

# XPLM<sup>®</sup>



## **Agile Product Lifecycle Management**

**MCAD Connectors for Agile Engineering Collaboration**

### **Installation Guide**

**V 3.6.2.7**

July 2020

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## Preface

### Contacting Oracle Support Services

For Oracle Agile Engineering Collaboration support contact the Oracle Global Customer Support (GCS) via [www.oracle.com/support](http://www.oracle.com/support) or My Oracle Support via <https://support.oracle.com>.

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# 1 Introduction and General Information

## 1.1 About this Document

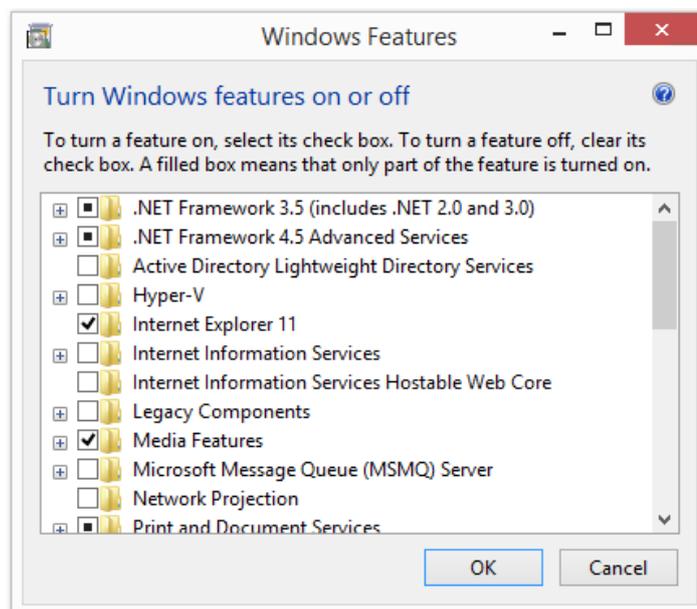
This document contains information about how to install the XPLM MCAD connector for Agile PLM. Chapter 2, *Prerequisites*, describes the systems that are supported by the MCAD connector and which prerequisites must be met in order to perform a successful installation. Chapter 3, *Installation*, contains a quick installation guide for advanced users and a step-by-step guide on how to install the connector and explains in detail what steps must be performed in order to install the connector correctly.

This document is intended for system administrators that intend to install the connector on one or more systems. A detailed overview on how to configure the connector after installation is provided in the *Administration Guide*. Instructions for end users are provided in the *User Guide*.

## 2 Prerequisites

Prior to the installation of the MCAD connectors for Agile PLM, the following items should be verified:

- An Agile PLM environment is operational and running.
- The Agile PLM environment must be configured for MCAD (see chapter *Agile PLM Server Class Administration* in the MCAD administration guide).
- A CAD system is installed on the end-user's workstation, the user has been granted any necessary privileges to use the CAD system.
- The user that performs the installation needs to grant elevated (administrator) privileges to the installation wizard. The user must be privileged to do this or the login of a user privileged to do so is required.
- A personal login for Agile PLM is available to the end-user.
- Microsoft .NET Framework 4.5 or higher is installed on the end-user's workstation.
- When installing on Windows 8.1 or 10, make sure that .NET Framework 3.5 and .NET Framework 4.5 (or higher) are activated in the *Windows Features* dialog:



- 32 and 64 Bit Java Runtime Environments

Before installing the XPLM integration, make sure that a valid Java Runtime Environment is available on the system. Both, 32 bit and 64 bit Java Runtime Environments need to be installed on the system. Only Java 8 is supported. The JREs in question can be downloaded using the following link: <https://java.com>

**Please note:** The Java Runtime Environments installed on the system should be detected automatically by the XPLM Installer. However the user may provide the installation paths of the corresponding Java Runtime Environments manually during the installation process, if necessary or in case that the installation wizard is unable to automatically detect them.

## 3 Installation

### 3.1 Installation Package

The MCAD connector for Agile PLM is shipped as a Zip archive which can be obtained via Oracle Software Delivery Cloud (<https://edelivery.oracle.com>). The Zip archive contains the required software components for each supported CAD system and for the web components.

Please note: In Oracle Software Delivery Cloud, the Zip archive mentioned above is named using a unique numerical identifier that does not reflect the package type mentioned above. Please refer to the information given in Software Delivery Cloud to identify the packages.

It is possible to install an MCAD connector environment for more than one CAD system on a workstation.

### 3.2 Overview on the Available Installation Procedures

The MCAD connector for Agile PLM can be installed using a variety of installation procedures which fit different environments and different requirements. The default end-user installation procedure is described in chapter 3.3.1, *Default Installation Procedure*. This chapter describes an installation method which should fit for most environments and is the most convenient way of getting started with the MCAD connector. Unless your system administrator requested you to refer to a different chapter, we recommend to perform the MCAD installation as described in this chapter.

For advanced installation methods, please refer to one of the following chapters:

- 3.3.2 Custom Files
- 3.3.3, *Performing a Silent End-User Installation Based on a Custom Installation Package*

### 3.3 Installation Procedures

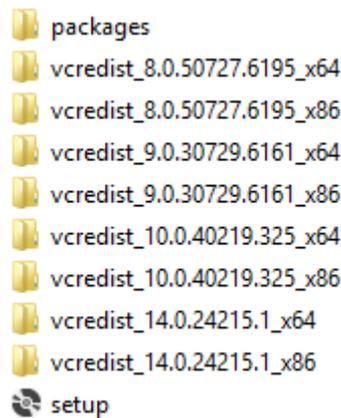
#### 3.3.1 Default Installation Procedure

The default installation procedure uses the graphical installation wizard to perform the installation on a single workstation. The procedure consists of the following steps which are explained in detail in this chapter:

1. Download the required installation package to a download directory
2. Extract (unzip) the package
3. Execute the setup wizard's executable and follow the instructions on screen

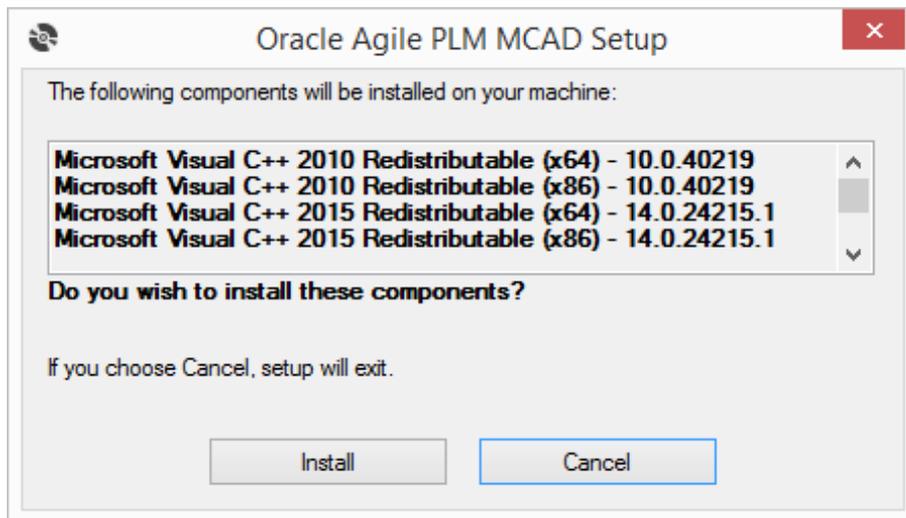
Select a directory on the end-user's workstation and download the installation package required to this directory. We recommend using the *Downloads* directory. The end-user needs full read and write privileges for this directory.

Download the necessary package and unzip the zip package. The package contains the files which are shown in the following figure.

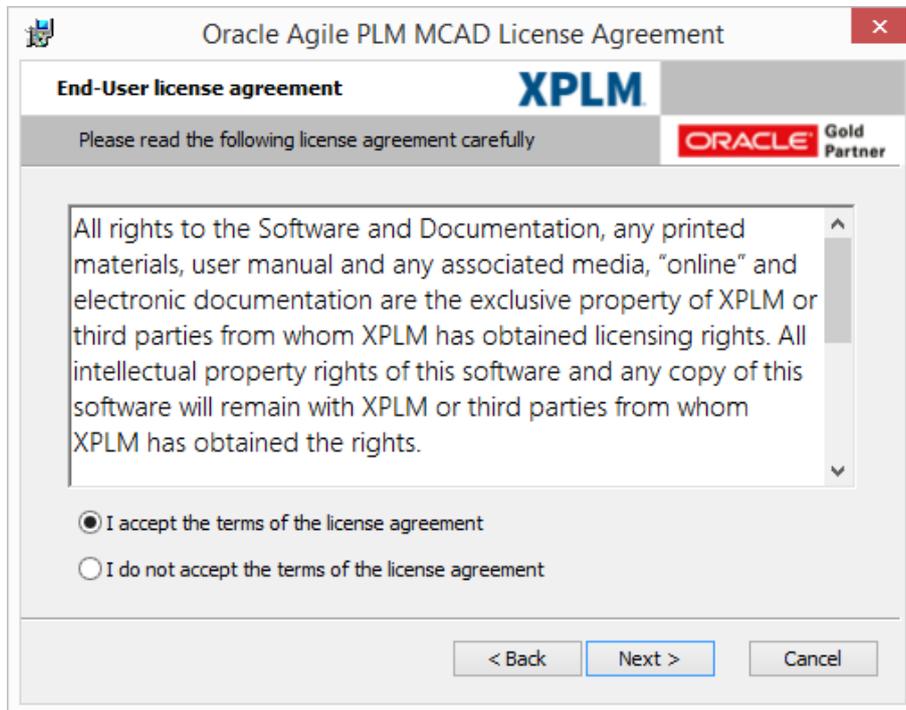
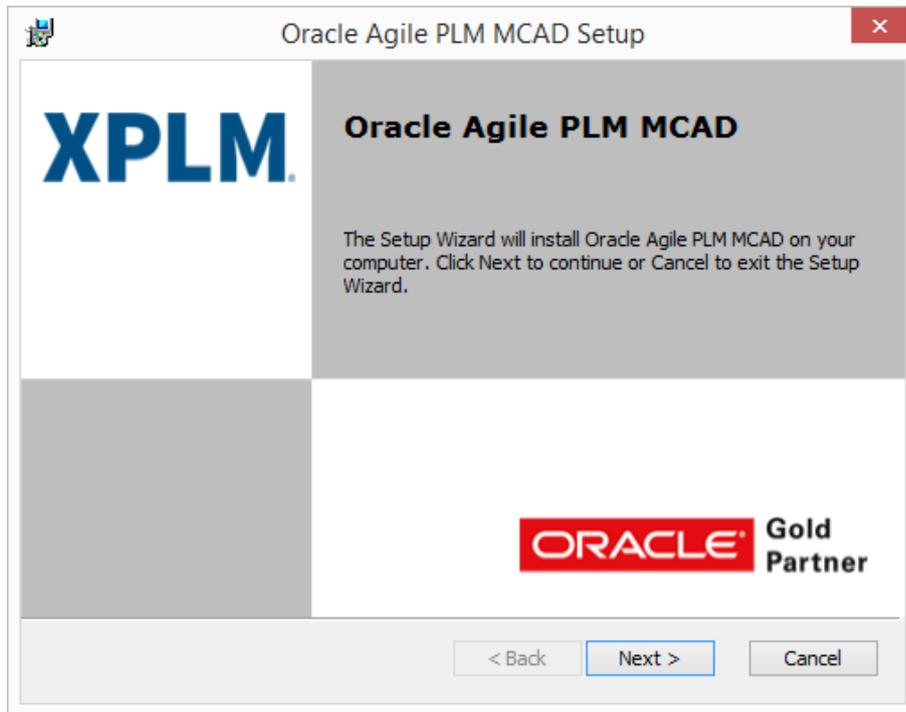


Execute the executable *setup.exe* taking into account the following instructions. Right click on *setup.exe*, on the drop down list click *Run as administrator*, an UAC prompts appears, click *yes* in order to startup the graphical installation wizard. Follow the instructions on each of the installation dialog boxes.

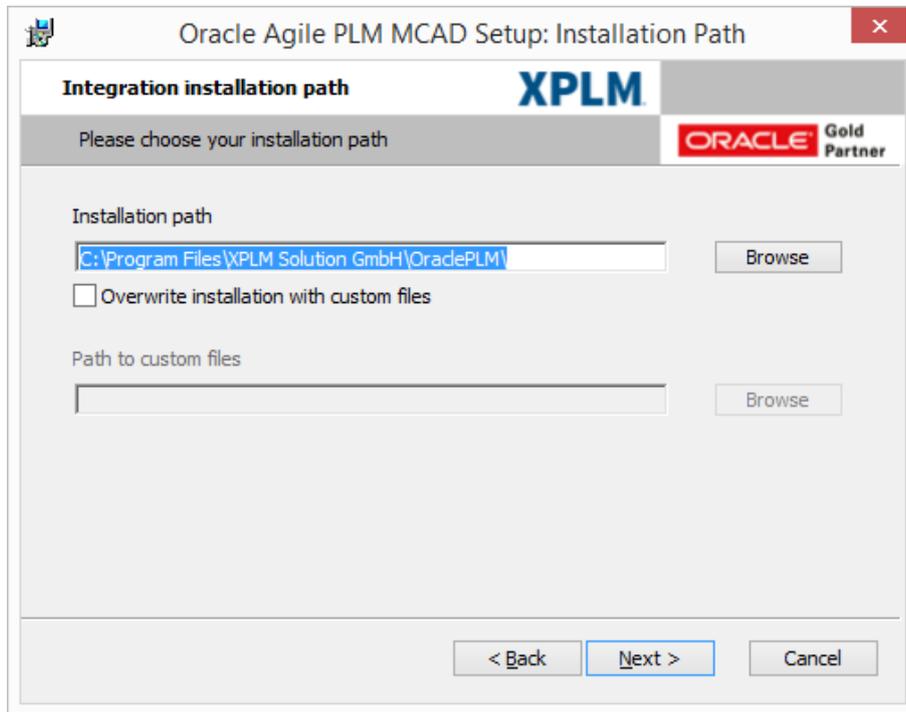
The installer checks the Microsoft C++ runtime environment. In case a component is missing on the local system, the missing components are displayed. You have to select the *Install* button in order to continue with the setup.



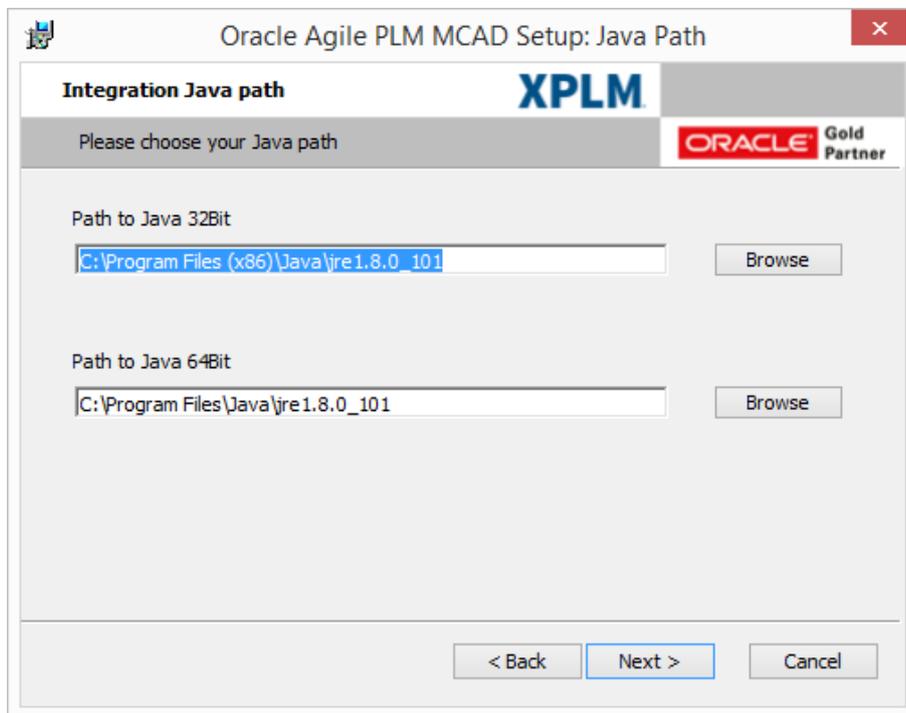
Now the C++ runtime environments are installed and the installation of EC starts.



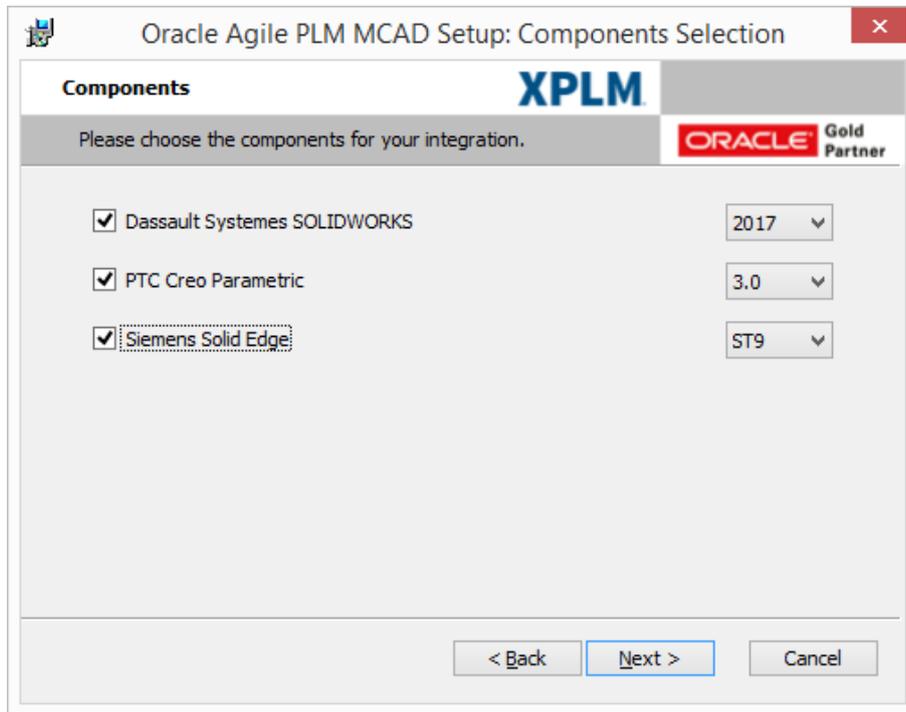
Accept the license agreement, click on the *Next* button again to proceed.



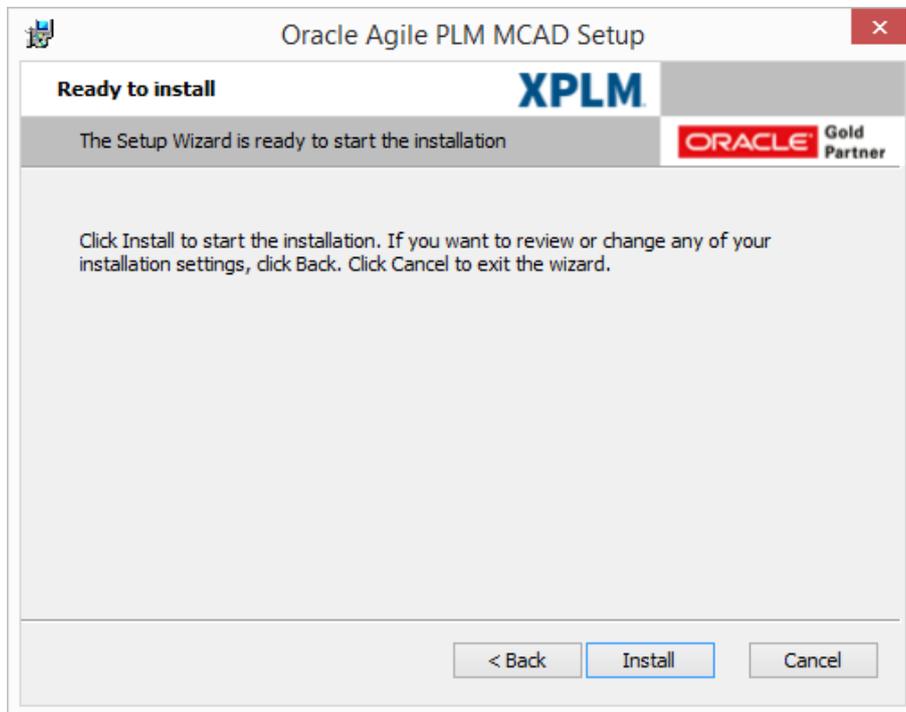
Define the installation path. If overwriting of custom files is required, select the check box *Overwrite with custom files* and define the path to the custom files. Refer to chapter 3.3.2 *Custom Files* for more details. Click *Next*.



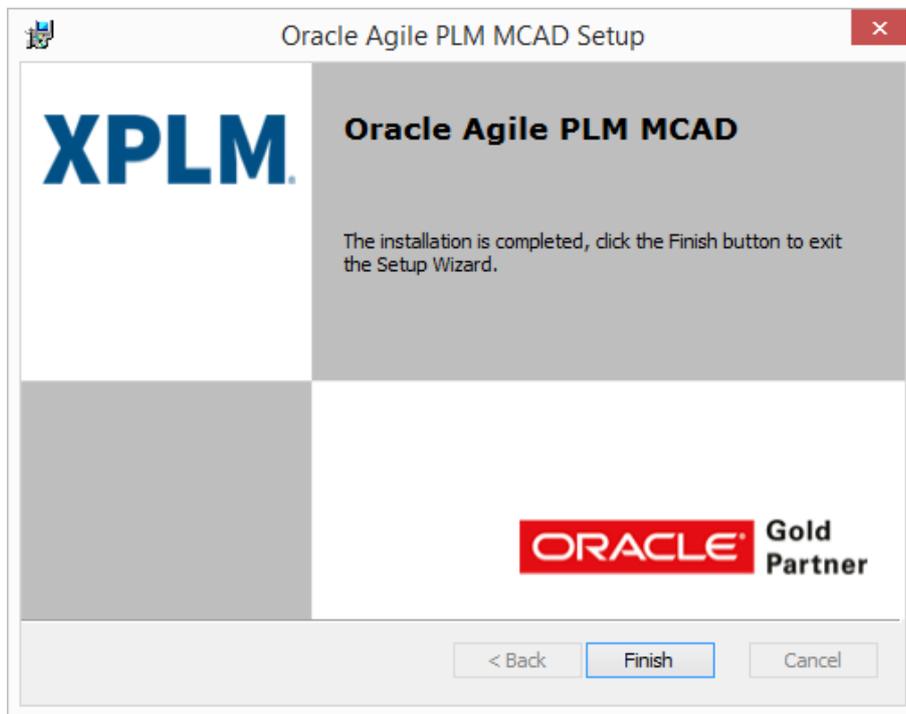
Define the Java path. Click *Next*.



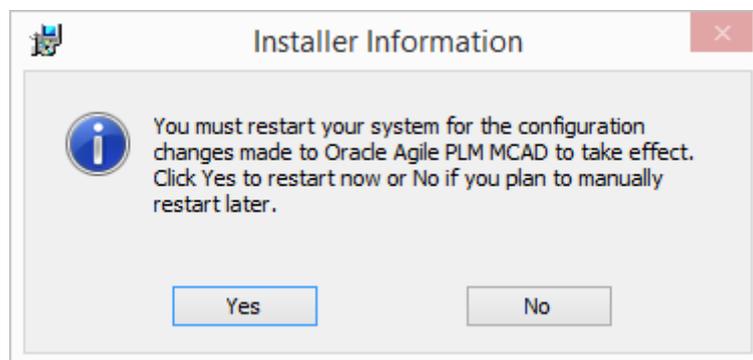
The available CAD versions are displayed. Select the desired CAD version for installation and click on the *Next* button.



Use the *Install* button to start the installation process. Wait until the process has completely finished.



Use the *Finish* button to close the installation wizard.



**Reboot the workstation after that.** For some CAD systems a post-installation configuration is necessary. Please continue reading chapter 3.4, *Post-Installation Configuration*.

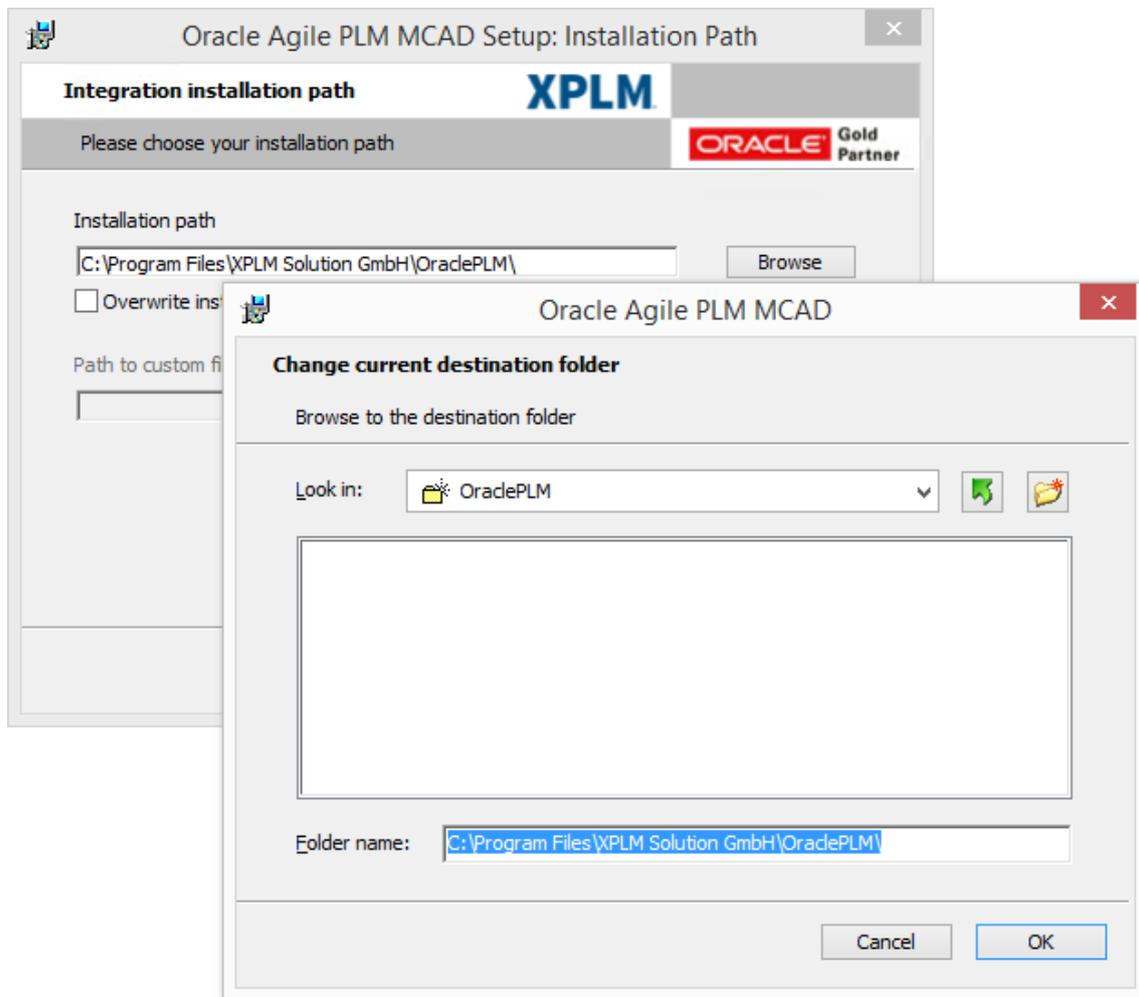
### 3.3.2 Custom Files

The MCAD connector setup wizard supports the use of a custom, redistributable installation package which can be configured by system administrators. To prepare such a package it is necessary to execute the usual installation procedure first, described in chapter 3.3.1 *Default Installation Procedure*. After the installation the required files can be customized by the system administrator. The modified files need to be placed in the correct directory. E.g. if the file XPlm[CAD]Connector.xml is modified, the file must be placed in <install dir>\xml

Please note: The custom, redistributable installation package must have the same structure as the installation directory and must contain only modified files.

End users can also install the custom installation package using a silent installation procedure.

When opening the installation wizard of the MCAD integration, select the check box *Overwrite with custom files* and define the path to the custom files.



When selecting this option setting, custom files are copied over the created installation.

### 3.3.3 Performing a Silent End-User Installation Based on a Custom Installation Package

This chapter describes the specific installer properties. For a documentation of all standard options and parameters run "msiexec /help".

Silent-mode installation allows defining an installation configuration only once. The configuration can be used to duplicate the installation on further machines. During the installation in silent mode, the installation program reads the settings for the configuration from a Batch file that needs to be created before installation. The installation program does not display any configuration options during the installation process.

Create a `silent.bat` (e.g.) file that defines the installation configuration that would be entered normally during an interactive installation process. For example, in `silent.bat`, it is possible to supply the values for the Middleware home directory, the product directory, and the components to be installed.

Copy the sample code and paste the code in a `.bat` file.

```
START /WAIT vcredist_8.0.50727.6195_x64\vcredist_8.0.50727.6195_x64.exe /q
START /WAIT vcredist_8.0.50727.6195_x86\vcredist_8.0.50727.6195_x86.exe /q
START /WAIT vcredist_9.0.30729.6161_x64\vcredist_9.0.30729.6161_x64.exe /q
START /WAIT vcredist_9.0.30729.6161_x86\vcredist_9.0.30729.6161_x86.exe /q
```

```
START /WAIT vcredist_10.0.40219.325_x64\vcredist_10.0.40219.325_x64.exe /q
START /WAIT vcredist_10.0.40219.325_x86\vcredist_10.0.40219.325_x86.exe /q
START /WAIT msixexec /i acx_oracle_x64.msi /quiet INSTALLDIR="C:\Test" JAVA_HOME_X86="C:\Program
Files (x86)\Java\jre7" JAVA_HOME_X64="C:\Program Files\Java\jre7" CHECK_PROE="1"
VERSION_PROE="3.0" CHECK_CUSTOM="1" CUSTOM_FILES=" C:\custom_files"
```

Store the .bat file in the same directory that contains the installation program and edit the values for the parameter names to reflect the configuration.

**Please note:** It is also possible to use the Windows Command Prompt (cmd.exe).

| Parameter     | Description   |
|---------------|---|
| INSTALLDIR    | Place where the integration should be installed (e.g. INSTALLDIR="C:\Test")   |
| CHECK_CUSTOM  | Copying custom files over the created installation (value must be "1" to enable, e.g. CHECK_CUSTOM="1")                     |
| CUSTOM_FILES  | Place where custom files are located (e.g. CUSTOM_FILES="C:\custom_files")  |
| JAVA_HOME_X86 | Place where Java 32Bit is installed (e.g. JAVA_HOME_X86="C:\Program Files (x86)\Java\jre7")                                 |
| JAVA_HOME_X64 | Place where Java 64Bit is installed (e.g. JAVA_HOME_X64="C:\Program Files\Java\jre7")                                       |
| CHECK_SED     | Enable Solid Edge (value must be "1" to enable, e.g. CHECK_SED="1")   |
| CHECK_SWX     | Enable Solid Works (value must be "1" to enable, e.g. CHECK_SWX="1")  |
| CHECK_PROE    | Enable Creo Elements (value must be "1" to enable, e.g. CHECK_PROE="1")   |
| VERSION_SED   | Version of Solid Edge (value must be "solidedge" followed by the version shown in the GUI, e.g. VERSION_SED="solidedgeST9") |
| VERSION_SWX   | Version of Solid Works (value must be "sw" followed by the version shown in the GUI, e.g. VERSION_SWX="sw2017")             |
| VERSION_PROE  | Version of PTC Creo Parametric (possible values listed below, e.g. VERSION_PROE="3.0")<br>Possible values: "2.0", "3.0"     |

Example to install MSXML 4.0 and Visual C++ Redistributable 9.0

```
START /WAIT msixexec /i msxml_4.30.2100_x86.msi /quiet
START /WAIT vcredist_9.0.30729.6161_x64.exe /q
```

Please continue reading chapter 3.4, *Post-Installation Configuration*.

## 3.4 Post-Installation Configuration

### 3.4.1 Workspace Location

The default workspace is set c:\AgileEC\wspaces. To change the location, modify the **acx\_start.bat** file located in the directory: C:\Program Files\XPLM Solution GmbH\OraclePLM\components\com

```
:::::::::::: workspace settings start  
  
set CAX_WORKSPACE_ROOT=C:\AgileEC\wspaces  
set cax_temp=%CAX_WORKSPACE_ROOT%\Default
```

### 3.4.2 For Creo and Pro/ENGINEER

#### 3.4.2.1 Standard Creo Installation

After the installation has finished, a shortcut of the startup script is added to desktop, either for Creo 2.0 or Creo 3.0. With this shortcut the Agile PLM integration can be started together with Creo without further configurations.



Figure 1: Shortcuts Creo 2.0 & 3.0

To define a workspace directory or change the language setting, open the **xACP.cfg** configuration file in a text editor. The configuration file is situated in the following directory: **<Install Directory>\com\**.

- To define the workspace directory used by the MCAD connector, adjust the option setting **AcpUserRoot**.
- Select a language setting for the MCAD connector by adjusting the option setting **AcpLang** or keep the default setting (English).

#### 3.4.2.2 Non-Standard Creo Installation

If you do not have a default installation of Creo Parametric, open the **start\_acp\_Creo3.0(or Creo2.0).bat**, situated in **<Install Directory>\com**, in a text editor (depends on the selected version during the installation process) and adjust the following configuration manually:

- The startup script that should be used to start Creo needs to be adjusted. To do so, define the path of the correct installation of Creo in the **SEARCHDIR** option setting, for example **C:\Program Files\PTC\Creo 3.0** when starting Creo Parametric 3.0 from an installation directory on a Windows 7 64 bit machine.

#### 3.4.2.3 Upgrade

In case of upgrading the Creo version, the MCAD connector needs to know which Creo version to use. Therefore adjust the option setting **AcpProEV** accordingly in the **start\_acp\_Creox.x.bat**. The **AcpProEV** option uses years to define the Creo version. The following values are supported: 2012 (stands for Creo Parametric 2.0) and 2014 (stands for Creo Parametric 3.0).

### 3.4.3 For Solid Edge

No additional configuration is necessary. You can start the Solid Edge Connector for Agile PLM by starting Solid Edge.

### 3.4.4 For SolidWorks

No additional configuration is necessary. You can start the SolidWorks Connector for Agile PLM by starting SolidWorks.

### 3.4.5 For Environments That Contained Older MCAD Connector Installations

For Environments, on which the MCAD connector had been installed in the past, make sure to delete the following file for each user. Replace [USER] with the actual user name:

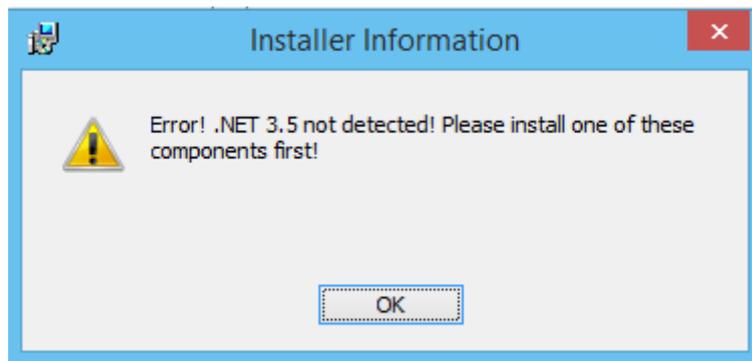
C:\Users\[USER]\AgileCache\connect.properties

## 3.5 Troubleshooting

**Problem: During installation, an error message “.NET 3.5 not detected” is displayed.**

Solution: When using a Windows 8.1 or Windows 10 system it is necessary to install the .NET Framework 3.5 manually.

Navigate to Control Panel -> Programs and Features -> Turn Windows features on or off -> select “.NET Framework 3.5”.



**Problem: After installation and reboot of the workstation, the MCAD connector’s Login dialog does not appear.**

Solution: This problem can occur on Windows 10 installations. The root cause of the issue is *8.3 file naming* being deactivated, but the MCAD connector’s startup scripts rely on this feature. Using the following command (requires a *command prompt with elevated privileges*) it is possible to verify if 8.3 file naming is activated on the system in question:

```
> fsutil 8dot3name query C:
```

This assumes that drive C: is the drive on which the MCAD connector should be installed. Use a different drive letter suitable for your environment in case that you intend to install the MCAD connector on a different drive.

If the above statement returns that 8.3 file naming is deactivated, the problem can be solved by uninstalling the MCAD connector and deleting all files and directories that have been written by the installation wizard (usually, this means the directory “C:\Program Files\XPLM Solution GmbH\” and all its contents).

Next, activate 8.3 file naming using the following command; this requires a Windows *command prompt with elevated privileges*:

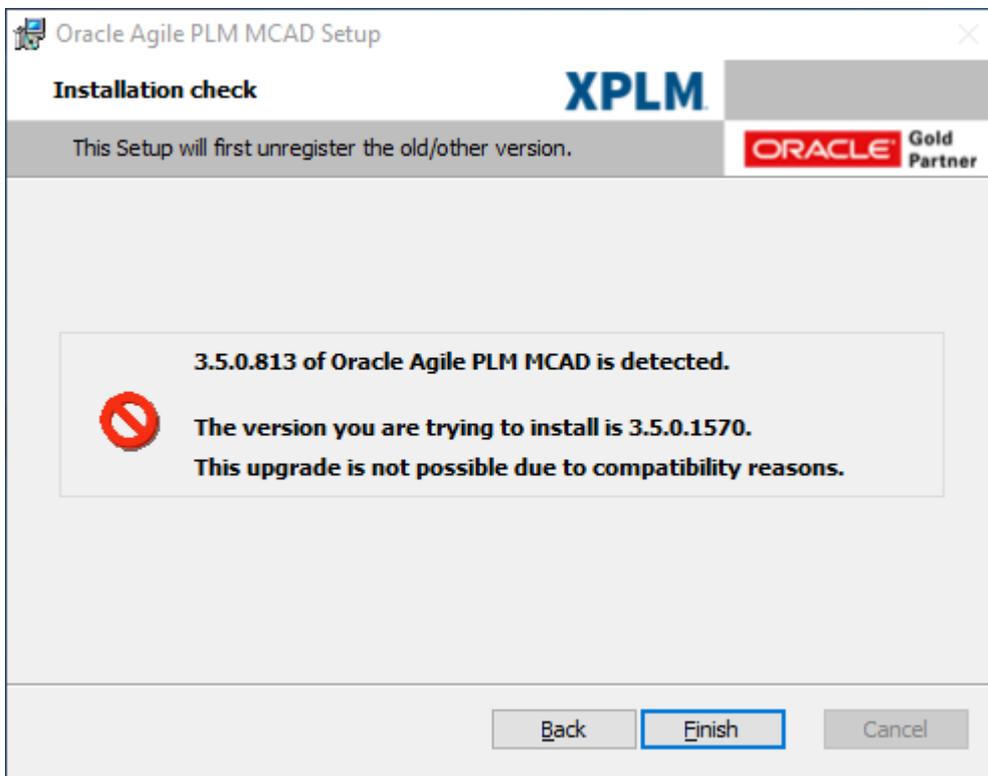
```
> fsutil behavior set disable8dot3 0
```

After that, reinstall the MCAD connector and verify that the login dialog appears.

**Problem: The setup wizard of the MCAD connector displays an error message saying: “This upgrade is not possible due to compatibility reasons.”**

Some versions of the MCAD connector cannot be upgraded automatically as the underlying architecture of the setup wizard might have changed. In such cases the error message shown in *Figure 2* appears. Only a very limited number of MCAD connector versions are affected by this issue.

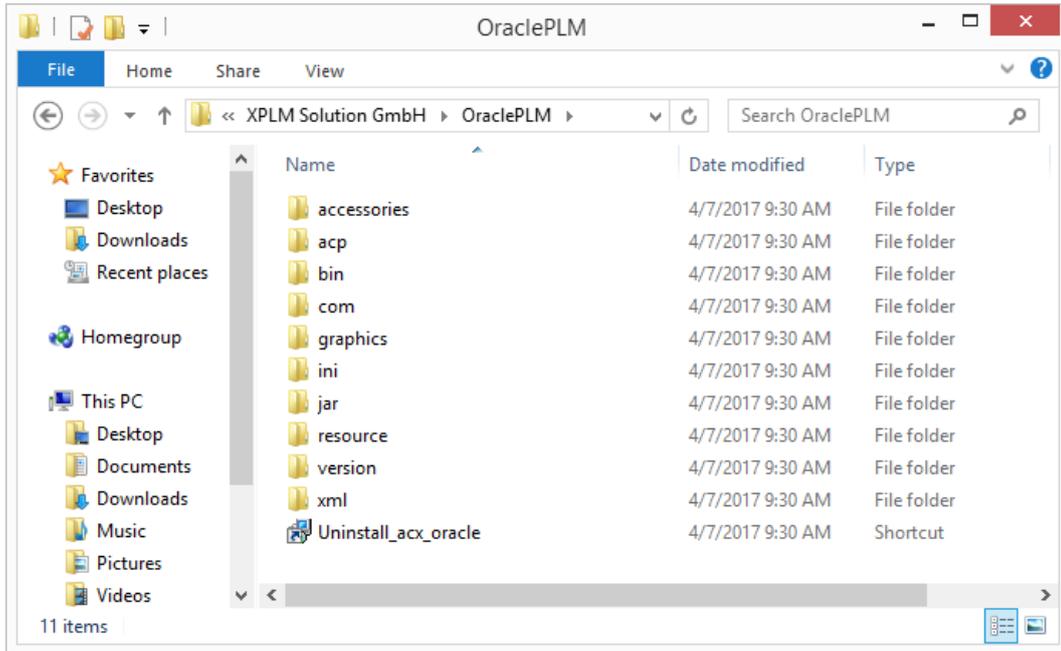
Solution: Completely uninstall the previous version of the MCAD connector that is installed on the environment in question and afterwards run the setup wizard of the new MCAD connector version.



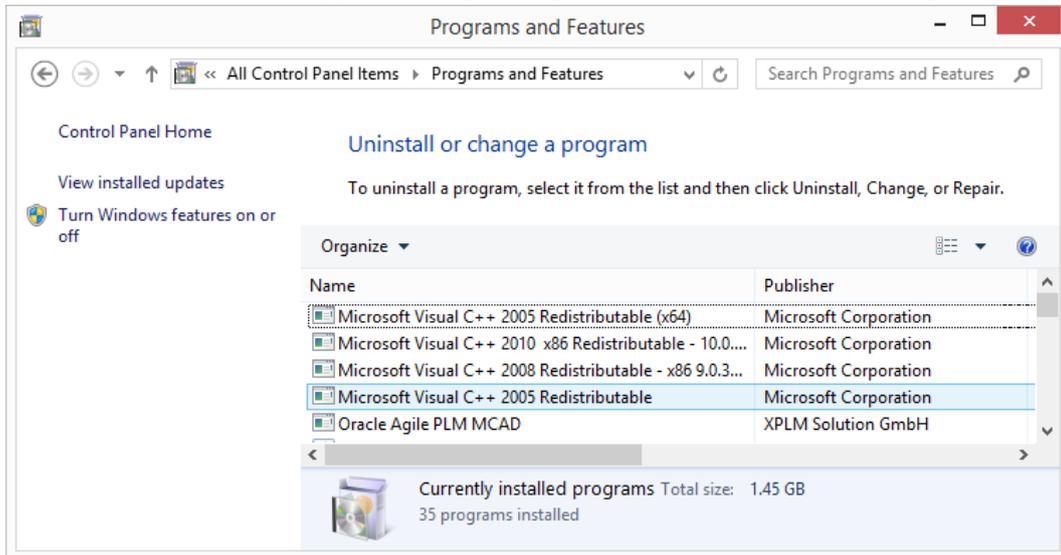
**Figure 2: Example of a compatibility related error message displayed by the setup wizard**

### 3.6 Uninstalling the MCAD connector

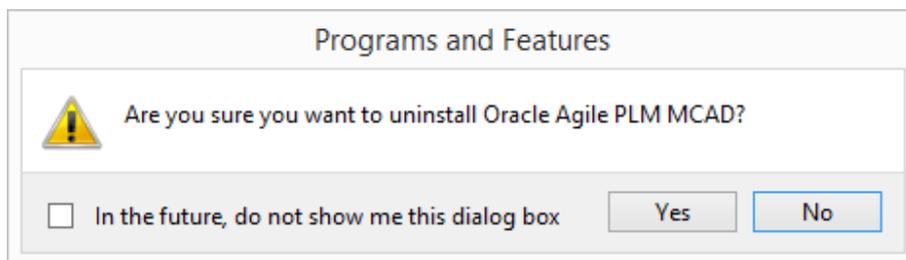
Navigate to the Agile EC installation directory. For the example used throughout this section “C:\Program Files\XPLM Solution GmbH\OraclePLM” and double click the *Uninstall\_acx\_oracle* link.



Alternatively select *Uninstall* for the application *Engineering Collaboration Installer* under *Programs and Features*:



Confirm the uninstallation using the “Yes” button:



The files and folders of the MCAD integration are not removed through the above mentioned process. Users who intent to fully remove the MCAD integration may eventually delete the MCAD integration's installation directory.

To uninstall the integration in a silent mode

- › Copy the sample code and paste the code in a .bat file (uninstallation of acw)

```
START /WAIT msiexec /uninstall acx_x64.msi /quiet  
START /WAIT msiexec /uninstall acw_x64.msi /quiet
```

- › Save the file, with the name `uninstall.bat`, in the same directory that contains the installation program.
- › In the `uninstall.bat` file which is saved on the system, edit the values for the parameter names to reflect the configuration (described in chapter Silent Installation).
- › Example to uninstall MSXML 4.0 and Visual C++ Redistributable 9.0

```
START /WAIT msiexec /uninstall msxml_4.30.2100_x86.msi /quiet  
START /WAIT vcredist_9.0.30729.6161_x64.exe /uninstall /q
```