



Agile Product Lifecycle Management

MCAD Connectors for Agile Engineering Collaboration

Installation Guide

V 3.4.0.0

Oracle Part Number – E60707-02

March 2015

Copyrights and Trademarks

This document contains information protected by copyright.

All rights are reserved, including the translation. No part of this documentation may be reproduced in any way (print, photocopy, microfilm or any other form) or processed, duplicated or distributed by use of electronic system without written permission of the company. The information contained in this documentation does not constitute any obligation on the part of the seller. The software described in this documentation is delivered under licensing contract which governs its use.

xPLM Solution is not liable for errors in this documentation.

All trademarks are the property of their respective owners.

Contact Address (for Support Services see Preface chapter):

xPLM Solution GmbH
Devrientstr. 5
D - 01067 Dresden, Germany
www.xplm.com

xPLM Solution Inc.
250 Commercial Street, Suite 520
Worcester, MA 01608 USA

Preface

Contacting Oracle Support Services

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

Accessibility of Code Examples in Documentation

Screen readers may not always correctly read the code examples in this document. The conventions for writing code require that closing braces should appear on an otherwise empty line; however, some screen readers may not always read a line of text that consists solely of a bracket or brace.

This documentation may contain links to web sites of other companies or organizations that xPLM Solution does not own or control. xPLM Solution neither evaluates nor makes any representations regarding the accessibility of these web sites.

CONTENT

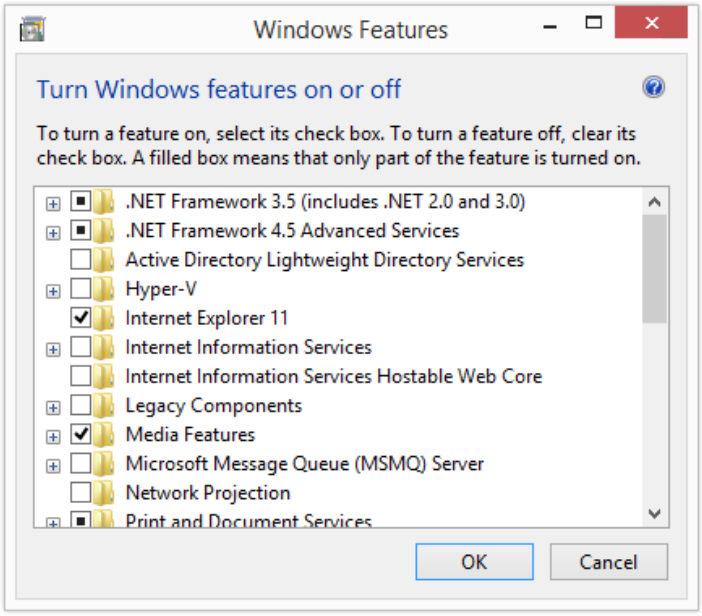
1 Introduction and General Information 4
1.1 About this Document 4
2 Prerequisites 5
3 Installation 6
3.1 Installation Packages 6
3.2 Overview on the Available Installation Procedures 6
3.3 Installation Procedures 7
3.3.1 Default Installation Procedure 7
3.3.2 Creating a Custom, Redistributable Installation Package 10
3.3.3 Performing a Silent End-User Installation Based on a Custom Installation Package 11
3.3.4 Performing a Legacy Installation with Manual Package Merging 12
3.4 Post-Installation Configuration 12
3.4.1 Workspace Location 12
3.4.2 For Creo and Pro/ENGINEER 12
3.4.3 For Solid Edge 13
3.4.4 For SolidWorks 13
3.4.5 For Environments That Contained Older MCAD Connector Installations 13
3.5 Troubleshooting 13
3.6 Uninstalling the MCAD connector 15

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 0, *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 Window 8.1, make sure that .NET Framework 3.5 and .NET Framework 4.5 (or higher) are activated in the *Windows Features* dialog:



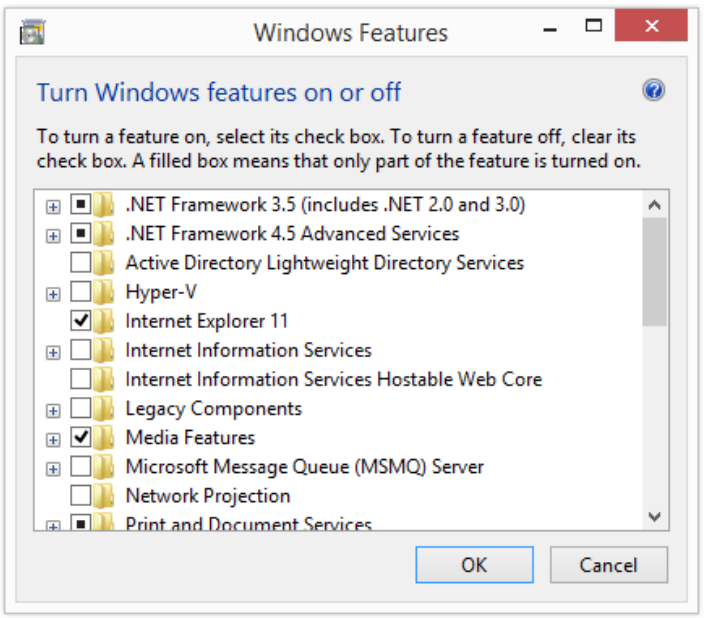
Installation, contains a quick installation guide for advanced users and a step-by-step guide on how to install the connector and explains in detail what steps must be performed in order to install the connector correctly.

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 Window 8.1, make sure that .NET Framework 3.5 and .NET Framework 4.5 (or higher) are activated in the *Windows Features* dialog:



3 Installation

3.1 Installation Packages

The MCAD connector for Agile PLM is shipped as a set of Zip archives which can be obtained via Oracle Software Delivery Cloud (https://edelivery.oracle.com). There is one Zip archive containing the required software components for each supported CAD system, a CAD-independent archive (web components package) and a separate archive containing the graphical setup wizard.

CAD Dependent Packages
MCAD Connector Package for Creo Parametric
MCAD Connector Package for SolidWorks
MCAD Connector Package for Solid Edge

CAD Independent/Common Package
MCAD Connector Web Components

Graphical Installation Wizard
MCAD Connector Setup Wizard

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

In order to install a functional MCAD connector environment, at least one CAD dependent package, the web components package and the installation wizard package are necessary. It is possible to install an MCAD connector environment for more than one CAD system on a workstation. In such cases, one CAD dependent package for each CAD system is required.

3.2 Overview on the Available Installation Procedures

The MCAD connector for Agile PLM is a modular software capable of connecting several CAD systems to Agile. For each CAD a dedicated installation package exists that contains the data relevant for this system. These packages are called *MCAD Connector for SolidWorks*, *Solid Edge* etc. Additionally, there is a common package which contains shared components, the *MCAD Connector Web Components* package and a separate package containing the graphical installation wizard.

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, *Creating a Custom, Redistributable Installation Package*
- 3.3.3, *Performing a Silent End-User Installation Based on a Custom Installation Package*
- 3.3.4, *Performing a Legacy Installation with Manual Package Merging*.

3.3 Installation Procedures

3.3.1 Default Installation Procedure

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

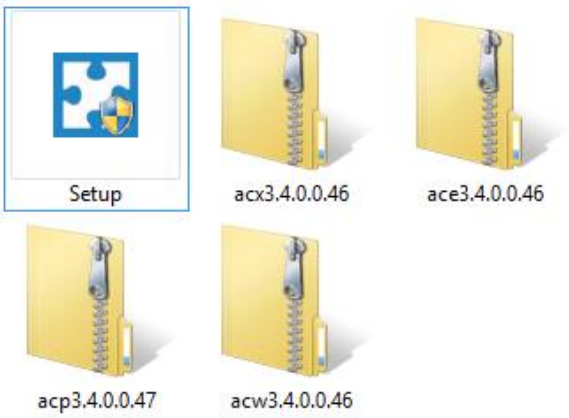
1. Download the required installation packages to a download directory
2. Extract (unzip) the setup wizard package
3. Execute the setup wizard's executable and follow the instructions on screen

Select a directory on the end-user's workstation and download the installation packages 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 MCAD connector installation files:

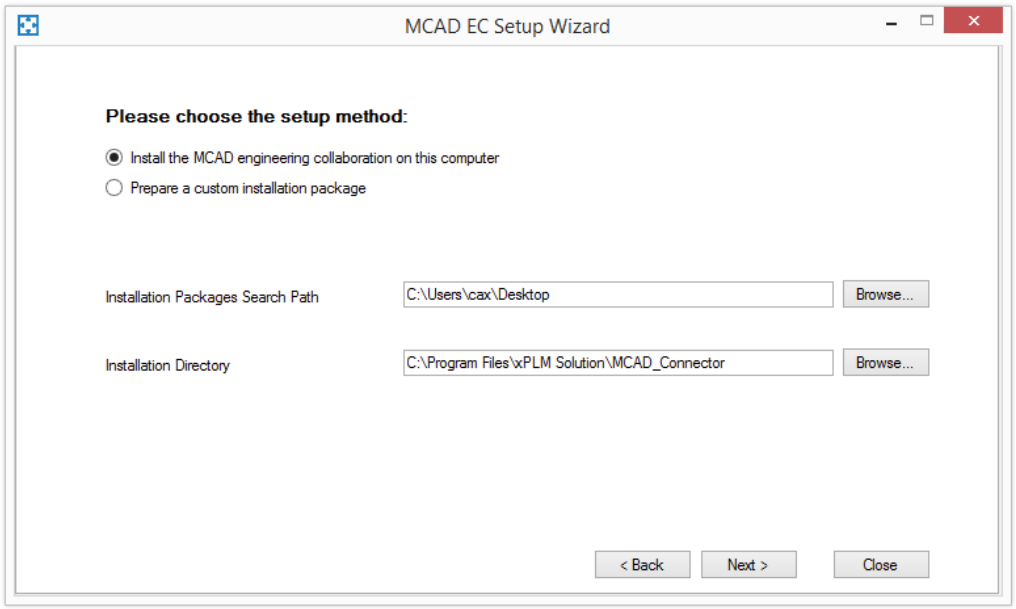
- All necessary CAD packages
- The web components package
- The installation wizard's package

Unzip the installer's zip package. A file named *Setup.exe* and possibly another configuration file will be unzipped through this. It is not required to unzip anything else.

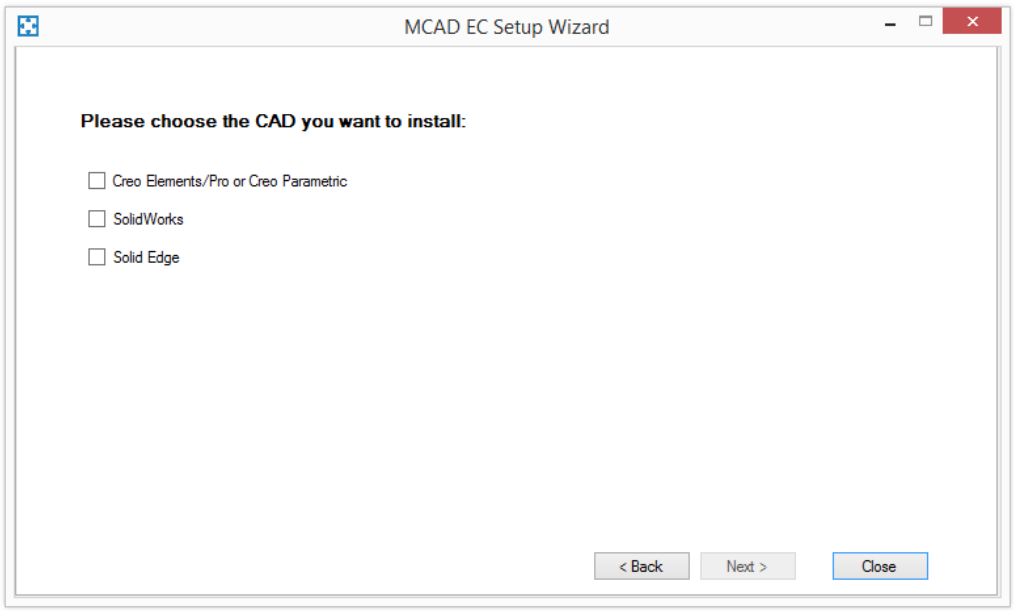


Execute the executable *Setup.exe*. A graphical installation wizard will start. Follow the instructions on each of the installation dialog boxes.

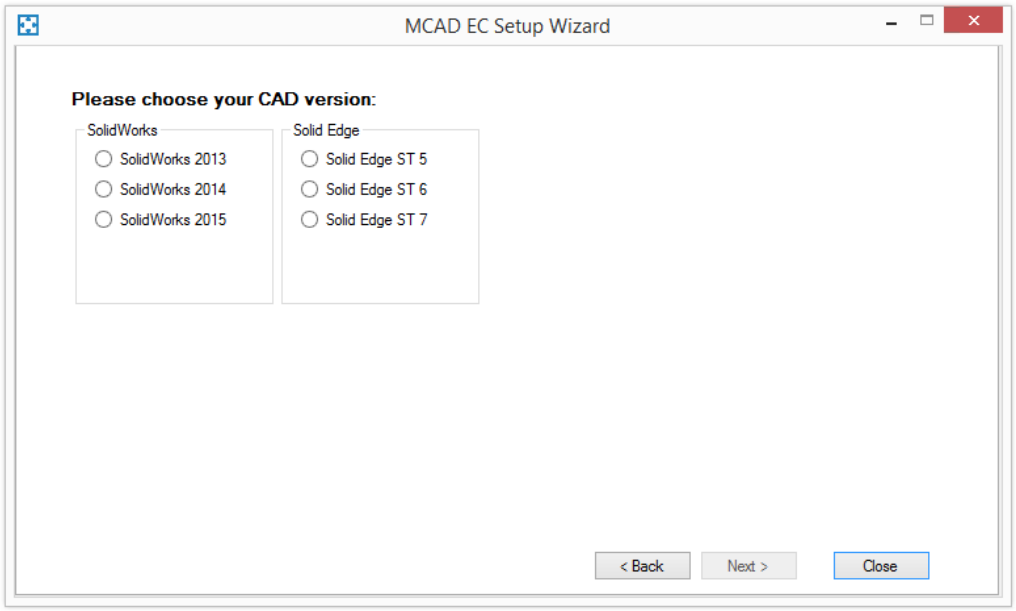




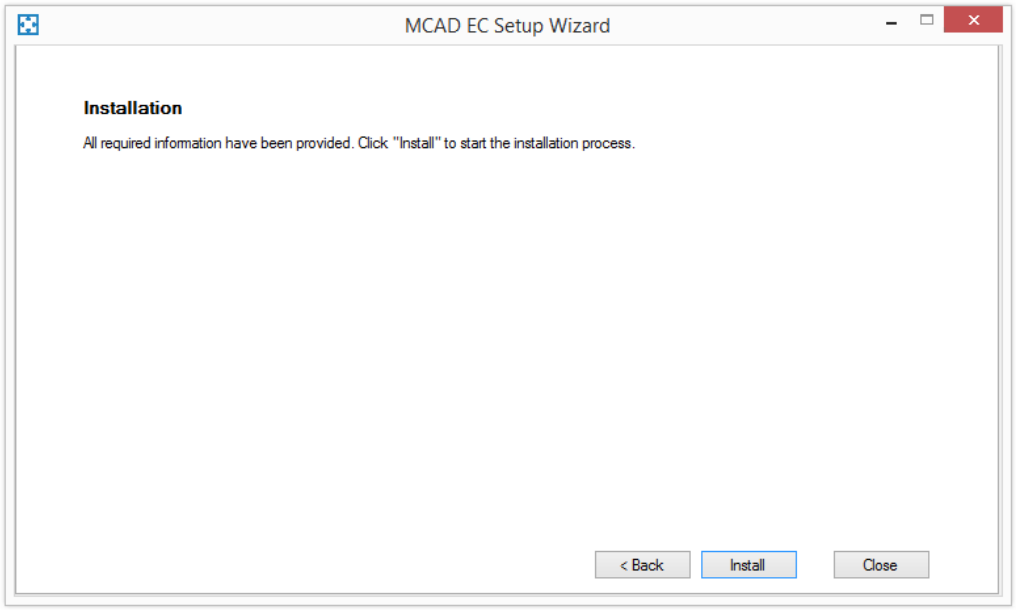
Choose the radio button for *Install MCAD engineering collaboration on this computer* (which should be the default option).



Select the CAD system/systems for which the MCAD integration should be installed. The CAD systems, for which the MCAD integrations can be installed, are determined automatically based on the MCAD installation packages available.



For some CAD systems (e. g. SolidWorks, Solid Edge) it is required to provide the actual CAD system version for which the MCAD integration should be installed. The installation wizard will query for the actual CAD version if required.



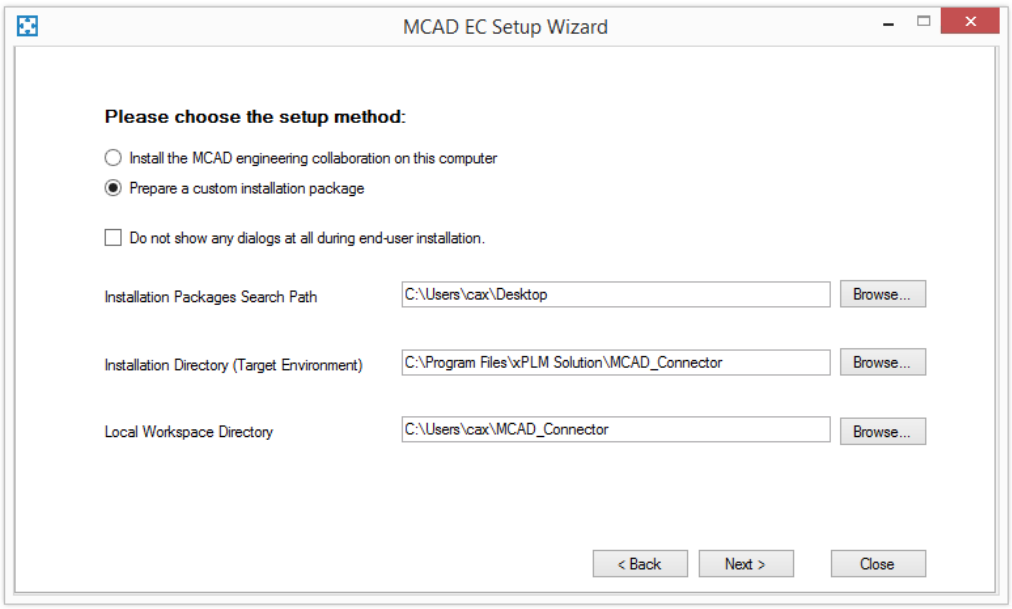
Use the *Install* button to start the installation process. Wait until the process has completely finished. Use the *Finish* button to close the installation wizard. **Reboot the workstation after that.**

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

3.3.2 Creating a Custom, Redistributable Installation Package

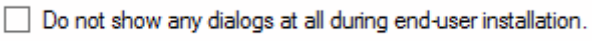
The MCAD connector setup wizard supports the preparation of a custom, redistributable installation package which can be configured by system administrators before redistributing the installation package to target environments where the actual installation is performed. End users can install the custom installation package using a silent installation procedure. This chapter provides information on how to create, customize and distribute a custom installation package.

When opening the installation wizard of the MCAD integrations, the radio button *Prepare a custom installation package* allows the creation of a redistributable installation package.



When selecting this option setting, the setup wizard displays an additional prompt for a local workspace directory. After having defined all required installation parameters, the installation package will be written to this directory.

The option setting *Do not show any dialogs at all during end-user installation*, which is only available when selecting to create a redistributable installation package, affects the behavior of the end-user installation.



If the checkbox is selected, the actual setup procedure will not display any dialog or visual feedback when running when executing the actual MCAD setup procedure on the target environment. If not selected, a dialog including a progress bar will be presented during installation to provide a visual feedback on the installation process. In addition, the installation process needs to be started by pressing a button in this case. However, a modification of the pre-defined, installation related option settings is not possible either way.

When creating a redistributable installation package, the same installation related parameters required for stand-alone installation (refer to chapter *3.3.1, Default Installation Procedure*) need to be provided. However, starting the setup procedure will not perform the installation of the MCAD connector on the current environment. Instead, the redistributable installation package will be provided in the workspace directory mentioned above.

For details on the silent installation procedures refer to chapter 3.3.3, *Performing a Silent End-User Installation Based on a Custom Installation Package*.

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

The installation of the MCAD integrations can be performed by running the setup wizard's executable *Setup.exe*, which is part of the redistributable installation package. After having started the executable, depending on the pre-defined installation parameters, the user is presented with a dialog window that allows starting the installation process or the installation process silently starts in the background without any additional user interaction or notification.

Please note: The setup wizard requires a user that can provide elevated privileges to a process via Windows User Account Control. This also accounts for silent installation.

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

3.3.4 Performing a Legacy Installation with Manual Package Merging

The MCAD connector environment needs to be installed into a local directory on the end-user's workstation. This directory will be called <install dir> in the following. The end-user needs full read and write privileges for this directory.
After you have downloaded the necessary installation packages, extract the *CAD dependent package* or one of the *CAD dependent packages* (in case an MCAD connector environment for more than one CAD system should be installed), to the <install dir>. A directory named *components* or another CAD specific directory (e. g. *xacp*) should appear in the <install dir> as a result.
If the MCAD connector environment should be installed for more than one CAD system, extract the remaining, not yet extracted *CAD dependent packages* into the <install dir>, merging the files contained within these packages into the existing *components* directory if necessary.
After that, extract the *CAD independent package* into the *components* or CAD specific directory (e. g. *xacp*), overwriting existing files if prompted.
The MCAD connector provides a graphical installation wizard (installer) that sets up the connector environment. To start the wizard, execute the file <install dir>\components\install\setup_x64.exe **with administration privileges**.
The installation wizard checks the runtime environments available on the workstation and installs missing libraries, if necessary. After that, the installer displays all CAD systems for which the MCAD environment could be installed. Select the CAD system(s) which is (are) appropriate for you and proceed using the *Next* button.
After the installation wizard has finished, a reboot of the workstation is necessary.

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\MCAD_Connector\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

Open the **xACP.cfg** configuration file in a text editor. The configuration file is situated in the following directory: **<install dir>\xacp\com\xACP.cfg**.

A number of configuration settings contained within this file need to be adjusted manually:

- Adjust the option setting **AcpUserRoot**. This setting defines the workspace directory used by the MCAD connector.
- Select a language setting for the MCAD connector by adjusting the option setting **AcpLang** or keep the default setting (English).
- The MCAD connector needs to know which Creo version to use. Adjust the option setting **AcpProEV** accordingly. The AcpProEV option uses years to define the Creo version. The following values are supported: *2010* (stands for Creo Elements/Pro 5), *2011* (stands for Creo Parametric 1), *2012* (stands for Creo Parametric 2) and *2014* (stands for Creo Parametric 3).
- The startup script that should be used to start Creo needs to be adjusted as well. To do so, define the file path of the correct startup script in the **AcpStartProE** option setting. For example **C:\Program Files\PTC\Creo 2.0\Parametric\bin\parametric.bat** when starting Creo Parametrics 2.0 from the default installation directory on a Windows 7 64 bit machine.

After having performed the above mentioned configuration, the Agile PLM integration can be started together with Creo using the startup script **<install Directory>\xacp\com\xacp_start.bat.** We recommend to create a shortcut of the startup script for easy access.

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

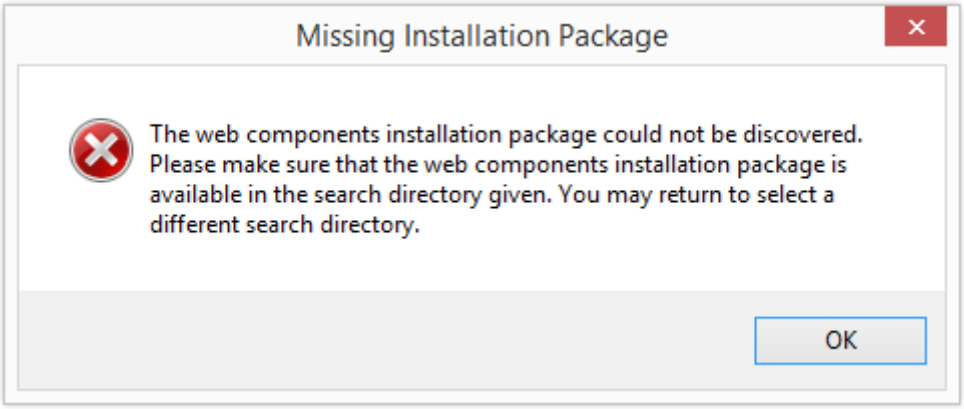
For Environments, on which the MCAD connector had been installed in the past, make sure to delete the following file for each user. Replace [USER] with the actual user name:

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

3.5 Troubleshooting

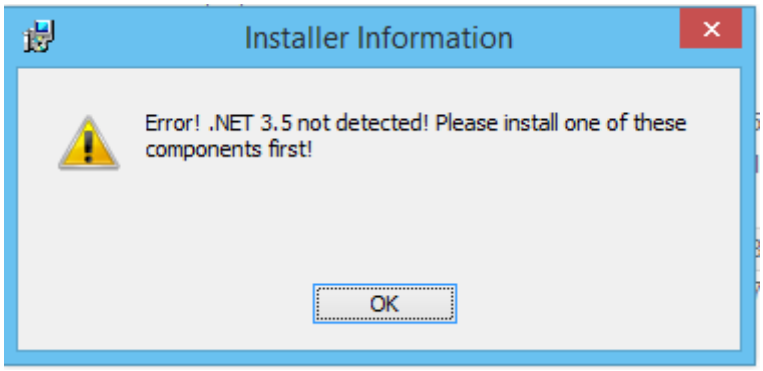
Problem: The MCAD connector installation wizard displays the error message "Missing Installation Package".

Solution: The message below indicates the Web Components installation package has not been downloaded to the folder from which the installation wizard has been started or the package could not be detected. Make sure that the Web Components installation package is available and has not been renamed after downloading.



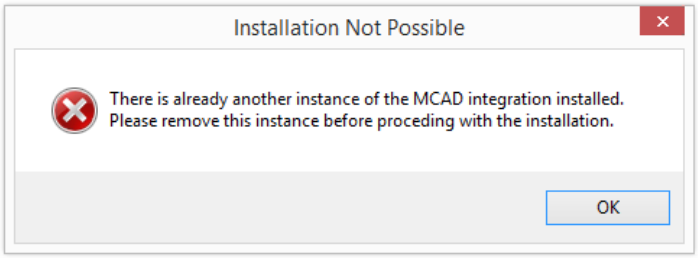
Problem: During installation, an error message ".NET 3.4 not detected" is displayed.

Solution: When using a Windows 8.1 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: The MCAD connector installation wizard displays an error message when another instance of the MCAD connector is already installed.

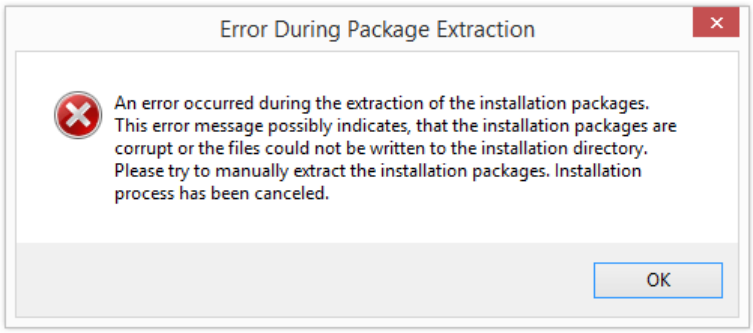
Solution: The following message points out that the integration is already installed:



The installation wizard requires that any other version of the MCAD integration is removed before installing a new one. Uninstall any other versions of the MCAD connector.

Problem: The MCAD connector installation wizard displays an error messsage "Error During Package Extraction".

Solution: The installation wizard displays this error message if the installation zip packages could not be read or the extracted files could not be written to the installation directory.

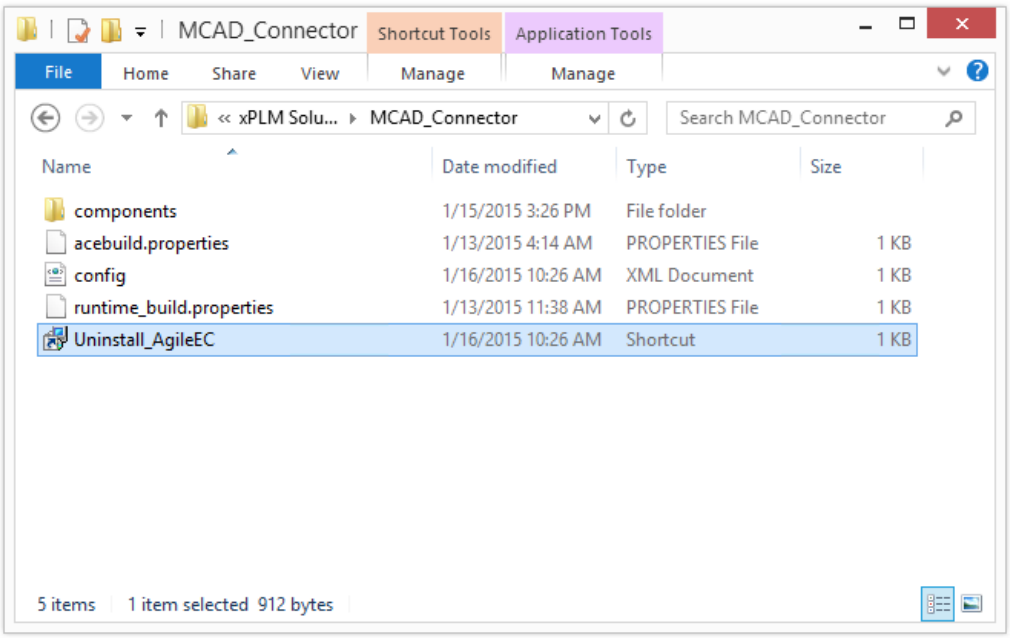


Problem: The Agile drop down-menu does not become visible on SolidWorks 2015.

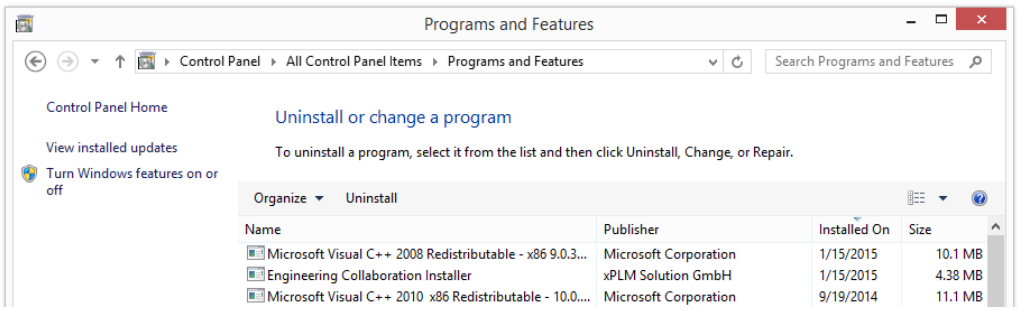
Solution: The CAD vendor has moved any plug-in menu bars to the sub-menu "Tools" (name of this menu varies depending on the language setting). The MCAD connector's menu bar is located there.

3.6 Uninstalling the MCAD connector

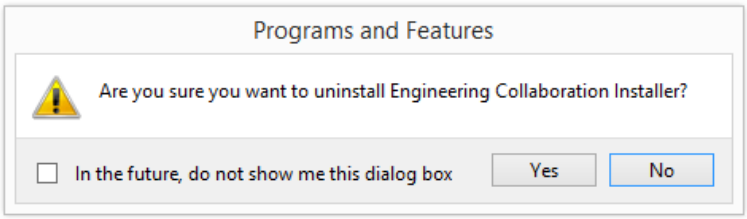
Navigate to the Agile EC installation directory. For the example used throughout this section "C:\Program Files\xPLM Solution\MCAD_Connector" and double click the *Uninstall_AgileEC* link.



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.