

# Rainbow Analyst Professional Remote Installation Guide

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## Deployment using SCCM

The following sections (on Software installation, License activation, Functionality management, and Access to the VBA Project Object Model) describe the low-level steps that would be required for manual installation and configuration of the Rainbow add-in software.

In practice many large organisations will be using Microsoft's System Center Configuration Manager (SCCM) software to automate the deployment. The details will vary between organisations, but the following general considerations will apply:

- The simplest method of initial software installation will normally be to run the EXE installer file (RainbowPro.exe) which is available for download from [www.themodelanswer.com](http://www.themodelanswer.com) . This can be run in silent mode with the usual /s switch: *RainbowPro /s* .
- The license activation and functionality management tasks involve setting a number of keys in the HKCU hive of the Windows Registry. The simplest way to do this is normally as follows:
  - Either export the relevant keys as a REG file from the Registry Editor, or create the REG file with a text editor using the templates shown below on page 2.
  - Run the file with Administrator privileges using *regedit /s file.reg* (for local testing, you can open a Command Prompt window as Administrator and run this command).
- Because the Rainbow add-in file is comparatively small (around 2 MB), there is no separate process for patching the software. Updates can be installed simply by deploying an updated version of the entire add-in file (RainbowPro.xlam) to the user's add-ins folder (normally C:\Users\[user name]\AppData\Roaming\Microsoft\AddIns ). The add-in file is available for download from <http://www.themodelanswer.com/download/#addinfiles> . There is no need to change or re-initialise any of the registry keys that have already been set.

## Deployment using GPO or Microsoft (Azure) Intune

At present there is no native MSI installer for Rainbow Pro, as required for both GPO installation and Azure Intune Applications (Microsoft Intune). However, there is software which can create an MSI "wrapper" for an EXE installer. The MSI Wrapper software (from Danish company exemsi) has a free version, or a Pro version for £75, available at <https://www.exemsi.com/>

The free version of MSI Wrapper has been proved capable of generating a working MSI installer for Rainbow Pro. If using this approach, the following GUID ("Upgrade Code") is recommended for Rainbow Pro: {4F7FB5CF-2AE5-43B2-A6B7-6699C8B2736B}

The Rainbow Pro MSI installer generated in this way will install the Rainbow software, but will not install (activate) a Rainbow license. However, the Pro version of MSI Wrapper will enable generation of an MSI installer with an "Action" to run a *regedit /s* command with a REG file as detailed below. The MSI installer can thus set the registry keys needed to install (activate) a Rainbow license.

## Software installation tasks

The following tasks are performed by the EXE installer file RainbowPro.exe, and could in principle be executed manually if necessary:

- Copy the add-in file (RainbowPro.xlam) to the user's add-ins folder; under Windows 10 this is Windows (C:) > Users > [username] > AppData > Roaming > Microsoft > AddIns
- Determine the current major Microsoft Office version, e.g. "16.0" for Office 2016 / 2019 / 365, "15.0" for Office 2013, and "14.0" for Office 2010.
- Look in registry key HKCU\Software\Microsoft\Office\[Office version]\Excel\Options for REG\_SZ values where the name starts with "OPEN", e.g. "OPEN", "OPEN1", "OPEN2", "OPEN3".
- If there are no such values, create a REG\_SZ value named "OPEN", or otherwise add a further value to the series, and set the data as the path and filename of the Rainbow add-in file (or simply the filename, RainbowPro.xlam).

## License activation

In order to activate the Rainbow license remotely (without user involvement):

- Create registry key HKCU\Software\VB and VBA Program Settings\RainbowAnalyst\UserDetails and within it create the following REG\_SZ values corresponding to the license details:
  - UserName - e.g. XYZ Company
  - UserEmail - e.g. itsupport@xyzcompany.com
  - UserCode - e.g. 4350-0710-8701-6949
- The REG file required to set the above registry values will be something like this:  
*Windows Registry Editor Version 5.00*  
*[HKEY\_CURRENT\_USER\Software\VB and VBA Program Settings]*  
*[HKEY\_CURRENT\_USER\Software\VB and VBA Program Settings\RainbowAnalyst]*  
*[HKEY\_CURRENT\_USER\Software\VB and VBA Program Settings\RainbowAnalyst\UserDetails]*  
*"UserName"="XYZ Company"*  
*"UserEmail"="itsupport@xyzcompany.com"*  
*"UserCode"="4350-0710-8701-6949"*
- The above registry values will activate the license, and after the user next runs Excel (which will automatically load Rainbow Analyst), the Rainbow software will create a further REG\_SZ value showing the license expiry date (which can then be checked remotely):
  - ExpiryDate - e.g. 12/31/2020 0:0:0

## Functionality management

In order to manage certain elements of Rainbow's functionality remotely via the registry:

- Create registry key HKCU\Software\RainbowAnalyst and within it create the following REG\_DWORD values with data 0 (or anything other than 1):

- AllowVBScript - This disables the two Rainbow functions that attempt to create and run a VBScript file, viz. “Check For Updates” and “Uninstall”; instead Rainbow will display a message stating that the function has been disabled.
  - DirectSupport - This removes all references (in message boxes etc. within Rainbow) to “support@themodelanswer.com” (the email address for direct support from the author) and replaces them with references to “your local IT support team”.
  - IncludeAgrmnt - This removes the final “License Agreement” section of the User Guide, so that the “User Guide” function only shows the preceding sections of the Guide.
- The relevant REG file will be something like this:
 

```
Windows Registry Editor Version 5.00
[HKEY_CURRENT_USER\Software\RainbowAnalyst]
"AllowVBScript"=dword:00000000
"DirectSupport"=dword:00000000
"IncludeAgrmnt"=dword:00000000
```

## Access to the VBA Project Object Model (VBOM)

In order for Rainbow to function fully, it needs to be able to access the Visual Basic Object Model (VBOM), or in other words, Rainbow’s VBA code needs to be able to access information about the VBA Project in any workbook that is being analysed. And so when Rainbow first runs, if it finds that access to the VBOM is not enabled, it will prompt the user to turn this on by selecting File > Options > Trust Center > Trust Center Settings > Macro Settings and checking the box marked Trust access to the VBA project object model.

It is also possible to enable access to the VBOM directly through the Windows registry. The value for this option is normally stored in registry key HKCU\Software\Microsoft\Office\16.0\Excel\Security, in a REG\_DWORD value AccessVBOM, which is set to 0 or 1 to prevent or allow access. In addition, it is possible for IT administrators to set a corresponding value in the HKLM hive of the registry, i.e. HKLM\SOFTWARE\Microsoft\Office\16.0\Excel\Security\AccessVBOM. This HKLM value (if it exists) overrides the HKCU value, and the relevant option is then greyed out (cannot be modified) in the Excel user interface.

Occasionally IT administrators may take the view that enabling access to the VBOM is a security threat, but this is very much a minority view. It is important to recognise that disabling VBOM access only prevents programmatic (e.g. VBA) access to the VBOM, and does not prevent someone from opening the VB editor and manually writing harmful VBA code. And if VBOM access is disabled, some features of Rainbow will not be available. In particular, it will not be possible to use the Data Explorer, the Macro Explorer, the Names Toolbox report and the Tidy Up Reports function. In addition there will be no interactive Help button on the reports in other functions, and the Summary Report will show “N/K” (not known) against Visual Basic modules and VB code (lines).

If for some reason it is decided to disable access to the VBOM, then (as noted above) Rainbow will display a message prompting users to enable VBOM access. It is possible to suppress this message by creating registry key HKCU\Software\VB and VBA Program Settings\RainbowAnalyst\GenIPrefers and then within this key setting up a REG\_SZ value EnableVBOM with data of 0. This can still be changed (restoring the prompt message) by setting the “Enable access to Visual Basic” option in Rainbow’s Preferences, but this will not allow the VBOM access to be modified if an overriding value has been set in the HKLM hive as described above.