

**CATIA
Teamcenter
Interface
RII**

CMI RII Release 3.1

Installation Manual

Copyright

© 1999, 2011 T-Systems International GmbH.
All rights reserved. Printed in Germany.

Contact

T-Systems International GmbH
PDC PLM
Fasanenweg 5
70771 Leinfelden-Echterdingen
Germany

<http://www.cmi-support.com>

☎ +49-711-972-40304

✉ +49-711-972-95975

mail : cmi_support@t-systems.com

Manual History

Version	Date
1.0	December 2008
1.0.1	January 2009
1.1	February 2009
1.2	March 2009
2.0	July 2009
2.0.1	August 2009
2.1	October 2009
2.2	April 2010
2.3	November 2010
3.0	April 2011
3.1	November 2011

This edition obsoletes all previous editions.

Trademarks

CATIA is a registered trademark of Dassault Systèmes.

Metaphase is a registered trademark of Metaphase Technology, Inc.

Teamcenter is a registered trademark of Siemens PLM Corporation.

Names of other products mentioned in this manual are used only for identification purpose and may be trademarks of their companies.

Preface

About this Manual

This manual provides installation and configuration information for the CATIA Teamcenter (CMI RII) Interface. Before using this guide, be sure you understand:

- the operating system
- the administration of the CATIA system
- the administration of the Teamcenter system

Related Documents

The following manuals contain information about installation, usage and customization of the CATIA Teamcenter Interface:

Manual Title	Version
<i>CATIA Teamcenter Interface RII Installation Manual</i>	3.1
<i>CATIA Teamcenter Interface RII User Manual</i>	3.1
<i>CATIA Teamcenter Interface RII Customizing Manual</i>	3.1

Your Comments are Welcome

Please feel free to tell us your opinion; we are always interested in improving our publications. Mail your comments to:

T-Systems International GmbH
PDC PLM
Fasanenweg 5
70771 Leinfelden-Echterdingen
Germany

E-mail: cmi_support@t-systems.com

Table of Contents

CHAPTER 1	1
OVERVIEW	1
SYSTEM AND SOFTWARE REQUIREMENTS.....	1
<i>Required CATIA V5 Modules</i>	2
CHAPTER 2	3
SERVER SIDE INSTALLATION	3
CMI RII SERVER SIDE INSTALLATION.....	3
REMARK FOR TEAMCENTER 2007.....	3
CMI RII CUSTOM TEMPLATE INSTALLATION	3
CMI RII CUSTOM LIBRARY INSTALLATION	14
CHAPTER 3	17
CLIENT SIDE INSTALLATION	17
HOW TO INSTALL THE CMI CLIENT	17
POST-INSTALLATION TASK.....	25
<i>Memory</i>	25
<i>Preference caching</i>	25
<i>Client cache</i>	25
TROUBLESHOOTING R18.....	25
CATIA V4 CLIENT	27
CHAPTER 4	31
IMPORTING CMI RII PREFERENCES	31
CHAPTER 5	33
SETUP THE CMI RII ICONS	33
CHAPTER 6	35
REGISTER THE XML STYLE SHEETS	35
CHAPTER 7	37
ADD THE DISPLAY NAMES	37
CHAPTER 8	39
SETUP THE CMI RII CREATE DIALOGS	39
DIMENSION.....	39
DISPLAY NAMES	40
SELECT ITEM TYPE	41
FORMS IN CREATE ITEM DIALOG.....	41
REMEMBER ATTRIBUTES.....	42
CHAPTER 9	43
SETUP THE CATIA TEMPLATES	43
TEMPLATE FOLDER.....	43
CHAPTER 10	45
STARTING CLIENT SIDE COMPONENTS	45
CMI_START.BAT	45
RII_START.BAT.....	45
CHAPTER 11	47

CMI LICENSE MANAGER	47
REMARKS.....	47
WINDOWS 7	47
RUNNING LICMAN AS A REGULAR EXECUTABLE ON WINDOWS.....	47

Figures

FIGURE 1: TEM - MAINTENANCE PAGE	4
FIGURE 2: TEM - CONFIGURATION MAINTENANCE PAGE	4
FIGURE 3: TEM - CONFIGURATION SELECTION PAGE	5
FIGURE 4: TEM - FEATURE MAINTENANCE PAGE	5
FIGURE 5: TEM - SELECT FEATURES PAGE	6
FIGURE 6: TEM - FEATURE SELECTION DIALOG	6
FIGURE 7: TEM - SELECT FEATURES PAGE	7
FIGURE 8: TEM - TEAMCENTER ADMINISTRATIVE USER PAGE	7
FIGURE 9: TEM - DATABASE TEMPLATE SUMMARY PAGE	8
FIGURE 10: TEM - CONFIRM SELECTIONS PAGE	8
FIGURE 11: TEM - INSTALL FEATURES PAGE	9
FIGURE 12: TEM - MAINTENANCE PAGE	9
FIGURE 13: TEM - CONFIGURATION MAINTENANCE PAGE	10
FIGURE 14: TEM - CONFIGURATION SELECTION PAGE	10
FIGURE 15: TEM - FEATURE MAINTENANCE PAGE	11
FIGURE 16: TEM - TEAMCENTER ADMINISTRATIVE USER PAGE	11
FIGURE 17: TEM - UPDATE DATABASE PAGE.....	12
FIGURE 18: TEM - FEATURE SELECTION DIALOG	12
FIGURE 19: TEM - UPDATE DATABASE PAGE.....	13
FIGURE 20: TEM - CONFIRM SELECTIONS PAGE	13
FIGURE 21: TEM - INSTALL FEATURES PAGE	14
FIGURE 22: PREFERENCES DIALOG OF TEAMCENTER RICH CLIENT.....	15
FIGURE 23: SETUP - START PAGE	18
FIGURE 24: SETUP - LICENSE AGREEMENT PAGE.....	18
FIGURE 25: SETUP - CHOOSE USERS PAGE	19
FIGURE 26: SETUP - CHOOSE INSTALL LOCATION PAGE	19
FIGURE 27: SETUP - CHOOSE EXCHANGE DIRECTORY PAGE	20
FIGURE 28: SETUP - CHOOSE TEAMCENTER DIRECTORY PAGE.....	21
FIGURE 29: SETUP - RICH CLIENT START FILE SELECTION PAGE.....	21
FIGURE 30: SETUP - CHOOSE JAVA RUNTIME ENVIRONMENT PAGE	22
FIGURE 31: SETUP - CHOOSE CATIA V5 INSTALLATION PAGE	23
FIGURE 32: SETUP - CHOOSE ORIGINAL CATIA V5 ENVIRONMENT PAGE	23
FIGURE 33: SETUP - SUBSUMPTION PAGE.....	24
FIGURE 34: SETUP - INSTALLATION COMPLETE PAGE	24
FIGURE 35: SETUP - FINISHED PAGE	25
FIGURE 36: SETUP OF CMI RII ICONS	34
FIGURE 37: DEFAULT CREATE DIALOG DISPLAYS - CONTAINER_LOCALE.PROPERTIES.....	40
FIGURE 38: DEFAULT CREATE DIALOG DISPLAYS - UI_LOCALE.PROPERTIES.....	40
FIGURE 39: CUSTOMIZED CREATE DIALOG DISPLAYS - UI_LOCALE.PROPERTIES.....	41

CHAPTER 1

Overview

The installation of the CATIA Teamcenter Interface RII consists of three parts.

The first step is to modify and extend your Teamcenter server installation. This is done by deploying a new custom template to the Teamcenter database, which will add several new dataset types to the database schema. The library of the custom server will be installed.

The second step is to install the client side components. This includes the installation of:

- CMI RII CATIA V5 module
- CMI RII Teamcenter Rich Client application
- RC CMI listener, a program responsible for the communication between CATIA and Teamcenter Rich Client

The third step is to import a set of CMI RII specific preferences and to create some specific objects.

System and Software Requirements

CATIA V5 Version V5R19, V5R20, and V5R21 (other revisions on request):

CATIA V5 Client V5R19	AIX 5.3 TL5 (32/64Bit) HP-UX 11i SUN Solaris 10 Windows XP (32/64)
CATIA V5 Client V5R20	AIX 6.1 (64 Bit) SUN Solaris 10 Windows XP Sp2 (32/64) Windows 7 64 Bit
CATIA V5 Client V5R21	AIX 6.1 (64 Bit) Windows XP Sp2 (32/64) Windows 7 64 Bit

Teamcenter 2007.2/8.3 Rich Client Installation:

Teamcenter Rich Client	OS supported by Teamcenter
------------------------	----------------------------

Teamcenter 2007.2/8.3 Server Installation:

Teamcenter Server	OS Supported by Teamcenter
CMI custom library	Suse Enterprise, Solaris 10, and Windows XP, Windows 7 other OS on request

T-Systems licman20 license manager:

T-Systems licman20	please refer to the licman documentation
--------------------	--

Required CATIA V5 Modules

Each CATIA client needs to have the following licenses in order to use CMI:

- Mechanical Design 2,
- HD2,
- or All in one marketing license (AL2)

A DMN license is needed for the optional Released Cache support, to set the path to the Released Cache.

Please check your CATIA license configuration to find out if these products are already part of your CATIA installation.

You should perform a full installation of CATIA V5, regardless of the licensed modules.

CHAPTER 2

Server Side Installation

CMI RII Server Side Installation

Download the software from <http://www.cmi-support.com/>. Choose “Download” → “CMI RII” → “CMI RII Server Package” for the correct Teamcenter version.

Locate the downloaded archive (e.g. CMIRII_Server_TC8.3_V310.zip).

Unpack the archive to a directory, for example to “C:\temp\server”. Inside this you will find two archive files, which contain the CMI RII server side template (e.g. CMIRII_Server_Template_TC8.3_V310.zip) and the CMI RII server side library (e.g. CMIRII_Custom_Server_Library_TC8.3_V310.zip).

Remark for Teamcenter 2007

The CMI RII server side library (see chapter *CMI RII Custom Library Installation*) has to be installed before the CMI RII server side template.

CMI RII Custom Template Installation

Pre-Installation task

It is recommended to stop Teamcenter Rich Clients and Teamcenter Servers which are connected to the database where the new template will be deployed.

How to deploy the CMI RII Custom Template to the Teamcenter Configuration



For more information about deploying templates, see the Teamcenter *Business Modeler IDE Guide*.

Use the Teamcenter Environment Manager (TEM) to deploy the CMI RII custom template.

The initial deployment is done using the “Add/Remove Features” option. Once the CMI RII custom template has been installed, newer versions of the template will be installed using the “Update the database” option.

Initial deployment of the CMI RII Custom Template

1. Locate the downloaded archive (e.g. CMIRII_Server_Template_TC8.3_V310.zip) that contains the four template feature files. Unpack the archive, for example to “C:\temp\server\template”.
2. Launch the TEM from `%TC_ROOT%\install` directory. Select “Configuration Manager” and click Next:

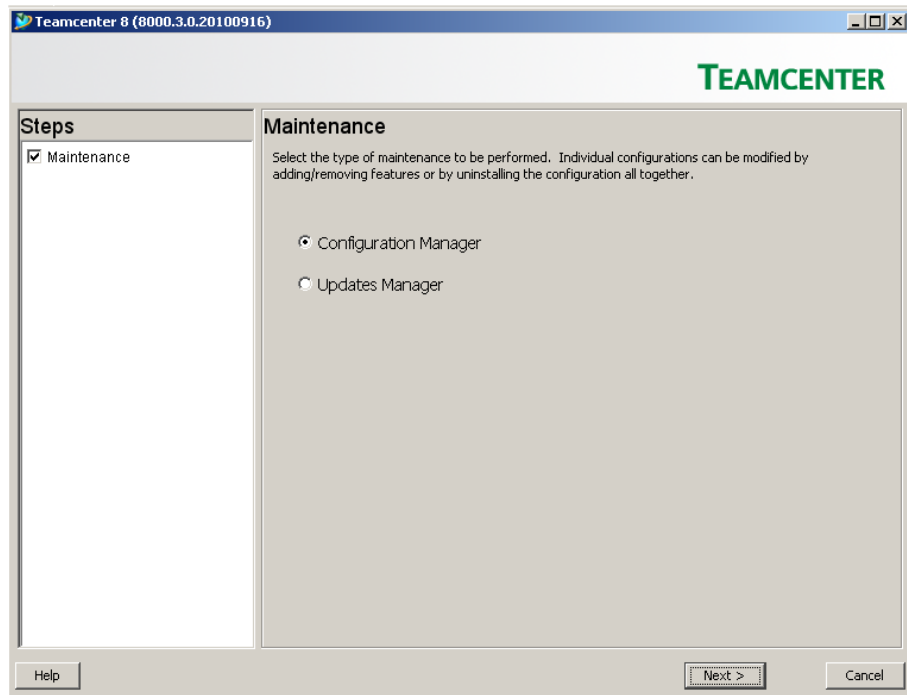


Figure 1: TEM - Maintenance page

3. Select “Perform maintenance on an existing configuration” and click Next:

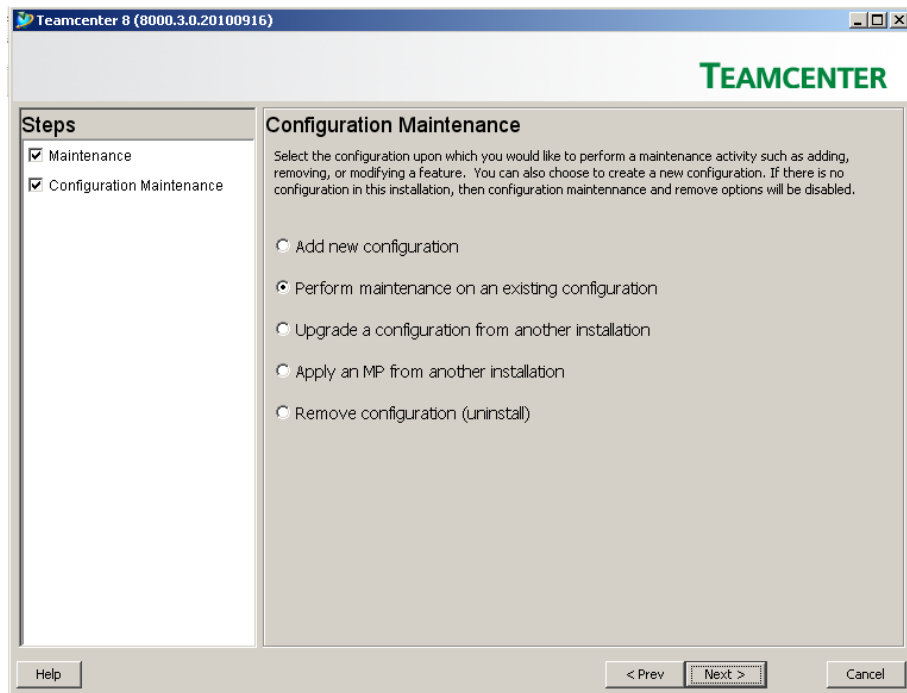


Figure 2: TEM - Configuration Maintenance page

4. On the Configuration Selection page, select the Configuration which you want to modify and click Next:

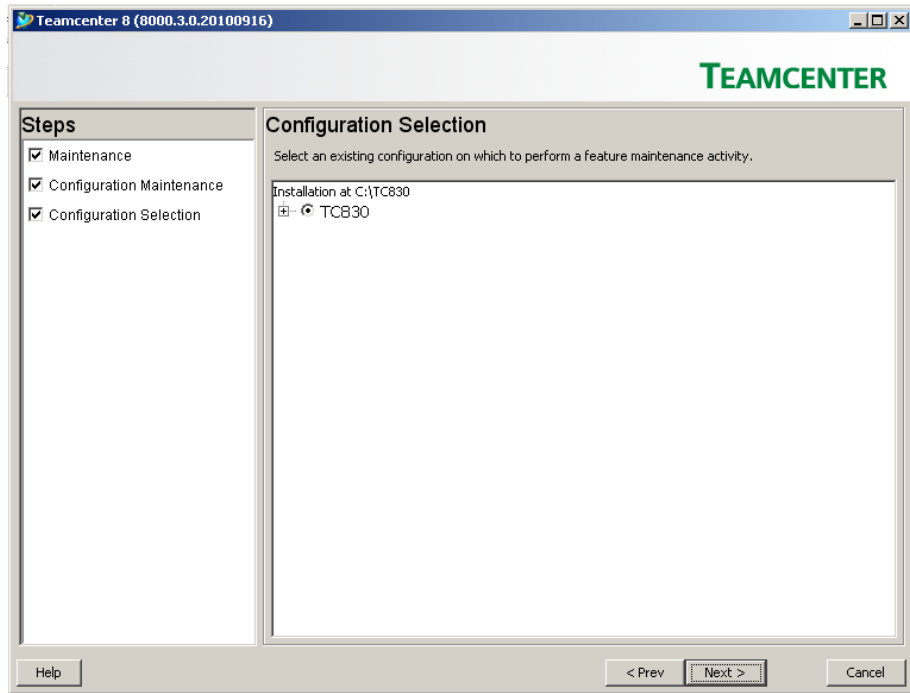


Figure 3: TEM - Configuration Selection page

5. Select “Add/Remove Features” and click Next:

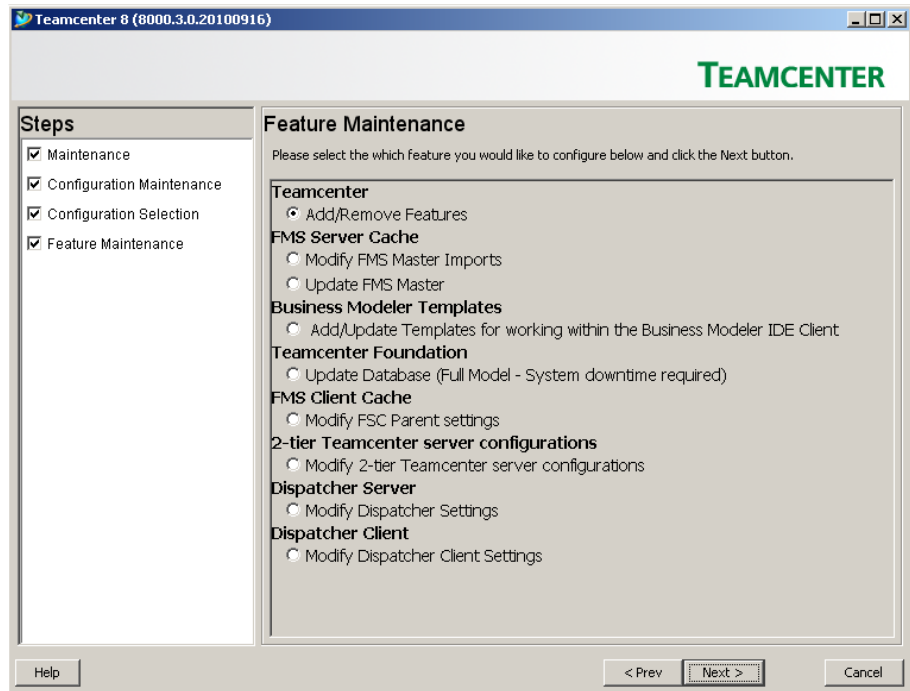


Figure 4: TEM - Feature Maintenance page

6. The Select Features lists all features which are available with the default Teamcenter installation and maybe also already installed custom templates:

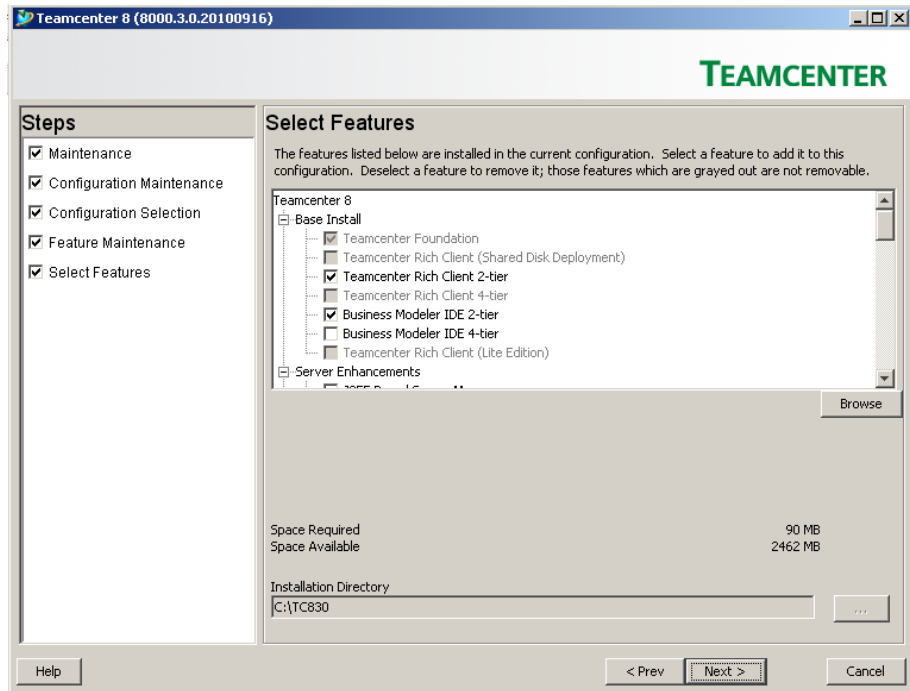


Figure 5: TEM - Select Features page

Most likely this list does not contain your new custom template, because it is not a part of the default Teamcenter installation. To install the template, TEM needs to be made aware of it. You do this by clicking on the Browse button (right below the feature list). In the following dialog, find the directory that contains the template feature files (for example “C:\temp\server\template” - see Chapter 2, step 2), select the “feature_cmirii.xml” and press the Select button:

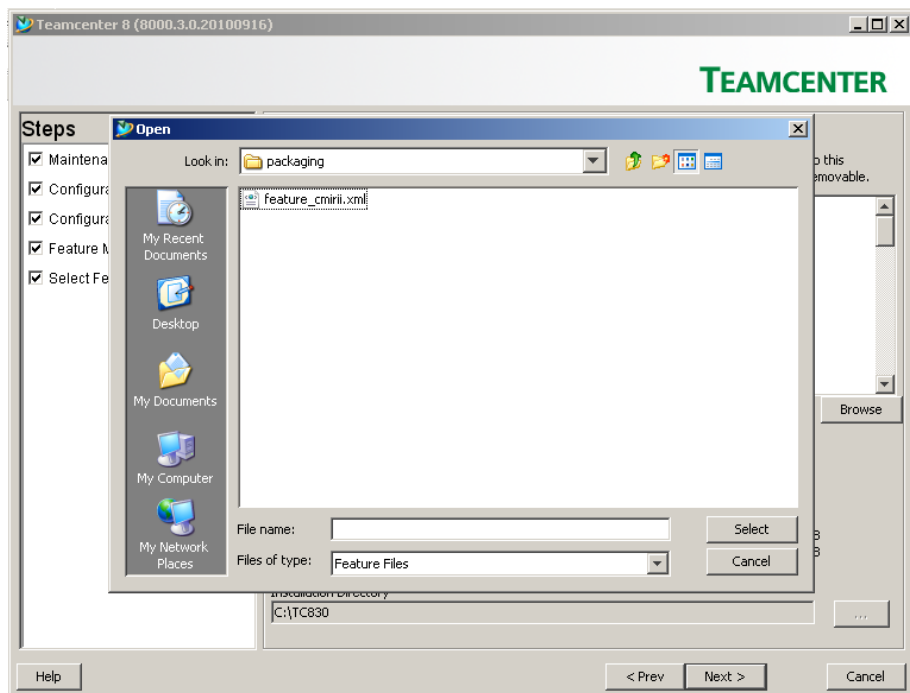


Figure 6: TEM - Feature Selection dialog

Now the Select Features page shows the new custom template below the “Teamcenter Corporate Server” section:

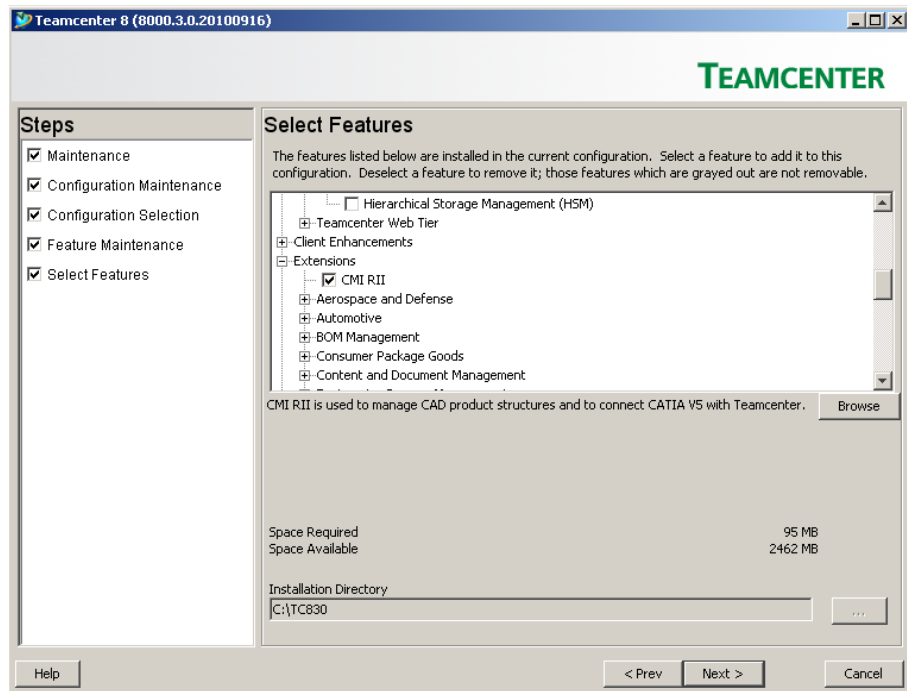


Figure 7: TEM - Select Features page

7. Check the feature in the list and click Next. Enter a valid Teamcenter Administrative user and password. Click Next:

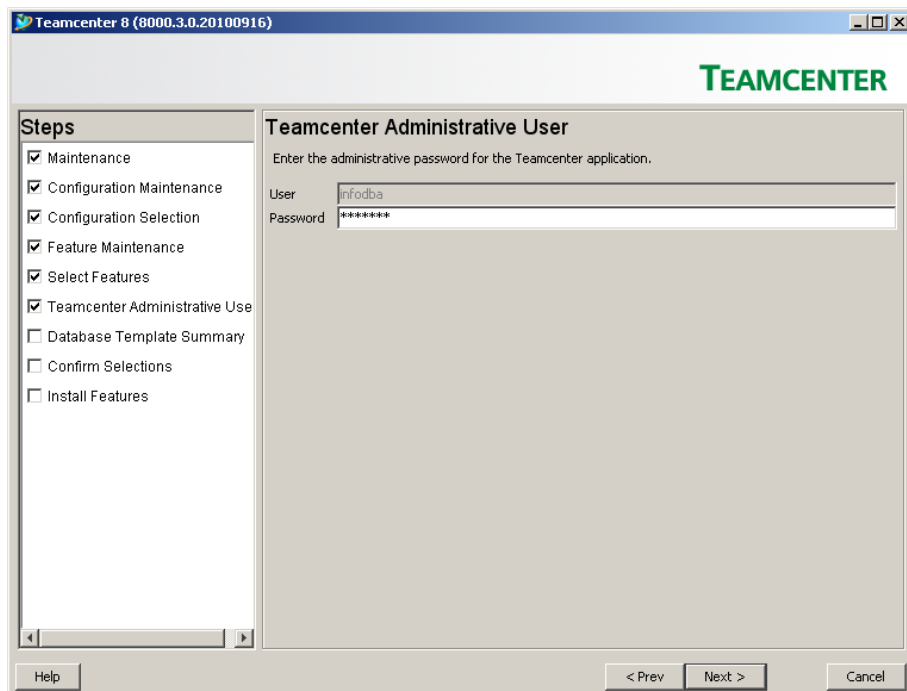


Figure 8: TEM - Teamcenter Administrative User page

8. The Database Template Summary displays a list of the templates which will be applied to the database. Click Next to proceed:

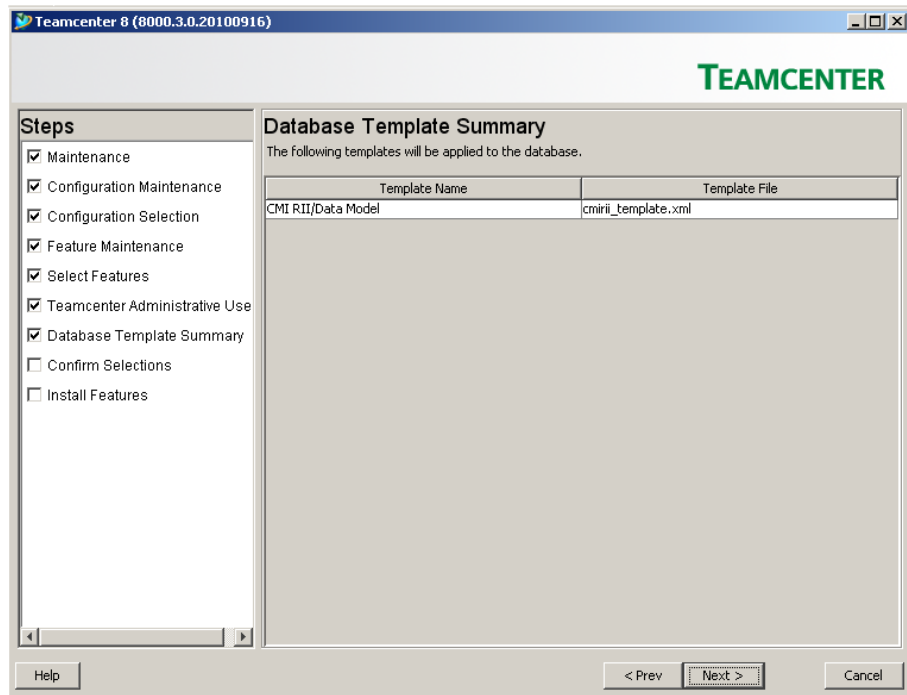


Figure 9: TEM - Database Template Summary page

9. On the Confirm Selections page, click Next:

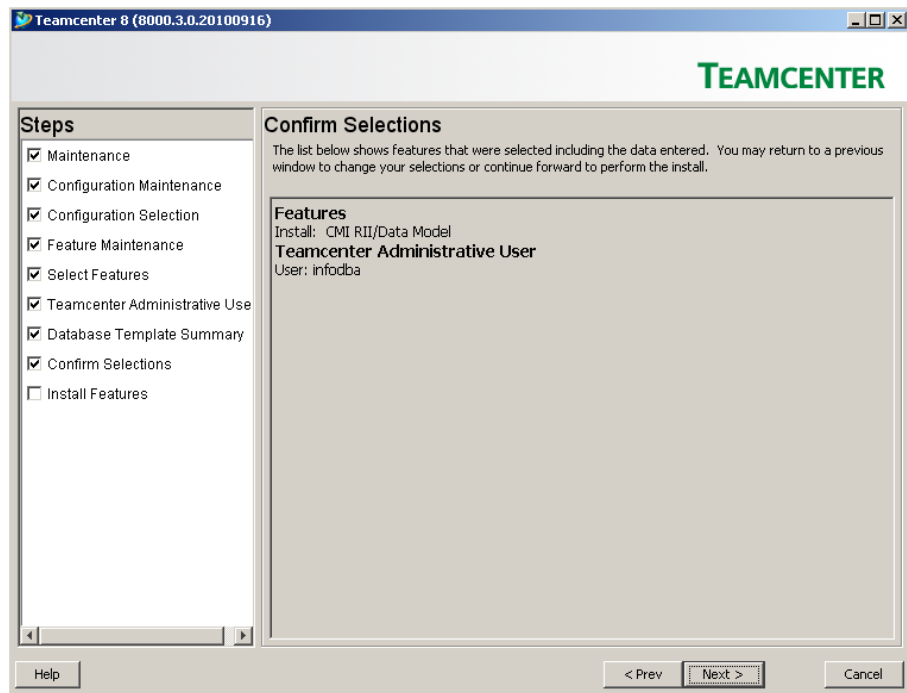


Figure 10: TEM - Confirm Selections page

10. The last page Install Features shows the progress of the installation and, finally, the installation success:

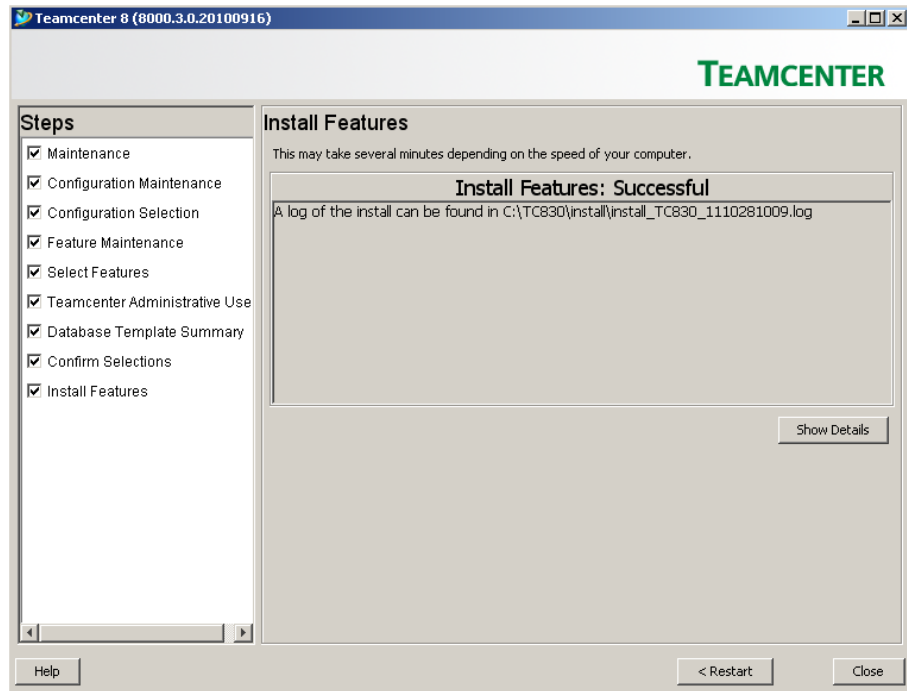


Figure 11: TEM - Install Features page

11. Restart the Teamcenter database to activate the changes. Restart also possibly running Teamcenter Rich Clients and Teamcenter Servers, which are connected to this database.

Updating an installed CMI RII Custom Template

1. Locate the downloaded archive (e.g. CMIRII_Server_Template_TC8.3_V310.zip) that contains the four template feature files. Unpack the archive, for example to "C:\temp\server\template".
2. Launch the TEM from %TC_ROOT%\install directory. Select "Configuration Manager" and click Next:

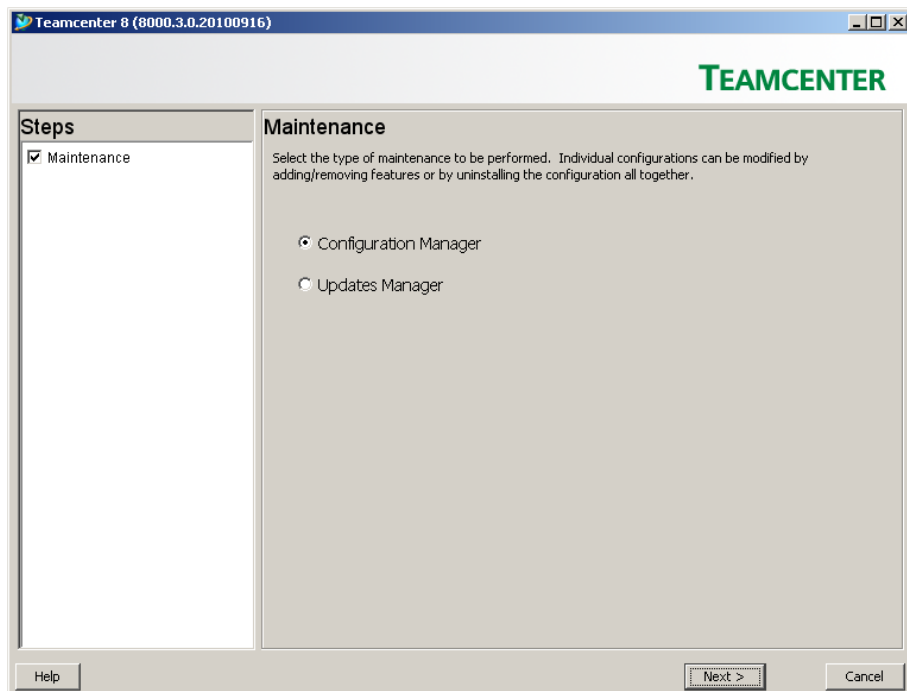


Figure 12: TEM - Maintenance page

3. Select "Perform maintenance on an existing configuration" and click Next:

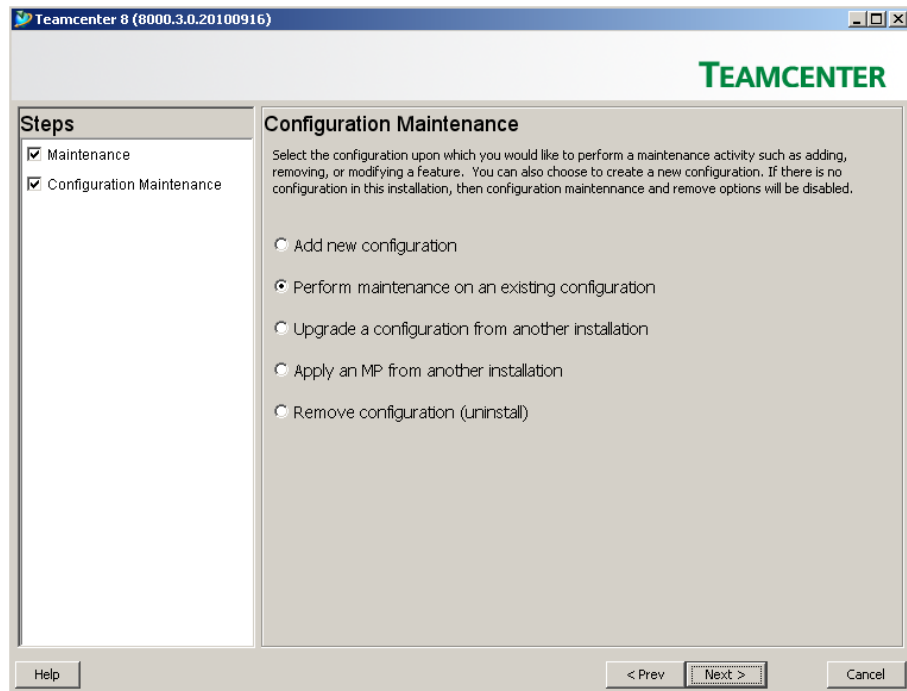


Figure 13: TEM - Configuration Maintenance page

4. On the Configuration Selection page, select the Configuration which you want to modify and click Next:

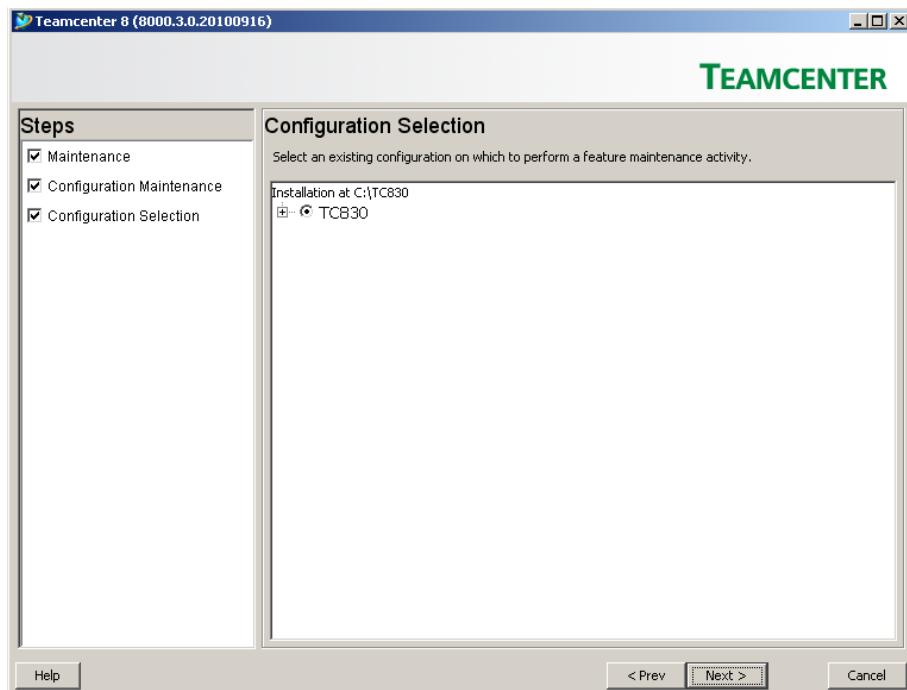


Figure 14: TEM - Configuration Selection page

5. Select "Update the database" and click Next:

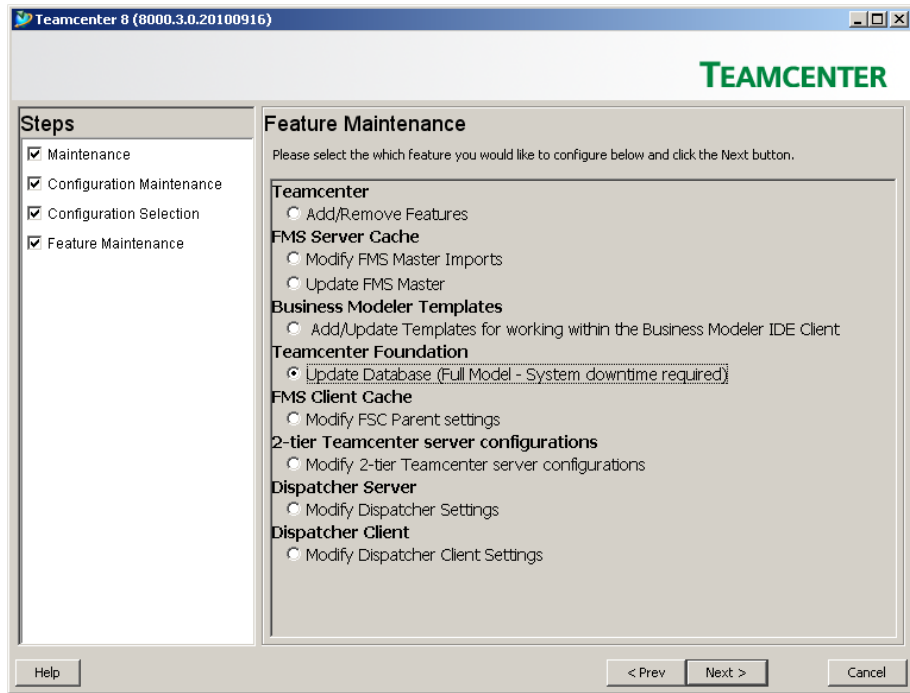


Figure 15: TEM - Feature Maintenance page

6. Enter a valid Teamcenter Administrative user and password. Click Next:

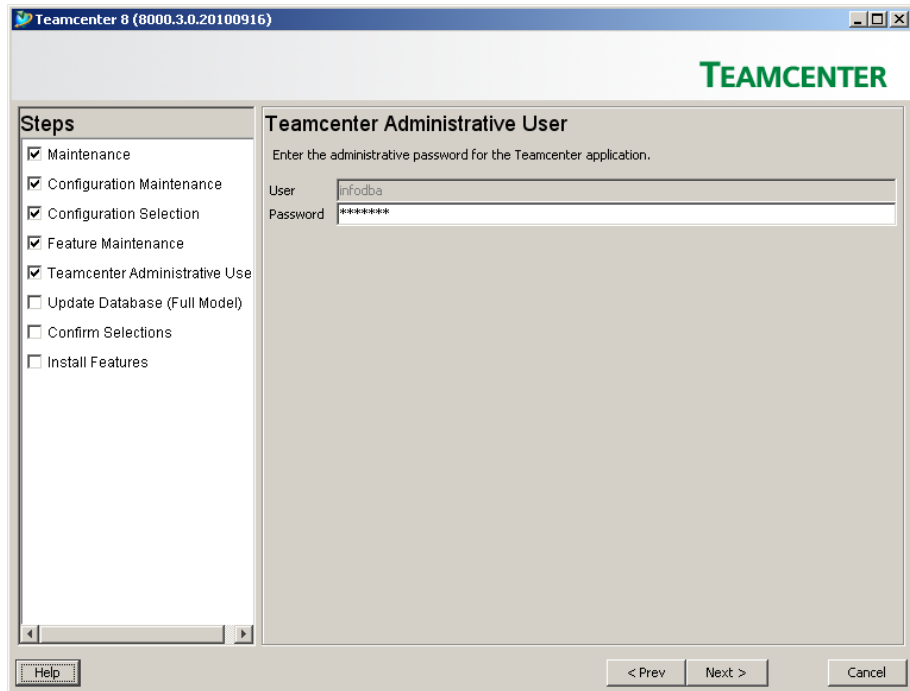


Figure 16: TEM - Teamcenter Administrative User page

7. TEM will display a list of all installed templates. To update the CMI RII custom template, click the Browse button. In the following dialog, find the directory that contains the template feature files (for example "C:\temp\server\template" - see Chapter 2, step 2), select the "cmirii_template.zip" and press the Select button. Mark the template by checking the box in the column "Apply". Press Next:

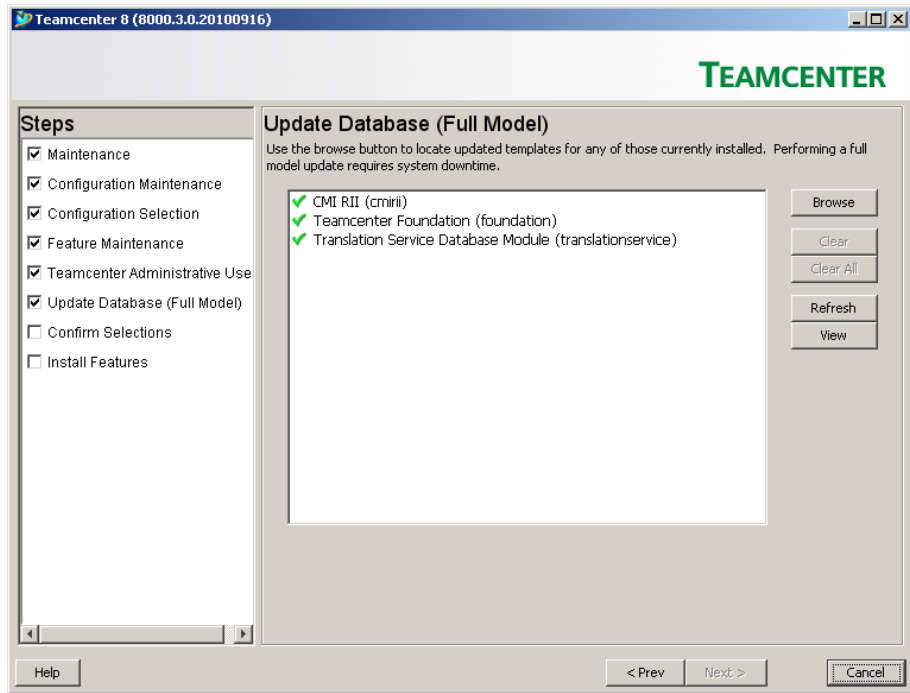


Figure 17: TEM - Update Database page

8. In the following dialog, find the directory that contains the template feature files (for example “C:\temp\server\template” - see Chapter 2, step 2), select the “feature_cmirii.xml” and press the Open button:

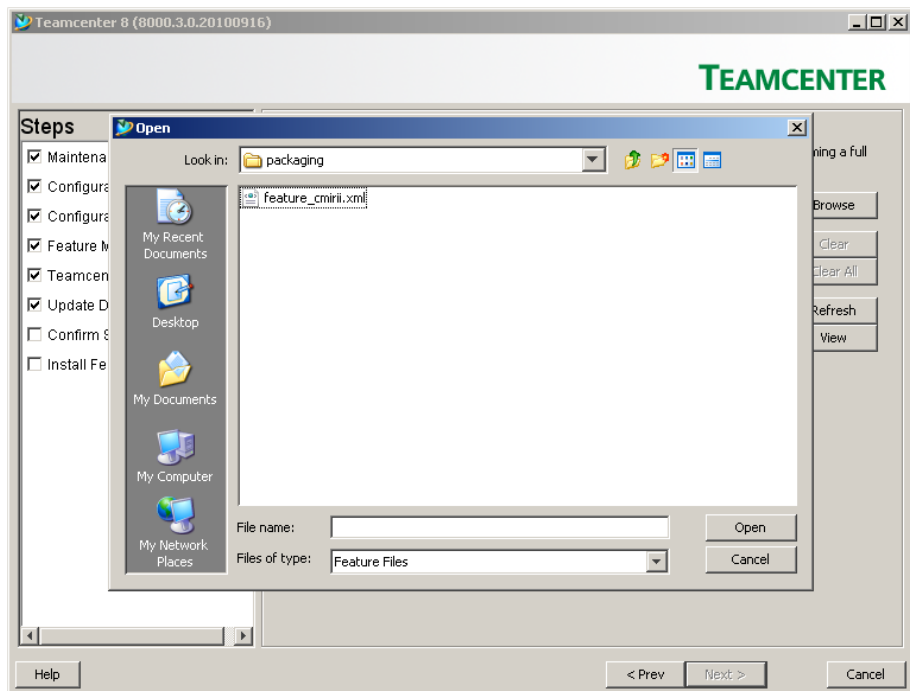


Figure 18: TEM - Feature Selection dialog

9. The template “CMI RII (cmirii)” is marked to be updated. Press Next:

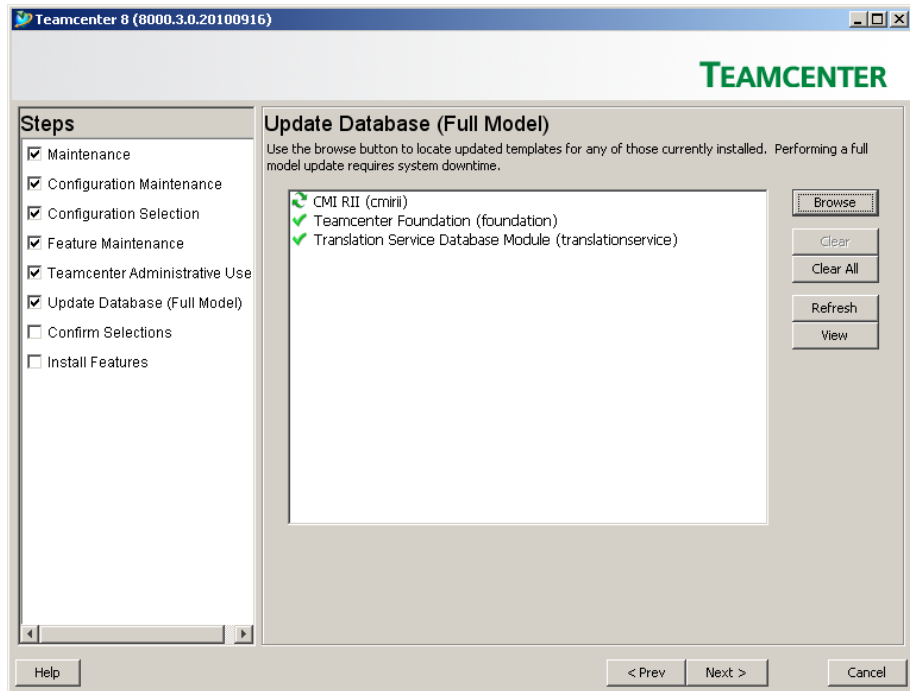


Figure 19: TEM - Update Database page

10. On the Confirm Selections page, click Next:

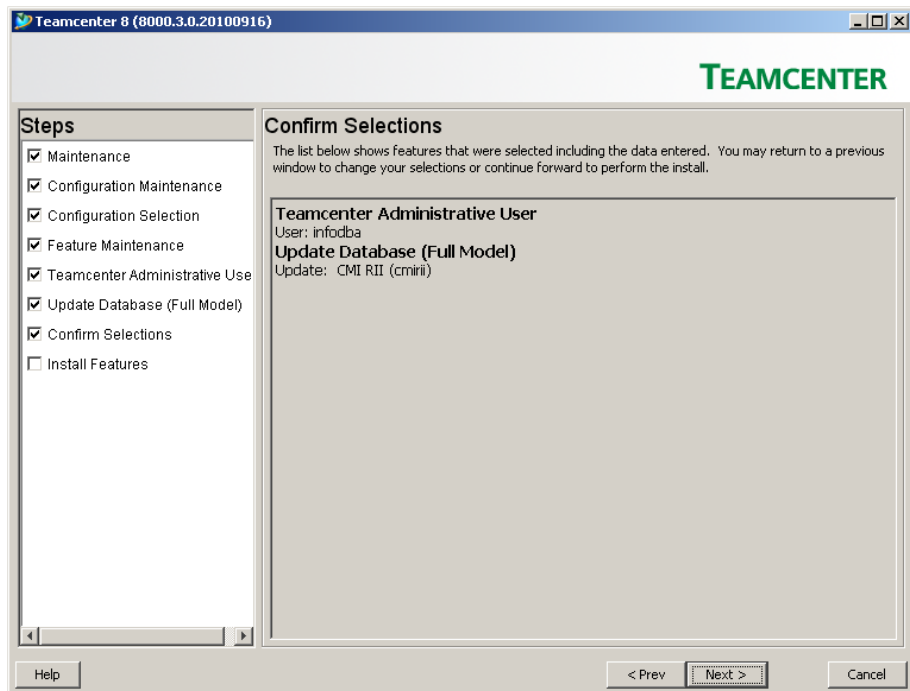


Figure 20: TEM - Confirm Selections page

11. The last page Install Features shows the progress of the installation and, finally, the installation success:

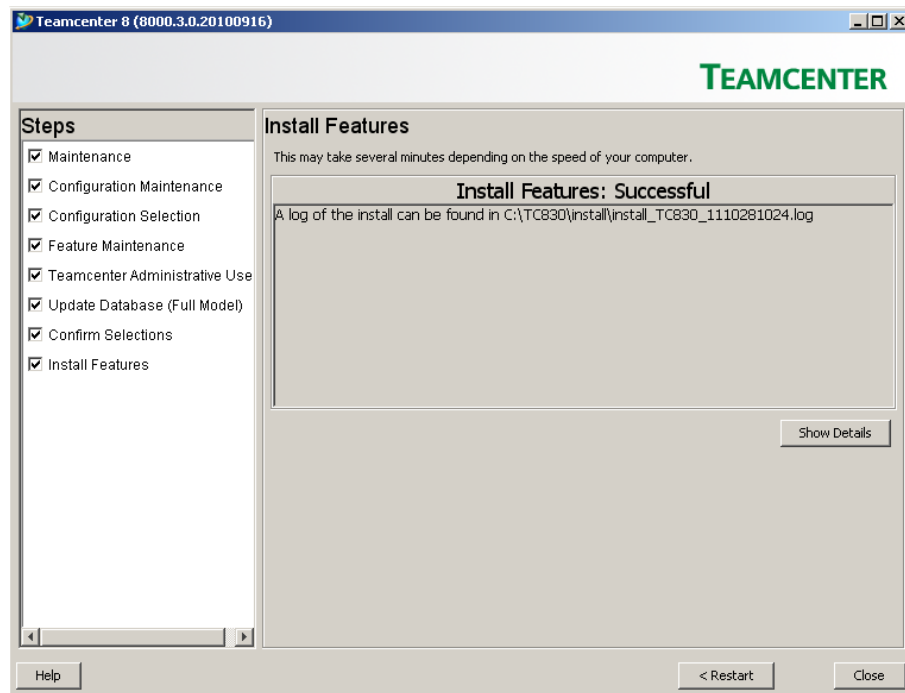


Figure 21: TEM - Install Features page

CMI RII Custom Library Installation

To install the library which contains the CMI RII custom functionality on the server the following steps have to be performed.

Locate the downloaded archive (e.g. CMIRII_Custom_Server_Library_TC8.3_V310.zip). Unpack the archive to a directory, for example to "C:\temp\server\customlib". Inside this you will find several sub-directories, which contain the CMI RII custom libraries for the supported server operating systems.

Locate the sub-directory for the appropriate operating system, for example "windows32", if your server operating system is Windows 32-Bit.

If you are using Windows, copy the files from the sub-directory to the directory `%TC_ROOT%\bin\` of your Teamcenter server installation. If you are using UNIX, copy the files to the `TC_USER_LIB` directory. Using UNIX, you can alternatively add the custom library directory to the shared library path (HP: `SHLIB_PATH`, Solaris: `LD_LIBRARY_PATH`).

Subsequently, you have to create or modify the `TC_customization_libraries` preference. You can do this by using the Teamcenter 8 Rich Client.

In the Rich Client, select *Edit* → *Options* and check, if this preference already exists. If it doesn't, you have to create it. Afterwards, add the value "cmi" to the set of current values:

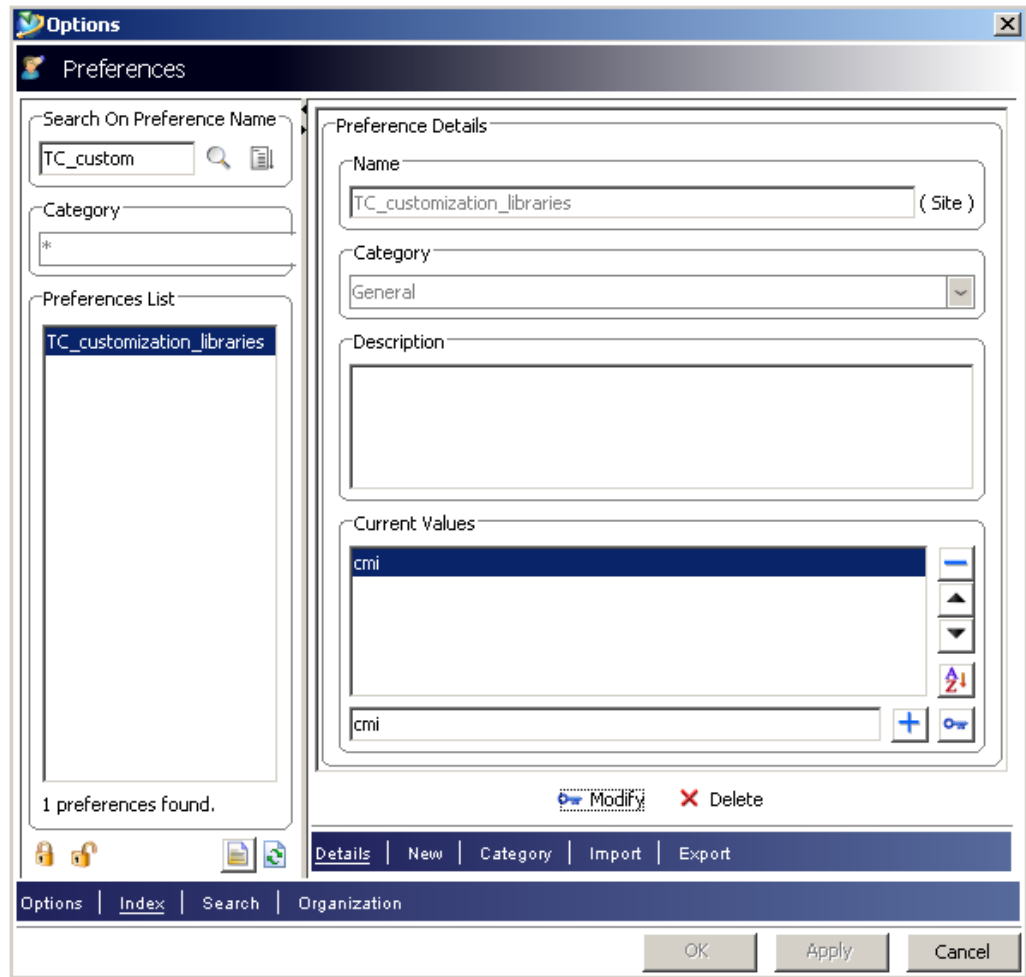


Figure 22: Preferences Dialog of Teamcenter Rich Client

CHAPTER 3

Client Side Installation

How to install the CMI client

The CMIRIICATV5 (**CMI RII CATIA V5** Integration) module provided by T-Systems International GmbH extends the CATIA V5 functionality to communicate with the Teamcenter PDM system.

You should perform the following steps with your CATIA system administrator. The CMIRIICATV5 module includes all of the supported platform data in a compressed file. Thus, you should choose an installation location for all CATIA V5 clients.

Download the software from <http://www.cmi-support.com/>. Choose "Download" → "CMI RII" → "CMI RII Client Software" and select the appropriate version (e.g. CMI RII Client Package for V5R19 / Teamcenter 8).

Locate the downloaded archive file (CMIRIICATV5_R[xx]_TC[xxxx]_V[xxx].zip). Extract the content of the archive file to a temporary installation location, e.g. "c:\temp\CMIRIICATV5_R19_TC8_V310".

Inside the temporary installation location, locate the folder "CMIRIICATV5_R[xx]_TC[xxxx]_V[xxx]\install\windows" for an installation on a client with Windows 32-bit or the folder "CMIRIICATV5_R[xx]_TC[xxxx]_V[xxx]\install\windows_64" for an installation on a client with Windows 64-bit.

Start the installation by double-clicking "Setup.exe".

The "CMI RII CATIA V5 Installation Setup" wizard appears. Click Next:

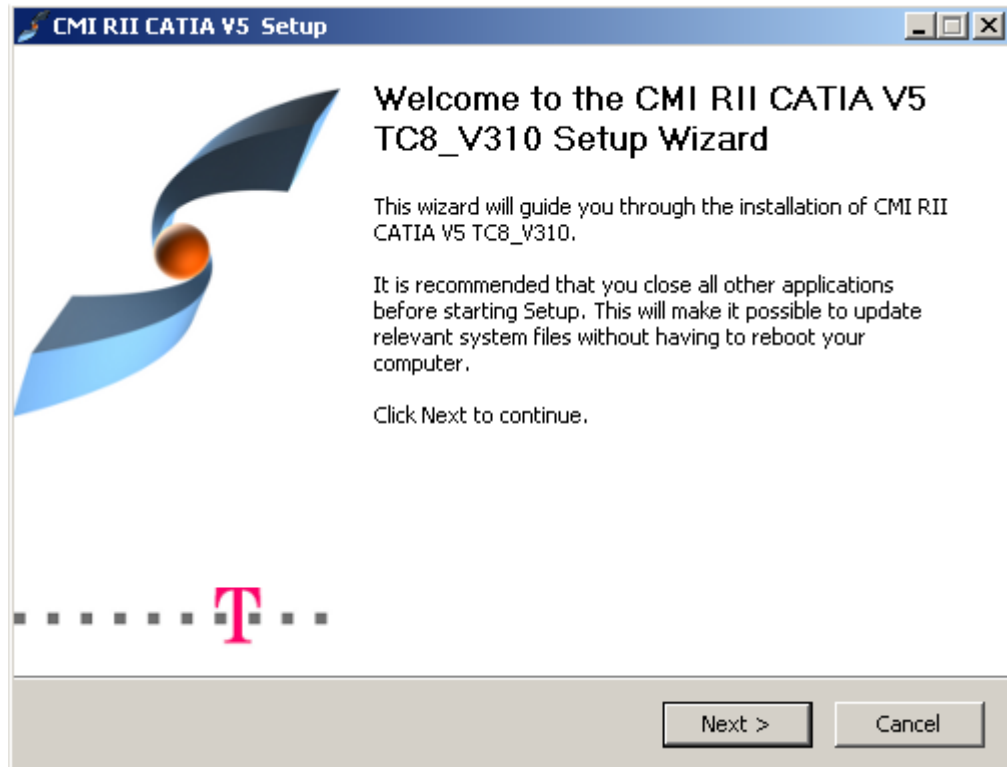


Figure 23: Setup - Start page

The License Agreement page displays the link to the general terms and conditions of software purchase and maintenance of T-Systems International GmbH. You have to click “I Agree” to get to the next page:

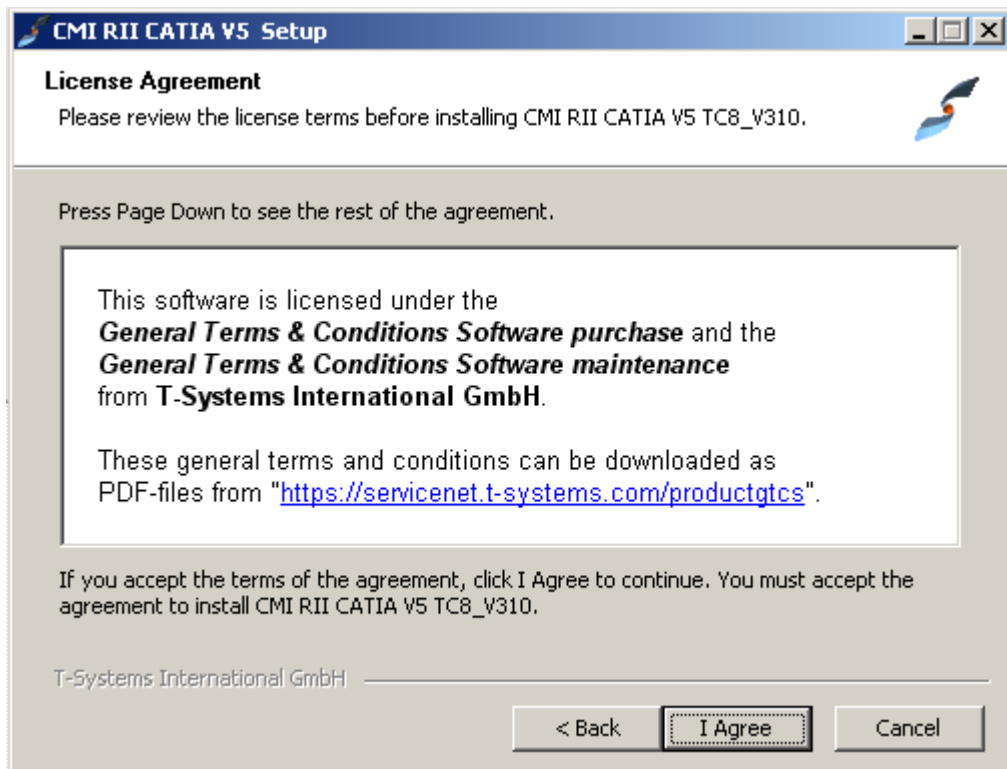


Figure 24: Setup - License Agreement page

On this page you have to choose for which users you want to install the CMI RII. Proceed with Next:

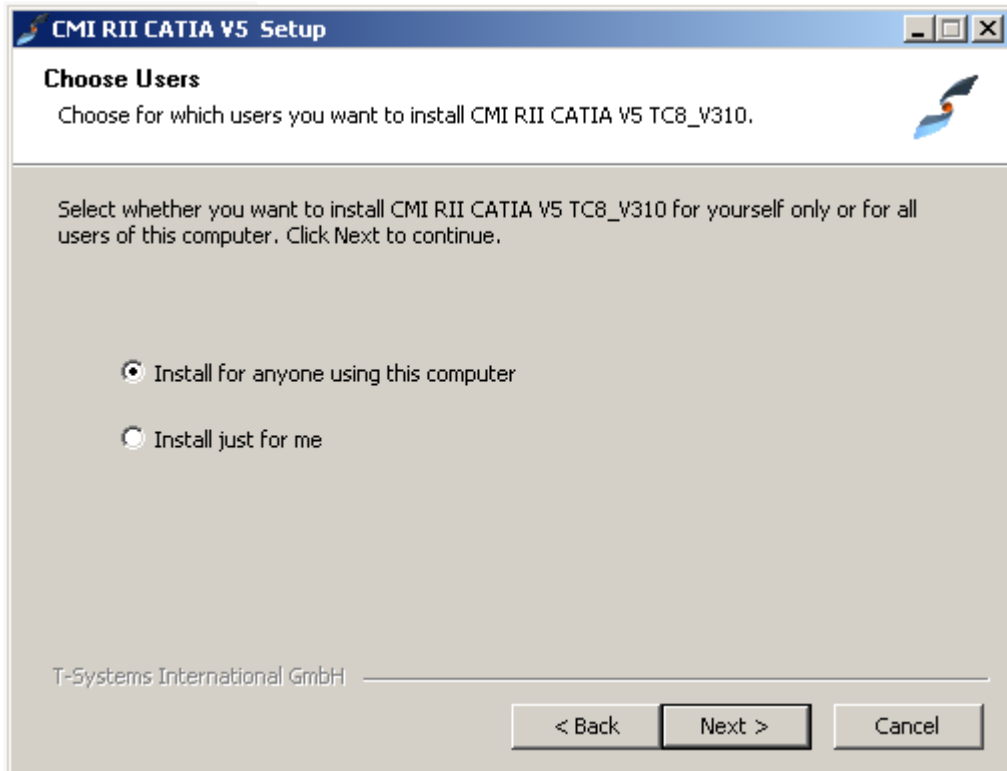


Figure 25: Setup - Choose Users page

On the Choose Install Location dialog you have to enter the folder where setup will install CMI RII CATIA V5. Select the path using the Browse button and proceed with Next:

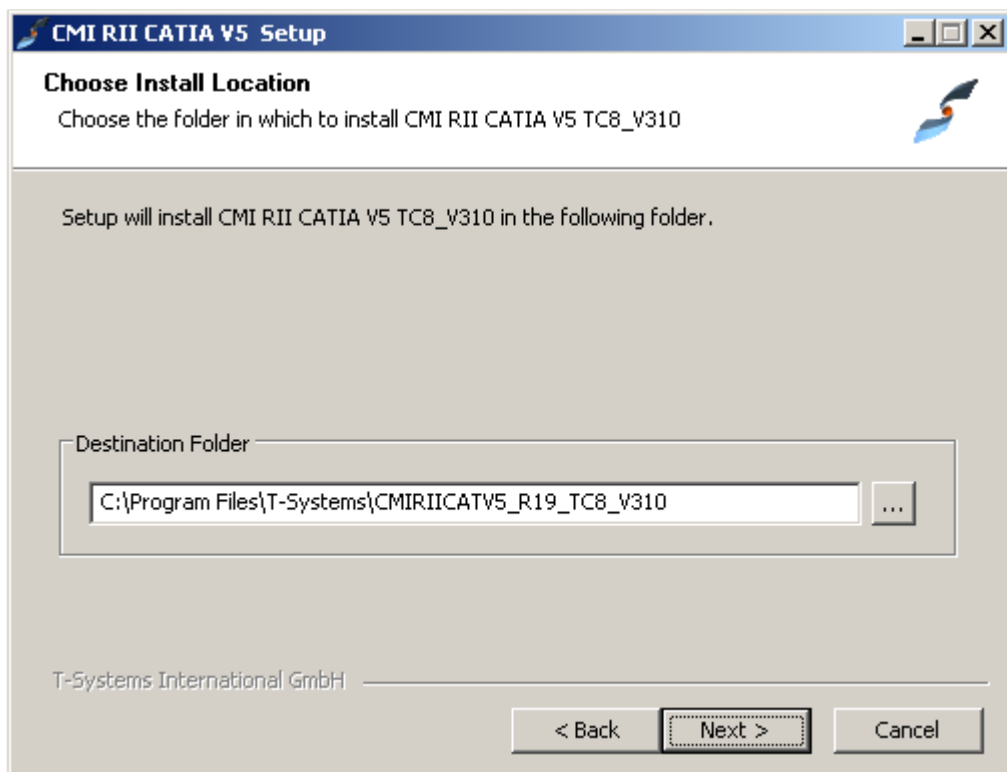


Figure 26: Setup - Choose Install Location page

To perform file exchange between Teamcenter and CATIA, CMI RII CATIA V5 needs a local directory. Please create this directory (e.g. "C:\CMI_XMAP") and ensure

- that this directory exists for every CMI RII user and
- that every CMI RII user has full access to it.

Select the path using the Browse button and proceed with Next:

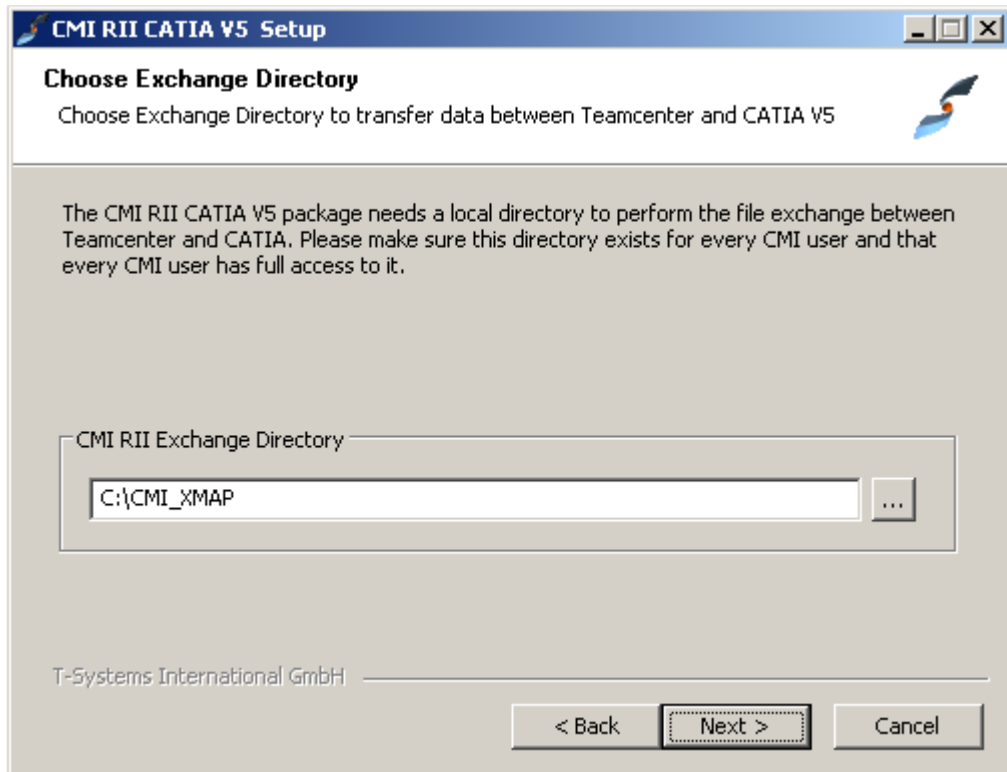


Figure 27: Setup - Choose Exchange Directory page

On the next page you will be asked for the folder, where the Teamcenter Rich Client resides (TC_PORTAL_ROOT). The Rich Client folder is usually named "portal" (2-tier client) or "rac" (4-tier client) and contains also the Rich Client start script "portal.bat".



During the Rich Client installation, a line is added to the Rich Client start script where the TC_PORTAL_ROOT is set as an environment variable named "TPR" (which is short for TC_PORTAL_ROOT). Example:

```
set TPR=C:\Programs\Siemens\Teamcenter8\portal
```

Please contact your Teamcenter system administrator to make sure that the selected path is correct. Select the folder using the Browse button and proceed with Next:

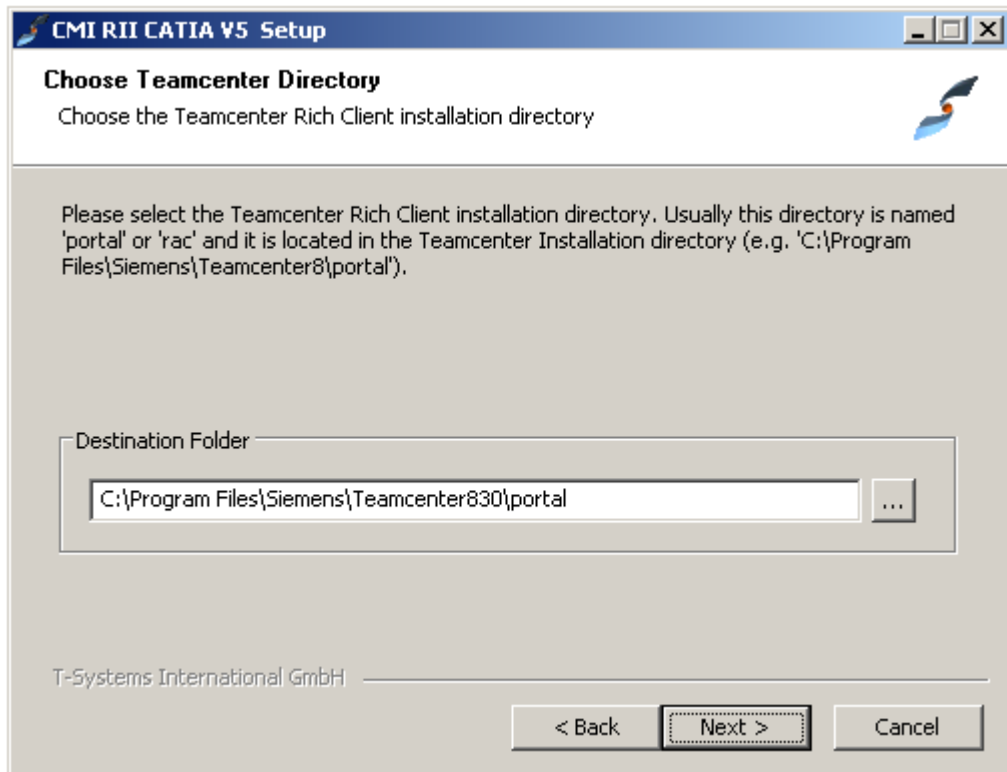


Figure 28: Setup - Choose Teamcenter Directory page

Select the Teamcenter Rich Client start file. This is a batch script that is located in the Rich Client folder (the one you have selected in the previous step). The file is usually named "portal.bat". Please contact your Teamcenter system administrator to make sure that you have selected the correct file. Select the file using the Browse button and proceed with Next:

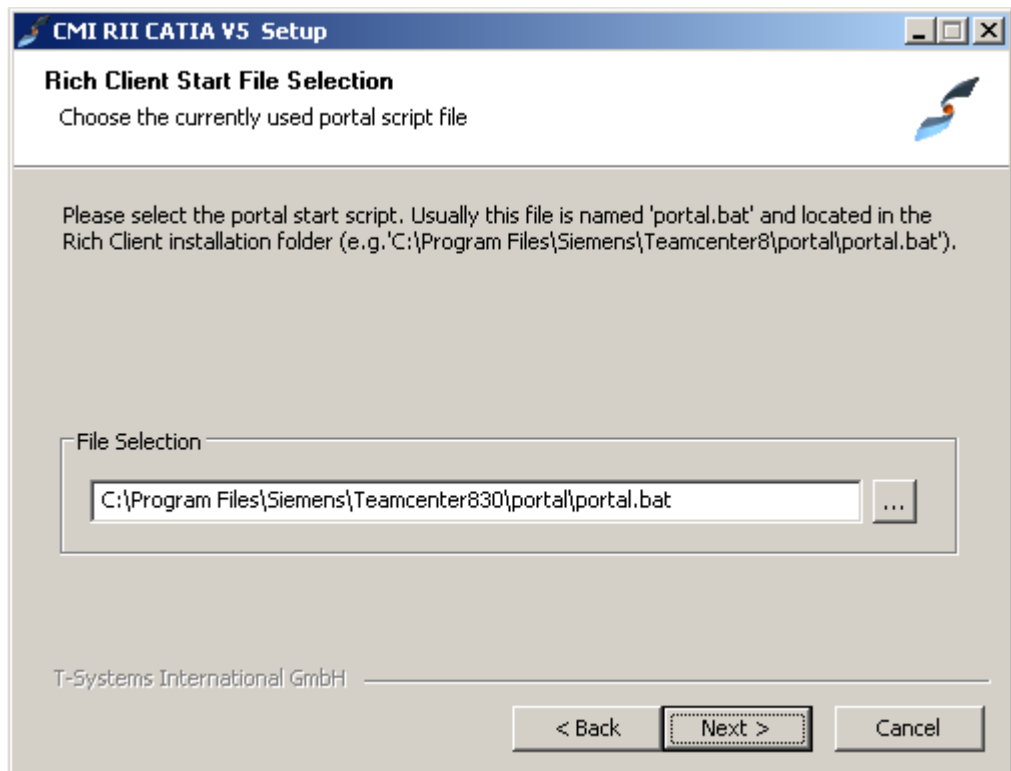


Figure 29: Setup - Rich Client start File Selection page

When there cannot be found the JAVA Runtime executable file (java.exe) below the given Teamcenter Rich Client installation directory then you have to select the location of the JAVA Runtime executable file.

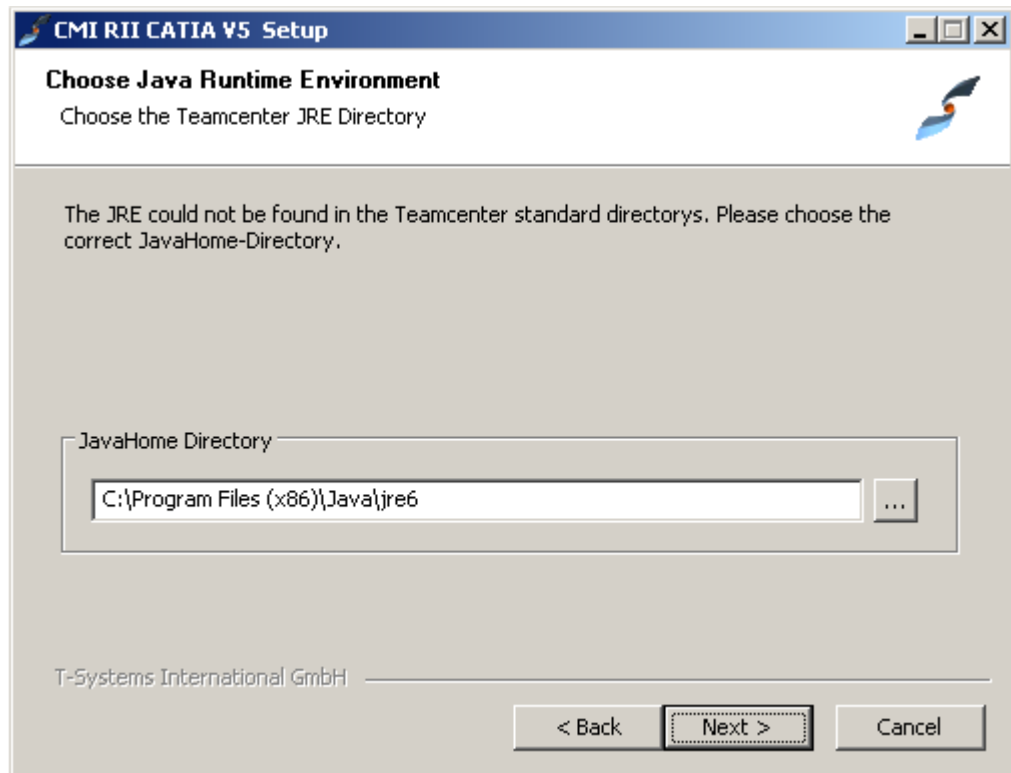


Figure 30: Setup - Choose JAVA Runtime Environment page

On the CATIA V5 Installation page you will be asked for the CATIA V5 installation path. If the path was not found in the Windows registry, select the path using the Browse button and proceed with Next:

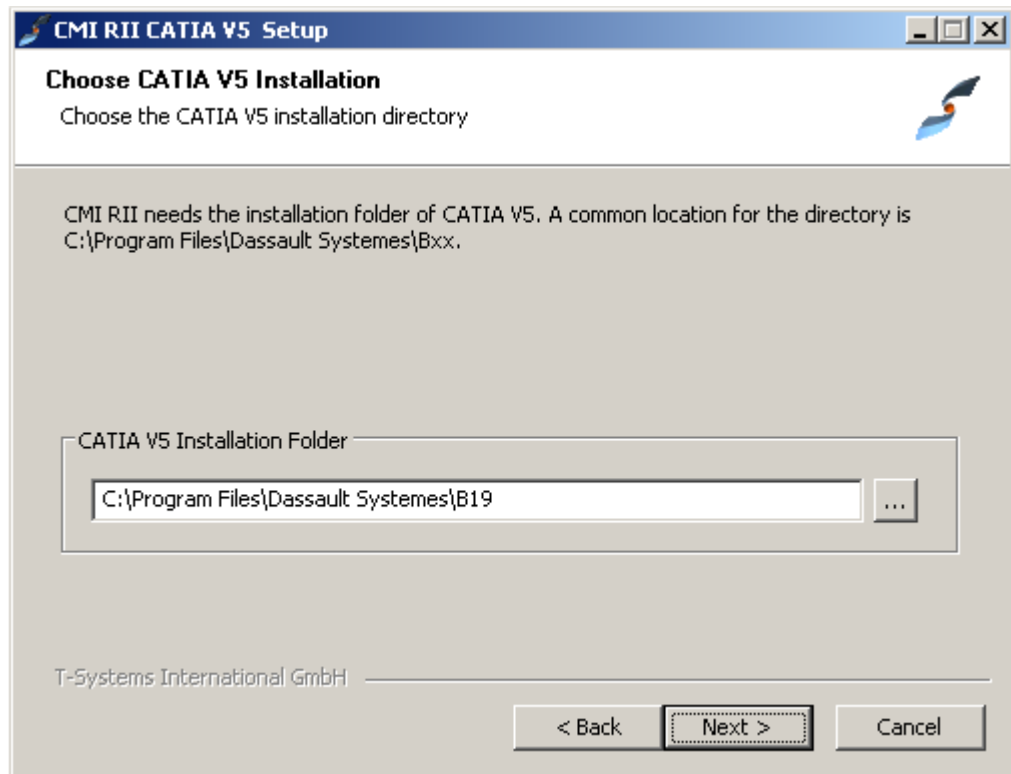


Figure 31: Setup - Choose CATIA V5 Installation page

During the installation, CMI RII generates a new CATIA environment file, which is based on the currently used CATIA environment file. Please select the currently used CATIA environment file using the Browse button. Proceed with Next:

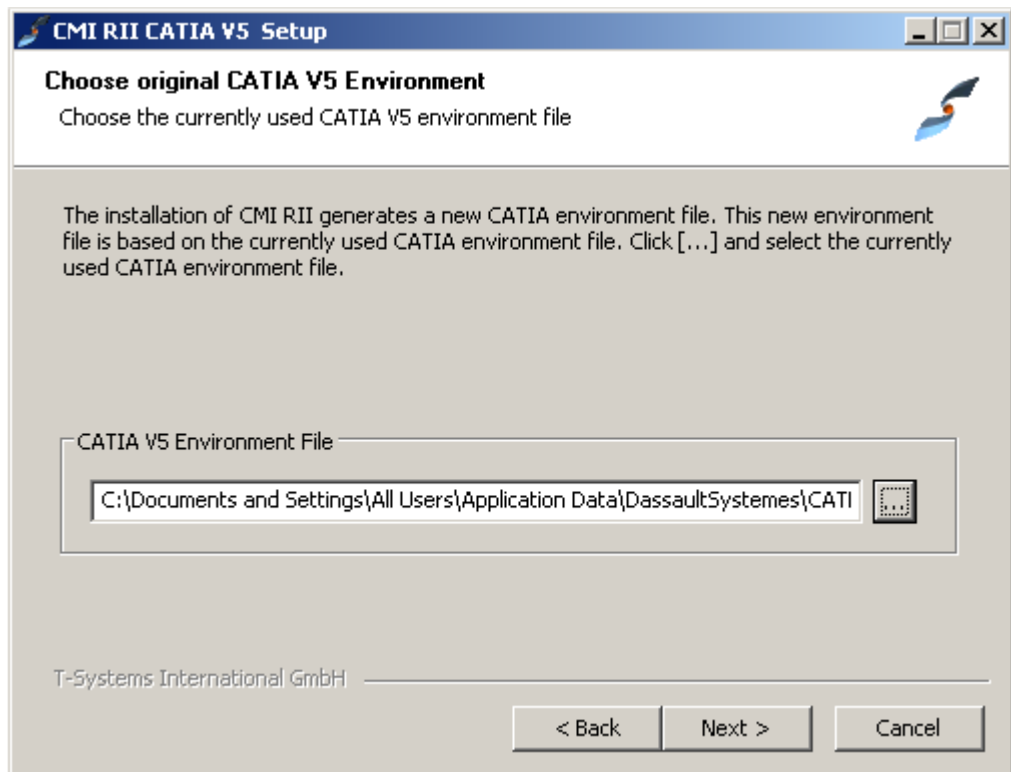


Figure 32: Setup - Choose original CATIA V5 Environment page

The Check Setup Information page lists all information which you have entered. If you detect some wrong information, please use the Back button to enter correct information, otherwise start the installation with click on the Next button:

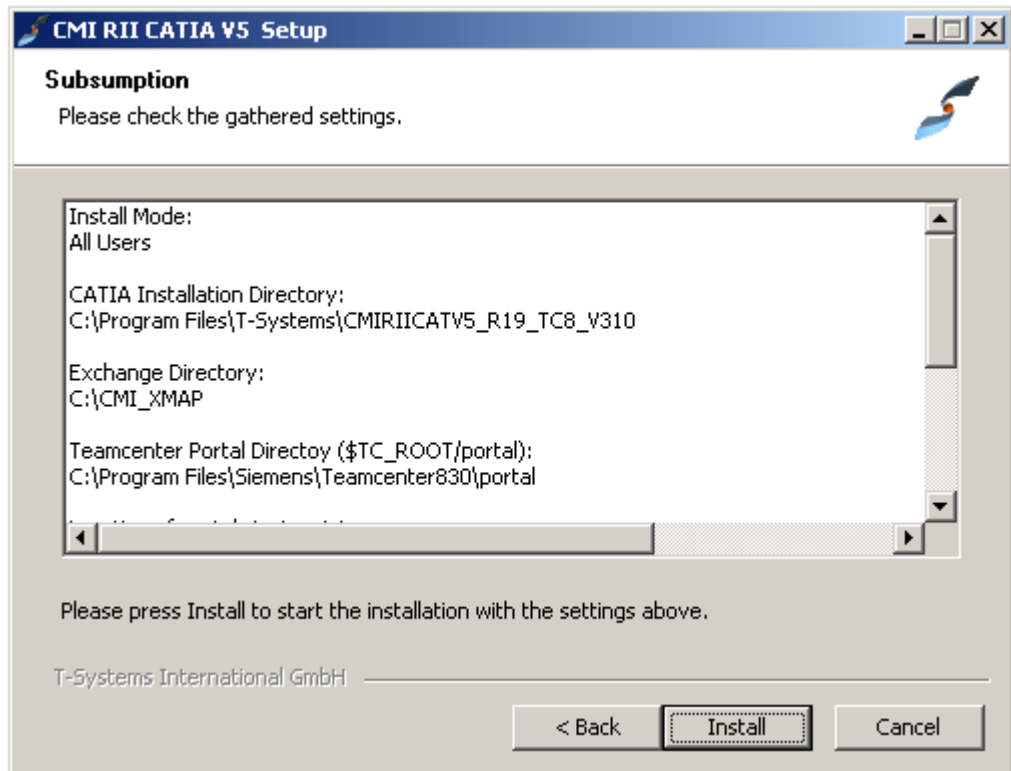


Figure 33: Setup - Subsumption page

For Teamcenter 2007.2 and Teamcenter 8.3 the registry will be generated.

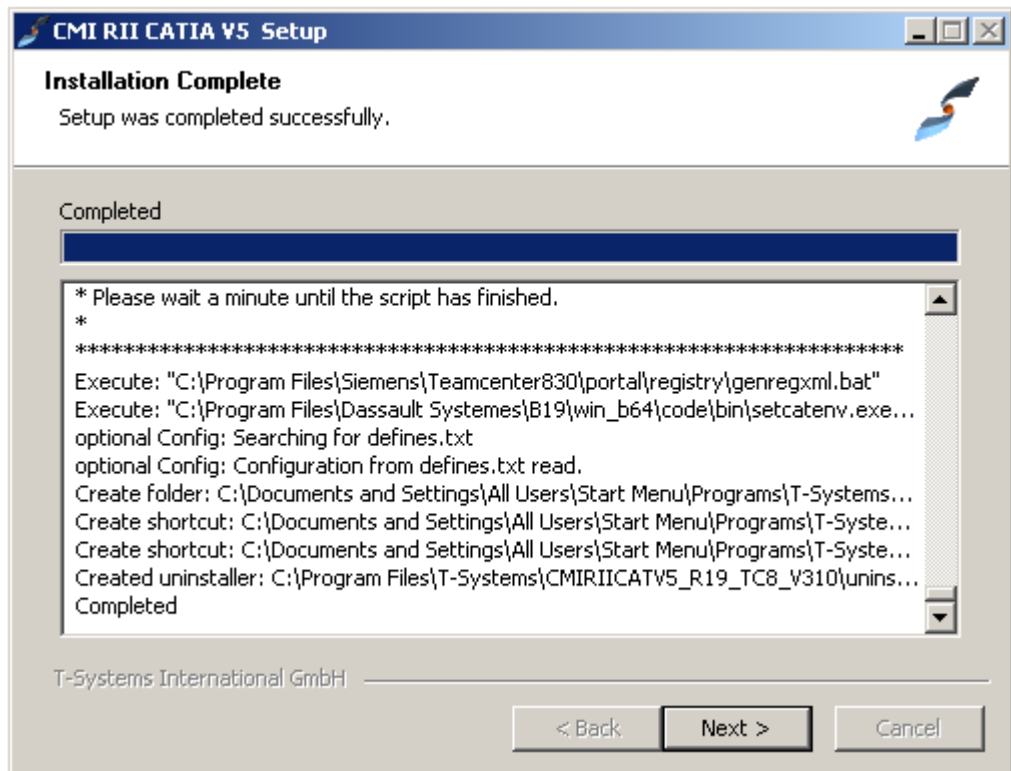


Figure 34: Setup - Installation Complete page

Once the wizard has successfully completed, click Finish:

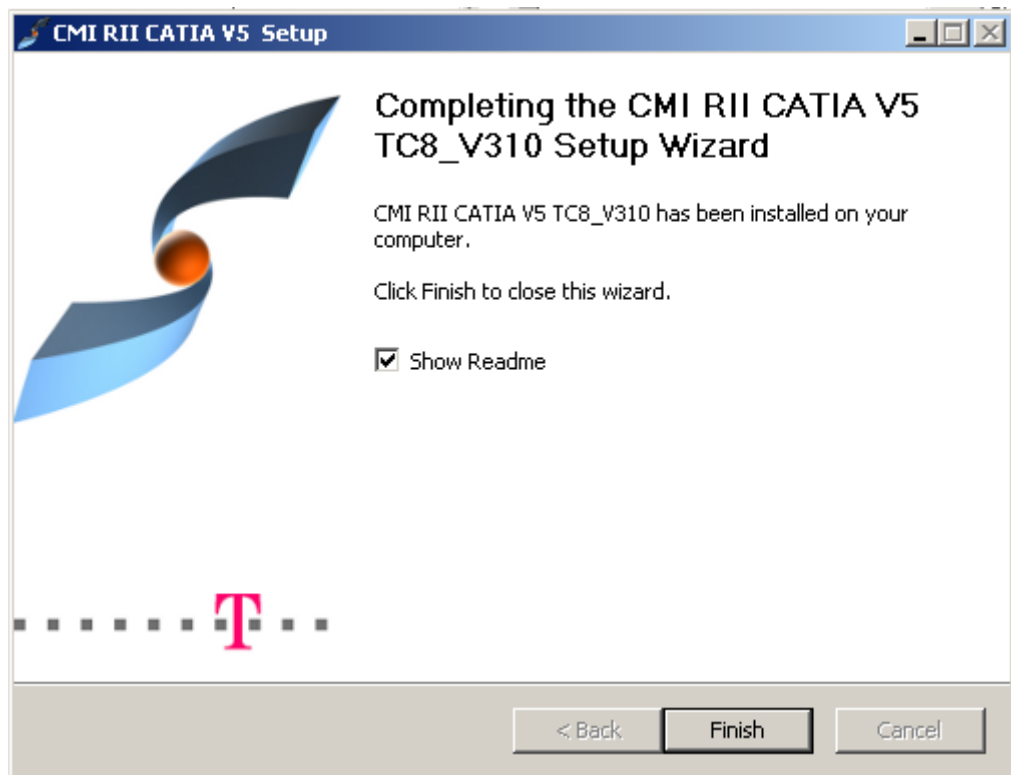


Figure 35: Setup - Finished page

Post-Installation task

Memory

By default, the amount of memory, which can be used by the Teamcenter Rich Client, is limited to 512 MB of RAM. This may be not enough to handle large product structures with a huge amount of CAD data. Therefore it is recommended to increase the limit to 1024 MB of RAM or more. This can be done by changing the "-Xmx" parameter in the Teamcenter Rich Client initialization file "Teamcenter.ini". This step should be performed by your Teamcenter system administrator.

Preference caching

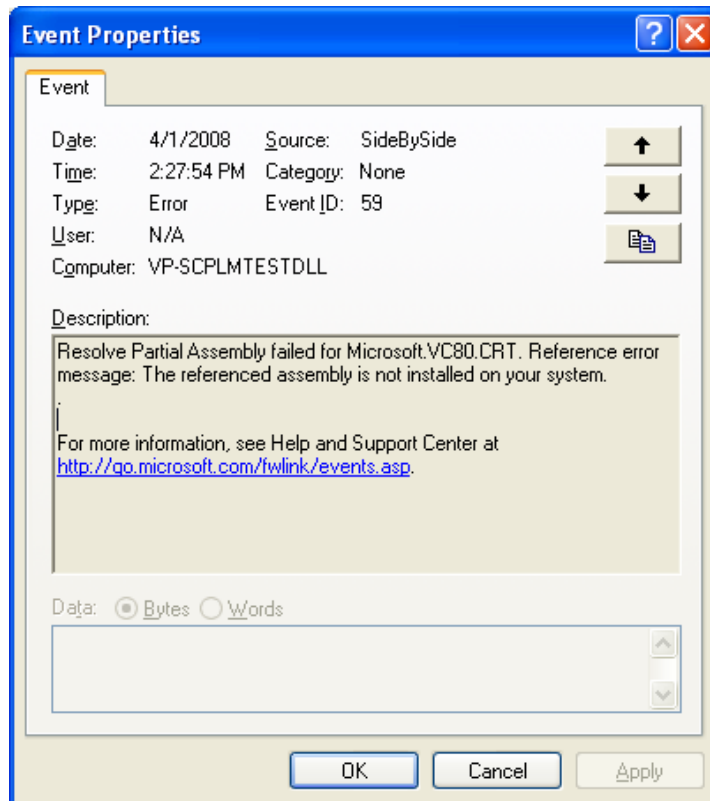
By default, the CMI preferences of the Teamcenter Rich Client are cached. In order to switch off this caching functionality you have to set the Windows environment variable "CMI_CACHE_PREFERENCES" to "OFF".

Client cache

Please clean the Teamcenter Rich Client cache. On Windows it is typically the directory *C:\Documents and Settings\<user name>\Teamcenter\RAC* and on UNIX the directory *\$HOME/Teamcenter/RAC*.

Troubleshooting R18

If your CMI RII Toolbar does not appear when starting up CATIA V5, please check Windows Event Viewer→System. Check if there is a SideBySide error like this.



This error indicates that you need additional Windows runtime libraries.

You can find these runtimes in one of the following directories:

```
CMIRIICATV5_R18_TC8_V310\Windows_Runtime\x86\  
(32 Bit CATIA)  
CMIRIICATV5_R18_TC8_V310\Windows_Runtime\x64\  
(64 Bit CATIA)
```

There are two possibilities to install the new runtime:

Install the runtime libraries into the Windows installation (recommended)

This may need system privileges.

For 32-Bit CMI RII/CATIA you have to extract the package `vcredist_x86.zip` and execute the setup routine `vcredist_x86\vcredist_x86.exe`

For 64-Bit CMI RII/CATIA you have to extract the package `vcredist_x64.zip` and execute the setup routine `vcredist_x64\vcredist_x64.exe`

or

Copy the additional libraries in a sub directory of the CMI RII CATIA V5 installation

For 32-Bit CMI RII/CATIA you have to extract the package

`Microsoft.VC80_x86.zip`. Copy the folder `Microsoft.VC80.CRT` to the binary location of the CMI RII CATIA module:

```
<...>\CMIRIICATV5_R18_TC8_V310\intel_a\code\bin\Microsoft.VC80.CR  
T
```

For 64-Bit CMI RII/CATIA you have to extract the package

`Microsoft.VC80_x64.zip`. Copy the folder `Microsoft.VC80.CRT` to the binary location of the CMI RII CATIA module:

```
<...>\CMIRIICATV5_R18_TC8_V310\win_b64\code\bin\Microsoft.VC80.CR  
T
```

CATIA V5 R19 already contains the correct runtime libraries.

CATIA V4 Client

The installation of the CATIA V4 module consists of two steps, the configuration, and the installation.

Configuration:

```
> cd /<...>/METAPHSE_5.0.0/install
```

```
> ./configure
```

Configuration of CMI CATIA V4

The configuration procedure will try to find out installation paths and flags. This will not modify anything within your system.

In general we propose to install the complete software in a separate directory. The directory should be readable by each user. You do not need to have root privileges.

Press Return to continue

Which configuration do you want to install?

- 1) Classic CMI (Teamcenter Enterprise / OMF Client)
(default)
 - 2) CMI RII (Teamcenter Unified Architecture / Rich Client)
- 2

What is your main installation path?

```
[/home/catusr/metaphse_5.0.0]:
```

To continue the installation of CMI CATIA V4 an installation of the T-Systems license manager Licman20 is required.

Note: It is not possible to use multiple licman installations on a single machine at the same time.

Is the T-Systems license manager Licman20 installed Y/[N]
Y

Please enter the full path of the Licman20 start script.example:

```
<licman20 installation directory>/licman20 []:  
/opt/Licman20/bin/licman20
```

Please enter the license information for licman20 (LICMAN_LICENSE_PATH_LLD).

If you use nodelocked licenses please enter the full path of the license file.

If you use floating licenses please enter
<licman20_port>@<license_server_host>

For more information about LICMAN_LICENSE_PATH_LLD please refer to the licman20 manual []:
22224@mylicenseserver

Which kind of help visualisation do you prefer? [XPDF | ACROBAT | NETSCAPE]:

Pay attention: CMI context help is only available with XPDF!
XPDF

Where should binaries go? [/home/catusr/metaphse_5.0.0/bin]:

Where should binaries go? [/home/catusr/metaphse_5.0.0/bin]:

Where should the catia load modul go?
[/home/catusr/metaphse_5.0.0/ etc]:

Where should program data files go?
[/home/catusr/metaphse_5.0.0/data]:

Where should doc files go? [/home/catusr/metaphse_5.0.0/doc]:

Where should example files go?
[/home/catusr/metaphse_5.0.0/examples]:

Where should html- files go?
[/home/catusr/metaphse_5.0.0/htdocs]:

Where should pdf- files go?
[/home/catusr/metaphse_5.0.0/pdfdoc]:

The CATIA EDM Integration includes a CATIA Load Modul (CATIA EXTENSION). Its name must be unique within your CATIA installation and can only use 8 characters. You may call it e.g. EDM, CATEDM, ...

What should be the name of the load modul ? [METAPHSE]:
CMI_RII

CATIA and the EDM system have to exchange CATIA models. Therefore a user specific directory is needed. You can specify the name of the subdir. The HOME-Path of the user is always set as a prefix (e.g. if you specify "maps/catiaexmap" the path "\$HOME/maps/catiaexmap" is used).

What should be the name of the subdir ? [catiaexmap] :

What is the path and name of your CATIA environment file?
[/catia424/v4r1/prod/START.env]:
/app/catia/cat424/catadm/env/YOUR.env
It is recommended to use a CATIA swap model
Use a CATIA swap model Y|N ? [Y]:

It is recommended to use an empty startmodel containing the standards of the actual project.
If there is no template defined, CMI CATIA generates an empty model using ISO standards.

What template model for TMPAXIS.model should be used? :

Summary of configuration results

```
CATEDM_ROOT: /home/catusr/metaphse_5.0.0
CATEDM_ROOT_BIN: /home/catusr/metaphse_5.0.0/bin
CATEDM_ROOT_ETC: /home/catusr/metaphse_5.0.0/etc
CATEDM_ROOT_DAT: /home/catusr/metaphse_5.0.0/data
CATEDM_ROOT_DOC: /home/catusr/metaphse_5.0.0/doc
CATEDM_ROOT_EXAM: /home/catusr/metaphse_5.0.0/examples
CATEDM_ROOT_PDFDOC: /home/catusr/metaphse_5.0.0/pdfdoc
CATEDM_ROOT_HDOC: /home/catusr/metaphse_5.0.0/htdocs
prefered helper: XPDF
CATEDM_LOADM: CMI_RII
CATEDM_EXMAP: $HOME/catiaexmap
CATEDM_CATIA_ENV: /app/catia/cat424/catadm/env/YOUR.env
CATEDM_LICMAN_VERSION 20
CATEDM_LICMAN_STARTSCRIPT /opt/Licman20/bin/licman20
CATEDM_LICMAN_LICENSEPATH 22224@mylicenseserver
```

```
configure: creating ./config.status
config.status: creating ./config.env
```

Configuration is finished, you may now check pathes in
./config.env
This pathes are used by the installation procedure.
You may run installation now by typing

```
> install_catedm
```

Installation:

```
./install_catedm
for which architecture do you wish to make this installation?
type one of the following or enter for all:
AIX HP-UX IRIX SunOS :
AIX
```

Installation of the CATIA V4 module for
CMI RII (Teamcenter Unified Architecture / Rich Client)
is started now.
This software was developed by T-Systems.

Press return to review your environment
...

CHAPTER 4

Importing CMI RII preferences

The CMI RII application needs several specific preferences. These preferences are provided in XML files and have to be imported before the first start of the CMI RII application.

To import, locate the folder “CMIRIICATV5_R[xx]_TC[xxxx]_V[xxx]\data\cmirii\preferences\” inside the temporary installation location (created with steps described in chapter 3). Import the files “cmi_preferences.xml” and “cmi_dialog_preferences.xml” using the Teamcenter Rich Client (*Edit*→*Options*) or using the **preferences_manager** utility.

You should perform this step with your Teamcenter system administrator. For more information about preferences, see the Teamcenter *Preferences and Environment Variables Reference*.

CHAPTER 5

Setup the CMI RII icons

The CMI RII application has defined new dataset types in the data model. For these classes you can define the icons. Otherwise the standard icons will be used.

The icons for the data model are included and defined in the file *common.properties* in the directory *com\teamcenter\rac\common* with the common definitions (e.g. *com.teamcenter.rac.common_8000.3.0.jar* for Teamcenter 8.3). This jar file is stored in the installation path *TC_PORTAL_ROOT/portal/plugins/*.

In order to customize the definitions and to use existing or new icons for user classes you have to do the following steps:

In the directory *TC_PORTAL_ROOT/portal/plugins/com.tsystems.cmi.resources_X.Y.Z/com/teamcenter/rac/common* you can find the file *common_user.properties*, where X.Y.Z indicates the version of CMI RII, e.g. "3.1.0".

Figure 36 shows the preconfigured icons in the *common_user.properties* file.

```

# CMI RII icons
# -----

CMI2Drawing.ICON=/images/cmi_drawing_16.png
CMI2Drawing32.ICON=/images/cmi_drawing_32.png
CMI2Part.ICON=/images/cmi_part_16.png
CMI2Part32.ICON=/images/cmi_part_32.png
CMI2Model.ICON=/images/cmi_model_16.png
CMI2Model32.ICON=/images/cmi_model_32.png
CMI2Cgm.ICON=/images/cmi_cgm_16.png
CMI2Cgm32.ICON=/images/cmi_cgm_32.png
CMI2Cgr.ICON=/images/cmi_cgr_16.png
CMI2Cgr32.ICON=/images/cmi_cgr_32.png
CMI2Rep.ICON=/images/cmi_rep_16.png
CMI2Rep32.ICON=/images/cmi_rep_32.png
CMI2Catalog.ICON=/images/cmi_catalog_16.png
CMI2Catalog32.ICON=/images/cmi_catalog_32.png
CMI2CacheCgr.ICON=/images/cmi_cachecgr_16.png
CMI2CacheCgr32.ICON=/images/cmi_cachecgr_32.png
CMI2AuxPart.ICON=/images/cmi_auxpart_16.png
CMI2AuxPart32.ICON=/images/cmi_auxpart_32.png
CMI2AuxModel.ICON=/images/cmi_auxmodel_16.png
CMI2AuxModel32.ICON=/images/cmi_auxmodel_32.png
CMI2AuxCgr.ICON=/images/cmi_auxcgr_16.png
CMI2AuxCgr32.ICON=/images/cmi_auxcgr_32.png
CMI2AuxRep.ICON=/images/cmi_auxrep_16.png
CMI2AuxRep32.ICON=/images/cmi_auxrep_32.png
CMI2Product.ICON=/images/cmi_product_16.png
CMI2Product32.ICON=/images/cmi_product_32.png
CMI2ModOnPart.ICON=/images/cmi_modon_part_16.png
CMI2ModOnPart32.ICON=/images/cmi_modon_part_32.png
CMI2ModOnProduct.ICON=/images/cmi_modon_product_16.png
CMI2ModOnProduct32.ICON=/images/cmi_modon_product_32.png
CMI2DerivedModel.ICON=/images/cmi_derivedmodel_16.png
CMI2DerivedModel32.ICON=/images/cmi_derivedmodel_32.png
CMI2Archive.ICON=/images/cmi_archive_16.png
CMI2Archive32.ICON=/images/cmi_archive_32.png
CMI2DesignTable.ICON=/images/cmi_designtable_16.png
CMI2DesignTable32.ICON=/images/cmi_designtable_32.png
CMI2Process.ICON=/images/cmi_process_16.png
CMI2Process32.ICON=/images/cmi_process_32.png
CMI2SavedSession.ICON=/images/cmi_session_16.png
CMI2SavedSession32.ICON=/images/cmi_session_32.png
CMI2Script.ICON=/images/cmi_script_16.png
CMI2Script32.ICON=/images/cmi_script_32.png
CMI2Mapping.ICON=/images/cmi_mapping_16.png
CMI2Mapping32.ICON=/images/cmi_mapping_32.png
CMI2TemplateFolder.ICON=/images/cmi_templates_16.png
CMI2TemplateFolder32.ICON=/images/cmi_templates_32.png
CMI2CadAttrForm.ICON=/images/cmi_cad_attr_form_16.png
CMI2CadAttrForm32.ICON=/images/cmi_cad_attr_form_32.png

```

Figure 36: Setup of CMI RII icons

The icons are located in the
TC_PORTAL_ROOT/portal/plugins/com.tsystems.cmi.resources_X.Y.Z/images
 directory where X.Y.Z indicates the version of CMI RII, e.g. "3.1.0".

CHAPTER 6

Register the XML Style Sheets

Log in as Teamcenter Administrator, e.g. "infodba".

Create a new dataset with name "CMI2CadAttrForm" of type "XMLRenderingStylesheet".

Import the file "CMI2CadAttrForm.xml" of the folder "CMIRIICATV5_R[xx]_TC[xxxx]_V[xxx]\data\cmirii\stylesheets\" inside the temporary installation location (created with steps described in chapter 3) as named reference.

Set the following preferences:

```
CMI2CadAttrForm.FORMRENDERING=CMI2CadAttrForm
```

```
CMI2CadAttrForm.REGISTEREDTO=CMI2CadAttrForm
```

Create a new dataset with name "CMI2CatiaInfoForm" of type "XMLRenderingStylesheet".

Import the file "CMI2CatiaInfoForm.xml" of the folder "CMIRIICATV5_R[xx]_TC[xxxx]_V[xxx]\data\cmirii\stylesheets\" inside the temporary installation location (created with steps described in chapter 3) as named reference.

Set the following preferences:

```
CMI2CatiaInfoForm.FORMRENDERING=CMI2CatiaInfoForm
```

```
CMI2CatiaInfoForm.REGISTEREDTO=CMI2CatiaInfoForm
```

CHAPTER 7

Add the Display Names

The Display Names for the attributes are defined in the following file:

```
%TCROOT%\lang\textserver\en_US\system_property_names_locale.xml
```

Copy the entries from the file “add_to_system_property_names_locale.xml” of the folder “CMIRIICATV5_R[xx]_TC[xxxx]_V[xxx]\data\cmirii\textserver\” inside the temporary installation location (created with steps described in chapter 3) to the above mentioned file.

CHAPTER 8

Setup the CMI RII Create Dialogs

Dimension

In the CMI Synchronize an interactive create can be used for items/item revisions and datasets.

The dimension (in pixel) of these dialogs can be customized.

The default values for the Create Item Dialog are: width=700; height=100.

The names of the integer preferences have the following format:

“CMICreateItemDialog_” plus the name of the class plus “_Height” respectively “_Width”, where the name of the class can be “Item”, “Part”, etc.

The default values for the Create Dataset Dialog are: width=700; height=100.

The names of the integer preferences have the following format:

“CMICreateDatasetDialog_” plus the name of the class plus “_Height” respectively “_Width”, where the name of the class can be “CMI2Product”, “CMI2Drawing”, etc.

When the objects are created from a template for CATIA files there exists a different create dialog, including the information for item and dataset.

The dimension (in pixel) of this dialog can be customized.

The default value for this Create Dialog is: width=700; height=100.

The names of the integer preferences have the following format:

“CMICreateDialog_” plus the name of the class plus “_Height” respectively “_Width”, where the name of the class can be “Item”, “CMI2AuxPart”, “CMI2Part”, “CMI2Product”, “CMI2Drawing”, etc.

Display Names

The display names for the classes in the create dialogs can be customized. In the CMI RII application the following display names are used as default:

```
BasicItemPanel.LABEL=Basic Item Information
ItemPanel.LABEL={0} Information
ItemRevisionPanel.LABEL={0} Information
ItemFormPanel.LABEL={0} Form Information
ItemRevisionFormPanel.LABEL={0} Form Information
BasicDatasetPanel.LABEL=Basic Dataset Information
DatasetPanel.LABEL={0} Information
DatasetFormPanel.LABEL={0} Form Information
```

Figure 37: Default Create Dialog Displays - container_locale.properties

```
// for the Create Item Dialog
Item.LABEL=Item
ItemRevision.LABEL=Item Revision

Part.LABEL=Part
Part\ Revision.LABEL=Part Revision

Design.LABEL=Design
Design\ Revision.LABEL=Design Revision

// for the Create Dataset Dialog
Dataset.LABEL=Dataset
CMI2Drawing.LABEL=CMI Drawing Dataset
CMI2Part.LABEL=CMI Part Dataset
CMI2AuxPart.LABEL=CMI Auxiliary Part Dataset
CMI2CacheCgr.LABEL=CMI Cache CGR Dataset
CMI2Catalog.LABEL=CMI Catalog Dataset
CMI2Script.LABEL=CMI Script Dataset
CMI2DesignTable.LABEL=CMI Design Table Dataset
CMI2ModOnPart.LABEL=CMI ModOn Part Dataset
CMI2ModOnProduct.LABEL=CMI ModOn Product Dataset
CMI2DerivedModel.LABEL=CMI Derived V4 Model Dataset
CMI2Product.LABEL=CMI Product Dataset
CMI2Archive.LABEL=CMI Archive Dataset
CMI2Process.LABEL=CMI Process Dataset
CMI2Mapping.LABEL=CMI Mapping Dataset
CMI2Model.LABEL=CMI V4 model Dataset
CMI2Cgm.LABEL=CMI cgm Dataset
CMI2Cgr.LABEL=CMI cgr Dataset
CMI2Rep.LABEL=CMI Representation Dataset
PDF.LABEL=PDF Dataset
TIF.LABEL=TIF Dataset
Image.LABEL=Image Dataset
```

Figure 38: Default Create Dialog Displays - ui_locale.properties

In order to customize the display names for the classes in the create dialogs you have to do the following change:

In the directory *TC_PORTAL_ROOT/portal/plugins/com.tsystems.cmi.resources_X.Y.Z/com/tsystems/cmi/ui* you can find the file *ui_locale.properties*, where X.Y.Z indicates the version of CMI RII, e.g. "3.1.0".

In the directory `TC_PORTAL_ROOT/portal/plugins/com.tsystems.cmi.resources_X.Y.Z/com/tsystems/cmi/ui/container` you can find the file `container_locale.properties`, where X.Y.Z indicates the version of CMI RII, e.g. "3.1.0".

Figure 39 shows a sample configuration of your own classes in the `ui_locale.properties` file.

```
// for custom classes

// for the Create Item Dialog for the Classes cus_Part, cus_PartRevision
cus_Part.LABEL=Custom Part
cus_PartRevision.LABEL=Custom Part Revision

// for the Create Dataset Dialog for the Class cus_Dataset
cus_Dataset.LABEL=Custom Dataset
```

Figure 39: Customized Create Dialog Displays - ui_locale.properties

Select Item Type

The item type in the create item dialog can be selected from a list of valid item types. This list can be defined in the CMI RII preference `CMICreateItemItemTypeList`. This functionality has to be switched on with the CMI RII preference `CMISelectItemType=1`.

Forms in Create Item Dialog

It is possible to fill several forms for item and item revision in the create item dialog. They are displayed in the sections "Item Form Information" and "Item Revision Form Information" in the dialog.

You have to set the following CMI RII preferences:

`CMICreateItemItemFormList`

List containing the type of the forms to be used in the create item dialog. It can be defined for which item type the form should be created. The item type has to be added with a "@". If the item type is not given, then the form will be used for every item. It can be defined with which relation type the form should be related to the item. The relation type has to be added with a ":". Otherwise the default relation type will be used.

e.g. "Item Master", "Item Master:IMAN_reference", "Item Master@Item:IMAN_reference"

`CMICreateItemItemRevisionFormList`

List containing the type of the forms to be used in the create item revision dialog. It can be defined for which item revision type the form should be created. The item revision type has to be added with a "@". If the item revision type is not given, then the form will be used for every item revision. It can be defined with which relation type the form should be related to the item revision. The relation type has to be added with a ":". Otherwise the default relation type will be used.

e.g. "ItemRevision Master", "ItemRevision Master:IMAN_reference", "ItemRevision Master@ItemRevision:IMAN_reference"

Remember Attributes

The attribute values – except basic information attributes – of the create item and the create dataset dialog can be stored depending on the item/dataset type. These stored attributes will be filled as default in the new create dialog for the same type. This functionality has to be switched on with the CMI RII preferences
CMICreateItemDialogRememberAttributes=1 and
CMICreateDatasetDialogRememberAttributes=1.

CHAPTER 9

Setup the CATIA Templates

Template Folder

The administrator manages the template folder of the type CMI2TemplateFolder in which the template datasets are stored. In this folder also Items and Item Revisions can be stored. Then their datasets will be handled as template datasets. There has to be read access for this folder and its contents for everybody.

The template datasets for the following types are supported:

CMIPartDatasetType (Teamcenter class of standard CMI RII: CMI2Part)

CMIPProductDatasetType (Teamcenter class of standard CMI RII: CMI2Product)

CMIDrawingDatasetType (Teamcenter class of standard CMI RII: CMI2Drawing)

CMIAuxPartDatasetType (Teamcenter class of standard CMI RII: CMI2AuxPart)

The possible values in the template selection of the create dialog are defined like this: Query for all folders of the type CMI2TemplateFolder. Get the datasets linked directly to these folders or via the items and item revisions.

Please create at least one folder of the type CMI2TemplateFolder and link the CATIA template datasets (or items and item revisions) to it. Be sure that the read access rights are set correct for the folder.

CHAPTER 10

Starting Client Side Components

During client side installation, the install wizard generates two script files: *cmi_start.bat* and *rii_start.bat*. The wizard also generates start menu entries for both files. The files are located in the CMI RII CATIA V5 installation folder (see Chapter 3, step 8).

cmi_start.bat

This file starts CMI CATIA V5. The CMI RII CATIA V5 installation wizard creates a shortcut to this file in the start menu: Start → Programs → T-Systems → CMI RII CATIA V5 R[xx] TC[xxxx]_V[xxx] → CATIA_START.

rii_start.bat

This file starts the CMI RII Teamcenter Rich Client. The CMI RII CATIA V5 installation wizard creates a shortcut to this file in the start menu: Start → Programs → T-Systems → CMI RII CATIA V5 R[xx] TC[xxxx]_V[xxx] → CMI_RII_START.

CHAPTER 11

CMI License manager

CMI RII requires licman20 as it's license manager.

Remarks

Use of CMI RII is licensed on a per user basis. License is required for the CATIA workstation.

CMI requires licman20 as its license manager. Licman 1.2 is no longer supported.

Licman20ptf19 is recommended.

For the installation of licman please refer to the licman documentation.

For CMI RII functionality please refer to the *CATIA Teamcenter Interface RII User Manual*.

Windows 7

During installation of licman, you have to specify a temporary working directory. Choose a directory where the user has full access rights. With Licman20 prior to ptf19, the windows/temp directory that is given as a default will not work under Windows 7.

Running Licman as a regular executable on Windows

If you install Licman with the setup program on Windows, it will be run as a service and require administrator rights. Beginning with ptf19, it is possible to launch Licman as a regular executable when CATIA V5/CMI is started.

You need to set the license path variable:

```
SET LICMAN_LICENSE_PATH=<port>@<host>
```

Then call licman20_1ld.exe as a regular executable.

No execution of the setup routine is required in this case.

For more information, see *Licman User Manual*.