Configuring Software Deployment Settings

In addition to the basic operations of assigning and publishing applications, you can use several other options to specify the details of how software is deployed. In the following sections, you will examine the various options that are available and their effects on the software installation process.

The Software Installation Properties Dialog Box

The most important software deployment settings are contained in the Software Installation Properties dialog box, which you can access by right-clicking the Software Installation item and selecting Properties from the context menu. The following sections describe the features contained on the various tabs of the dialog box.

Managing Package Defaults

On the Deployment tab of the Software Installation Properties dialog box, you'll be able to specify some defaults for any packages that you create within this GPO. Figure 7.10 shows the Deployment options for managing software installation settings.

Figure 7.10 Deployment tab of the Software Installation Properties dialog box

Hyper-V Integration Services (version 6.2.9200.1 ? ×
General Deployment Upgrades Categories Modifications Security
Deployment type
Published
Deployment options
Auto-install this application by file extension activation
Uninstall this application when it falls out of the scope of management
Do not display this package in the Add/Remove Programs control panel
Install this application at logon
Installation user interface options
⊖ Basic
Maximum
Advanced
OK Cancel Apply

The following options are used for managing software installation settings:

Default Package Location This setting specifies the default file system or network location for software installation packages. This is useful if you are already using a specific share on a file server for hosting the necessary installation files.

New Packages These settings specify the default type of package assignment that will be used when you add a new package to either the user or computer settings. If you'll be assigning or publishing multiple packages, you may find it useful to set a default here. Selecting the Advanced option enables Group Policy to display the package's Properties dialog box each time a new package is added (see Figure 7.11).

Figure 7.11 Advanced Deployment dialog box

Advanced Deployment Options					
Advanced deployment options:					
✓ Make this 32-bit X86 application available to Win64 machines.					
Include OLE	class and product information.				
Advanced diagnostic information:					
Product code:	{E675F32B-3508-4658-84EC-2069EE621899}				
Deployment Count: 0					
Script name:	\\Stellacon.com\SysVol\Stellacon.com \Policies \{B9E0F447-3621-4C61-9AFE-796159B32382} \User\Applications \{998B24A3-D041-480D-86AF-0827AA25654A}.aas				
	OK Cancel				

Installation User Interface Options When installing an application, system administrators may or may not want end users to see all of the advanced installation options. If Basic is chosen, the user will only be able to configure the minimal settings (such as the installation location). If Maximum is chosen, all of the available installation options will be displayed. The specific installation options available will depend on the package itself.

Uninstall Applications When They Fall Out of the Scope of Management So far, you have seen how applications can be assigned and published to users or computers. But what happens when effective GPOs change? For example, suppose User A is currently located within the Sales OU. A GPO that assigns the Microsoft Office 2013 suite of applications is linked to the Sales OU. You decide to move User A to the Engineering OU, which has no software deployment settings. Should the application be uninstalled, or should it remain? If the Uninstall This Application When It Falls Out Of The Scope Of Management option is checked, applications will be removed if they are not specifically assigned or published within GPOs. In this example, this means that Office 2013 would be uninstalled for User If this box is left unchecked, however, the application will remain installed.

Managing File Extension Mappings

One of the potential problems associated with using many different file types is that it's difficult to keep track of which applications work with which files. For example, if you received a file with the filename extension .abc, you would have no idea which application you would need to view it.

Fortunately, through software deployment settings, system administrators can specify mappings for specific *filename extensions*. For example, you could specify that whenever users attempt to access a file with the extension .vsd, the operating system should attempt to open the file using Visio diagramming software. If Visio is not installed on the user's machine, the computer can automatically download and install it (assuming that the application has been properly advertised).

This method allows users to have applications automatically installed when they are needed. The following is an example of a sequence of events that might occur:

1. A user receives an email message that contains a PDF (.pdf) file attachment.

2. The computer realizes that the PDF file does not have the appropriate viewing application for this type of file installed. However, it also realizes that a filename extension mapping is available within the Active Directory software deployment settings.

3. The client computer automatically requests the PDF software package from the server, and it uses the Microsoft Windows Installer to install the application automatically.

4. The computer opens the attachment for the user.

Notice that all of these steps were carried out without any further interaction with the user. You can manage filename extension mappings by right-clicking the

Creating Application Categories

In many network environments, the list of supported applications can include hundreds of items. For users who are looking for only one specific program, searching through a list of all of these programs can be difficult and time-consuming.

Fortunately, methods for categorizing the applications are available on your network. You can easily manage the application categories for users and computers by right-clicking the Software Installation item, selecting Properties, and then clicking the Categories tab. Figure 7.12 shows you the categories tab of the Software Installation package. When creating categories, it is a good idea to use category names that are meaningful to users because it will make it easier for them to find the programs they're seeking.

Figure 7.12 The Categories tab of the Software Installation Properties dialog box

Hyper-V Integration Se	rvices (version	6.2.9200.1.	? X			
General Deployment Upg	rades Categories	Modifications	Security			
Select the categories under which this application will be listed in Add/Remove Programs.						
Available categories:		Selected cate	gories:			
	Select >					
	< Remove					
	ОК	Cancel	Apply			

Once the software installation categories have been created, you can view them by clicking the Programs or Programs And Features icon in Control Panel. When you click Add New Programs, you'll see that several options appear in the Category drop-down list. Now when you select the properties for a package, you will be able to assign the application to one or more of the categories.

Removing Programs

As discussed in the beginning of the chapter, an important phase in the software management life cycle is the removal of applications. Fortunately, if you use the GPMC and

the Windows Installer packages, the process is simple. To remove an application, you can right-click the package within the Group Policy settings and select All Tasks \gg Remove (see Figure 7.13).



Figure 7.13 Removing a software package

When choosing to remove a software package from a GPO, you have two options:

Immediately Uninstall The Software From Users And Computers System administrators can choose this option to ensure that an application is no longer available to users who are affected by the GPO. When this option is selected, the program will be uninstalled automatically from users and/or computers that have the package. This option might be useful, for example, if the license for a certain application has expired or if a program is no longer on the approved applications list.

Allow Users To Continue To Use The Software, But Prevent New Installations This option prevents users from making new installations of a package, but it does not remove

the software if it has already been installed for users. This is a good option if the company has run out of additional licenses for the software, but the existing licenses are still valid.

Figure 7.14 shows these two removal options.

Figure 7.14 Software removal options

Remove Software	X			
Select removal method:				
 Immediately uninstall the software from users and computers 				
 Allow users to continue to use the software, but prevent new installations 				
OK Cancel				

If you no longer require the ability to install or repair an application, you can delete it from your software distribution share point by deleting the appropriate Windows Installer package files. This will free up additional disk space for newer applications.

Microsoft Windows Installer Settings

Several options influence the behavior of the Windows Installer; you can set them within a GPO. You can access these options by navigating to User Configuration >> Administrative Templates >> Windows Components >> Windows Installer (see Figure 7.15). The options are as follows:

Figure 7.15 GPO settings for Windows Installer



Always Install With Elevated Privileges This policy allows users to install applications that require elevated privileges. For example, if a user does not have the permissions necessary to modify the registry but the installation program must make registry changes, this policy will allow the process to succeed.

Prevent Removable Media Source For Any Install This option disallows the installation of software using removable media (such as CD-ROM or DVD-ROM). It is useful for ensuring that users install only approved applications.

Prohibit Rollback When this option is enabled, the Windows Installer does not store the system state information that is required to roll back the installation of an application. System administrators may choose this option to reduce the amount of temporary disk space required during installation and to increase the performance of the installation operation. However, the drawback is that the system cannot roll back to its original state if the installation fails and the application needs to be removed.

Specify the Order In Which Windows Installer Searches This setting specifies the order

in which the Windows Installer will search for installation files. The options include n (for network shares), m (for searching removal media), and u (for searching the Internet for installation files).

With these options, system administrators can control how the Windows Installer operates for specific users who are affected by the GPO.