



Configuration

EB GROUP

How to debug customised Save Manager using Eclipse

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Date: 25.08.2022



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1 User Story

Teamcenter Integrated for CATIA (TcIC) provides (OOTB) Save Manager to the customer with a powerful & customizable xml engine to meet the Customer's business needs & to provide easy data.

The Customer has opted to customize their TcIC Save Manager UI using "Save Manager Entry Point Customization" method using Eclipse. Their requirement is to debug their already customized Save Manager with Eclipse & directly test the reflected changes. This can be achieved by hooking TcIC RACLess connection to Eclipse for debugging.

2 Deliverables

2.1 Configuration

- Workflow
- Preferences
- Organization
 - Groups and Roles
 - ACL
 - Display Rule
- Transfer mode
- Style sheet
- LOV
- Templates
- Closure Rules
- SQL-Scripts

- BMIDE
 - Additional Objects
 - Additional Relations
 - Change Objects
 - Change Relations
 - GRM Rules
 - Deep Copy Rules
 - Naming Rules
- Reports
- Queries
- Other – CATIA Configuration
- Attribute Mappings

3 Methodology

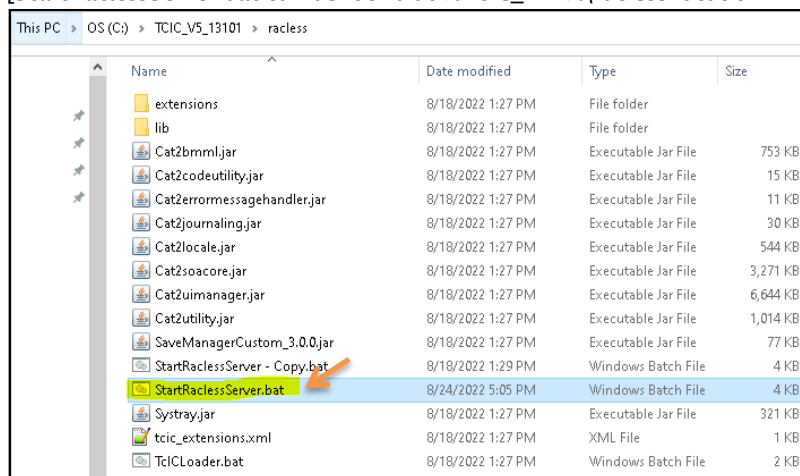
3.1.1 Environment Details

O.S. : Windows 10, 64Bits.
 Teamcenter : 13.1, 4T, 64-bit
 CATIA : V5 R31, SP2, 64 Bits.
 TcIC : 13.1.0.1_build2022061614

3.1.2 Configuration

1. Open "StartRaclessServer.bat" in Notepad++.

[StartRaclessServer.bat can be found at %TcIC_DIR%\racless location.



2. In Notepad++, modify line 71 where Developer have to add java « server » that will allow Eclipse to hook on to your RACLESS process (for debugging purpose) :

-agentlib:jdwp=transport=dt_socket,address=8000,server=y,suspend=n

Before (Line 71):

```
set RACLESS_CMD= "%JRE_HOME%\bin\java" -javaagent:%RACLESS_DIR%\Cat2soacore.jar -Xms256M -classpath "%RACLESS_JAVA_CLASSPATH%" %MAINCLASS% %*
```

After (Line 71, highlighted line is added):

```
set RACLESS_CMD= "%JRE_HOME%\bin\java" -javaagent:%RACLESS_DIR%\Cat2soacore.jar -Xms256M -agentlib:jdwp=transport=dt_socket,address=8000,server=y,suspend=n -classpath "%RACLESS_JAVA_CLASSPATH%" %MAINCLASS% %*
```

```
71 set RACLESS_CMD= "%JRE_HOME%\bin\java" -javaagent:%RACLESS_DIR%\Cat2soacore.jar -Xms256M -agentlib:jdwp=transport=dt_socket,address=8000,server=y,suspend=n -classpath "%RACLESS_JAVA_CLASSPATH%" %MAINCLASS% %*
```

3. Connect to TcIC RACLess connection to Teamcenter via Command Prompt.

[Note: Avoid connecting racless connection using TcIC Save Process as Developer will need to hook Eclipse before being able to debug TcIC Save Manager.]

- a) Open a new Command Prompt and add the following command line with parameters as shown below, press enter to launch StartRaclessServer.bat:

"%TcICV5_DIR%\racless\StartRaclessServer.bat" -u=<user_id> -p=<password> -g=<group>

E.g.

```
C:\Users\Administrator>"%TcICV5_DIR%\racless\StartRaclessServer.bat" -u=dba_rsa -p=dba_rsa -g=dba
Listening for transport dt_socket at address: 8000
TSP Binding Implementation 1.0.0(1.0.0) initialized.
```

- b) Open another new Command Prompt and add the following command line with parameters as shown below, press enter to launch DoLoginRACLessAction command:
- "%TCICV5_DIR%\bin\WIN32\SocketV5.exe" DoLoginRACLessAction 0 11400 -u=<user_id> -p=<password> -g=<group>**

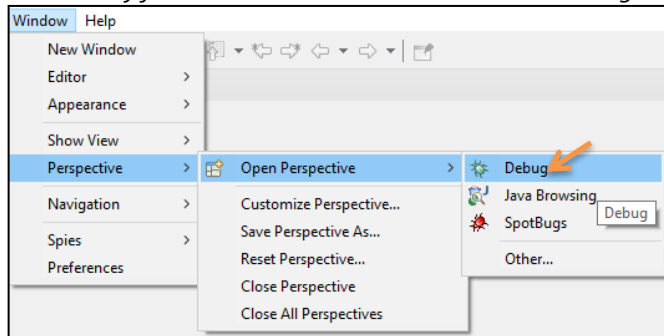
E.g.

```
C:\Users\Administrator>"%TCICV5_DIR%\bin\WIN32\SocketV5.exe" DoLoginRACLessAction 0 11400 -u=dba_rsa -p=dba_rsa -g=dba
```

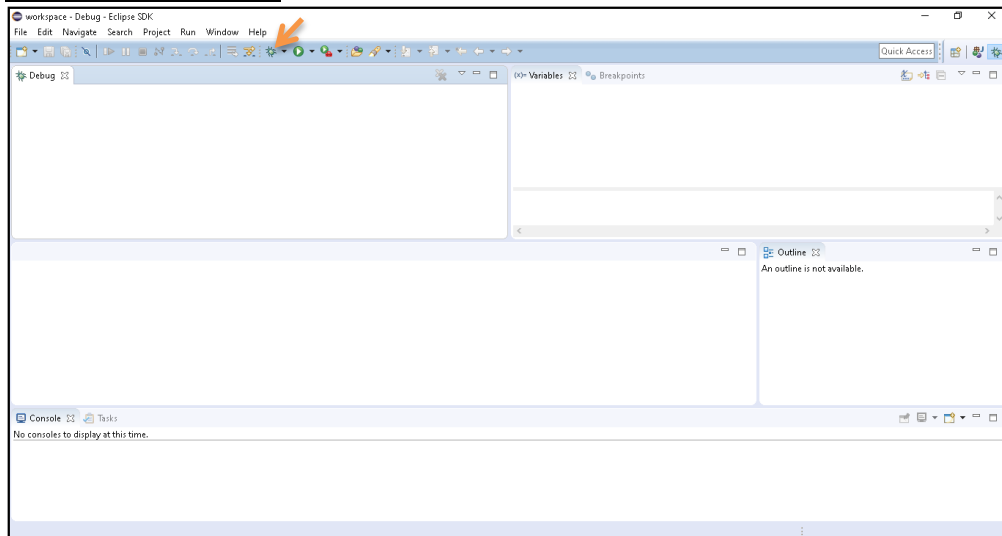
This method will create a RACLess connection between Teamcenter & TcIC CATIAV5 via command line.


4. Once RACLess connection has been established between TcIC CATIAV5 & Teamcenter, launch Eclipse. Select "**Window Menu -> Perspective -> Open Perspective -> Debug**" to add debugging « stop points » in java project custom code.

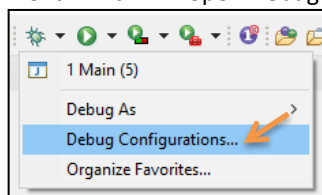
[Note: Every further action will have to be done in a "Debug Perspective".]



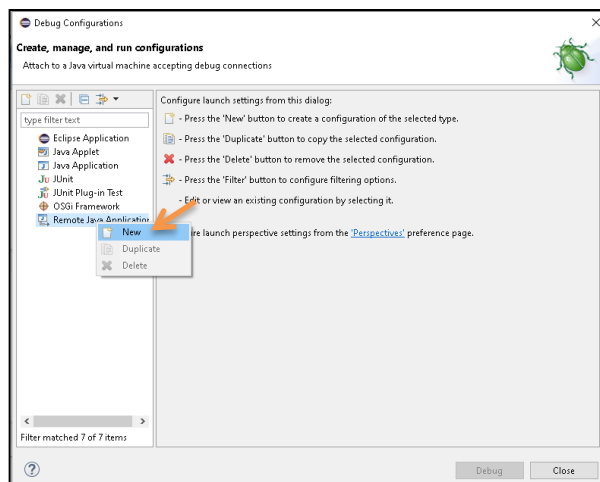
Debug Perspective Panel:



5. In Debug Perspective Panel, Developer has to hook Eclipse to TcIC RACLess. Select **Debug New_Configurations**  and click on "**Debug Configurations...**" in the contextual menu which will open Debug Configuration Window.



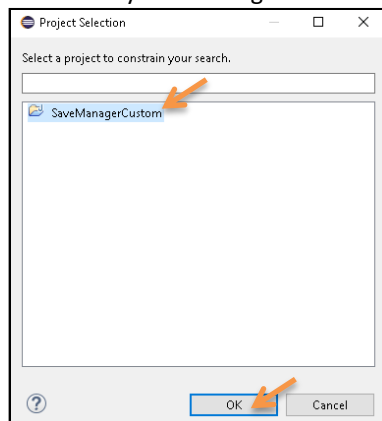
6. In Debug Configurations Window, select "**Remote Java Application**" and right click to select **New** to create a configuration of the selected type.



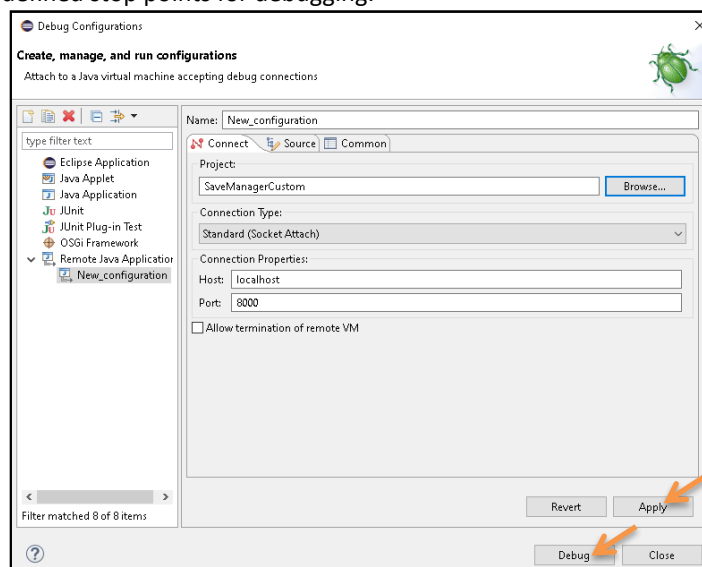
7. In Debug Configurations window **"Connect" Tab**, select the existing Save Manager project in Eclipse, click on **Browse...**



And select your existing *SaveManagerCustom* project to add, click **OK**.



8. Click on **Apply & Debug** to connect TcIC RACLess connection. This will make code to stop on the defined stop points for debugging.



3 Result

Developer can debug & test their already customized Save Manager with Eclipse directly.

