

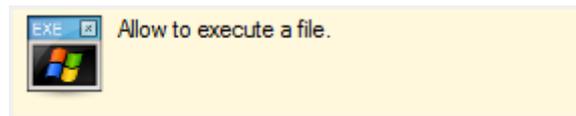


Custom Updates

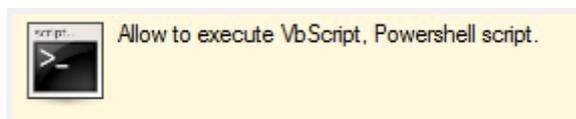
Custom Updates are updates where you can do actions before and/or after the update itself.

These actions are:

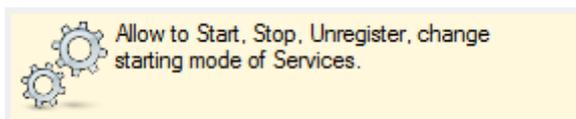
- Execute a file (*.Exe, *.Msi...):



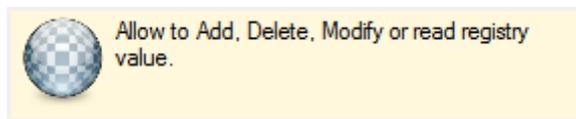
- Run a Script (*.Vbs, *.Ps1):



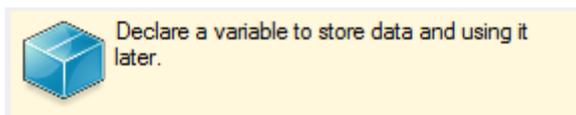
- Work with Services:



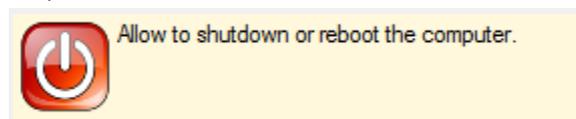
- Work with Registry:



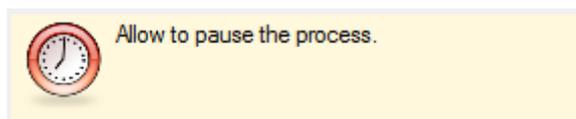
- Declare a Variable:



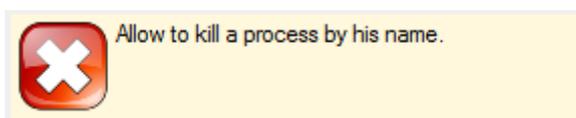
- Shutdown or Reboot computer:



- Wait x seconds:

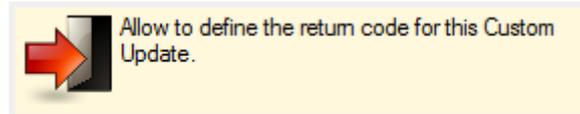


- Kill a process:





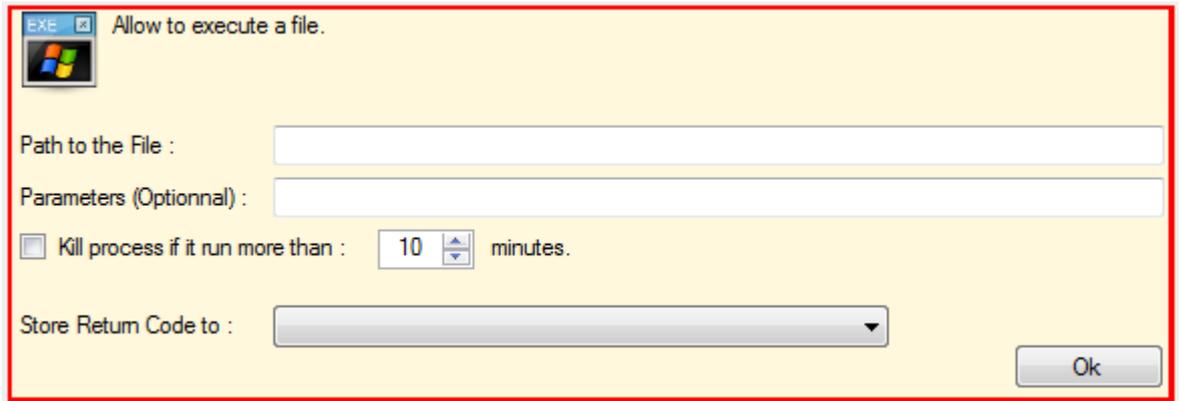
- Return Code:



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

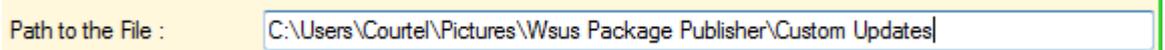
I) Detail view of Actions :

a. Execute a file :

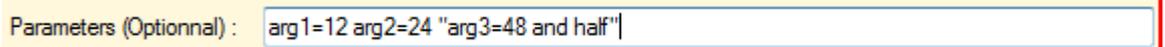


This action is usually use to run the update itself (generally an EXE or a MSI).

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



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



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.



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

Action :

Hive :

Key :

Value :

New Data :

Value Type :

Variable :

e. Declare a Variable :

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

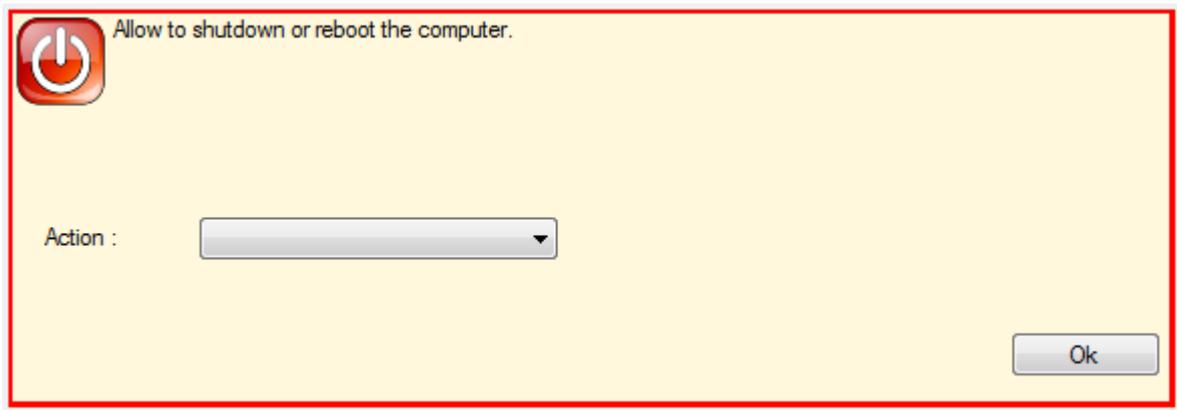
 Declare a variable to store data and using it later.

Variable Name :

Variable Type :

f. Shutdown or Reboot computer :

Allow to shut down or reboot the computer.



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



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

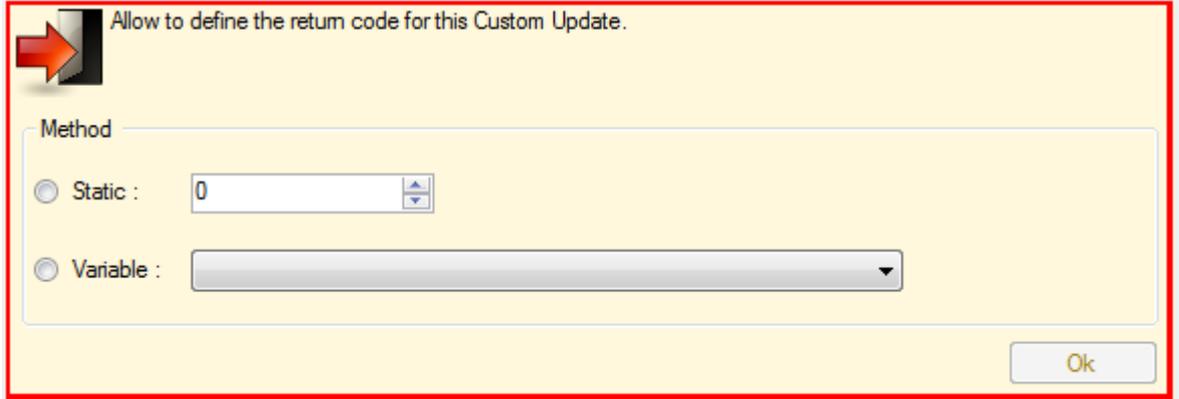




i. **Return Code:**

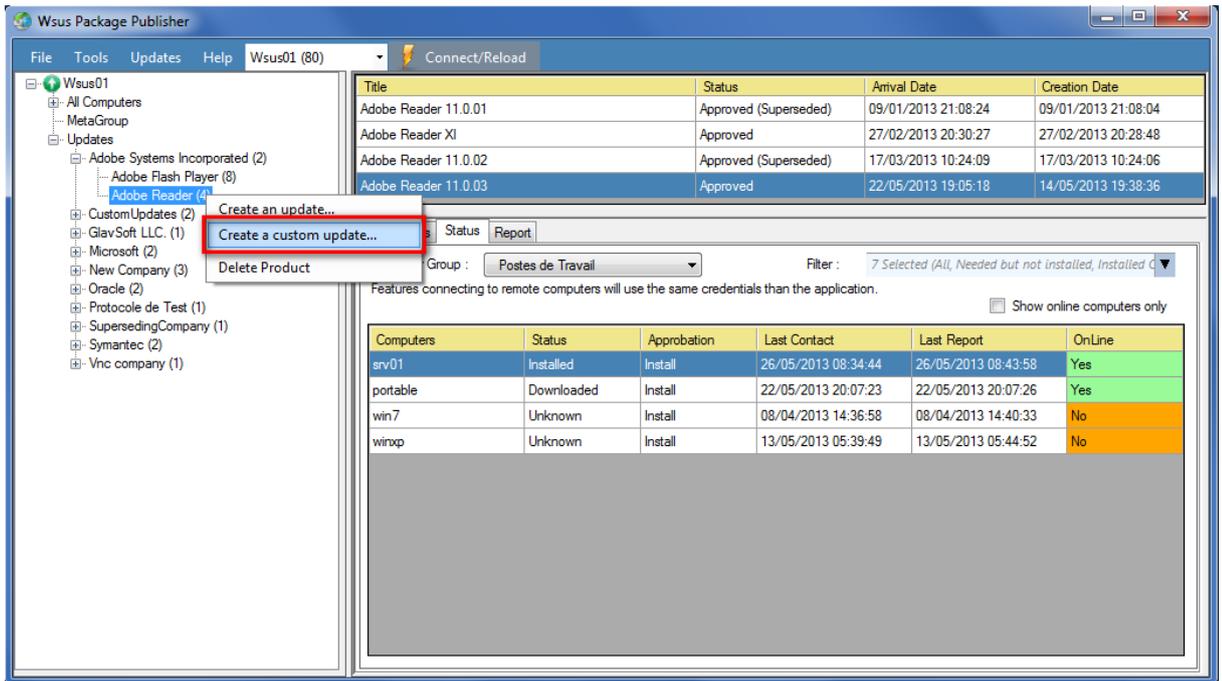
Usually, the last action. Allow to end the process by sending a Return code for this custom update.

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



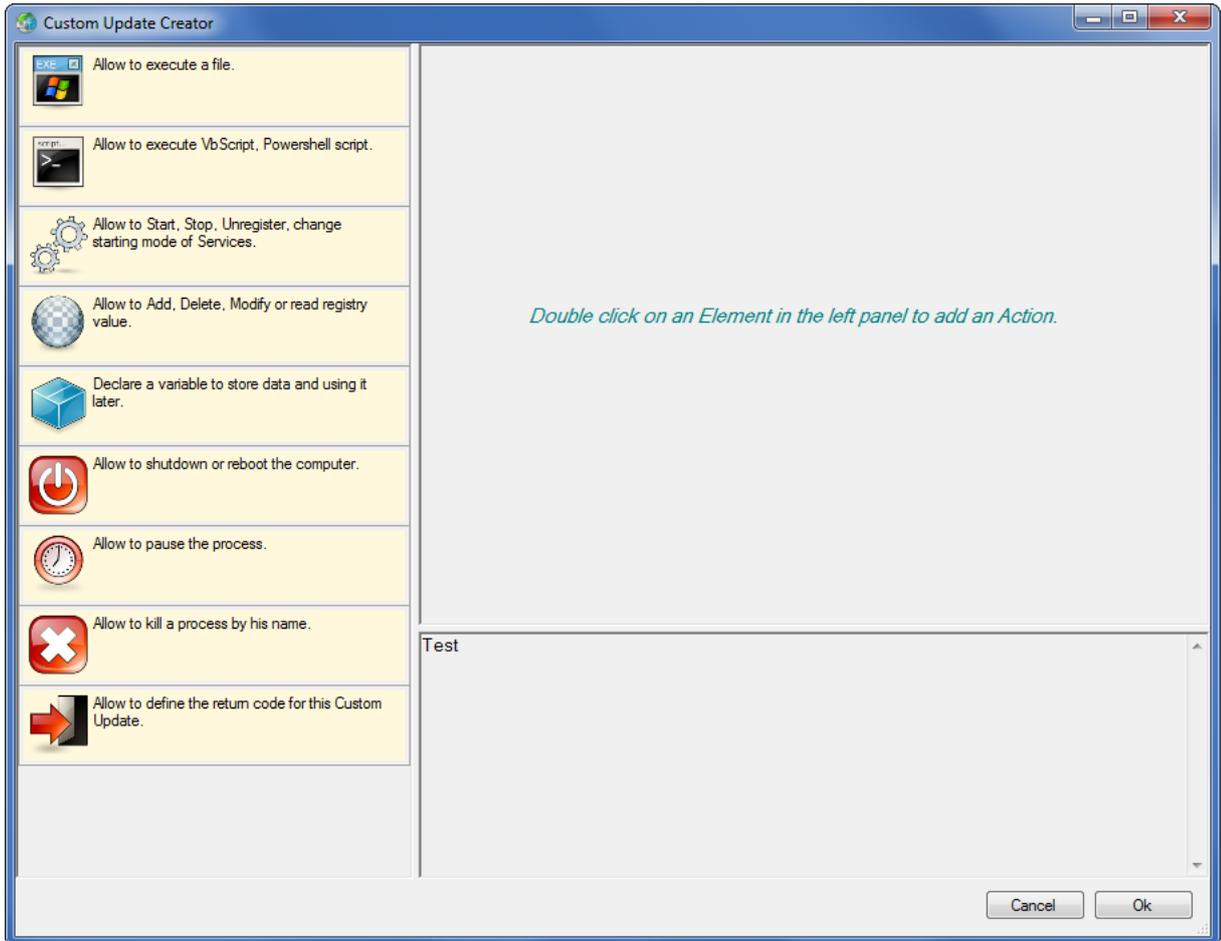
II) **Making a custom update :**

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..."

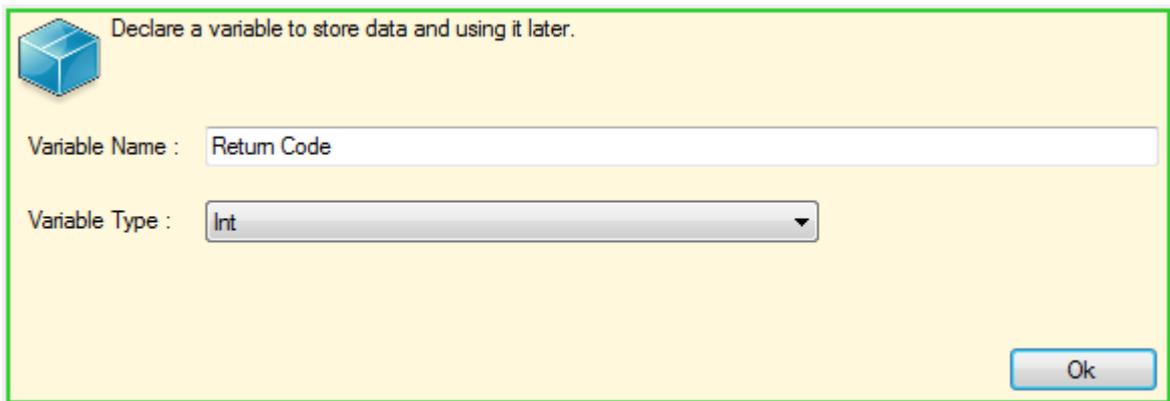




The Custom Update Wizard shows up.



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 :



EXE 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

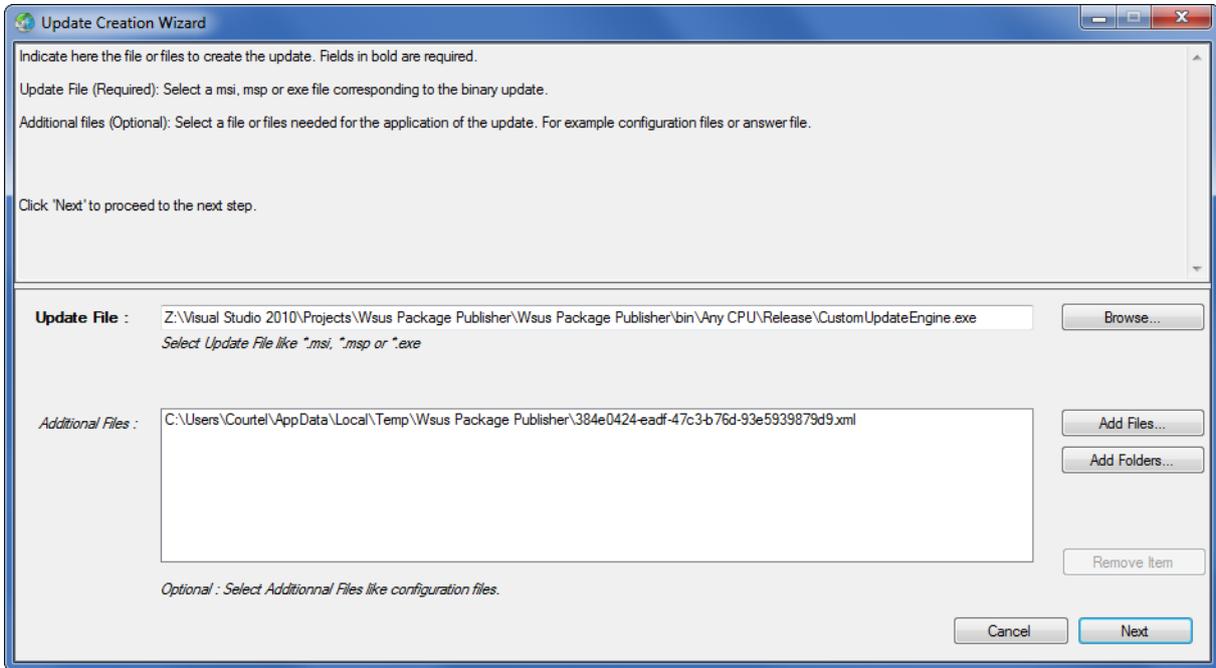
Ok



And choose the variable you have defined above.

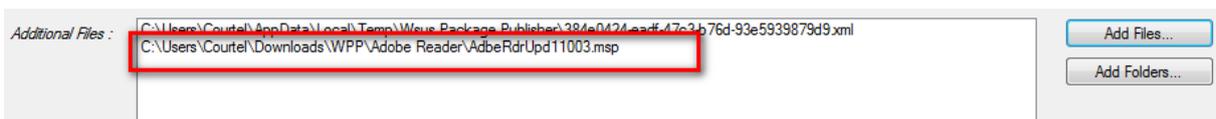
Click “Ok” to close the wizard and return in Wsus Package Publisher.

The “Update Creation Wizard” appears:



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

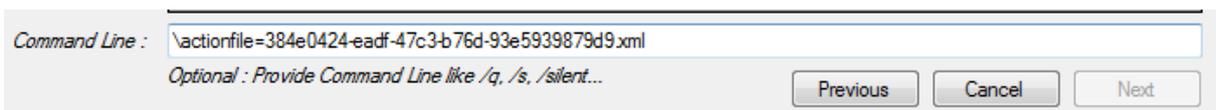
Add the MSP file for the Adobe update.



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





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

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:

File Path :

Reverse Rule

Comparison :

File Version :



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



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>