

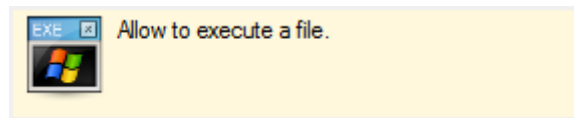


Custom Updates

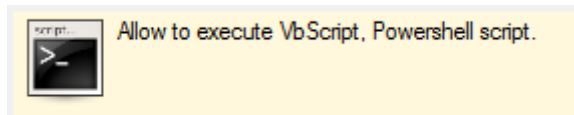
Custom Updates are updates where you can do actions before and/or after the update itself.

These actions are:

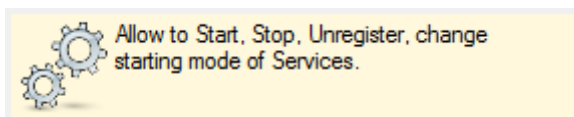
- Execute a file (*.Exe, *.Msi...):



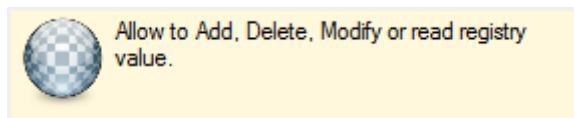
- Run a Script (*.Vbs, *.Ps1):



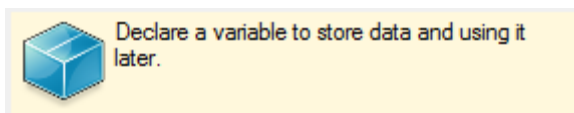
- Work with Services:



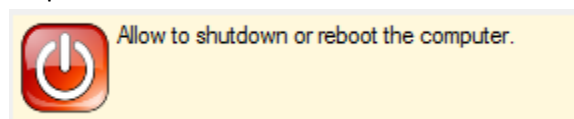
- Work with Registry:



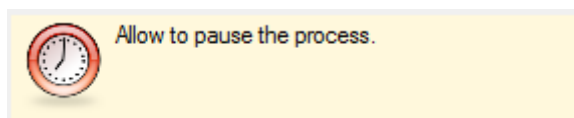
- Declare a Variable:



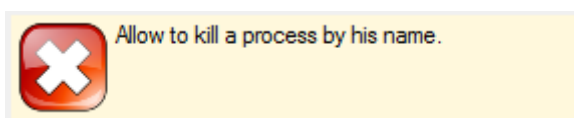
- Shutdown or Reboot computer:



- Wait x seconds:

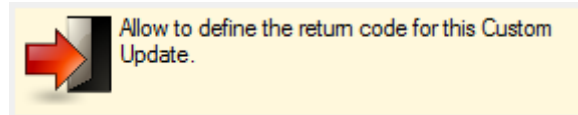


- Kill a process:





- Return Code:



These Actions are simple. For more complex actions, you should write a VbScript and run it.

I) **Detail view of Actions :**

a. **Execute a file :**

Allow to execute a file.

Path to the File :

Parameters (Optional) :

☐ Kill process if it run more than : minutes.

Store Return Code to :

Ok

This action is usually use to run the update itself (generally an EXE or a MSI).

Fill the "Path to the File" field. Don't use quote.

Path to the File :

If you need to add some Parameters, put it in the next field. If some parameters have space in it, use quote like this:

Parameters (Optional) :

If you don't want this EXE to run too much time, you can set a maximum time.

If the EXE or MSI file returns a "Return Code" at the end, you can store it in a Variable.

You have to define this variable before.

b. **Run a script :**

This action is useful to run complex action that can't be performed with these simple actions.



script Allow to execute VbScript, Powershell script.

Script Engine

☒ VbScript

☐ Powershell

Filename :

Arguments :

Ok

Choose between VbScript or Powershell script. Indicate the path to the script and eventually Arguments.

c. Work with Services :

With action, you will be able to Start, Stop or Unregister service. Or change the starting mode of a service.

Allow to Start, Stop, Unregister, change starting mode of Services.

Action :

Service Name :

Path to EXE :

Startup Mode :

Starting Account :

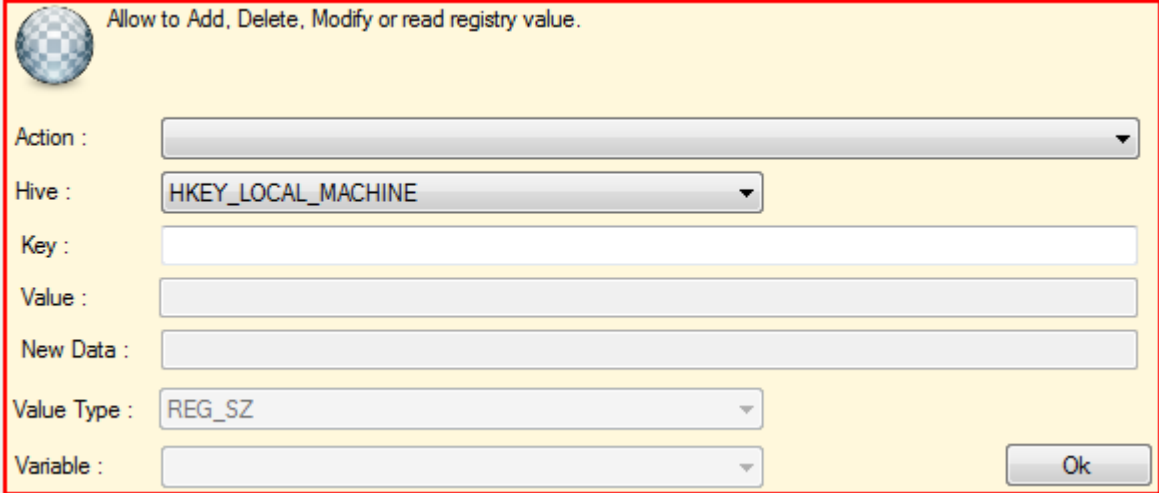
Login :

Password :

Ok

d. Work with Registry :

Here, you will be able Add, Delete, Modify or Read a registry value.

A dialog box titled "Allow to Add, Delete, Modify or read registry value." with a globe icon. It contains several input fields: "Action" (a dropdown menu), "Hive" (a dropdown menu with "HKEY_LOCAL_MACHINE" selected), "Key" (a text box), "Value" (a text box), "New Data" (a text box), "Value Type" (a dropdown menu with "REG_SZ" selected), and "Variable" (a dropdown menu). An "Ok" button is located at the bottom right.

Allow to Add, Delete, Modify or read registry value.

Action :

Hive :

Key :

Value :

New Data :

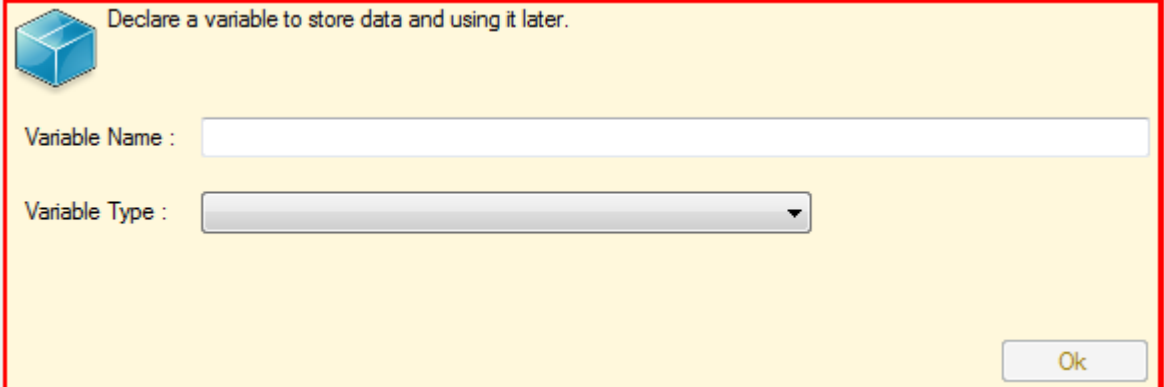
Value Type :

Variable :

Ok

e. Declare a Variable :

Variable are useful to store "Return code" of an Exe or MSI, and using it later with the "Exit" action.

A dialog box titled "Declare a variable to store data and using it later." with a blue cube icon. It contains two input fields: "Variable Name" (a text box) and "Variable Type" (a dropdown menu). An "Ok" button is located at the bottom right.

Declare a variable to store data and using it later.

Variable Name :

Variable Type :

Ok

f. Shutdown or Reboot computer :

Allow to shut down or reboot the computer.



Allow to shutdown or reboot the computer.

Action :

Ok

- g. Wait x Seconds :
Allow to wait for x Seconds.

Allow to pause the process.

Seconds to wait :

Ok

- h. Kill a process :
Allow to kill a process. If the process is start many time, all instance of this process will be kill.

Allow to kill a process by his name.

Process Name to kill :

Ok



i. Return Code:

Usually, the last action. Allow to end the process by sending a Return code for this custom update.

You can return always the same code, or return a code from a variable previously filled.

Allow to define the return code for this Custom Update.

Method

☐ Static : 0

☐ Variable :

Ok

II) **Making a custom update :**

Let's try it. We will publish an update for Adobe Reader XI and resetting a registry Data.

Start Wsus Package Publisher, connect to the Wsus Server. Right-click on the "Adobe Reader" Product and choose "Create a Custom Update..."

Title	Status	Arrival Date	Creation Date
Adobe Reader 11.0.01	Approved (Superseded)	09/01/2013 21:08:24	09/01/2013 21:08:04
Adobe Reader XI	Approved	27/02/2013 20:30:27	27/02/2013 20:28:48
Adobe Reader 11.0.02	Approved (Superseded)	17/03/2013 10:24:09	17/03/2013 10:24:06
Adobe Reader 11.0.03	Approved	22/05/2013 19:05:18	14/05/2013 19:38:36

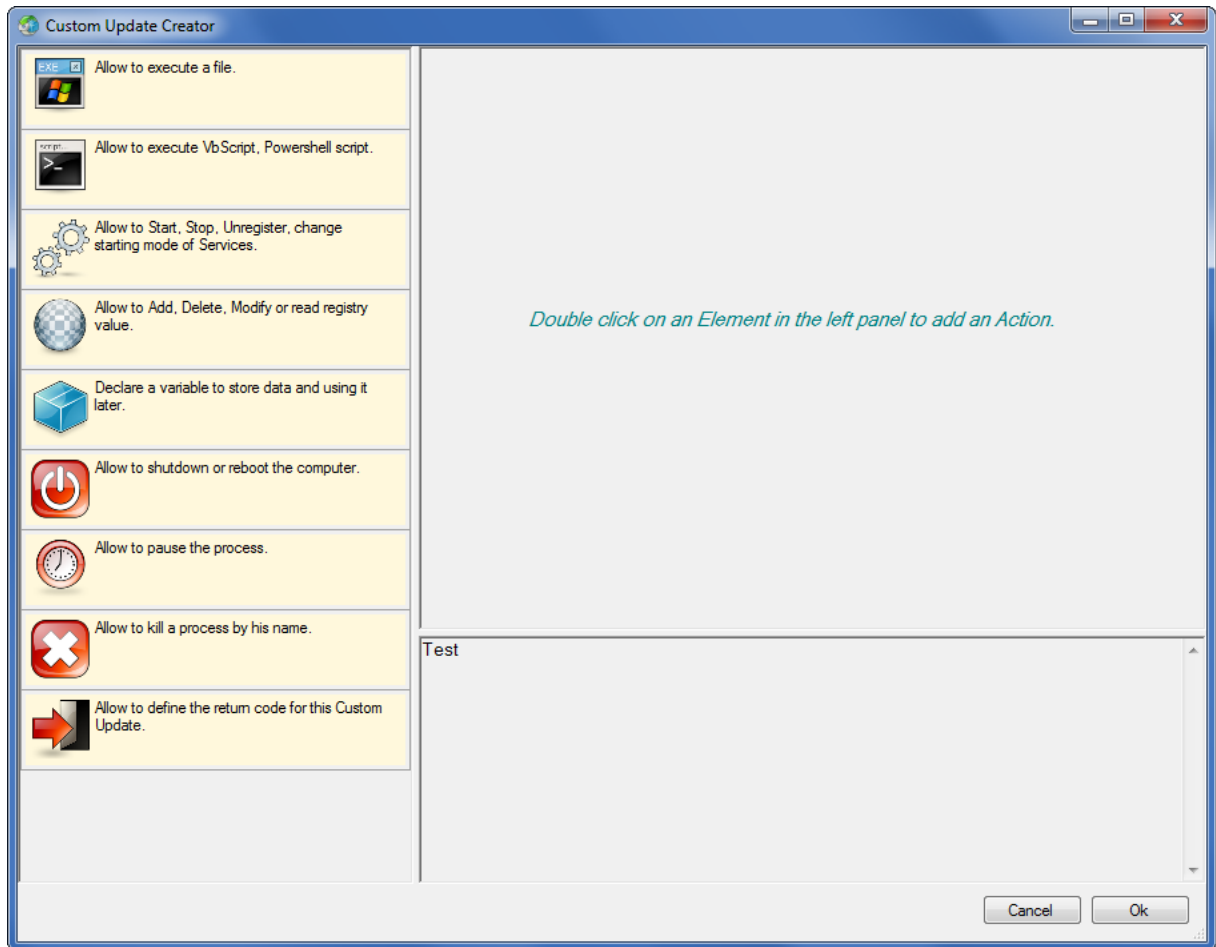
Group : Postes de Travail Filter : 7 Selected (All, Needed but not installed, Installed)

Computers

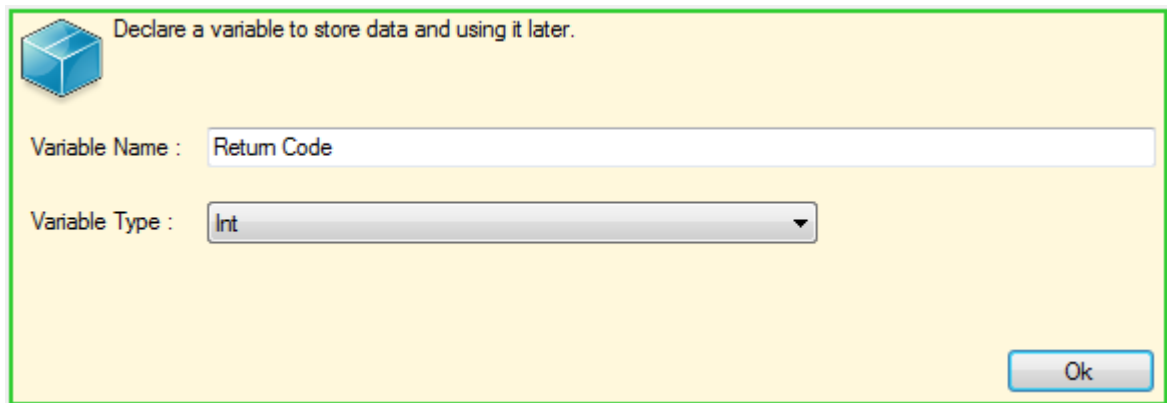
Computers	Status	Approbation	Last Contact	Last Report	OnLine
srv01	Installed	Install	26/05/2013 08:34:44	26/05/2013 08:43:58	Yes
portable	Downloaded	Install	22/05/2013 20:07:23	22/05/2013 20:07:26	Yes
win7	Unknown	Install	08/04/2013 14:36:58	08/04/2013 14:40:33	No
winxp	Unknown	Install	13/05/2013 05:39:49	13/05/2013 05:44:52	No



The Custom Update Wizard shows up.



Double-click on “Declare a variable...”. Give a name to this Variable and choose “Variable Type” = “Int”. This variable will be use to store the return code of the MSI that we will launch later.



Add an “Execute file” action.

In the “Path to the File” field, put the name of the MSI : AdbeRdrUpd11003.msp

You do not have to give the full path because we will provide the MSI file with the update, so the MSI file will be in the same directory.

In the parameters, we need to indicate some switch to make this update silent :



Allow to execute a file.

Path to the File : %windir%\System32\msiexec.exe

Parameters (Optional) : /update AdbeRdrUpd11003.msp /norestart /qn

☒ Kill process if it run more than : 10 minutes.

Store Return Code to : Return Code

Ok

This shouldn't take more than 10 minutes to update client computers, so we check the checkbox to kill the process if it runs more than 10 minutes.

In the combobox, choose the variable previously define. So that, the code return by the MSI will be store into this variable.

Then Add a Registry Element:

Allow to Add, Delete, Modify or read registry value.

Action : Modify

Hive : HKEY_LOCAL_MACHINE

Key : Allow to Add, Delete, Modify or read registry value.

Value : iProtectedView

New Data : 0

Value Type : REG_SZ

Variable :

Ok

Setting it like above. This allows to set to zero the iProtectedView Value. This will deactivate the ProtectedView feature of Adobe Reader.

Then Add a "Return Code" Element:

Allow to define the return code for this Custom Update.

Method

☐ Static : 0

☒ Variable : Return Code

Ok



And choose the variable you have defined above.

Click “Ok” to close the wizard and return in Wsus Package Publisher.

The “Update Creation Wizard” appears:

Update Creation Wizard

Indicate here the file or files to create the update. Fields in bold are required.

Update File (Required): Select a msi, msp or exe file corresponding to the binary update.

Additional files (Optional): Select a file or files needed for the application of the update. For example configuration files or answer file.

Click 'Next' to proceed to the next step.

Update File : Z:\Visual Studio 2010\Projects\Wsus Package Publisher\Wsus Package Publisher\bin\Any CPU\Release\CustomUpdateEngine.exe
*Select Update File like *.msi, *.msp or *.exe*

Additional Files : C:\Users\Courtel\AppData\Local\Temp\Wsus Package Publisher\384e0424-eadf-47c3-b76d-93e5939879d9.xml

Optional : Select Additional Files like configuration files.

Buttons: Browse..., Add Files..., Add Folders..., Remove Item, Cancel, Next

The “Update File” is pre-filled with the CustomeUpdateEngine.Exe, which is the engine who will run customs actions. In “Additional Files’ you can see the XML file which contains actions setting.

Add the MSP file for the Adobe update.

Additional Files :

- C:\Users\Courtel\AppData\Local\Temp\Wsus Package Publisher\384e0424-eadf-47c3-b76d-93e5939879d9.xml
- C:\Users\Courtel\Downloads\WPP\Adobe Reader\AdbeRdrUpd11003.msp

Buttons: Add Files..., Add Folders...

Don’t forget it. Or else the “Executable” action won’t run it.

Click on “Next” button.

Fill necessary fields. Don’t touch the “CommandLine”. It contains the parameter for CustomUpdateEngine.exe

Command Line : &actionfile=384e0424-eadf-47c3-b76d-93e5939879d9.xml

Optional : Provide Command Line like /q, /s, /silent...

Buttons: Previous, Cancel, Next



In the “IsInstalled” rule Page, create a rule based on the File Version:

A screenshot of the 'IsInstalled' rule configuration dialog box. The dialog has a title bar with standard Windows window controls. The main area contains a text box with the following text: 'Compares the specified file's version to the specified four-part version string. If Csidl is specified, the Client will call Win32 SHGetFolderPath to retrieve the CSIDL and prepend it to Path to form the actual path to the file. Standard folder (Optional) : List of predefined file whose location may vary from one OS to another. Path to the file (Required) : Full path to the file search (260 characters max.). Version (Required) : File Version.' Below this text box are several fields: a checkbox for 'Wellknown Directory' with a dropdown menu, a 'File Path' field containing 'C:\Program Files\Adobe\Reader 11.0\Reader\AcroRd32.exe', a checkbox for 'Reverse Rule', a 'Comparison' dropdown menu set to 'Equal To', and a 'File Version' field with four spin boxes containing the values 11, 0, 3, and 37. At the bottom right are 'Cancel' and 'Ok' buttons.

Compares the specified file's version to the specified four-part version string. If Csidl is specified, the Client will call Win32 SHGetFolderPath to retrieve the CSIDL and prepend it to Path to form the actual path to the file.

Standard folder (Optional) : List of predefined file whose location may vary from one OS to another.
Path to the file (Required) : Full path to the file search (260 characters max.).
Version (Required) : File Version.

☐ Wellknown Directory: [dropdown]

File Path : C:\Program Files\Adobe\Reader 11.0\Reader\AcroRd32.exe

☐ Reverse Rule

Comparison : Equal To

File Version : 11 0 3 37

Cancel Ok



In the “IsInstallable” rule Page, create 3 rules based on the File Version:

The screenshot shows the 'Update Creation Wizard' window. The title bar says 'Update Creation Wizard'. The main text area contains instructions: 'Indicate here the rule or rules that allow clients computer to determine if the update is installable.' Below this is a list of rule types: '- Msi Product installed: Checks that the specified product is installed. Only the ProductCode is required, but the other attributes will be checked if they are supplied.', '- Processor Architecture: Determines whether the processor is x86, x64 or IA64.', '- Windows Version : Compare's the operating system's version information to specified values. Implemented using 'Win32 VerifyVersionInfo()'. The Comparison attribute applies to MajorVersion, MinorVersion, BuildNumber, ServicePackMajor, and ServicePack Minor. If Comparison is omitted, it is assumed to be set to EqualTo.', '- Windows Language : Returns true if the operating system is localized to the specified language. Always returns false if the Windows Multilanguage User Interface (MUI) is installed.', '- File Exists : Checks for the existence of the specified file. If Csidl is specified, the Client will call 'Win32 SHGetFolderPath' to retrieve the CSIDL and prepend it to Path to form the actual path to the file. If other optional metadata are specified, such as Version or Size, they must all match for this applicability rule to return true.'

Below the list, there is a 'Rule type:' dropdown menu set to 'Msi Product Installed'. To the right of the dropdown are buttons: 'Add Rule...', 'Add a "AND" Group', 'Add a "OR" Group', 'Edit', and 'Delete'. Below these buttons is a green bar labeled '<Start OR>'. Below this bar are three rule entries, each in a separate box:

- <bar: FileVersion Path="C:\Program Files\Adobe\Reader 11.0\Reader\AcroRd32.exe" Comparison="EqualTo" Version="11.0.1.36"/>
- <bar: FileVersion Path="C:\Program Files\Adobe\Reader 11.0\Reader\AcroRd32.exe" Comparison="EqualTo" Version="11.0.2.0"/>
- <bar: FileVersion Path="C:\Program Files\Adobe\Reader 11.0\Reader\AcroRd32.exe" Comparison="EqualTo" Version="11.0.0.379"/>

Below the rule entries is a green bar labeled '<End OR>'. At the bottom of the window, there is a checkbox labeled 'Delete Rules at Package Level' which is unchecked. To the right of the checkbox are buttons: 'Save Rules...', 'Load Rules...', 'Previous', 'Cancel', and 'Revise...'.

Adobe Reader 11.0.3 can be installed over Adobe Reader XI, 11.0.1 and 11.0.2.

Publish the update. Check that it apply to computers that need it, and don't apply to computer that don't need it.

If you are satisfied with your test, you can deploy it on test group to see if installation goes right.

Leave comments or questions to: <https://wsuspackagepublisher.codeplex.com/discussions>