Siemens PLM Software

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Installation Guide

IMM CATIA Integration

Siemens PLM

**On behalf of Sphera Solutions GmbH and its subsidiaries**

**Document prepared by**        Product Compliance Team

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# List of Acronyms

| | |
|---|---|
| IMM | Integrated Material Management |
| OOTB | Out of the box |
| TC | Teamcenter |
| TEM | Teamcenter Environment Manager |
| TCIC | Teamcenter Integration for CATIA |

# 1.    Introduction

This documentation describes the steps to install the **IMM Catia integration** between Teamcenter, TCIC and CATIA V5Rxx

The **IMM Catia integration** requires a prior full deployment of Integrated Material Management.

# 2. Deploy IMM for CATIA V5Rxx

## 2.1. Pre-requisites

To be able to run properly the IMM integration for the corresponding IMM release from within **CATIA V5Rxx**, the **Microsoft.NET Framework64 v4.6.2** for TC12 or **v4.7.2** for TC13 should be available.

To **handle the materials for multi bodies**, the required TCIC version is **11.0.5.02** and **upwards**.

To avoid any issue the installation should run with an **administrator account**.

## 2.2. Deploy IMM extension for TCIC

In case you have **No** other TCIC custom **extensions**, then copy the **content** of the **TCIC\racless** from the IMM for CATIA installation **kit**, into the TCIC installation root folder under **racless** directory.

**Otherwise** be careful of **overriding** the **tcic_extensions.xml**. in this case copy first only the **CatiaUserExit4ImmImpl.jar** file from **TCIC\racless\extensions** in the IMM for CATIA installation **kit**, into the TCIC installation root folder under **racless\extensions** directory. Afterwards merge the tcic_extensions.xml from the installation kit with the one in the TCIC **racless** folder this will add the following XML extract into the <*extensions*> tag

```
<entry
  id="com.ebsolutions.soacore.extensions.ICatiaUserExit"
  filename="CatiaUserExit4ImmImpl.jar"
  handler="com.teamcenter.rac.imm.catiman.extension.CatiaUserExit4ImmImpl">
</entry>
```

## 2.3. Deploy Teamcenter Preferences and Stylesheets

From the IMM Catia Installation package:

- ✓ go to **Teamcenter\preferences** and import the **preferences.xml** in merge mode.
- ✓ go to **Teamcenter\xslt_transformations** and run the **CreateTransformationDatasets**.cmd batch file to create the **IMM_Mapping_CatiaMatml** dataset that includes the stylesheet Mapping_CatiaMatml.xslt needed for mapping the material parameter names with CATIA.
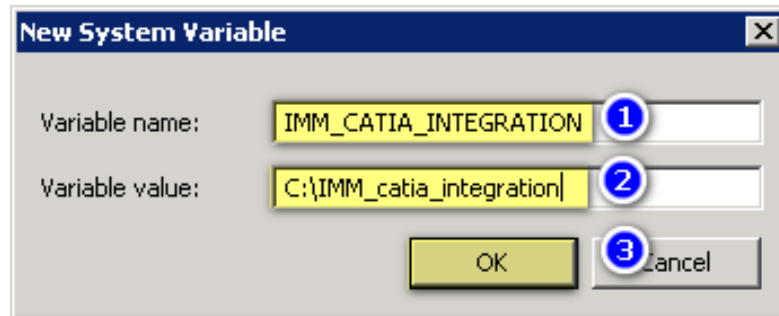
## 2.4. Copy the IMM CATIA Integration client

From the IMM Installation package go to **CATIA\CATIAV5Rxx** folder and copy the content [win_b64 folder + register.bat file] and paste it to the **preferred location** on the target system, for example "**C:\IMM_catia_integration**". **Note:** this could be a **network** shared location.
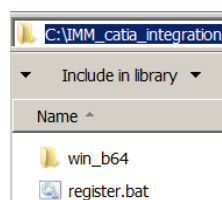
## 2.5. Create an environment variable **IMM_CATIA_INTEGRATION**

Create a system environment variable **IMM_CATIA_INTEGRATION** in the target system. Its value is the path of the **preferred location** folder in the target system used in the previous step, where the **CATIA\CATIAV5\Rxx** content was pasted to.



## 2.6. Un-register older IMM CATIA Integration: **un-register.bat**

If it is the first time to deploy IMM CATIA Integration on the system, skip this step.

If any older version of the **IMM CATIA Integration** is already existing and registered in a **different path**, before the registration of any latest version of IMM:

- From any older installation path check in the **un-register.bat** that **Framework64 v4.6.2** for TC12 or **v4.7.2** for TC13 installation path is correct.
- Run **un-register.bat** as administrator.
- Check in the console if the unregister process was successful.
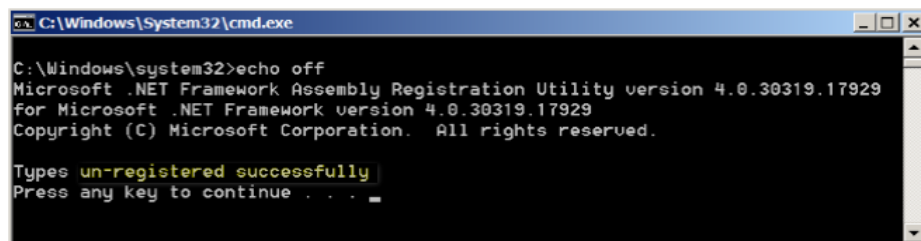


## 2.7. Register the new IMM CATIA Integration: **register.bat**

If it is the first time that the IMM integration for CATIA is getting deployed or the content of the same path is getting updated with a newer version:

- Go to the path defined above in **IMM_CATIA_INTEGRATION.**
- Check in **register.bat** that **Framework64 v4.6.2** for TC12 and **v4.7.2** for TC13 installation path is correct.
- Run **register.bat** as administrator.
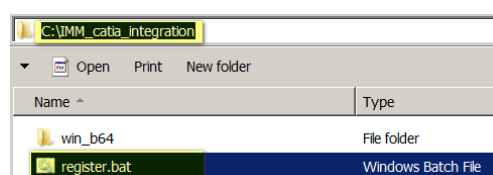


- Check in the console if the register process was successful and that the **IMM4CATIA.tlb** file is newly created under .\**win_b64\code\bin\**.

**Note:** The RegAsm command, in the **register.bat** and **unregister.bat** batch files, is used to **register** the **IMM4CATIA**.dll **Assembly** or unregister it. The **RegAsm.exe** does not present any threat to the system. It is a genuine .NET component of Windows developed by Microsoft, it opens the Assembly Registration tool to read the **metadata** within the **IMM4CATIA**.dll assembly and adds the necessary entries to the Windows **registry**. This allows **COM** clients like the CAA IMMBrowserCmd to create **.NET** Framework classes transparently. The class is registered only once, when the assembly is installed. Instances of classes within the assembly cannot be created from COM until they are actually registered.
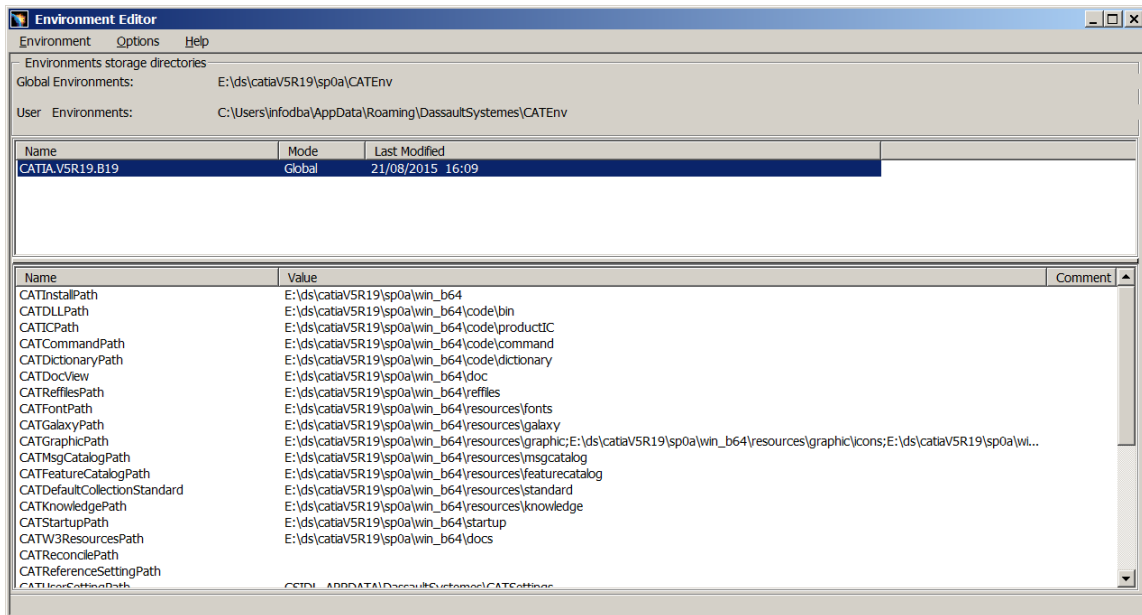
## 2.8. Create the **Shortcut** to start IMM and TCIC within CATIA

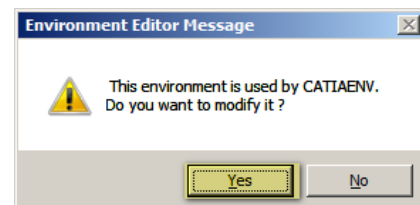To integrate and run IMM as well as TCIC form within CATIA follow the next steps:

- Start/Run the **Catia Environment Editor**
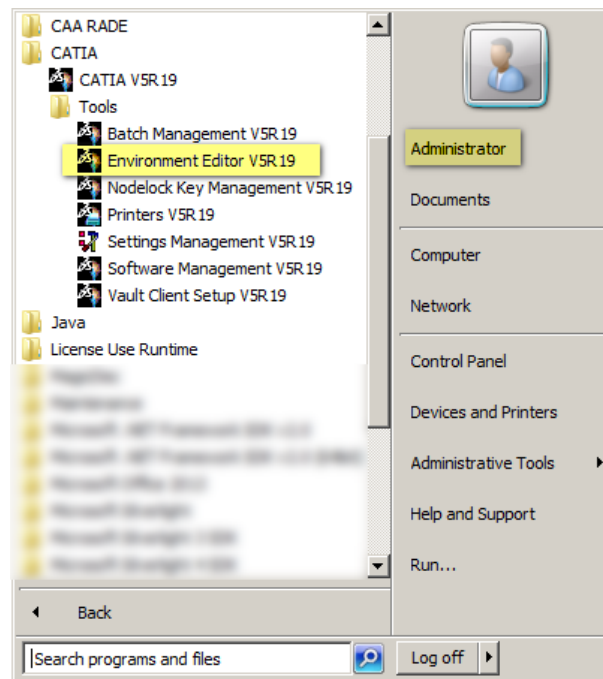


- Select the default CATIA V5Rxx environment

- If some warning dialog pop up, press Ok.
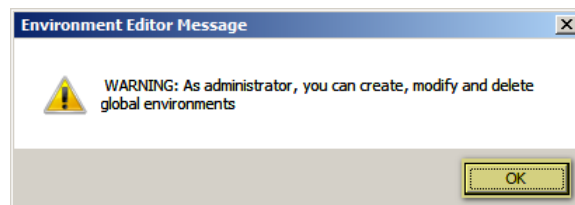


- Go and press menu item **Environment → new from …**
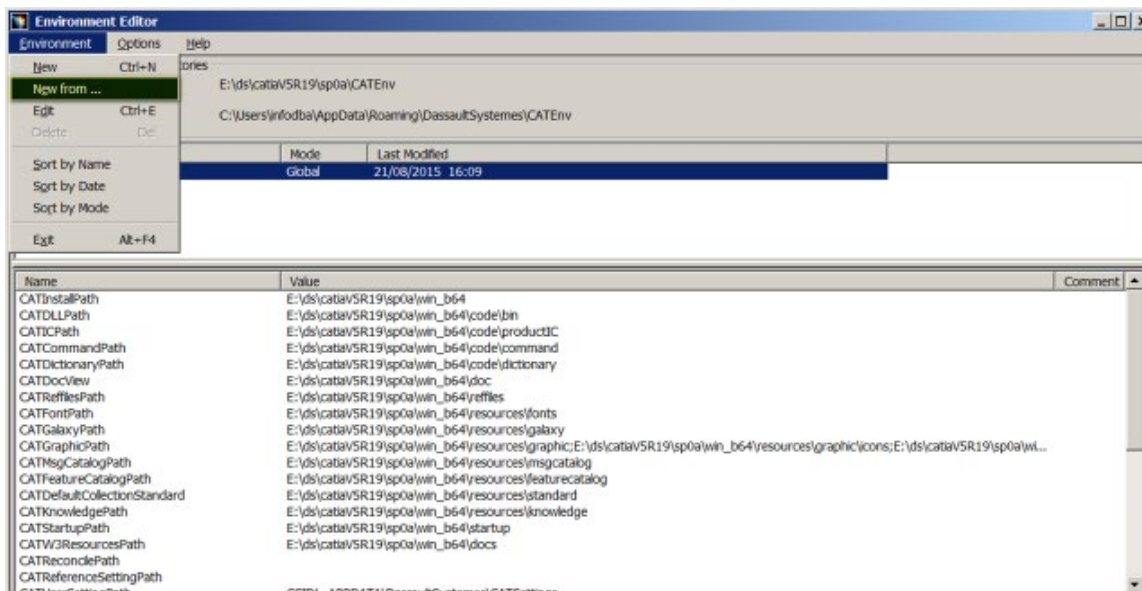


- Fill the dialog with the right input: **first step for TCIC**
    - o   Give the name to the new environment for IMM and TCIC in CATIA for example: **TC_IMM_Integration_for_CATIAV5.**
    - o   Give in this first step, the path to the TCIC like shown below.
    - o   Set the model to Global.
    - o   **DO NOT** Select **Overwrite** existing environment.
    - o   Finally press OK.
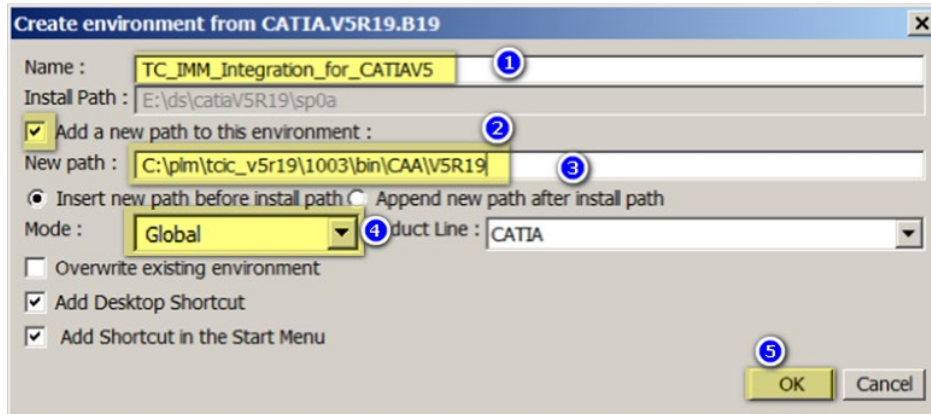
- From the Environment Editor **select** the new create environment **TC_IMM_Integration_for_CATIAV5.**
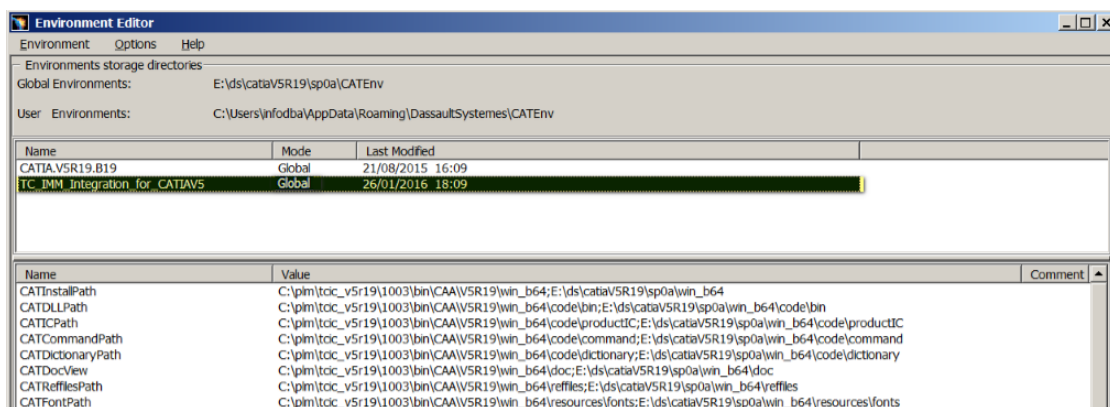


- After selecting the new environment, go and press again the menu item **Environment → new from …**
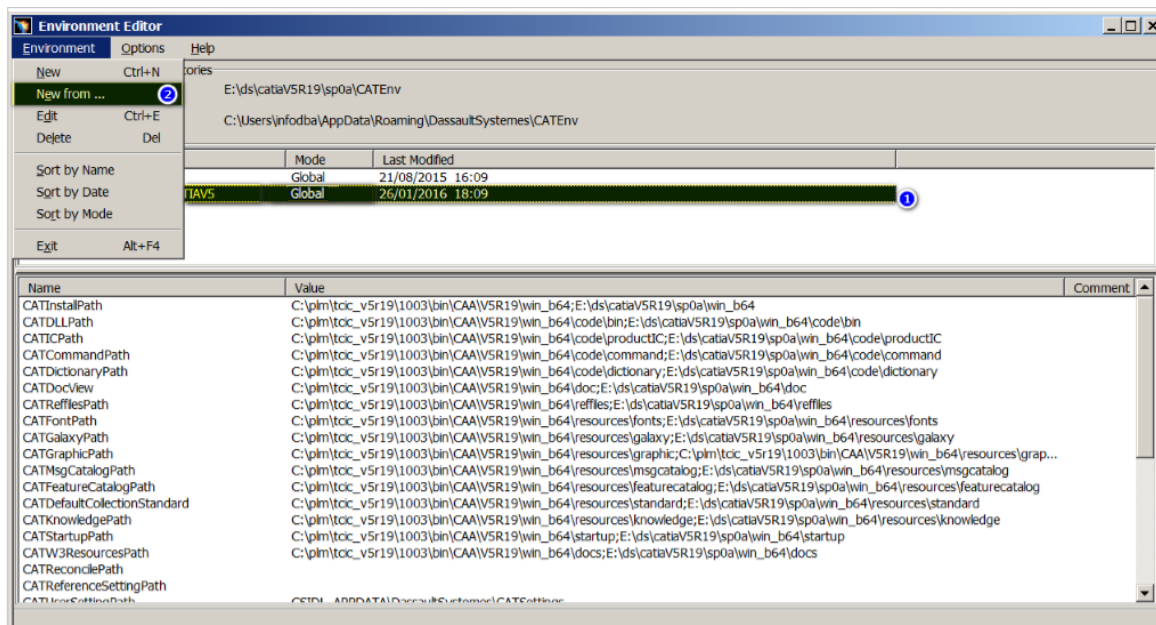


- Fil the dialog with the right input: **second step for IMM**
  - Give the same name of the **TC_IMM_Integration_for_CATIAV5** environment.
  - Give in this second step, the path to the **IMM** CATIA Integration like defined in the **IMM_CATIA_INTEGRATION** variable.

- o Set the model to Global.
- o **Select Overwrite** existing environment.
- o Finally press OK.



- Check that the result of the 2 steps above, both IMM, TCIC and CATIA paths are in the same environment



- Check that the new **TC_IMM_Integration_for_CATIAV5.txt** is created and the CATEnv of CATIA installation.



- Check that the **TC_IMM_Integration_for_CATIAV5 SHORTCUT** is created on the **Desktop** and click twice to start CATIA.

- Finally check that the IMM toolbar button is in CATIA
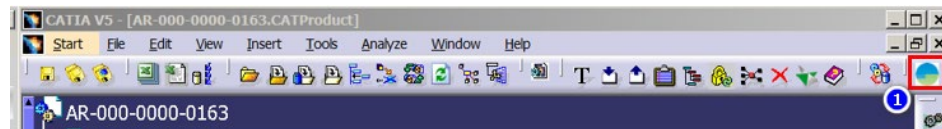


## 2.9. Configure the Teamcenter **connection** settings

If it is the first time that the IMM integration for CATIA is getting deployed or the content of the same path is getting updated and overridden with a newer version you need to configure the teamcenter connection settings:

- Under the path defined above in **IMM_CATIA_INTEGRATION.**
- Go to **\win_b64\resources\imm_work_dir\config**
- Modify the **IMM4CATIA.config file**
  - o If the connection should be via **SSO** then set the **ssoenabled** value to **true** and set properly the different tc servers with the correct server **url**, **ssologinurl** and **ssoappid**.
  - o By default and as a template the config file has 2 tcserves defined, you can either add extra tcserver tags or remove none used ones.
  - o If the connection via **SSO** is not required keep the value of **ssoenabled** set to **false** and set properly the different tc servers with the correct server **url**. And ignore the ssologinurl and ssoappid.
  - o The keyname is optional, that is the display server names in the login dialog.

```xml
<?xml version="1.0" encoding="utf-8"?>
<!--********************************************************-->
<!-- IMM 4 CATIA: settings                          -->
<!--********************************************************-->
<configuration>
  <!--********************************************************-->
  <!--              IMM connection settings           -->
  <!--********************************************************-->
  <connection>
    <!--is SSO enabled or not-->
    <ssoenabled value="false"/>
    <!--tcServer Section: HTTP addresses of the 4Tier servers http://localhost:7001/tc
            for each tcserver, a keyname and a server url are required. If the SSO is enabled then ssologinurl=http://host:port/LoginService and ssoappid
    <tcservers>
      <tcserver keyname="development" url="https://localhost:8080/tc" ssologinurl="https://teamcentersso.cutomer.com/devlogin" ssoappid="TeamcenterDEV"/>
      <tcserver keyname="acceptance" url="https://server2.cutomer.com:port/tc" ssologinurl="https://teamcentersso.cutomer.com/accptlogin" ssoappid="Teamce
      <tcserver keyname="production" url="https://server3.cutomer.com:port/tc" ssologinurl="https:/teamcentersso.cutomer.com/pplogin" ssoappid="Teamcenter
    </tcservers>
```

## 2.10. IMM Display Language: **IMM_CAD_DISPLAY_LANGUAGE**

By default the IMM CAD interface picks the windows system display language.

To be able to modify the display language of IMM CAD interface, the environment variable **IMM_CAD_DISPLAY_LANGUAGE** could be defined and set to the desired language in a special format for instance **en-US** or **de-DE**.

This environment variable is not mandatory unless to force changing the display language.