Inventory & Software Gathering, Detection and Deployment Methods

Description	This course is designed to provide a deep understanding of some of the more complex features within Inventory and Software Management.				
	This lab assumes a basic and general understanding of the Symantec Management Platform and operating system imaging. Basic Microsoft Windows skills are recommended.				
At the end of this lab, you	 Create a Stand-alone Inventory Package. 				
should be able to	 Configure some of the advanced Inventory options. 				
	 View Custom Inventory options. 				
	 Create Software Products. 				
	 Import software packages. 				
	 Create software Applicability Rules. 				
	 Deliver software using managed delivery policies. 				
	Create Automation Policies.				
Notes	 A brief presentation will introduce this lab session and discuss key concepts. 				
	 Feel free to follow the lab using the instructions on the following pages. You can optionally perform this lab at your own pace. 				
	 Be sure to ask your instructor any questions you may have. 				
	 Thank you for coming to our lab session. 				

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Lab Exercise 1: Standalone Inventory

A stand-alone inventory package is an executable file that you create from the Symantec Management Console. You run the package on target computers and gather the Inventory data on that computer. This method lets you gather inventory on the target computers that are not managed through Symantec Management Agent.

This method does not apply to the following cases:

- Older or same version of Symantec Management Agent is installed on a computer.
- Symantec Management Agent is installed on a client computer but not connected to the Notification Server computer.
- Symantec Management Agent is installed on a client computer, but is broken or not functioning.
- Symantec Management Agent is installed on a client computer, but is disabled.

If you use stand-alone packages, you must be able to report the inventory data back to the Notification Server computer. You can use different options of reporting data depending on the configuration of your network. You can create multiple packages with different options according to your needs.

Creating a Stand-alone Inventory Package

1) Make sure the SMP, DC and Win7 Virtual Machines are powered on.

2) Switch to the SMP Virtual Machine.

- 3) Double click on the **Symantec Management Console** icon on the desktop to launch the **Symantec Management Console.**
- 4) Navigate to **Settings | All Settings.**
- 5) Expand Discovery and Inventory > Inventory Solution.
- 6) Click on Stand-alone Inventory Packages.
- 7) On the right side of the screen press **New Package** to create a new package.



- 8) For the Package Name enter **My Inv Package**.
- 9) **Check** the following boxes:
 - ✓ Hardware and Operating System
 - ✓ Software
 - ✓ File Properties
 - ✓ Server Applications

- 10) Check the box to Show progress under "When running on the target computer."
- 11) Leave the **default Notification Server** location to send the Inventory data to.
- 12) Press the Advanced button.
- 13) Review the various tabs and options available to you.
- 14) Press Cancel.
- 15) Your package should now look like this:

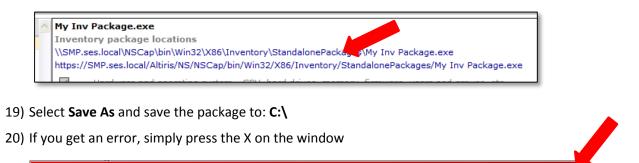
Symantec Management Console	2 🛛
Edit Stand-alone Inventory Package	
Package name: My Inv Package	
Description:	
Select the types of inventory to gather:	
☑ Hardware and operating system - CPU, hard drives, memory, firmware, users and groups, etc.	
Software - Windows Add/Remove Programs	
File properties - manufacturer, version, size, internal name, etc.	
Server applications (Requires Inventory Pack for Servers)	
When running on the target computer:	
Show progress	
After running on the target computer:	
Keep the inventory cached for future comparisons	
Send inventory data to:	
The location of the Notification Server must be accessible from the target computers	
Notification Server: https://SMP.ses.local/Altiris/NS/Agent/PostEvent.asp	
O Folder:	Browse
	Advanced
	OK Cancel

16) Press OK.

17) You will now be placed back at the Stand alone Inventory Packages page.

There are two components to this screen. The left side contains information about the names of the packages you have created. The right side of the screen display details about the selected package and also a link to download the package for distribution.

18) Click on the package download URL to download the package (choose the UNC path).



The publisher of My Inv Package.exe couldn't be verified. Learn more

Run <u>V</u>iew downloads

Deploying Stand-alone Inventory Packages

- 1) Switch to the **Win7** virtual machine.
- 2) Press Start.
- 3) Type **Run** in the search box and press **Enter.**
- 4) Type the following command in the run box: \\smp\c\$\My Inv Package.exe Press OK.
- 5) Press **Run.** The Inventory window is displayed:



Note: This may take a few minutes to complete.

- 6) Press **Ok** when the inventory package finishes its scan. The operation is completed when the OK button is not greyed out.
- 7) No further action is required on the part of the administrator or the end user. The inventory information will be forwarded to the appropriate Notification Server and processed on schedule.

Lab Exercise 2: Advanced Inventory Configuration

Exploring Advanced Inventory Options

In most cases an administrator will want to collect as much inventory information from a client as possible. In some cases, however, there is a need to collect only a subset of the possible inventory catalog. Like all other policies in the Notification Server, Inventory Policies can be scaled down to capture only the specific details required by the administrator.

In this example we will be collecting inventory data from an ESX farm. As such we are not concerned with the hardware profiles of the machines. We need only collect software information.

1) Switch to the SMP virtual machine.

- 2) In the Symantec Management Console navigate to Manage | Policies in the main console menu
- Expand the Discovery and Inventory > Inventory folders and note the out of the box inventory tasks are available on the left pane.
- Right Click on the Inventory folder and select New > Inventory Policy to create a new inventory policy.



- 5) Name the policy **My Inventory Policy**.
- 6) Select the radio button labeled Custom Schedule.
- 7) Press the Add Schedule button.
- 8) Select **Scheduled Time**.
- 9) Leave the defaults and press OK.
- 10) Uncheck Hardware and Operating System.
- 11) Check Software.
- 12) Check File Properties.
- 13) Check Server Applications.
- 14) Press Advanced.
- 15) Under the Data Classes tab check the boxes for:
 - ✓ Software
 - ✓ Operating System
 - ✓ User and Group

- 16) Select the **Run Options** tab.
- 17) <u>Check</u> the box to **Enable Verbose Client Logging**. This will provide more detailed data on the process used to gather the inventory.
- 18) Press **OK.**
- 19) In the **Applies To/Compliance** section, highlight the **SES\Administrator** line item and **delete it** (press the red X).

Applies To/Compliance						(
🗣 Applied to 👻 🗙 View: App	oli by	×			Group by 🔽 Search	¢	•
User Name	Resources	Tasks Run	Last Modified	Status			
··· 🖳 SES\Administrator	106	0	8/27/2014 2:25:18 PM		0% Started		

20) Enable the policy by clicking on the red orb in the upper right corner and selecting **On**.



21) Press Save Changes.

22) At this stage the policy has been created but not applied to any computers. In the next exercises, we will create a target and apply it to this policy.

Creating User Defined Filters

Now that your inventory policy has been created, you need to apply it to the appropriate group of resources it was intended for. In this next section we will simulate creating a custom filter. We will be using the Windows 7 lab virtual machine but this process can be applied using any number of variables.

- 1) Navigate to Manage | Computers.
- 2) Select the >> (double chevron) icon in the upper middle of the screen to select the flip book

Core Symantec Core Symantec Core Symantec	Manageme		Internet	Explore	er		Q	- 🔒 😽 🍳
Symantec Management Console	Home	Manage	Act	dins	orts) Settings	Session	? Help
鰔 Computers				»	Installe 135 availab	d Agent Ne - 0 selected, 'Q	uery Builder' filt	🔩 135 avai
Filters			*	G 5	earch in 'Insta	lled Agent'	₽ € ¥	
Search			۵ ور	Name				
🔺 👢 Favorites				(A) [C			No comput
Tinstallee	-				0.10.7.130 SLAB1			

3) "Flip through" the windows by pressing the link in the right corner.

Actions	Reports	Settings	Session	Help		
- (🍸 Installe	d Agent				Y
*			Managed Del	ivery Policies	Quick Delivery Tasks	₩ 50
e						Name
	Filton recult	is amoty				G

4) The next-to-the-last screen will be labeled **Operating Systems.** Stop there.

« 🍸 Installed Agent				
Manufacturers	Operating Systems			
	Mac OS X Microsoft Windows Server 2003 Microsoft Windows XP Red Hat Enterprise Linux SunOS SUSE Linux Enterprise Server Windows 7 Enterprise	9% 7% 10% 1% 17% 3%	10 8 11 19 3	
	Windows 7 Professional Windows 7 Professional N Windows 7 Ultimate Windows 8.1 Enterprise Windows Server (R) 2008 Enterprise Windows Server 2008 R2 Enterprise Windows Server 2008 R2 Standard Windows Vista (TM) Business Windows Vista (TM) Ultimate	4% 1% 5% 10% 12% 4% 4%	4 1 6 11 14 5 4	

5) On the dynamic pie chart locate and select the Windows 7 Professional label

Note: Notice how the right hand side of the screen (*the computer list*) automatically scopes itself based on your selection.

- 6) Now that we have the basis of our target you may **close** (click the >> double chevrons) **the flip book**.
- 7) Your target scope has carried over and there are 5 computers with Windows 7 Professional

») [•]		ed Agent e - 0 selected, 'Query Builder' filte	ar .
a E) 🗟 🛃 🕯		* 📀
۲	Managed 👻	= • 1	\mathbf{x}
	OS Name 🔻	"Windows 7 Professional"	\mathbf{X}
Add	Filter Criteria	i -	\$
	Explicit Crite		0
Name	TIT Instaneu	Agent	~
	SYM5446450 10.21.28.77	1	
	SYM5446450 10.20.28.124	-	
	SYM5446450 10.20.28.71	3	
	SYM5446450 10.20.17.192	-	
0	WIN7		

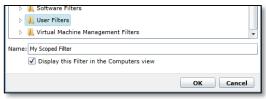
- 8) Now we need to filter out the objects we do not need.
- 9) Press the Add Filter Criteria button located at the bottom of the orange section.
- 10) Select IP Address from the drop down.
- 11) In the IP Address box type: **10.10.7**. This will only show objects with an IP address that begins with 10.10.7.
- 12) You should now have 1 resource in view.

>> Tinstalled Agent 1 available - 0 selected, 'Query Builder' filte					
7 D U 🛛 Y 🖄 🛞 🤅	* ﴿				
🕐 Managed 🔻 💷 🕇 1	\times				
OS Name ▼ "Windows 7 Professional"	\times				
⑦ IP Address ▼ 10.10.7.	\times				
Add Filter Criteria 🔻	*				
Add Explicit Criteria 🔻					
Search in 'Installed Agent'	9				
Name					
WIN7 10.10.7.137					

13) Press the **floppy disk** icon to save this filter.



- 14) Name the filter My Scoped Filter.
- 15) Scroll down the list in the window and Select the User Filters folder.



16) Press OK.

Displaying User Defined Filters

By default only a certain set of filters are displayed in the Manage | Computers view. This is designed to simplify the interface. The "User Filters" folder is <u>not</u> displayed by default. In this exercise we will see how to expose the user filter folder and any additional folders that may be required.

1) Right click in the empty white space under the **Filters** pane.

🛃 Computers	
Filters	*
Search	P 😯
> 🕕 Favorites	
💫 📙 Computer Filters	Show/Hide Filters
> 📙 Software Filters	New
🍸 Live Demo Systems	

- 2) Select Show/Hide Filters.
- 3) Check the box for User Filters.
- 4) Press Close.
- 5) The User Filter folder is now available.



Creating User Defined Targets

We have learned that a filter is not an actual resource within the Notification Server; rather it is a statement that will ultimately result in a number of resources. In Notification Server terminology we call that result a Target. A target can include or exclude any number of filters, organizational groups or static resource lists. In this exercise we will create a simple target based on the previously created filter.

1) Right click in the empty white space under the **Targets** section.

Targets		*
Search		• ج
👢 Favorites		
👂 📙 System	Show/Hide Targets	1
🍪 TEC VM Set	New +	🛅 Folder
		Target

- 2) Select **New > Target**.
- 3) Name the target My Target.
- 4) Press OK.
- 5) You should now see the **My Target** object on the screen.



- 6) Select **My Target** from the list on the left pane.
- 7) In the middle pane, expand the target view by pressing the Double chevrons (\gtrsim)



- 8) In the Orange colored area press the Add Include/Exclude drop down menu.
- 9) Select **Include** from the drop down list. The default setting is to include a filter. This can be modified to reflect a group or a list as well.
- 10) Click the Select one... link.
- 11) In the search box type: **My Scoped Filter** (Alternatively you may expand and select it from the folder tree).
- 12) Select the My Scoped Filter object

13) Press the single chevron > to include this filter in the target.

Include Filter	() x
my scoped filter 🗶 📀	Name
🔺 📙 User Filters	Y My Scoped Filter
Y My Scoped Filter	

14) Press OK.

15) Press the **floppy disk icon** to save the target.

M J gelected	€ ≈
My Scoped Filter	•
Add Include/Exclude 🔻	
Search in 'My Target'	7
WIN7 10.10.7.137	

16) You have successfully created a Target.

Assigning Inventory Policies to Targets

Multiple methodologies exist in the Notification Server for binding resources, policies, tasks, jobs, etc. to each other. This exercise will demonstrate the drag and drop method.

1) Select the **Policies** blade in the lower left hand corner of the screen.

Computers	
💫 Jobs / Tasks	
Policies	
🥎 Software	

- 2) Navigate to **Discovery and Inventory > Inventory**.
- 3) Select the My Inventory Policy.

- 4) This next set of steps is completed in one fluid motion. You are going to click on the policy, drag it to the Computers blade, wait for the screen to change; and "drop" it on the My Scoped Filter that was created.
 - a. Left click on and <u>hold</u> the **My Inventory Policy** object.
 - b. Drag it to the **Computers** blade.

Computers	My Inventory Policy
> Policies	
Software	

Notice that the console changes to the Computers View

c. While still holding the left click button move over the **My Scoped Filter** object and let go of the mouse button.

🛃 Computers	
Filters	*
Search	ρ 📀
T Live Demo Systems	^
🔺 📜 User Filters	
T All Users	
My Scoped Filter	-
Targets	*
Search	9

5) Notice what happens – An error window appears.



This error occurs due to the fact that a policy can only be applied directly to a set of resources. A Filter <u>is not</u> a resource; rather it is a statement that ultimately results in a set of resources. Drag and drop functionality is resource to resource (e.g. dragging a software package on to a computer resource).

- 6) Press OK.
- 7) Press the **Policies** blade.
- 8) This time drag the policy on to the **My Target** object (instead of the My Scoped Filter object).

Targets	*
Search 🔎	۲
📙 Favorites	
👂 📙 System	
() My Target	
My Target My Inventory Policy TEC VM Sec	
	_

9) The operation will produce a window that verifies that you would like to complete this task.



10) Press OK.

11) Notice that your target has been added to the Applies to area of the policy

Applies To/Compliance				
👎 Applied to 👻 🗙 View: Appli	ed by	~		
User Name	Resources	Tasks Run	Last Modified	Status

- 12) Press Save Changes on the My Inventory Policy window.
- 13) You have successfully applied your policy to your target. This inventory policy will run on the Win7 Virtual machine sometime during this lab.

At their most basic level, policies, filters and targets are ultimately this simple. They can, however, become infinitely complex based on the number of inclusions and exclusions they contain. Think of the statement they make as a mathematical equation:

Inclusions(Filters, Organizational Groups, Lists) [-] Exclusions(Filters, Organizational Groups, Lists) = Target.

Lab Exercise 3: Complex Software Delivery Policies

Software Management Solution is a component of IT Management Suite that allows you to manage basic to advanced software implementation scenarios. It works in conjunction with portions of Inventory Solution to provide you with holistic control of your environment. We will use this exercise to create a software product out of a discovered piece of software. We will then investigate scenarios for deploying that software product in the environment.

Creating Software Products

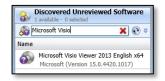
1) In the Symantec Management Console navigate to Manage | Software.

Multiple packages have been pre-loaded and detected beforehand to provide illustrative examples of what a real world environment would look like.

2) Expand the Favorites folder and select **Discovered Unreviewed Software** in the left pane.



3) In the search box found in the middle pane type: Microsoft Visio



- 4) Locate and select Microsoft Visio Viewer 2013 English x64.
- 5) On the right side of the screen (called the Flip Book) click the **Manage this software** link. The software product window appears.



- 6) For the Name, re-type it as Microsoft Visio Viewer 2013 x64.
- 7) In the category drop down select **Desktop Application** from the list.
- 8) **Review** the information on the Identify Inventory tab, and notice that there is information prepopulated and that there is 1 Installation found.

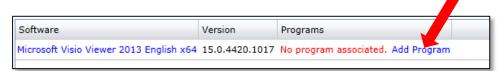
Softw	are Pr	oduct									× ()
Name	e:	Microsoft '	/isio Viev	ver 2013 x	64						
Com	pany:	Microsoft								• 🥖 🗱	
Versi	ion:	15.0.4420	.101 Ca	ategory:	Desktop	Application				• 🥖 🗱	Change
ÿ	, Iden	tify inve	ntory	= Mete	er / tra	ck usage	Delivery	📑 Licenses	-		
	Modify	the filter	criteria	to identif	y softw	are to assoc	iate with this p	roduct.			
	Micros	oft Visio Vi	ewer 201	3 English >	:64						≈ <mark>م</mark>
	Softwa	are name	Microsoft	Visio Viewe	er 2013 E	nglish x64					
	Comp	any	Microsoft								
	Versio	n	15.0.442	0.1017							
	Softwa	are name				Company	Version	Installs			
	Micros	oft Visio \	/iewer 2	013 Engl	ish x64	Microsoft	15.0.4420.1	017 1			
	Inc	lude com	onents	associate	d with	other produ	icts		1 s	oftware co	mponents
										ОК	Cancel

9) Select the Meter / track usage tab.

This option lets you perform the following tasks on your managed Windows Computers:

- Track usage of the managed software at the software product, component, and version level by enabling the software-based usage tracking option. This task is the primary method to use for the majority of software products.
- Meter the use and control the availability of applications by running predefined or custom application metering policies. Symantec recommends that you use this task only if you need to meter start, stop, and denial events for applications at the file level.
- Deny multiple applications from running by configuring the predefined Blacklisted Applications policy or running custom application metering policies.

10) Click the Add Program link on the Visio line item.



- 11) Notice that it is already aware of the executable associated with the Visio Viewer application.
- 12) Select VPREVIEW.EXE from the list and press the > (chevron button) to move it to the associated

programs list.	Add Program	0	×				
	Add key program files to software to meter / track usage. If the file you are looking for is not listed, click Add Program File and add the program file (.exe) on the File Inventory tab						
	Available programs:	Associated programs:					
	Search	🔎 🕂 Add program file					
	Name Version	Name Version					
		VPREVIEW.EXE 15.0.4420.1017					
Press OK.							

- 13) Press O
- 14) Make sure that the Check box to Turn on metering / usage tracking is selected

[Identify inventory	- Meter / track usage	Delivery	😽 Licenses	_
			ge of this product, associ sage tracking for this soft		orogram below.	
	V	Software	Version	Program	ıs	
		Microsoft Visio Viewer 2	013 English x64 15.0.442	20.1017 VPREVI	EW.EXE	

- 15) At this time a Visio Viewer application is not included in our Software Catalog and cannot be deployed to targeted computers. The following steps will demonstrate how we can import software into the software catalog for deployment.
- 16) Select the **Delivery** tab.
- 17) Press the Import button. The Import Software form loads.

***Press **Run** if you receive the Java Security prompt.

- 18) Make sure Software Type is set to Software Release (default).
- 19) Verify that Source is set to **Software Library** (default).
- 20) Press Add.
- 21) Navigate to C: \Lab Resources \SoftwareResources \WindowsSoftware
- 22) Select VisioViewer64bit.exe from the list.
- 23) Press Open. You will now see that visioviewer64bit has been added to the package contents.

Symantec Management Console	? 🗙
Import Software: Specify Software	
Specify the type of software resource to create. Software type: Software Release	
Package source	-
Define where to source the package from.	
Source: Software Library	
Package contents	_
Add the files to include in the package for this software resource. Then set the installation fil from which to obtain the properties of this software resource.	e
🕂 Add 🗟 Set Installation File 🛛 🗙	
Package Folder	

- 24) Press Next. The package uploads and imports into the Software Library.
- 25) Select the **Update an existing software resource** radio button. It is a best practice to Update an existing package to ensure that there is only one version of it in the CMDB.
- 26) Press Browse.



- 27) Type Visio Viewer 2013 in the search box.
- 28) Select Microsoft Visio Viewer 2013 x64 from the list.
- 29) Press OK.
- 30) Press **OK** again to close the software import screen.
- 31) The Package view opens. Select the Package tab.

Microsoft Visio Vie Add description	wer 2013 English x64	Created on: 8/29/2014 SES\Ad Last Modified: 8/30/2014 SES\Ad	
operties Package Rul	es Associations File Inventory	Software Publishing	
Define all installation par	ckages and command lines that install	this software resource.	
Packages			۲
🕂 Add package 🛛 Actio	ons * 🧷 🗙		¢
Name	△ Source Location	Created	~
visioviewer64bit.exe	Library	8/30/2014 10:35:40 AM	~
visioviewer64bit.exe Command lines	Library	8/30/2014 10:35:40 AM	
		8/30/2014 10:35:40 AM	<u>ب</u> ک
Command lines		8/30/2014 10:35:40 AM	-

Note: A default command line is always created when a package is imported. However, unless the package is an MSI, RPM, DMG, or PKG, the default command line will likely not be sufficient. Regardless of what command lines are created <u>Symantec recommends you test EVERY software</u> deployment scenario BEFORE you roll it out in a production environment.

32) Highlight the Install command and press the pencil icon to edit it.



33) In the **Command Line** field append the command with the following text (after the quotes):

/passive /quiet

Symantec Manager	nent Console	? ×
Add or Edit Com	mand Line	
Name:	Install	
Description:	Installs visioviewer64bit.exe	
Command line req	uires a package	
Package: visioviev	ver64bit.exe	
Installation file type:	EXE Software Installation File	
Command type:	Install	
Set as the defau	It for this command type	
Command line:	"visioviewer64bit.exe" /passive /quiet Edit	
Success codes:		
Failure codes:		

- 34) Press **OK.**
- 35) Explore the **Rules and Associations** tabs. Note how they are empty. This information is populated one of several ways. The two most common are via a package import (an MSI import will create an MSI Product Code detection rule) or after an Inventory scan has been run AND the package has been associated with a detected piece of software (the software must be installed and inventoried on at least one endpoint for this to work). We will revisit this later in the lab.
- 36) Press **OK** to close the Package Resource window. You are now back at the Software Product wizard.
- 37) Your screen should now look like this:

Software Pr	oduct									0	×
Name:	Microsoft Visio	Viewer 2013 x	64								
Company:	Microsoft							•	/ s‡	1	
Version:	15.0.4420.101	Category:	Desktop	Application				-	<i>/</i> 🖈	Change	
💃 Ider	ntify inventor	y 🔤 Mete	er / tra	ick usage	👽 Delivery	📑 Lice	enses				
Select	which softwar	e package to	deliver	r from avail	able packages						
🐼 Im	port 🕂 Add	software pao	kaqe	🕂 Add co	mmand line	/ X			Search		
Softv	vare				Version					•	
	💿 🗳 Micro	osoft Visio V	ewer 20	013 English	x64 15.0.442	20.1017					
										-	
4										•	
							1 packa	ige/com	nand lin	e selected	
									ок	Cancel	

- 38) Press **OK** to close the Software Product wizard.
- 39) Expand Deliverable Software and select Software Products from the left pane.
- 40) You should now see the **Microsoft Visio Viewer 2013 x64** software product displayed in the middle pane. You have successfully created a Software Product.

- 41) Notice that the Icon for Visio Viewer is the default icon. If you would like to have a company logo or product icon for this product, complete the following steps:
 - a. Double click on the **Microsoft Visio Viewer 2013 x64** software product in the middle pane.
 - b. Select the "Change..." link under the icon on the top right corner
 - c. Browse to C:\Lab Resources\Inventory Solution\Visio Viewer.png
 - d. Press **Open**. Notice that the icon changed.
 - e. Press OK

NOTE: Many manufacturer icons are included and can be found and selected by browsing to:

C:\Program Files\Altiris\ActivityCenter\Web\ClientBin\img\product



Creating Software Detection Rules

Software detection rules are the basis for advanced software management. They utilize a set of IF, THEN statements and Boolean arguments to determine whether or not a piece of software is installed on an endpoint. The most straightforward way of detecting software is to look for an MSI product code, look in Add/Remove Programs or look for a specific file. Any, all and a few more additional rules may be used to detect software all at the same time. This would ensure a granular account of software resources in the environment.

- 1) Navigate to Manage | Software.
- 2) In the left pane, expand Deliverable Software and select Software Releases.
- 3) Locate and select the Microsoft Visio Viewer 2013 English x64 software package.
- 4) Double click on the **Microsoft Visio Viewer 2013 English x64** software package to edit the software resource.
- 5) Select the **Rules** tab.
- 6) In the **Detection Rule** section press * **New.**

Select the detecti	on rule to determine if the software r	esource is installed.
Detection rule:	Type to select a rule	🚽 🅎 Browse 🥢 🗱 New 🗙 Delete

Understand that these detection rules can end up being quite complex. It is always recommended to keep them as simple as possible. If a Registry Key will accurately detect a product then there is no need to add an additional statement for Add/Remove Programs.

- 7) Name the rule My Detection Rule.
- 8) Press the + sign to create a new rule expression.
- 9) Select Smart Rule > Software File Expression.
- 10) Click the Select a Software Resource link to browse the software catalog.
- 11) Type Microsoft Visio Viewer 2013 in the search bar.
- 12) Locate and select Microsoft Visio Viewer 2013 English x64.

Symantec Management Console			? ×
Select Software			
		soft visio viewer 2	2013
Software Name	Product	Version	~
Microsoft Visio Viewer 2013 English x64	Microsoft Visio	vi 15.0.4420.10	17

13) Press OK.

14) Your screen should now look like this:

Symantec Manageme	ent Console			X
Software File Exp	ression			
Evalutes files associate	d with a software resource that match an exp	pression.		
Software resource: File match expression: Default version match: <u>Update matching files</u>				
Path	Name	Match	Version	
StaticPath	VPREVIEW.EXE	Any 🗸		

- 15) Press OK.
- 16) Press **OK** to close the Create Rule form. You have successfully created a Detection Rule.
- 17) IMPORTANT: Leave the Package Resource Editor open for the next exercise!

Software Dependencies & Applicability Rules

Software dependencies & applicability rules are the pieces of logic that allow you to deploy one software policy to thousands of computers without having to worry about whether or not the appropriate prerequisites exist on the end point. They are not designed to be a "lazy way" of deploying software to the masses, rather they are built it check points to make sure mistakes are avoided.

A Software Dependency is a piece of logic that check the endpoint for a value or set of values and then returns a status. If the status is negative (the dependency is not met) then the rule fails and the software is not installed. In some cases, dependences can be applied "on demand" if they are not met (e.g. deploying the required Java client if it is not on the endpoint).

An Applicability Rule is almost identical in structure but serves a different purpose. Where a dependency rule validates *if* a software package has all of the necessary components an Applicability Rule validates if the software *can* be installed at all (e.g. this software package applies to 32-bit systems only).

There are many cases where the same logic could be used in either place. The ultimate decision boils down to remediation. Software Dependencies can be remediated. Applicability Rules (by nature) cannot be.

Creating a Basic Applicability Rule

1) While still in the Software Package Resource Editor press the ***New** button located next to **Applicability Rule.**



- 2) Name the rule **My Applicability Rule**.
- 3) Press the + button to add a new Expression.
- 4) Select **Operators > Not**.
- 5) Select the **Not** operator on the left pane.
- 6) Press the + button to add a new expression.
- 7) Select Standard Rule > 64-bit Windows Installed.
- 8) Press OK.

9) Your rule should now look like this:

Symantec Management Consol	e	? 🗙
Create Rule		
Name: My Applicability Rule		Rule type: Smart: Rule
Expressions:		
+ × 😔	0	
🗆 🦢 And	🗉 🔱 Expression type: 64-b	t Windows Installed
🗎 🗁 Not	This expression type checks client system. There are no p	or the existence of a setting on the arameters to configure.

Note: Pay close attention to the rule logic. The statement reads "And Not 64-bit Windows Installed." In plain English; do not execute on x64 based systems.

- 10) Press OK.
- 11) Your screen will now look like this:

🩋 Symantec Management C	Console - Internet Explorer	
Add description	io Viewer 2013 English x64	
Properties Package	Rules Associations File Inventory Soft	ware Publishing
Define rules to d	letect if the software resource is installed and if the s	oftware resource is applicable.
Select the detection rule	e to determine if the software resource is installed.	
Detection rule: My [Detection Rule 🔹 🍫 E	Browse 🥜 🗱 New 🗙 Delete
Select the applicability r	rule to determine if the software resource can be ins	talled.
Applicability rule: My A	Applicability Rule 🚽 🍫 E	Browse 🥖 🗱 New 🗙 Delete

12) Press **Ok** to close the Package Resource Editor.

Using Advanced Delivery Policies to Deploy Software

Now that we have created a Software Product with install command and some logic rules, it is time to test the deployment of this software product.

1) Switch to the Win7 virtual machine.

2) Open the **Symantec Management Agent** by double clicking the icon in the taskbar.



3) **Press the Software Delivery Tab**. Leave this window open for now. We will be switching back and forth to the SMP virtual machine to watch the software policy be deployed.

4) Switch to the SMP virtual machine.

- 5) Navigate to **Manage | Software** if it is not already open.
- 6) Expand the **Deliverable Software** folder and select **Software Products** from the left pane.
- 7) Right click on **Microsoft Visio Viewer 2013 x64**.
- 8) Select Actions > Managed Software Delivery.
- 9) Review the defaults and press Next.

- 10) In the Select Destinations screen press the Apply to button.
- 11) Select Quick Apply.
- 12) In the search box, type **My Target**.
- 13) Select My Target from the list and press >.

Symantec Management Console		2
Select a resource target		
Available targets:	Selected targets:	
Folder: Select a folder	Search	_
Target name	▲ Target name	
My Target	My Target	×
	x x	
	<<	

- 14) Press **OK**.
- 15) Press Next.
- 16) In the Choose when to check compliance section press Add Schedule.
- 17) Select Schedule Window.
- 18) Set the Schedule Window to check every 5 Minutes.
- 19) Press the No repeat link.
- 20) Select **Day** from the drop down.
- 21) Press OK
- 22) Your window should look like this:

	need and verify that the start and end dates are set
correctly.	: Use agent time
Start: 00 : 00 End: 00 : 00	
0 1 2 3 4 5 6 7 8 9 10 11	12 13 14 15 16 17 18 19 20 21 22 23 24
◆ During window, check every: 5 Minutes ▼	Repeat daily
	Advanced

- 23) Press **Next** to continue the wizard.
- 24) Press Deliver Software.
- 25) Switch to the Win7 virtual machine. In a few moments the policy will be delivered.
- 26) To speed the process up you can press the **Update Configuration** button at the top of the agent window.
- 27) You will see the software policy in the **Software Delivery** tab.

28) Select Microsoft Visio Viewer 2013 English x64 – Install from the list.

tware Delivery			🧤 Update Co	nfiguration Ba	sic Inventory 👔 View 🔻	🕜 He
Status: OK					😢 0 🔔 0	1
Agent Settings 🏾 🤫 Softw	are Deliv	ery 🔯 Task Status 🍄 Software Updates 🔀 Logs				
		Deliveries available for this computer:				
Package Tasks	۲	Policy	Туре	Status	Next Run	
APR Properties		application Metering Plug-in for Windows Install	Package Rollout	Disabled	Not scheduled	
		Application Metering Plug-in for Windows Upgrade	Package Rollout	Disabled	Not scheduled	
Application Tasks	۲	Plug-in for Windows Upgrade (x64)	Package Rollout	Disabled	Not scheduled	
Application Tasks	×	Deployment Plug-in for Windows (x64) - Upgrade	Package Rollout	Disabled	Not scheduled	
No tasks available		Deployment Plug-in for Windows (x64) - Upgrade	Package Rollout	Disabled	Not scheduled	
		Deployment Plug-in for Windows(x64) - Install	Package Rollout	Disabled	Not scheduled	
Package Description		😚 FileZilla 3.3.5.1		Not compliant	Not scheduled	
		Inventory Plug-in for Windows Install	Package Rollout	Disabled	Not scheduled	
No description provided b administrator.	y the	Inventory Plug-in for Windows Install (x64)	Package Rollout	Disabled	Not scheduled	
administrator.		Inventory Plug-in for Windows Upgrade	Package Rollout	Disabled	Not scheduled	
		Inventory Plug-in for Windows Upgrade (x64)	Package Rollout	Disabled	Not scheduled	
Options	۲	😚 Microsoft Visio Viewer 2013 English x64 - Install		Unknown or no	2/11/2015 2:20:00 PM	
Show scheduled tasks		Patch Install Tools	Package Rollout	Disabled	Not scheduled	
in phow scheduled tasks	dn	pcAnywhere Plug-in Install for Windows	Package Rollout	Disabled	Not scheduled	
Show internal tasks ar	nd	Power Scheme Task Plug-in Install	Package Rollout	Disabled	Not scheduled	
-		Software Management Solution Plug-in for Windows (64-bit) - Install		Disabled	Not scheduled	
Show expired package	25	Software Management Solution Plug-in for Windows (64-bit) - Upg	Package Rollout	Disabled	Not scheduled	

- 29) After a few minutes have passed you will see the four step process for the policy attempting to install the package in the bottom half of the Software Delivery window. This process will:
 - Check to see if package has been downloaded.
 - Run Applicability Rule to see if package *can* be installed.
 - If Applicability Rule passes then download package.
 - Execute command line to install package.
- 30) To speed up the process, under **Application Tasks** on the left, select the "**Microsoft Visio Viewer 2013...**" link. This will execute the policy immediately.



31) As you can see from the screenshot below our policy stopped at step 2.

Task Name	Last Run	Last Status
Pre-download detection check for Microsoft Visio Viewer 2013 English x64	2015-02-11 14:20:01	Not detected
Applicability check for Microsoft Visio Viewer 2013 English x64	2015-02-11 14:20:03	Not detected
Downloading package for Microsoft Visio Viewer 2013 English x64	Never	Unknown or not started
Execute install command for Microsoft Visio Viewer 2013 English x64	Never	Unknown or not started

This is because the "only install on x64 base systems" Applicability Rule failed. This process demonstrated how rules can affect the way a policy behaves.

Removing the Applicability Rule from the Policy

- 1) Switch to the SMP virtual machine.
- 2) Navigate to Manage | Software if it is not already open.
- 3) Select **Deliverable Software > Software Releases** from the navigation pane.
- 4) Double click on the icon for **Microsoft Visio Viewer 2013 English x64.** The Package Resource Editor opens.
- 5) Select the **Rules** tab.
- 6) Locate the Applicability Rule **My Applicability Rule** and press the **Delete** link.

Microsof		r 2013 English x64		Created on: 8/29/2014 SES\Administrator ast Modified: 2/11/2015 SES\Administrator
Properties Pag	kage Rules	Associations File Inventory	Software Publishing	
🔯 Define rule	es to detect if the	software resource is installed and	if the software resourc	e is applicable.
Select the detect	ion rule to determ	ine if the software resource is inst	alled.	
Detection rule:	My Detection R	ule	🔹 🏷 Browse 🥖 🗱	New 🗙 Delete
Select the applica	ability rule to dete	rmine if the software resource can		
Applicability rule:	My Applicability	Rule	🔹 🏷 Browse 🥖 🗱	New X Delete

- 7) Press **OK** to confirm the delete.
- 8) Press **OK** to close the Package Resource Editor.

9) Switch to the Win7 virtual machine.

10) Now that the package rules have been updated it is only a matter of time before the client checks in to the Notification Server and updates its policy information. This should take less than 5 minutes (Or press the Update Configuration button in the Symantec Management Agent on Win7).

<u>Note</u>: Nothing will happen at this point. No matter how long you wait. Can anyone guess why? Hint: there is a clue in the statement for question 10. Your instructor will explain.

11) Note the absence of the Applicability Rule check:

Task Name	Last Run	Last Status
Pre-download detection check for Microsoft Visio Viewer 2013 English x64	2015-02-11 14:42:36	Not detected
YDownloading package for Microsoft Visio Viewer 2013 English x64	2015-02-11 14:42:40	Success
Execute install command for Microsoft Visio Viewer 2013 English x64	2015-02-11 14:42:42	Success

- 12) Once you see a Success message displayed next to the Execute Install Command
- 13) In Windows, open **Control Panel | Programs | Uninstall a program** to validate that the Visio Viewer has been successfully installed.

Uninstall or change a program					
To uninstall a program, select it from the list and then	click Uninstall, Change, or Repair.				
Organize 🔻					
Name	Publisher	Installed On	Size	Version	
🕐 µTorrent	BitTorrent Inc.	8/26/2014		3.4.2.33254	
🖊 Adobe Flash Player 13 ActiveX	Adobe Systems Incorporated	6/2/2014	6.00 MB	13.0.0.214	
E FileZilla Client 3.3.5.1		8/26/2014		3.3.5.1	
🕌 Java 7 Update 60	Oracle	6/2/2014	118 MB	7.0.600	
Microsoft .NET Framework 4.5.1	Microsoft Corporation	6/2/2014	38.8 MB	4.5.50938	
Microsoft Access database engine 2010 (English)	Microsoft Corporation	6/2/2014	174 MB	14.0.6029.1000	
🔡 Microsoft Office 2003 Web Components	Microsoft Corporation	8/21/2014	28.6 MB	12.0.4518.1014	24 of 3
Ø Microsoft Silverlight	Microsoft Corporation	6/2/2014	100 MB	5.1.30214.0	
Microsoft SQL Server 2005 Analysis Services 9.0 OLED	Microsoft Corporation	10/24/2013	71.5 MB	9.00.3042.00	
Microsoft SQL Server 2005 Analysis Services ADOMD	Microsoft Corporation	10/24/2013	1.84 MB	9.00.3042.00	
Microsoft Visio Viewer 2013	Microsoft Corporation	2/11/2015	59.8 MB	15.0.4420.1017	

Lab Exercise 4: Automation Policies

Automation Policies allow an administrator to automate reoccurring tasks within the Notification Server. They can be as simple as assigning a user to a location based on computer name or as complex as automatically assigning contracts to locations based on the amount of software installed in a particular location. For this exercise we are going to demonstrate how a computer resource can be moved into an Organizational Group based on the computers IP Schema found by Inventory Solution.

Creating an Automation Policy

- 1) On the SMP virtual machine open the Symantec Management Console.
- 2) Navigate to Manage | Organizational Views and Groups in the console main menu
- Right click on the Organizational View folder on the left pane and select New > Organizational View
- 4) Name the new view **Machines by Subnet**
- Right click on the Machines by Subnet organizational view on the left pane and select New > Organizational Group
- 6) Name the new group Subnet: 10.10.7.x
- 7) Select the view Subnet: 10.10.7.x group. Notice that there are no resources in the Group.

Symantec Management Console	Actions Reports	6 Settings Session	2 Help	
Ø	Resource Manage	ement + Organizational View	■ Machines by Subnet ■ Subnet: 10.10.7.× ■	
 Organizational Views Active Directory Domains 		: 10.10.7.x ted custom Organizational Gro	up	
🗉 ම Assets by Cost Center	Resources: 0 r	resources - Status: O polici	es assigned	
B Assets by Location B Contracts by Location B Contracts by Location B User Created Resources B User by Department B Users by Location B Machines by Subnet B Machines by Subnet	+ Add - X	🔀 Actions 👻 View: 📶	V Role: None	

- 8) Navigate to Manage | Policies.
- 9) Select the Automation Policies link on the left pane
- 10) Create a new policy by pressing the **New policy** button on the right pane.
- 11) Name the policy My Automation Policy.
- 12) Set the schedule to Repeat every 5 minutes starting today.

My Automation Policy Add description
Schedule: At date/time
Date: 2/11/2015 Time: 14 🚔 : 48 🚔
Repeat every: 5 V Minutes

- 13) In the Data Source drop down select **Raw SQL Query.** Notice you can choose a report or Resource Query if you wish. Most users choose a custom report that was previously created.
- 14) Press Edit Query.

15) Type the following query into the blank area:

```
SELECT _ResourceGuid
FROM Inv_AeX_AC_TCPIP
WHERE [IP Address] Like '10.10.7.%'
```

- 16) This query simply returns the GUID of any computer that has an IP address in the 10.10.7.x subnet range
- 17) Select the Results tab.
- 18) You should now see the GUID's of 4 computers who have an IP Address that starts with 10.10.7.
- 19) Press OK.
- 20) Under Evaluation Rule choose Run for non-empty data from the drop down.
- 21) Press select a job or task.
- 22) Expand System Jobs and Tasks > Notification Server > Automation Policy Tasks.
- 23) Select **Assign to Organizational Group**. This step simply selects the task you wish to run in the Automation Policy it is not configured here it is a read only task.

Symantec Management Console Select Task	8
SCIECE TASK	
	Assign to Organizational Group Assign resources to an organizational group
Cystem Jobs and Taaks Deployment and Migration Deployment and Migration Discovery and Inventory	• This task cannot be edited here • This task is read-only. This task is for assigning resources to an Organizational Group
Monitoring and Alerting Antification Server	Choose the Organizational Group that the resource(s) will be assigned to. Group:
Automation Policy Tasks Automation Policy Tasks Baging to Organizational Group Less Email Patch Report 'Maintain Retired Machine Historical Data' Email Patch report 'Indination Notice'	Must only contain Must at least contain Resources (0): None selected

24) Press **OK**

- 25) Press **Edit Input Parameters.** This is where we enter the parameters that are needed by the previously selected task. We will need to know the Organizational Group we want to send the resources to.
- 26) In the Organizational Group drop down, select **[Custom]** then on the right dropdown, choose **Machines by Subnet > Subnet: 10.10.7.x**

Symantec Management	Console		? ×
Edit Job/Task Input Pa	rameters		
Job or task name: My A	utomation Policy		
Parameters			—
Select the data source	field or a custom valu	e that will be supplied to each parameter of your action.	
	Data Source	Custom Value	
Organizational Group*	[Custom]	Subnet: 10.10.7.x	
Action*	[Select Field]	Must only contain	
		O Must at least contain	
Resources*	Results as CSV 🔽	No resources selected	
* Indicates required fiel	d.		

- 27) In the Resources drop down, select **Results as CSV.** This will ensure that the GUID's are compatible to the task (text instead of another format).
- 28) Press OK.
- 29) Press Save Changes to save the automation policy.
- 30) Press **Test Automation Policy** to verify the automation policy is working.
- 31) Navigate to Manage | Organizational Views and Groups in the main console menu.
- 32) Expand Machines by Subnet > Subnet: 10.10.7.x on the left pane.
- 33) Verify that our 4 resources have been moved to the organizational group. This automation policy is set to run every 5 minutes and will add any new resources to this group if they are part of the 10.10.7.x subnet.

Lab Exercise 5: Custom Inventory

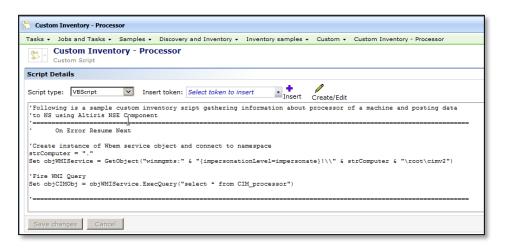
Custom Inventory is designed to extend the functionality of Inventory Solution by allowing an administrator to collect data points outside of what is included by default with Inventory Solution. First, a custom data class is created to store your information in the database. Then some methodology for collecting the data point (typically a script of sorts) is executed on the endpoint(s) to gather the data. Once the data is on the Notification Server it is managed like any other piece of information.

Collecting Custom Inventory

1) Switch to the SMP Virtual Machine

- 2) Open the Symantec Management Console if it is not already open.
- 3) Select Manage | Computers
- 4) Select All Computers under the Computer Views and Groups view on the left pane
- 5) Find **SMP** in the list and double-click on it. The Resource Manager will open.
- 6) Select View > Inventory on the top menu
- 7) In the middle pane, expand the **Data Classes > Inventory** folder
- 8) Look for a folder called **Custom** You will notice that it does not exist. This is where custom inventory data will be stored.
- 9) Close the **Resource Manager** window.
- 10) Navigate to Manage | Jobs and Tasks.
- 11) Expand the Samples > Discovery and Inventory > Inventory Samples > Custom folder
- 12) Select Custom Inventory Processor from the list.

13) Notice that this is just a Run Script task rebranded as a custom inventory.



You can see that the script type is set to **VBscript.** You can choose a multitude of programming languages to feed data into the CMDB. You can read and research further information on the VBscript programming language on the internet.

14) Select the **Quick Run** under **Task Status**, type **SMP** and from the drop-down menu, select SMP as the resource you want to run this on.

Task Sta	atus				
🐌 Quick	Run	New Schedule	🖏 Rerun Task	~ X	
Q	uick R	un Now			×
s	SMP (S	ES, 10.10.7.131)		× •	Run

- 15) Press Run.
- 16) It should only take a few seconds for this task to run.
- 17) Double click on the Symantec Management Agent in the system tray.
- 18) Select the Task tab and notice that the Custom Inventory Processor task ran.
- 19) In the console main menu Select Manage | Computers.
- 20) Select All Computers under the Computer Views and Groups view on the left pane.
- 21) Find SMP in the list and double-click on it. The Resource Manager will open.
- 22) Select View > Inventory on the top menu.
- 23) In the middle pane, expand the **Data Classes > Inventory** folder.
- 24) You will now notice that there is now a custom folder and inventory data in this data class called **Processor Extension**.
- 25) Close the Resource Manager window.

Creating a Custom Inventory Task

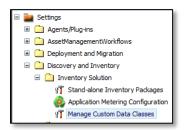
In this example the Administrator is tasked with tracking the service state of the Print Spooler service on a target group of computers. In order to complete this task, the following must be accomplished:

- Create a Custom Data Class through the Manage Custom Data Classes item
- Create a Custom Task VBScript that collects the data from a computer resource and places it in the created Custom Data Class

Creating the Custom Data Class (Table/Fields)

To get this data into the CMDB we will need to create a custom data class for inventory to place the collected data into.

- 1) Open the Symantec Management Console.
- 2) Select Settings | All Settings.
- 3) Expand Settings > Discovery & Inventory > Inventory Solution.
- 4) Select Manage Custom Data Classes.



- 5) Press the **New Data Class** button in the middle pane.
- 6) Name it Monitor Spooler Service.
- 7) Press OK.
- 8) Make sure the **Monitor Spooler Service** data class is selected.
- 9) Press the + Add Attribute button on the right pane.
- 10) Type Status in the Name field.
- 11) Ensure that you select NO to Key, and NO to required like the following:

Symantec Management Console	×
Data Class Attributes	
Define a data class attribute by giving it a name and datatype. Attributes th help uniquely define a row should be defined as a key. Do not set data requ unless you are sure that data will be received for this attribute.	
Name: Status	
Data type: String V Maximum size: 50	
Key: No Data required: No V	
ОК Са	ncel

- 12) Press **OK**.
- 13) Your managed custom data classes should look like the following now:

🗱 New data class 🛛 \land 🗎 🗙			
Data class	^	Click Add attribute to add properties	. Once the data class is p
Monitor Spooler Service		💠 Add attribute 🛛 🖉 🛛 🗙 🛛 🔼	
Processor Extension UNIX PS List		Attribute	Data type
		Status	String

14) Press Save Changes

15) You have now made a data class for the custom Inventory script to populate.

Creating the Custom Inventory Script

Now we need to create an initial VBScript Task that will be executed on a computer resource. But before we do that you will need to configure a pre-made script that has been written and modify it so it now collects data and places it in the data class we just created.

This script was created by taking the base script in the Processor Extension example provided in the default installation of the Symantec Management Platform.

- 1) In Windows Explorer, browse to: C:\Lab Resources\Inventory Solution\Check Service Example
- 2) Double-click **Checkspooler.txt** to open it in Notepad.
- 3) Look for the line with ("{XXX}") in the script. It will need to be updated with the GUID of the dataclass we just created.
- 4) In the console, make sure **Monitor Spooler Service** is selected and press the **Properties** button.

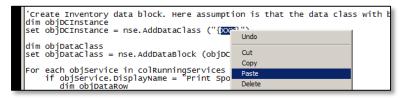
🗱 New data class 🗖 🛪 🗙		
Data class	•	Click Add attr
Monitor Spooler Service		🕂 Add attri
Processor Extension		Attribute
UNIX_PS_List		Status
		Status

5) Highlight the GUID, right-click it and select **copy**.

Symantec Management Console					
ails					
accda6ed-1e02-45fb-9787-b Monitor Spooler Service Inv_Monitor_Spooler_Servic Status	Cut Copy Paste Select all Print Print preview				
	ails accda6ed-1e02-45fb-9787-b Monitor Spooler Service Inv_Monitor_Spooler_Servic	ails accda6ed-1e02-45fb-9787-b-t			

6) Press Close.

7) Return to the **Checkspooler.txt** file and replace the **XXX** letters with the copied GUID. Make sure there are no spaces between the { and }.



8) Save the script, but keep it open.

Creating the Custom Inventory Task

- 1) You are ready to create the task and associate a schedule to it to collect this information.
- 2) From the Symantec Management Console select Manage | Jobs & Tasks.
- 3) Expand the Samples > Discovery & Inventory Inventory Samples > Custom folders.
- 4) Right Click on the **Custom** folder and select **New Task**. The Create New Task window appears.
- 5) Scroll down the list in the left pane and near the bottom, select **Run Script**.
- 6) Name the task Monitor Spooler Service.
- 7) Select **VBScript** for the **Script Type**.
- 8) Return to the **Checkspooler.txt** and copy the contents of the file.
- 9) Return to the Monitor Spooler Service task and Paste the contents into the blank area.

- 10) Press **OK**
- 11) Once you have finished saving your Task, it should look something like the following:

📡 Jobs / Tasks	😓 Monitor Spooler Service
م	Tasks + Jobs and Tasks + Samples + Discovery and Inventory + Inventory samples + Custom + Monitor Spoole
🔺 📙 Jobs and Tasks	Monitor Spooler Service Executes a script on one or more remote computers
🔺 👢 Samples	Script Details
 Discovery and Inventory Inventory samples 	Script type: VBScript Insert token: Select token to insert Insert Create/Edit
Lustom	'Following is a custom inventory sript gathering information about SPOOLER service of a machine an
😓 Custom Inventory - Processor	'to NS using Altiris NSE Component
😓 Custom Inventory - UNIX PS List	'Create instance of Whem service object and connect to namespace strComputer = "."
5 Monitor Spooler Service	Set objWMIService = GetObject("winmgmts:" & "{impersonationLevel=impersonate}!\\" & strComputer &
뤶 Gather Inventory	'Fire WMI Query
Notification Server	Set colRunningServices = objWMIService.ExecQuery("select * from win32_service")
Real-Time Console Infrastructure	•
Remote Management	'Create instance of Altiris NSE component
J Isstem Jobs and Tasks	dim nse
	Save changes Cancel

- 12) Open a Command Prompt and type net stop spooler then press enter.
- 13) The following will appear indicating that your command executed correctly

The Print Spooler service is stopping. The Print Spooler service was stopped successfully.

14) Perform a quick run to run the task against the SMP virutual machine by selecting the **Quick Run** button under **Task Status** and selecting **SMP** as the Resource you want to run this on.

Task S	itatus	
📆 Qui	ck Run 🛯 🌭 New Schedule 🛛 🔞 Reru	un Task 🛛 🔍 🗙
	Quick Run Now	
	SMP (SES, 10.10.7.131)	× • Run

- 15) Press the **Run** button. It should only take a few seconds for this task to run.
- 16) Double click on the Symantec Management Agent in the system tray.
- 17) Select the Task tab and notice that the Monitor Spooler Service task ran.
- 18) In the console main menu, select Manage | Computers
- 19) Select All Computers under the Computer Views and Groups view on the left pane
- 20) Find **SMP** in the list and Double Click on it. The Resource Manager will open
- 21) Select View > Inventory on the top menu
- 22) In the middle pane, expand the Data Classes > Inventory > Custom folder
- 23) Select the Monitor Spooler Service data class and note that the status indicates Stopped.

Scheduling the Custom Inventory Task

Once you have verified that everything is working you can now schedule the script for daily/hourly runs an a targeted group of computers. In this case the Administrator has been asked to target all Windows Servers.

- 1) Return to the console and select Manage | Jobs and Tasks
- 2) Highlight the Monitor Spooler Service task

- 3) On the right pane, select the **New Schedule** button on the bottom of the pane.
- 4) In the New Schedule Window select the **Schedule** radio button and select **At date/time** in the drop-down.
- 5) Check the Repeat every box and select **30 Minutes**.
- 6) In the **Selected Devices** area, press the **Add** dropdown list and select **Target**.
- 7) Press the **Open** button and search for and select **All Windows Servers**.
- 8) Press OK.
- 9) Press OK.
- 10) Press Schedule.

This has demonstrated to you how to create a custom inventory in a windows environment and provide a mechanism for collecting custom inventory from a machine and viewing that information

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