

# INSTALLING AND UPDATING MAESTRO\* USING A GROUP POLICY (GPO) VERSION 3.05 MS SQL

## OBJECTIVE

Installing **maestro\*** using a **Group Policy (GPO)** lets you deploy **maestro\*** automatically on workstations without the user having to be a Windows administrator on their workstation. This document presents the different steps necessary to its deployment.



Please read and understand this document in its entirety before starting the procedure.

## PREREQUISITES

- The server on which the GPO will be created must have **Windows Installer 4.5** or a higher version.
- The target computers must be part of the domain.
- The target computers must have **Microsoft.NET Framework 3.5 and 4.8**.
- The target computers must have **Windows Installer 4.5** or a higher version.
- The users on target computers **must be logged off of their Windows session** to receive updates, otherwise, they may have to restart their computer.
- **Maestro\*** must be installed on the server first. **Maestro\*** kits must be published after the update.
- A software which allows the creation of MSI files must be installed. The recommended software is ORCA.

## SUMMARY

Installing and updating **maestro\*** using a GPO involve the following steps :

- [Initial configuration of the GPO](#)
  - [Preparation of the distribution directory for the GPO](#)
  - [Defining target computers with the GPO in the Active Directory](#)
  - [Creating the group policy to deploy \*\*maestro\\*\*\* via GPO](#)
  - [Other settings to be activated in the GPO](#)
- [Updating or installing \*\*maestro\\*\*\* using GPO](#)
  - [MSI kits extraction from the .exe file](#)
  - [Adding \*\*maestro\\*\*\* MSI kits to the GPO](#)
- [Troubleshooting Table](#)



We invite you to consult the Appendix ([Troubleshooting table](#)) at the end of this document.

## STEPS

### Initial configuration of the GPO

#### *Preparation of the distribution directory for the GPO*

1. On your **maestro\*** server, create a directory, for example **D:\Maestro.GPO** and share it on the network.
2. Add read permissions to the directory and sharing for the **Domain Computers** group.



The network share must be accessible in read mode to the **Domain Computers** group. If the directory is a sub-directory on an existing share, the share must also be accessible in read mode to the **Domain Computers** group.

### *Defining target computers with the GPO in the Active Directory*

#### Creating a Security Group

1. From the **Active Directory**, create a security group containing all targeted computers in an *Organizational Unit* (OU) of your choosing. **Computer** for example.
2. Using the right clic button on them ouse, select **Computer**, press **New**, the **Group**, and enter **maestro.GPO.Workstations**.
3. Check **Global** and **Security**, then click on **Ok**.

#### Adding Targeted Computer to the Group

1. Double-clic on the group named **maestro.GPO.Workstations** and select the **Members** tab.
2. Click on **Add**, then **Change Types**.
3. Check **Computers**, then click on **Ok**.
4. Add in this group all computers which must receive **maestro\*** updates from a GPO, then click **Ok**.
5. Close the Active **Directory**.



It is very important to target computers for the GPO and not users directly.

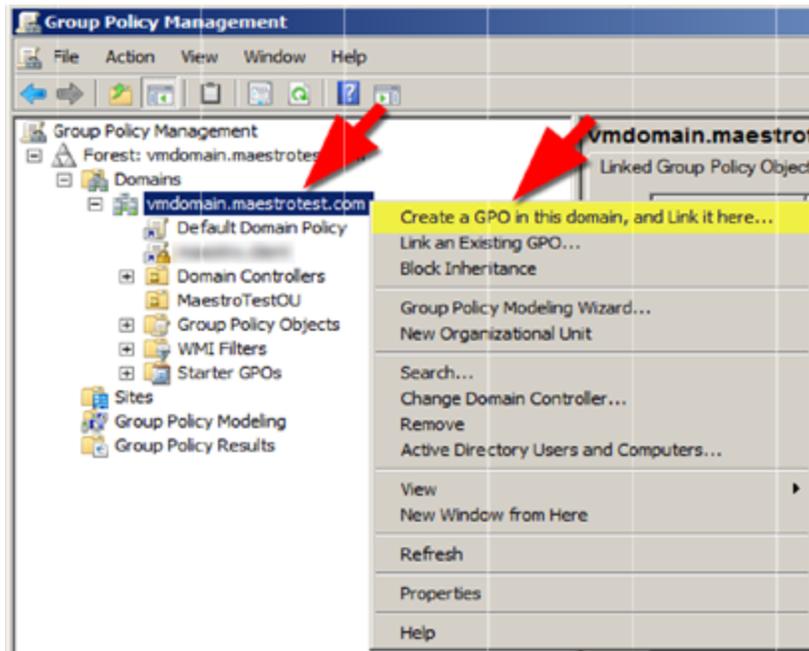
## Creating the group policy to deploy maestro\* via GPO

1. Launch **Group Policy Management**: type **GPMC.MSC** in the **Run** box or launch it by clicking its icon in the **Start** menu.

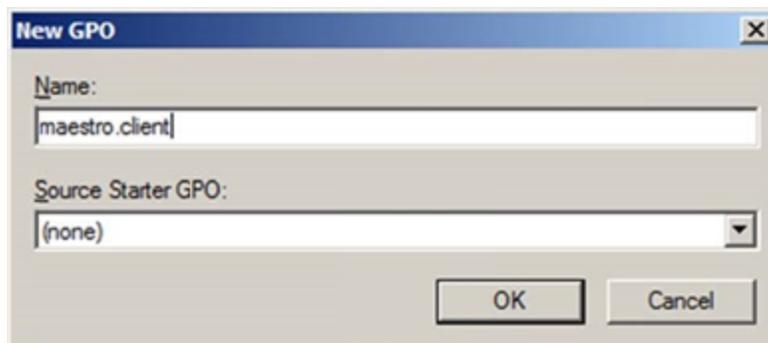


GPEDIT.MSC is not the correct utility: it only edits local policies and not the domain policies.

2. Open the **Domains** node in the **Forest: your domain** node.
3. Right click the **Your domain** node and then **Create a GPO in this domain, and Link it here...**

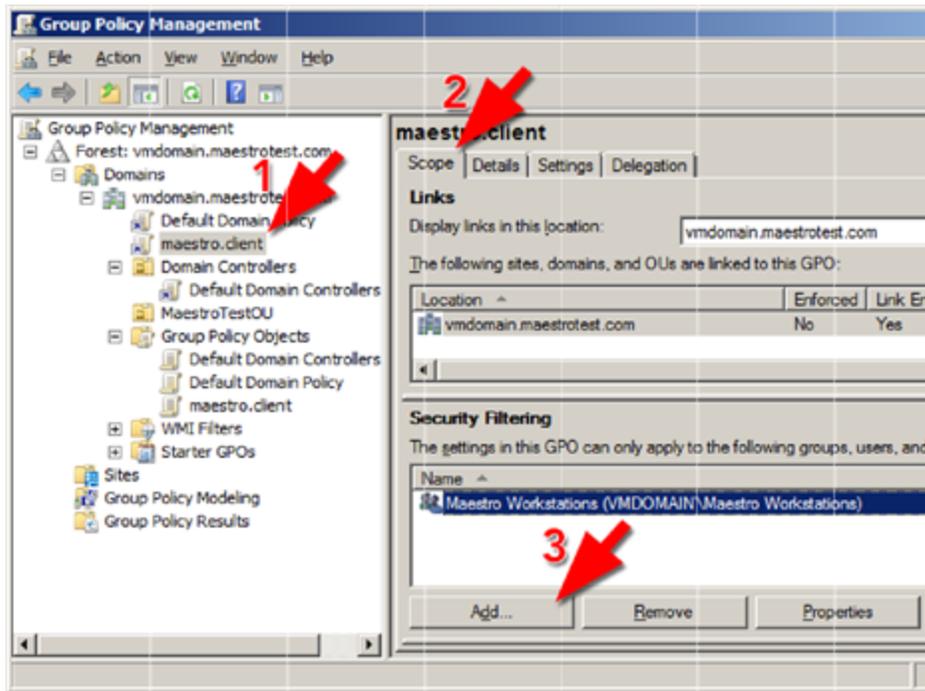


4. Name the new GPO **maestro.client**.



5. Click the **maestro.client** item in the **Group Policy Management** window, now available under your domain name.

- In the **Scope** tab, remove all items in the **Security Filtering** section and then add the security group you just created.

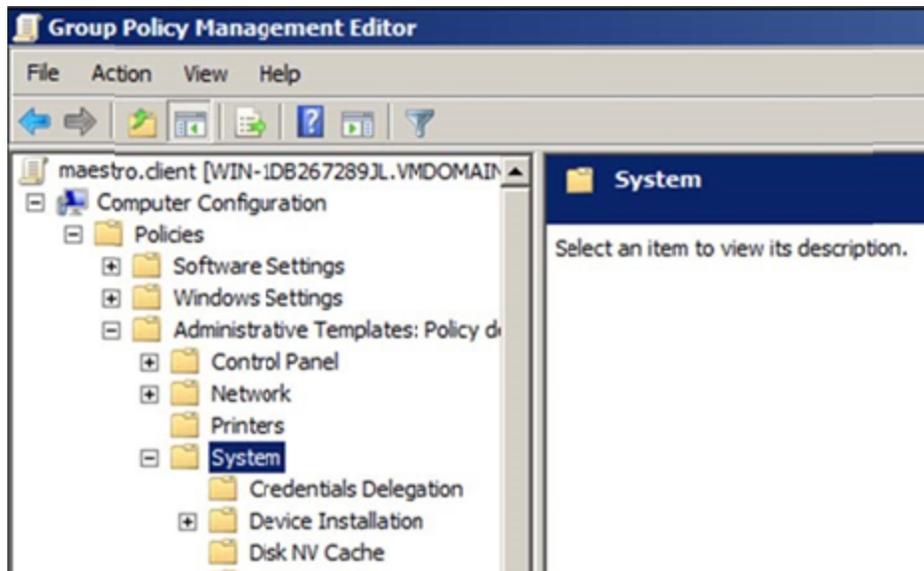


### Other settings to be activated in the GPO

- Make a right-click on the **maestro.client** GPO, then click on **Edit**.
- Go to **Computer Configuration > Policies > Administrative Templates**.
- Activate the following settings:

Node	Action
System	Activate the <b>Verbose vs normal status message</b> option.
Logon	Activate the <b>Always wait for the network at computer startup and logon</b> option.
Group Policy	Activate the <b>Startup policy processing wait time</b> option.

- Enter the value **30 seconds** in the **Amount of time to wait** field and click on **Ok**.
- Close the GPO editor.



These settings will not be effective the first time the GPO will be executed. Therefore, the very first time, the **maestro**\*/GPO update may not install until after the 2<sup>nd</sup> attempt or after the settings have been applied at least once.

To overcome this issue, prepare the GPO in advance without adding any MSI kit. Settings will thus be applied and effective when a **maestro**\* update will be deployed.

The initial configuration of your GPO for **maestro**\* deployment is now completed. You may now move to the next step: Updating or installing **maestro**\* using a GPO.

## Updating or installing **maestro**\* using GPO

### *MSI kits extraction from the .exe file*

In this step of the installing and updating from a GPO process, we will extract the required MSI packages from the .exe file, available from **Guide** website.

1. Go to [Guide](#) website.
2. Download the appropriate version from the **Downloads** tab.
3. Open a **Command Prompt** with Administrative rights.
4. Enter the following command: **Maestro3.0X.XX.000.exe /stage\_only /extract=I /ISRootStagePath="C:\maestro\_kits" /silent**



Modify the file name **Maestro3.0X.XXX.XXX.exe** for the downloaded installation file name.



This command will result in the extraction of the suite packages in such a way they are put in C:\maestro\_kits.

5. Copy the following MSI kits into the **Maestro.GPO** directory, created previously :
  - Maestro.Kit.msi
  - MaestroThirdParties.Kit.msi
  - MaestroOutlookAddInSetup.3.0X.XXX.msi
  - Maestro Amyuni.msi
  - Redemption.v5.11.ForOutlook.x64.msi or Redemption.v5.11.ForOutlook.x86.msi (depending on the *Outlook* version used: x64 for *Outlook* 64bit or x86 for *Outlook* 32bit).
6. Rename **Maestro.Kit.msi** using the current version number, for example **Maestro.Kit.msi** will become **Maestro.3.05.XX.msi**.
7. Rename **MaestroThirdParties.Kit.msi** with the current version number, for example: **MaestroThirdParties.Kit.mis** becomes **MaestroThirdParties3.05.XXX.XXX.msi**.



This last step when installing or updating **maestro\*** using a GPO is paramount!

It is very important to only change what is described in the preceding procedure at the risk of seeing your installation not working or failing.

## Creating a modified installation file for SQL mode



The steps toward the creation of a modified installation file must only be made upon the first creation of the GPO.

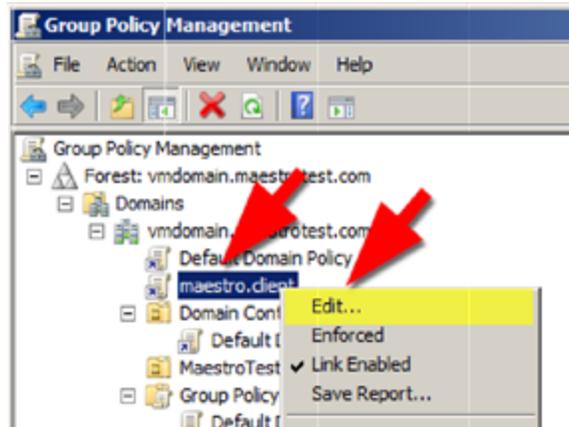
1. Download the Windows 10 SDK ISO file using this [LINK](#).
2. Open **ISO** in a virtual CD player and open the **Installers** directory.
3. Launch **Orca-x86\_en\_us.msi** to install it.
4. Open a *Windows* explorer.
5. Open the previously created **MaestroGPO** directory.
6. Using the mouse's right button, click on the **maestro\*** kit that was previously named **Maestro3.05.XXX.XXX.msi**.
7. Choose **Edit with Orca**.
8. Click on the **Transform** menu.
9. Click on **New Transform** and give the application time to open the msi kit.
10. Select the **Feature** table.
11. On the **Feature Mertech** line, in the **Level** column, replace the *0* by *1*.

Feature	Feature_Par...	Title	Description	Disp...	Level	Directory_
Mertech	MaestroSystem	Mertech		0	1	MAESTRO_SYSTEM
Maestro		Maestro main application	Maestro main application	2	1	INSTALLDIR
Migrator	MaestroSystem	Migrator		0	1	MIGRATOR
MaestroSystem	Maestro	MaestroSystem		8	1	MAESTRO_SYSTEM
ActiveX.DLL	MaestroSystem	Maestro ActiveX DLL		0	1	MAESTRO_SYSTEM
ActiveX.EXE	MaestroSystem	Maestro ActiveX EXE		0	1	MAESTRO_SYSTEM
ActiveX.OCX	MaestroSystem	Maestro ActiveX OCX		0	1	MAESTRO_SYSTEM
DataMaestro	Maestro	DataMaestro		2	1	DATAMAESTRO
DotNetFactory	MaestroSystem	DotNetFactory		0	1	INSTALLDIR
FileMaestro	Maestro	FileMaestro		2	1	FILEMAESTRO
Maestro.DotNet	MaestroSystem	Maestro.Net components		0	1	MAESTRO_SYSTEM
MaestroShared		MaestroShared		4	1	MAESTRO_SYSTEM
MaestroSystemOther	MaestroSystem	Maestro other files		0	1	MAESTRO_SYSTEM
PROGRAMS.EXE	MaestroSystem	Maestro programs		0	1	MAESTRO_SYSTEM
ProgressionRunner	MaestroSystem	ProgressionRunner		0	1	PROGRESSIONRUNNER
Star.Host	MaestroSystem	Star.Host		0	1	HOST

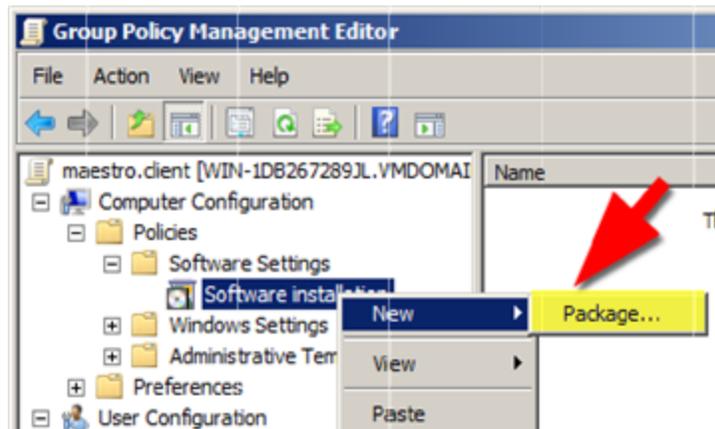
12. Open the **Transform** menu.
13. Select the **Generate Transform...** option.
14. Browse until you reach the **MaestroGPO** directory.
15. Change the name in the **File name** section for **MaestroKit.msi**.
16. Click **Save**.
17. Once again click on the **Transform** menu.
18. Select **Close Transform** and then close **Orca**.

### Adding maestro\* MSI kits to the GPO

1. In the GPO management console, click the **maestro.client** GPO and then, right click **Edit...** This action will allow you to open the **Group Policy Management** editor.



2. Go to section **Computer Configuration > Policies > Software Settings**.
3. Right click **Software Installation**.
4. Click **New** then, **Package...**

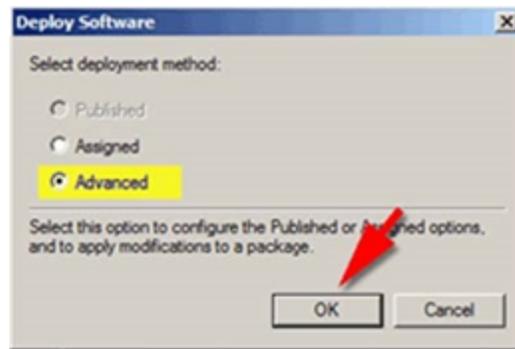


5. Browse until you reach the shared MaestroGPO directory from the UNC path (\\NomServeur\MaestroGPO) and choose one of the previously copied kits, the one extracted from the MSI kits in the .exe file.

 Use the network share (created when [preparing the distribution directory for the GPO](#)) to choose one of the copied MSI kits. It is not possible to access the kits if the specified path is a local one.

Make sure the version number appears in the name of the kits to be selected, for example **Maestro.3.4.11.000.msi**.

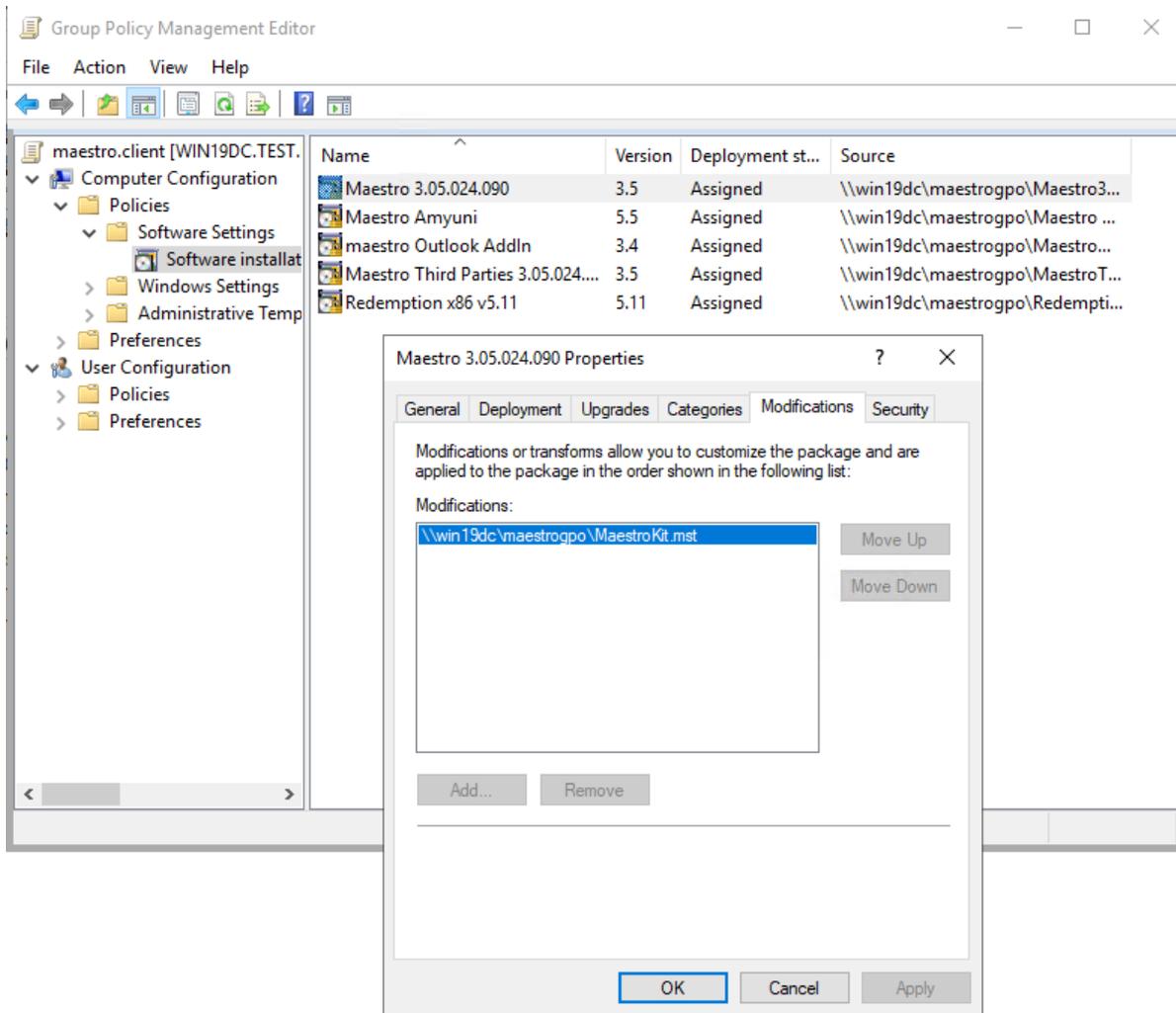
6. In the **Deploy Software** window, select **Advanced** and click **OK**.



There may be a delay of a few minutes while the kit is analyzed and added to the GPO. It will look like nothing is happening on the screen but you need to be patient and wait until the process is complete.

If you receive an error message at this stage, it is likely that your server does not have **Windows Installer 4.5**. You can install **Windows Installer 4.5** using **Windows Update**. This component is included with **Windows 2008 R2** and higher (for servers) and any Windows version after **Windows 7**.

7. Repeat these steps for every MSI kit listed below, taking care to indicate which versions are for Maestro.KIT and MaestroThirdParties, then follow the specific method for Maestro.Kit.
  - Maestro Amyuni.msi
  - MaestroOutlookAddInSetup.3.04.010.msi
  - Redemption.v5.11.ForOutlook.x64.msi or Redemption.v5.11.ForOutlook.x86.msi (depending on the Outlook version used: x64 for Outlook 64bit or x86 for Outlook 32bit; only one of the two must be installed).
  - MaestrothirdParties.3.05.XXX.XXX.msi
    - In the General tab, rename the kit with the current version's number, for example: Maestro Third Parties 3.05.0XX.XXX
  - Maestro3.05.XXX.XXX.msi (pay attention)
    - a. In the **General** tab, rename the kit with the current version's number, for example: Maestro 3.05.0XX.XXX.
    - b. In the **Modifications** tab, click on **Add** then select **MaestroKit.msi**, which was previously created.
    - c. Click on **Ok** and give the tool time to generate the package.



- Close all windows; your GPO is ready and will be applied to the targeted stations. The **maestro\*** installation will be done upon the opening of each targeted work station, before or during connection. On customer stations, the following message will appear before displaying the user's desktop.

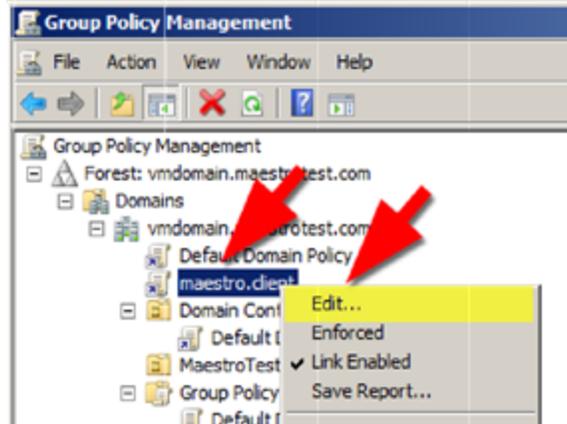


## Updating maestro\* from a GPO

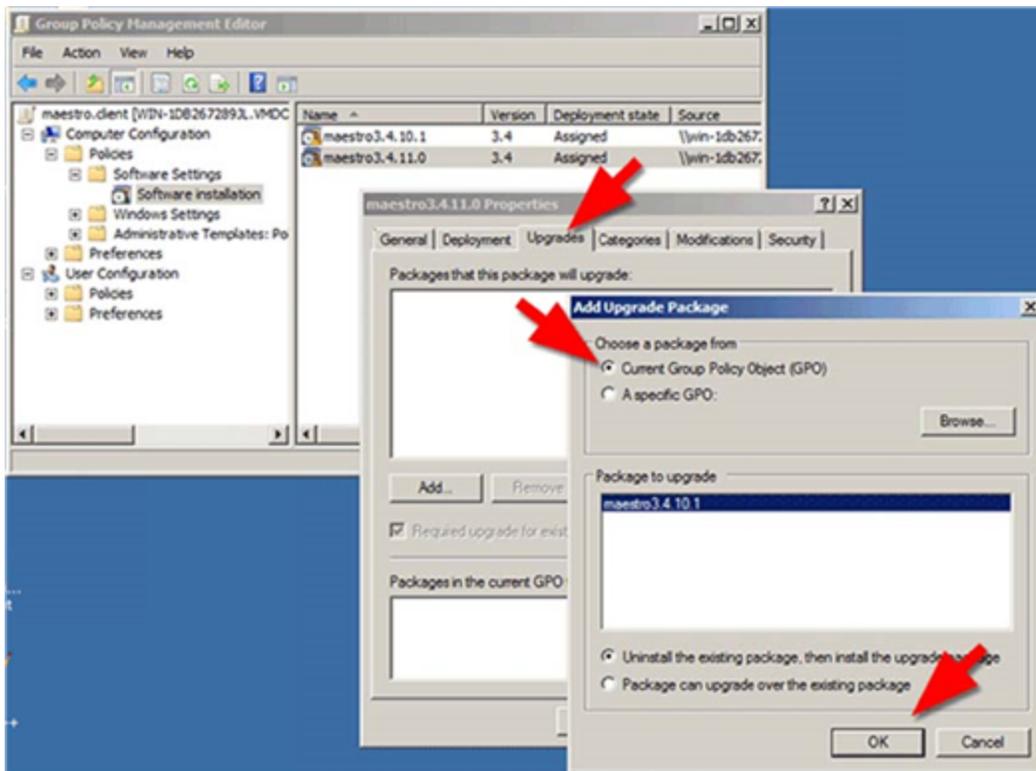


The regularly updated kits are **Maestro.Kit.msi** and **MaestroThirdParties.Kit.msi**.

1. In the GPO management console, click the **maestro.client** GPO and then, right click **Edit...** This action will allow you to open the **Group Policy Management** editor.



2. Go to **Computer Configuration > Policies > Software Settings**.
3. Right click on **Software Installation**.
4. Click **New**, then click on **Package...**
5. Select the MSI that must be updated.
6. Click **Open**, select **Advanced**, then click on **Ok**.
7. In the **General** tab, rename the kit with the current version number, for example: **Maestro 3.05.0XX.XXX**.
8. In the **Upgrades** tab, click on **Add...**
9. Leave the **Current Group Policy Object (GPO)** option checked by default.
10. Choose the MSI package version that must be updated. For example: **Maestro 3.05.024.090**. If there are more than one version, choose the most recent.
11. Select the **Uninstall the existing package, then install the upgrade package** option.
12. Click on **Ok**, then on **Ok** once more to close the **Maestro Properties** window.



9. Close all windows; your GPO is ready and will be applied to the targeted workstations. **Maestro\*** installation will occur when starting the chosen workstations, before or after the connection. Users will see the following message on their workstation screens, before viewing their desktop:



# ANNEX

## Troubleshooting Table

Problem/Question	Solution/Answer
<p><b>Maestro*</b> is not installing and the GPO seems correct. On the failed workstation (s), you observe:</p> <ul style="list-style-type: none"> <li>In the event viewer, you see events 101, 103, 108 and 1112.</li> <li>The details of event 101 indicate error 1274 when assigning the application.</li> </ul>	<ol style="list-style-type: none"> <li>Check that all of the GPO settings specified in the <a href="#">Other parameters to be activated in the GPO</a> section have been applied.</li> <li>Enable the <b>Always wait for the network at computer startup and logon</b> policy. To do this, edit your maestro.client policy and navigate to:                     <ul style="list-style-type: none"> <li> GPO <b>maestro.client</b> &gt; Computer Configuration &gt; Policies &gt; Administrative Templates &gt; System &gt; Logon</li> <li>Double click <b>Always wait for the network at computer startup and logon</b>.</li> <li>Click <b>Enabled</b>.</li> <li>Close all editing windows of the maestro.client strategy.</li> </ul> </li> </ol>
<p>Can I remove old MSI kits in my deployment directory?</p>	<p>In short, no.</p> <p><i>We recommend against removing old MSI from your deployment directory because workstations that have installed these kits may reference them in the future, either to repair or uninstall.</i></p> <p><i>We recommend that you always keep at least two previous versions that you deployed in GPO mode in your GPO deployment directory.</i></p>
<p>When does the group policy apply?</p>	<p>When the workstation is started.</p> <p><i>Group policies that install software targeting a workstation (rather than a user) typically perform their functions when the workstations start. Therefore, starting the workstation while the GPO is being applied will take longer than usual because <b>maestro*</b> will be installed.</i></p>

Last modification: February 20, 2025