

Intel® vPro™ Technology Use Case Reference Design

Automatic Overnight Patching with Altiris*

Revision 1.2

July, 2010

Document Number: 1062b

Revision History

Revision	Revision History	Date
1.0	Initial release.	April, 2010
1.1	Changed title to better reflect process.	April, 2010
1.2	Changed title per Marketing.	July, 2010

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1 Preface

With the release of Intel® vPro™ technology, companies have adopted the practice of using a third-party management console to manage their machines that have Intel vPro technology. To help customers get started with using their third-party consoles with Intel vPro technology, this Use Case Reference Design document provides information on performing the basic functions of creating a package, turning the remotely managed system on, deploying the package, and then rebooting the remotely managed system.

1.1 Intended Audience

This document is intended for Information Technology (IT) professionals dealing with Altiris* 7.0 Management Console. These IT professionals should have access to the full functionality of their company's third-party management console. Readers should have a good working familiarity with Intel vPro Technology, and including configuration and use of the Intel AMT platform for out-of-band management. Readers should also be familiar with the basics of IT infrastructure, especially networked environments and their component technologies.

2 Introduction

This Use Case Reference Design provides instructions on using Altiris to wake, patch, and reboot a remotely managed Intel vPro technology based system by doing the following:

- create an update package in Altiris
- turn on the remotely managed system
- push the update package to the remotely managed system
- reboot the remotely managed system



NOTE

Although this Use Case Reference Design document describes the use of Altiris, you may use any third-party management console to perform the same functions (although some steps may need to be altered to work with another management console).

The process described in this document is intended to work with any provisioned Intel vPro technology based client already in Altiris.

2.1 Example Used Throughout This Document

The example referenced throughout this document uses Altiris as the third-party management console with an already provisioned client. The environment illustrated in the document example has the following requirements:

1. Access to the third-party console
2. Access to create a package
3. Client Machine must be already provisioned by third-party console
4. Access to deploy a package
5. Access to the Intel AMT functions to turn on and reboot system

Other types of deployments, management consoles, Intel AMT states, etc. are beyond the scope of this document. This document will not address all features of the third-party management console but rather will focus only on base steps of creating and deploying a package.

2.2 Use Case Process Overview

In order to begin creation of the package, first we must have access to the third-party console and have verified the machine is already provisioned. Next we will create a package, turn the system on, deploy the package, and reboot the machine.

The following table provides a brief overview of this use case's implementation process.

Phase description	The IT Professional creates a package, turns the client system on, deploys it, and then reboots the machine.
Phase prerequisites	<ul style="list-style-type: none"> Managed Clients must already be set up and configured using Altiris. http://communities.intel.com/community/openportit/vproexpert/ssp/blog/tags/altiris http://www.symantec.com/connect/articles/symantec-software-management-70-best-practices http://www.altiris.com/Support/Documentation.aspx#sms IT professional must have full access to the third-party management console IT professional must have accounts and passwords for AMT functions on the client
Phase flow	<ol style="list-style-type: none"> 1. Log into Altiris console 2. Create a package 3. Locate the remote managed system in Altiris 4. Turn on remote managed system if necessary 5. Deploy package 6. Reboot remote managed system 7. Turn remote managed system off if necessary
Phase outcome	Package is deployed successfully to remote managed system

3 Step by Step Process

This chapter and its subsections describe the creation of a package, deployment of that package, and rebooting of the client machine after it is done.



NOTES

The IT professional must have access to the console and have permissions to create, deploy, and turn on and off the client machine.

The procedure in this section assumes you have the Software Management Solution installed as part of your Altiris installation. If you do not have the Software Management Solution portion of Altiris, you can add a package using the command line. See Appendix A: Alternative Method If No Software Management Solution on page 15 for details.

Also, steps for obtaining and installing the Software Management Solution are provided in Appendix B: Installing and Configuring the Software Management Solution on page 16.

3.1 Create a Package in Altiris* 7.0

Perform the steps to create and deploy a package in Altiris 7.0.



NOTE

The document shows basic steps for deploying Adobe Acrobat. These steps are applicable to other software packages.

3.1.1 Obtain Adobe Install File and Determine the Command Line to Install

From www.adobe.com download the full installer for Adobe Acrobat Reader. At the time of this writing the link is

http://ardownload.adobe.com/pub/adobe/reader/win/9.x/9.3/enu/AdbeRdr930_en_US.exe

Once install package is obtained, command line parameters must be determined to perform a silent install. Usually this can be done by running the installer executable from a command line with the `/?` argument. This works for Adobe Acrobat Reader. In this case the command line we want is `AdbeRdr930_en_US.exe /sPB /rs`.



NOTE

Write down the command line parameter information. It will be used later in this procedure.

3.1.2 Copy Adobe Install File to a Network Share for Altiris to Use

Copy the Adobe Acrobat Reader Install file to a network share. In the document example, the file was copied to the following network share:

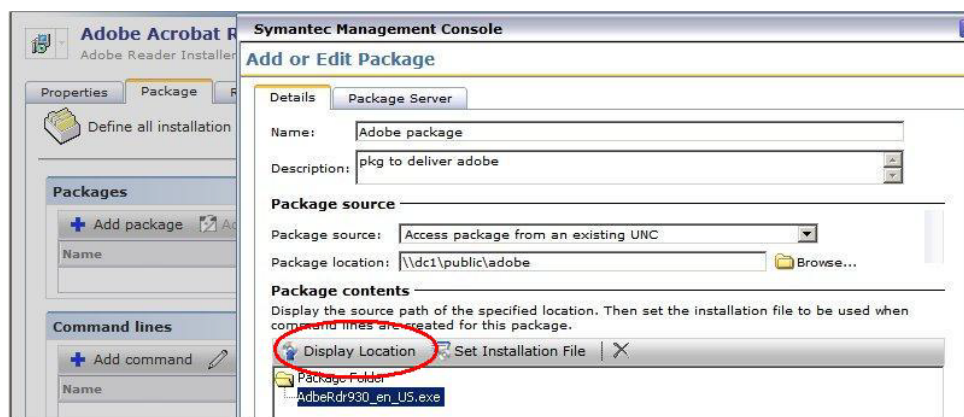
<\\dc1\public\adobe>.

3.1.3 Create a Software Package in the Altiris Software Catalog

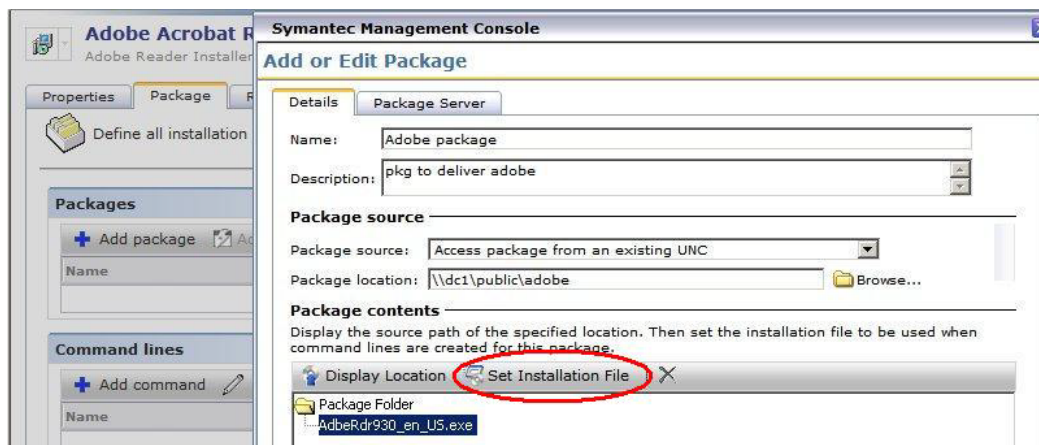
Once you have obtained the software installation file and placed it on network share where Altiris can find it, you need to create a software package to be deployed in the Altiris Software Catalog.

Follow the steps below:

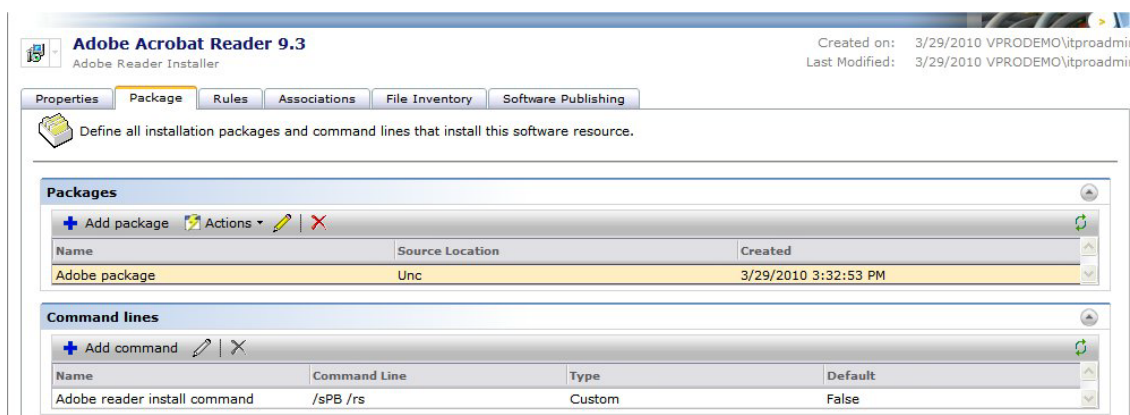
1. On the Altiris Management Console menu bar, click **Manage -> Software**.
2. In the left hand pane, expand **Software -> Software Catalog -> Installed Software**.
3. In the right hand pane, click **Add -> Software Release**.
4. Edit the **Title** to **Adobe Acrobat Reader 9.x**.
5. Enter the **Description** as **Acrobat Reader Installer**.
6. On the Properties Tab, enter **9.3** for **Version**.
7. Enter **Adobe Systems** for **Company**.
8. Enter **Acrobat Reader** for **Software Product**.
9. On the Package Tab, click **Add Package**
10. On the Details Tab, enter Name and Description of the Package (in the document example the name is **Adobe package**).
11. Under the Package Source, choose your location of your files. We have it on the network share <\\dc1\public\adobe> so we will choose **Access package from an existing UNC** and click **Display location** under **Package Contents** as shown below.



12. Select the Adobe .exe file, then click **Set Installation File**, as shown below.



13. Click **OK** at bottom right.
14. In the Command Lines section, click **Add command**.
15. Enter a **Name** and **Description**.
16. Select **Command Line requires a package**.
17. Select the package you added above (in the example, this is **Adobe package**) from the drop down menu.
18. For **Installation file type** select **EXE Software Installation File** from the drop down menu.
19. Select **Custom** for the **Command type**.
20. In the **Command Line** field, enter the appropriate command line and switches. In this example, we are using **/sPB /rs**. Do NOT click **Edit**.
21. Enter **0** for **Success codes** (leave **Failure codes** blank).
22. Click **OK**. Your screen should look similar to the following:



**NOTE**

There are many other settings can be used for your software package, there are Rules, Associations, and File Inventory. At this time we will not be using them in our test.

23. Click the **Software Publishing** tab.
24. Select **Publish to Software Portal**.
25. Enter a software name and description (in the example this is **Adobe Acrobat**).
26. Click **Add User**.
27. Add the desired user or a group of users (specified user or users must have domain admin privileges). In the document example, we add our domain administrative user, vprodemo/amtadmins, by selecting **Groups**, then **Domain** and entering **VPRODEMO** and the first letter (**a**) and clicking **Find**. We then select **vprodemo/amtadmins** and click **OK**.
28. Select **Approved - pre-approve this software for immediate delivery**.
29. Select **Recommended – appears by default for this user**.
30. Click **Save Changes**.

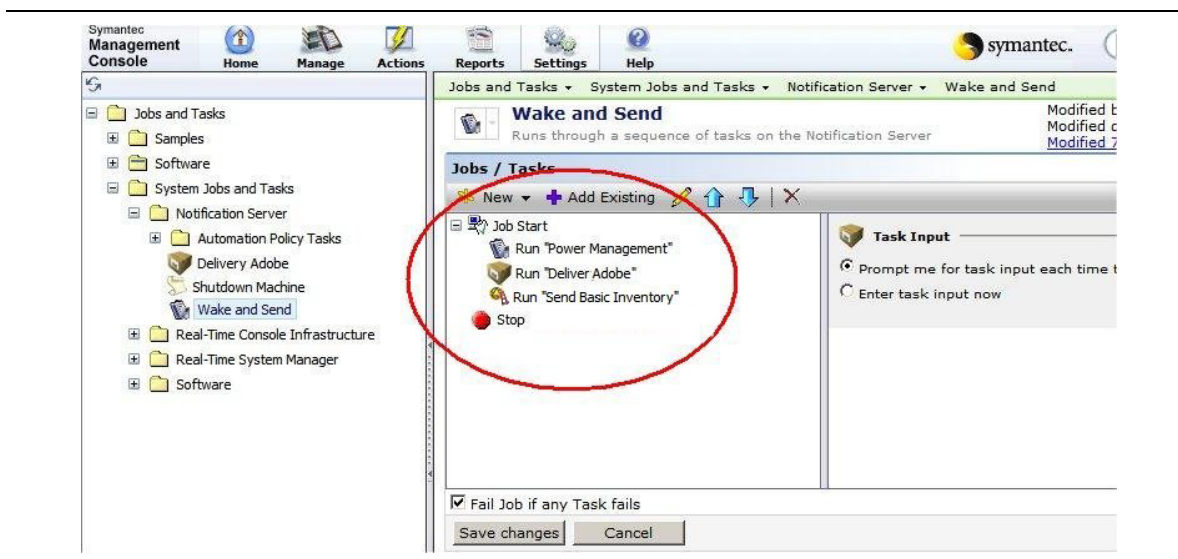
3.2 Create and Deliver a Software Deployment Task in Altiris Console

In this section you will create a new software deployment task in Altiris and then schedule that new task for delivery.

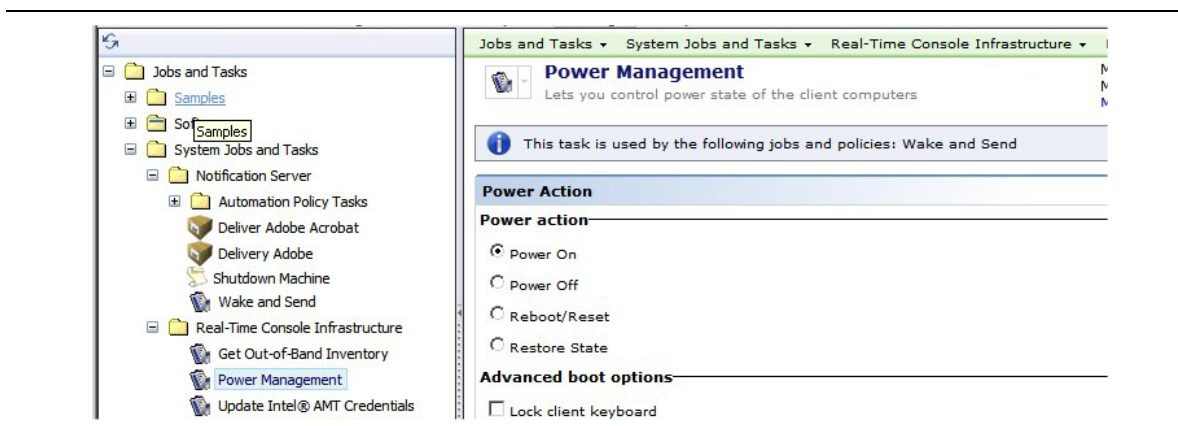
Follow the steps below:

1. On the Altiris Management Console menu bar, click **Manage > Jobs and Tasks**, then expand **System Jobs and Tasks > Notification Server** and select **Wake and Send**.
2. Click **New > Task**.
3. In the Create New Task screen, under **Software**, select **Package Delivery**.
4. In the right hand pane, change the title from **Package Delivery** to **Deliver Adobe**.
5. For **Package**, select **Adobe Acrobat Reader 9.3**.
6. For **Command line**, select **Adobe Acrobat Reader 9.3**.
7. Click **OK**.

8. Under the Jobs/Tasks section in the right-hand pane under Job Start, you should now see Run Power Management, Run Deliver Adobe, and Run Send Basic Inventory, as shown below.

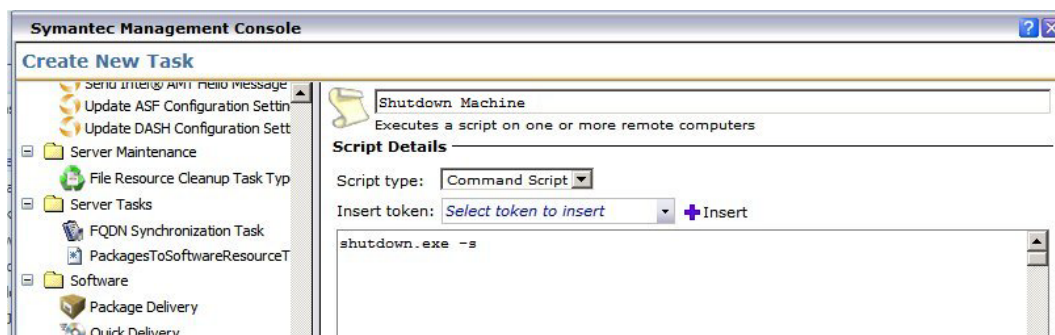


9. Click **Save Changes**.
10. On the menu bar, click **Manage > Jobs and Tasks**, then expand **Real-Time Console Infrastructure** and select **Power Management**.
11. Ensure **Power On** is selected. The information bar should display "This task is used by the following jobs and policies: Wake and Send" as shown below.

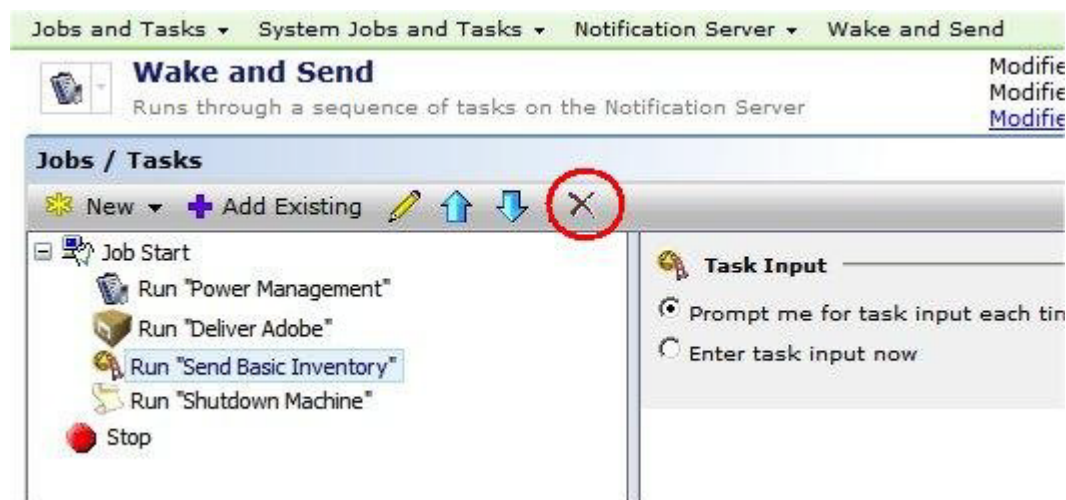


12. If you modified this screen, click **Save Changes**.
13. In the left-hand pane, under **Jobs and Tasks**, expand **Software**.
14. Right-click on **Software** and select **New > Task** from the menu.
15. In the left-hand pane of the Create New Task screen, scroll down to the bottom of the list and click **Run Script**.

16. Change the title to **Shutdown Machine**.
17. Leave **Script type** as **Command Script** and leave **Insert token** as default.
18. In the text field, enter the text of the script as **shutdown.exe -s** as shown below.



19. Click **OK** at lower right.
20. In the left-hand pane, under System Jobs and Tasks, expand Notification Server and click Wake and Send. Your Wake and Send job should list the following:
 - **Job Start**
 - Run "Power Management" to power on machine
 - Run "Deliver Adobe" to run Adobe 9.3
 - Run "Send Basic Inventory"
 - Run "Shutdown Machine"
 - **Stop**
- Note:** this will only run if a machine is off.
21. Select **Run "Send Basic Inventory"** and click the **X** icon (see figure below) to remove this item since it is not needed.



22. Click **Save Changes**.
23. Click on **Run "Deliver Adobe Acrobat"**.
24. In the right-hand pane, select **Enter task input now**.
25. If you are deploying to a specific machine, select **use a set value** for the field **For Selected Devices**.
26. In the **Quick add** field, select the desired computer from the drop down menu.
27. Click **Save Changes**.
28. In the **Task Status** section, click **New Schedule**.
29. Schedule the desired date and time or click **Now** to run immediately.
30. If you are deploying to a specific machine, select **Quick add** to specify the machine name.
31. Click **Schedule**.

Now your task will run on the schedule you just set.

4 Appendix A: Alternative Method If No Software Management Solution

If you do not have the Software Management Solution included as part of your Altiris installation, you can use a command line script to deploy a package to your managed Intel vPro technology based client systems. This appendix will show you how to create a task as a script and include the wake, patch, and shutdown commands.

Perform the following steps:

1. In the Altiris Management Console, click **Manage -> Jobs and Tasks** from the menu bar, then expand **Jobs and Tasks -> System Job and Tasks -> Notification Server** and select **Automation Policy Tasks**.
2. Select **Wake and Send**.
3. Click **New Task**.
4. Select **Run Script** under **Software**.
5. Change the **Title** from **Run Script** to **Install Adobe Acrobat Reader**.
6. Leave the **Script Type** as **Command Script**.
7. In the text box enter the following:
 - `net use U: /del`
 - `net use u: \\server\shared`
 - ***Note:** this is the server you created and copied the source files into above.*
 - `U:`
 - `cd U:\adobeacrobat93`
 - ***Note:** to ensure you have the correct path.*
 - `AdbeRdr930_en_US.exe /sPB /rs /rps`
 - `shutdown.exe -s -f`
8. Click **OK**.
9. Click **Save Changes**.
10. After the page refreshes, click **Quick Run** in the **Task Status**, then select the managed client system to push to.
11. Click **Run**.

5 Appendix B: Installing and Configuring the Software Management Solution

If you do not have the Software Management Solution as part of your current Altiris installation, but would like to install it so that you can follow the instructions in the main body of this document, this section provides instructions on how to install and configure the Software Management Solution.

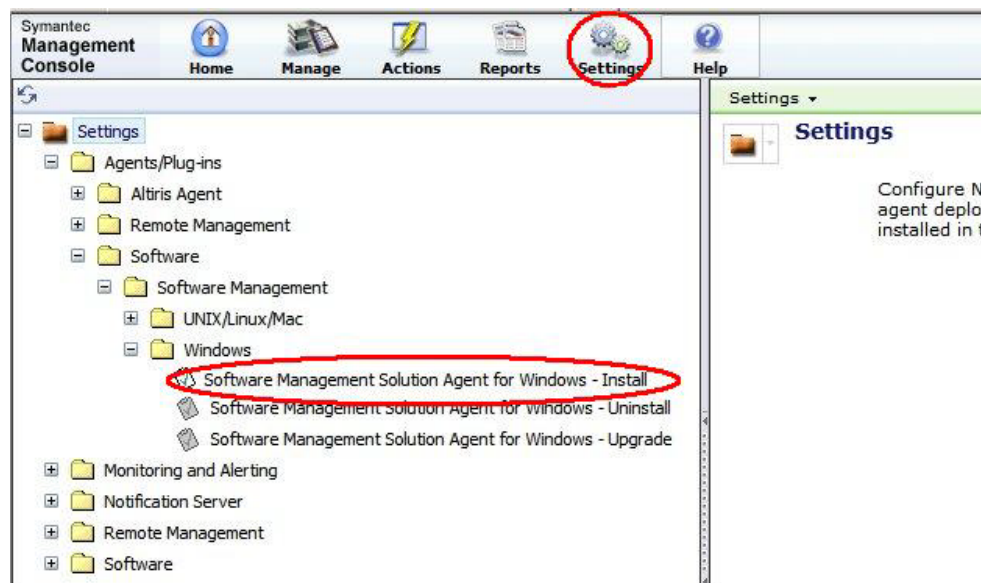
5.1 Install the Software Management Solution Agent for Windows

1. On the Altiris Management Console menu bar, click **Manage > All Resources**, then expand **All Resources** and select **Software Command Line**.
2. In the **Search** box, enter **Software Portal**.
3. Double-click the entry labeled **Install with Software Portal – No UI**.
4. In the left hand pane, under **Right-click Actions**, click **Edit Command Line**.

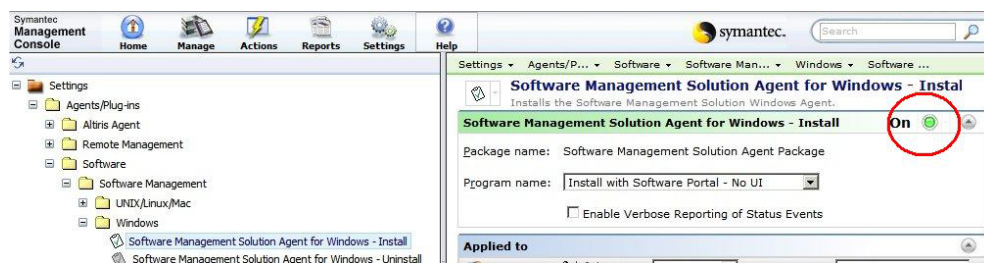
Note: *At this point you can just edit your settings for deployment. This is for your agent and not the software application you are pushing out.*

5. Enter the Name and Description. By default, Name = Install with Software Portal – No UI and Description = <blank>.
6. Ensure the following default values:
 - **Command line requires a package** is selected.
 - **Package** = **Software Management Solution Agent Package**.
 - **Installation file type** = **MSI Software Installation File**.
 - **Command Type** = **Install**.
 - **Command line** contains the command line text.
7. Click **OK** to close the pop-up window.

8. On the Altiris Management Console menu bar, click **Settings > All Settings** and expand **Agents and Plug-ins > Software > Software Management > Windows** then select **Software Management Solution Agent for Windows – Install**, as shown below.



9. Leave the **Program name** as **Install with Software Portal – no UI**.
10. Ensure that the **Applied to** field shows **All Windows Computer without Software Management Solution Agent Installed**.
11. Leave the **Extra Schedule** options as their defaults below:
 - **Run once ASAP**
 - **User can run**
12. Click **Save Changes**.
13. Ensure that the button on the right displays green with **On** and NOT red with **Off**.



5.2 Setting the Software Management Paths

1. In the left-hand pane, expand **Software > Software Catalog and Software Library Settings** and click **Software Library Location**.
2. Ensure that you have entered the UNC path to your Software Library (i.e., where your source software is stored) and click **Validate**.
3. Click **Save Changes**.
4. A information note should be displayed stating "The Software Library configuration settings have been saved."

5.3 Ensure JAVA Runtime Environment is Installed

Follow the steps below to ensure that you have installed the JAVA Runtime Environment as it will be needed for the Software Library.

1. Go to www.java.com to download the JAVA runtime environment download package.
2. Copy the download package over to your Altiris Server.
3. Execute the download package file (in our example, this is **jre-6u18-windows-i586-s.exe**).
4. When the installer window displays, click **Install**.
5. When the installation completes, click **Close**.

5.4 Ensure Software Management Plug-In is Present and Configured

The Software Management Framework Plug-In is installed by default with the Altiris Agent. However, you should ensure it is actually installed and configured by doing the following:

1. Check for the Software Management Solution Plug-In by clicking **Settings -> All Settings** and expand **Software**. If you see **Software Portal Settings** then the plug-in is installed. If **Software Portal Settings** is not present, then the plug-in is not installed.
2. To configure the plug-in once it is installed, click **Settings -> All Settings** and expand **Software**, then select **Software Portal Settings**.
3. Set the **Maximum Number of Open Requests** to a reasonable number. The document example is set to the default value, **3**.
4. Click **Save Changes**.