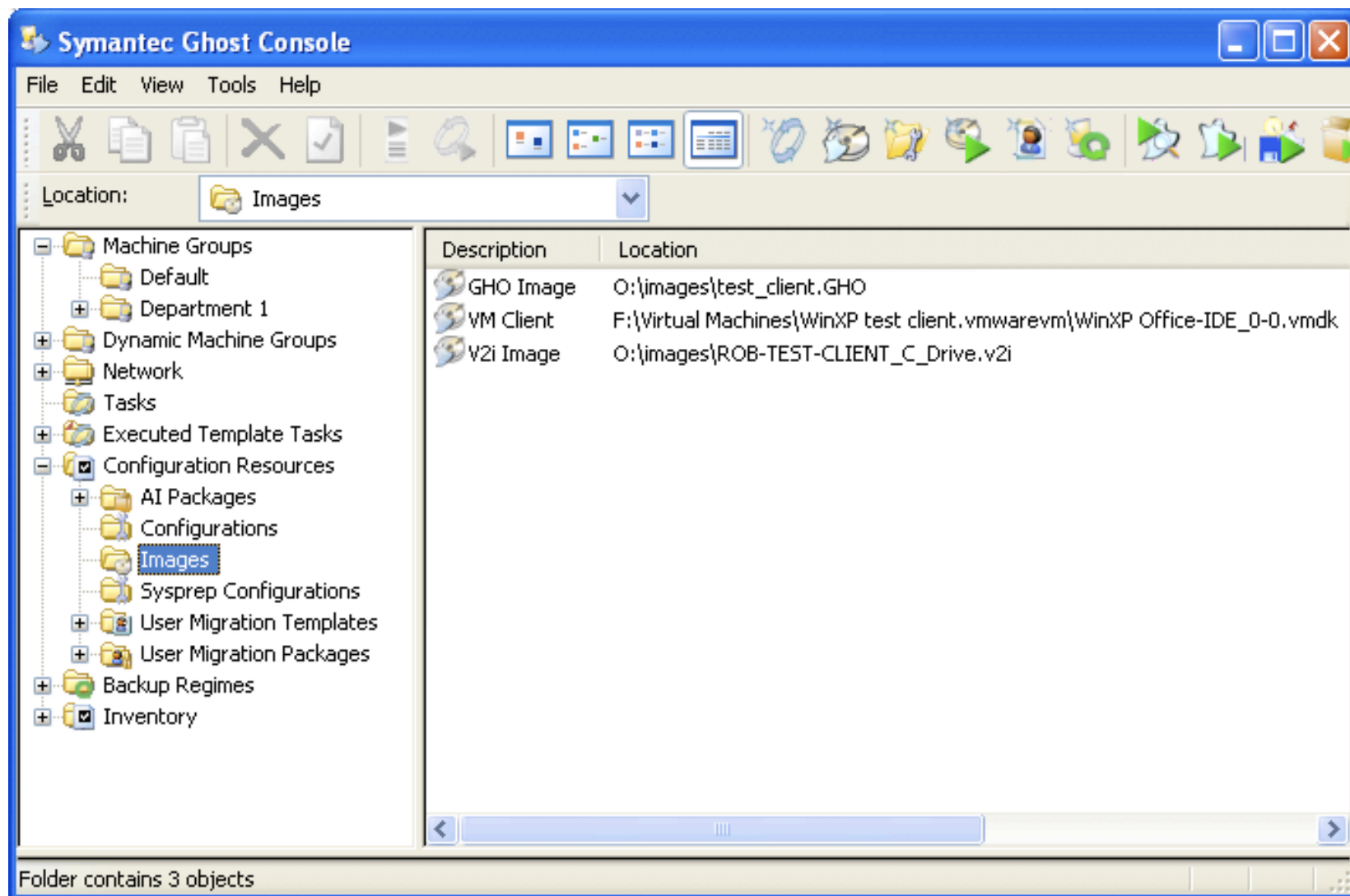
```
Gdisk32 /diskwipe /disk:all /noub /no1394
```

```
Gdisk32 /diskwipe /disk:system
```

New formats supported

- Supported formats include:
 - VMDK
 - PQi
 - V2i
- Can Create & Deploy VMDK
- Can only Deploy PQi & V2i
- Does not create actual VM

VMDK Support - Managed



VMDK Support - Unmanaged

- Supported by Ghost & GhostCast Server
- Image Creation – just specify “.VMDK” in the image filename
- Image Restore – just select a .VMDK, PQi, or V2i file as the image file
- Image conversions – need to “mount” one of the block-based images within Ghost
 - Ghost can treat a VMDK as local disk
 - PQi & V2i can be treated as local disks
 - This works around the lack of specific image to image operations

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Image file name to restore from

Look in:

C: 1.1: [boot] NTFS drive

Name	Size	Date
..		04/02/2008 07:24:50 PM
bin		04/02/2008 07:22:02 PM
ClientInstall		04/02/2008 07:22:18 PM
db		04/02/2008 07:22:20 PM
ndis		04/02/2008 07:21:36 PM
PETools		04/02/2008 07:21:50 PM
scripts		04/02/2008 07:22:20 PM
SUMWizardInstall		04/02/2008 07:22:14 PM
xml		04/02/2008 07:21:36 PM

File name:

Open

Files of type:

*.GHO

Cancel

Image file description:

*.GHO
*.GHS
*.VMDK
*.V2I
*.IV2I
*.PQI

Physical to Virtual

- Example – Want to bring an existing physical system into a VM.
- Use a Ghost Disk to Image operation:

```
Ghost32 -clone,mode=create,src=1,dst="n:\disk.vmdk"
```

- Could use GhostCast server to pull image.
- Create VM that uses this vmdk
- Boot new VM from a Win PE ISO and run DeployAnywhere
- Restart VM

VMDK disk resizing

- Example – Want to resize both the VMDK disk and the NTFS volume within.
- Use a Ghost Disk to Image operation:

```
Ghost32 -ad=disk1.vmdk -clone,mode=create,src=50,dst=disk2.vmdk  
-vmdksize=40960
```

- Edit VM configuration file – replace disk1.vmdk with disk2.vmdk

New Linux Tools

- Linux versions of the following are supplied:
 - Ghost
 - Gdisk
 - Ghconfig
 - Ghregedit
 - Omnifs

Better Sysprep Support

- Now the Console has it's own editor for Sysprep answer files
- Can also edit the raw file

Sysprep Answer File Editor

Create Sysprep answer file for Windows Vista

License key:

Computer Name:

Registered User:

Registered Company:

Protect your PC:

Network Settings

Network Location:

Join Workgroup

Join Domain

Domain Administrator:

Domain Password:

Regional Settings

Time Zone:

System Locale:

UI Locale:

Input Locale:

User Locale:

Skip EULA Keep existing PnP drivers

Skip User OOBE Skip Rearm

New PreOS Package Types

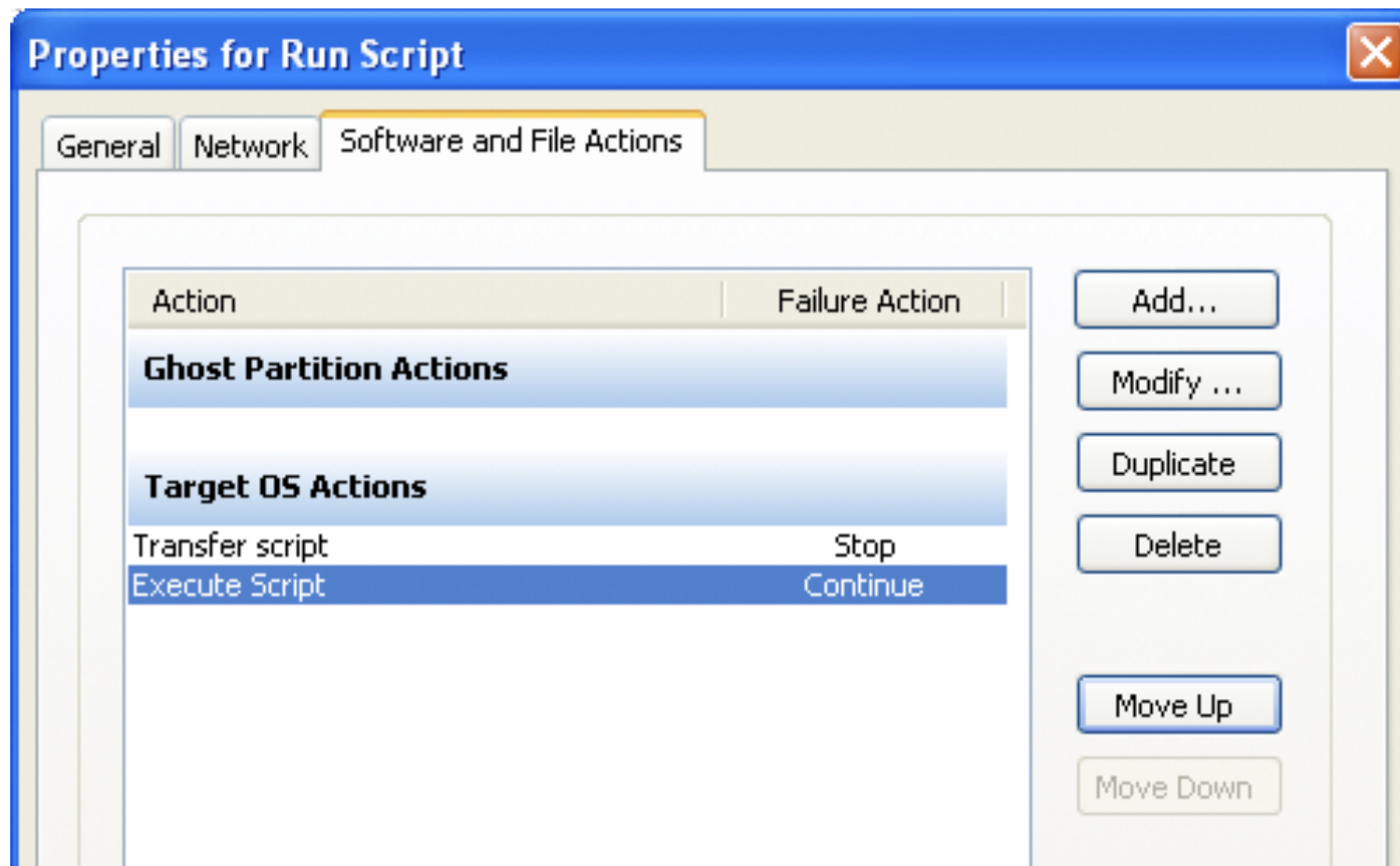
- Floppy Disk Set
- VMware Virtual Floppy
- USB Disk
- Create ISO Image
- CD/DVD ROM
- One-click Virtual Partition



Folder:

Remove Virtual Partition after the boot

Re-orderable Task Actions



Better support for running scripts

Wait for the command to finish executing before continuing the task

Successful Return Codes (e.g. 0, 1-10, 88)

Warning Return Codes (e.g. 40, 100-108, 58)

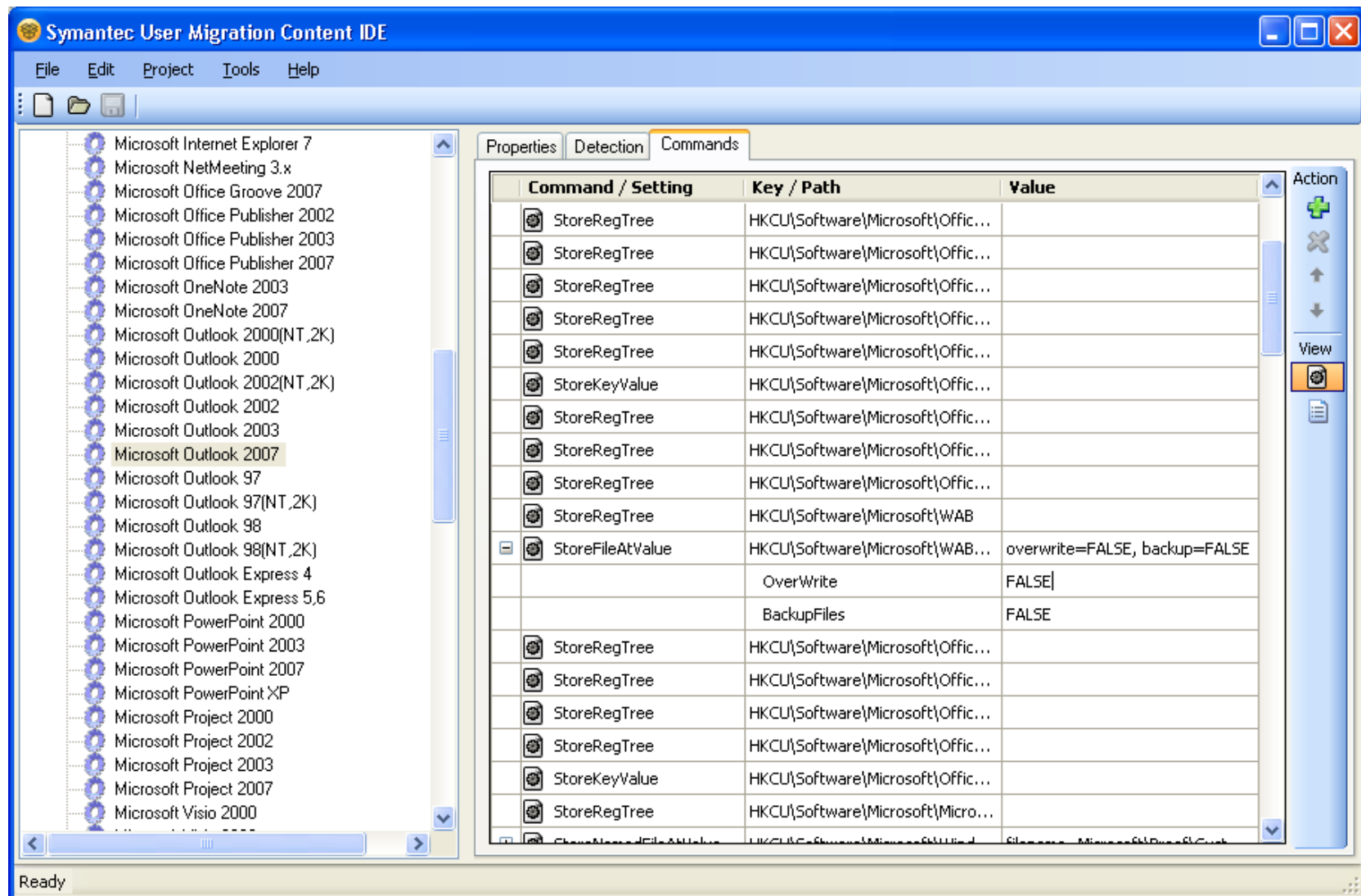
File Retrieval Tasks

File Name

Retrieve from the Target Operating System
 Retrieve from the Ghost Partition

Destination file

SUM Content Editor



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