DX200 RCS-Module for DELMIA
Installation Manual

Upon receipt of the product and prior to initial operation, read these instructions thoroughly, and retain for future reference.

Please have the following information available when contacting Yaskawa Customer Support:
- System
- Primary Application
- Software Version (Located on Programming Pendant by selecting: {Main Menu} - {System Info} - {Version})
- Robot Serial Number (Located on robot data plate)
- Robot Sales Order Number (Located on controller data plate)

Part Number: 175522-1CD
Revision: 1
DANGER

- This manual explains the RCS-Module for DELMIA. Read this manual carefully and be sure to understand its contents before handling the DX200.
- General items related to safety are listed in Chapter 1: Safety of Controller Instructions. To ensure correct and safe operation, carefully read the DX200 Instructions before reading this manual.

CAUTION

- The drawings and photos in this manual are representative examples and differences may exist between them and the delivered product.
- YASKAWA may modify this model without notice when necessary due to product improvements, modifications, or changes in specifications.
- If your copy of the manual is damaged or lost, contact a YASKAWA representative to order a new copy. The representatives are listed on the back cover. Be sure to tell the representative the manual number listed on the front cover.
- YASKAWA is not responsible for incidents arising from unauthorized modification of its products. Unauthorized modification voids your products warranty.
- Software described in this manual is supplied against license only, with permission to use or copy under the conditions stated in the license. No part of this manual may be copied or reproduced in any form without written consent of YASKAWA.

Registered Trademark

- Windows OS is a registered trademark of Microsoft Corporation in the United States.
- 3DEXPERIENCE, DELMIA V5, DELMIA are trademarks or registered trademarks of Dassault Systemes or a subsidiary of Dassault Systemes in the United States and other countries.
- All other company names and product names are registered trademarks or trademarks of their respective owners.
Index

1. Introduction ........................................................................................................................................ 5
   1.1. Operating environment ............................................................................................................. 6
       1.1.1. Hardware .......................................................................................................................... 6
       1.1.2. Software ............................................................................................................................ 6
   1.2. Hardware Lock Key ................................................................................................................... 6
   1.3. Software Terms of Use ............................................................................................................. 7
2. Installation ........................................................................................................................................... 8
   2.1. Installation of RCS-Module for DX200 ................................................................................... 8
       2.1.1. Run setup program ............................................................................................................ 8
       2.1.2. Installation folder ............................................................................................................... 8
3. Connection operation of RCS-Module .............................................................................................. 10
   3.1. Prior confirmation ..................................................................................................................... 10
       3.1.1. setup rrs.servers ................................................................................................................ 10
   3.2. DELMIA V5 RCS-Module connection operation .................................................................. 11
       3.2.1. DELMIA V5 Setup of the RRS property ............................................................................. 11
       3.2.2. DELMIA V5 Start-up of the RCS Server Program .......................................................... 12
       3.2.3. DELMIA V5 RRS Connection Operation ............................................................ 13
       3.2.4. DELMIA V5 RRS Disconnection Operation .............................................................. 15
       3.2.5. DELMIA V5 Stop of the RCS Server Program .......................................................... 16
       3.2.6. DELMIA V5 RRS Connection Using Parameters of Actual Manipulator ............... 16
       3.2.7. DELMIA V5 Settings when the MOTOMAN model required when selecting the Manipulator is not displayed ........................................................................................................ 17
   3.3. DELMIA 3DEXPERIENCE RCS-Module connection operation ........................................... 19
       3.3.1. Setup CTL file (Only Extended version RCS module) ..................................................... 19
       3.3.2. 3DEXPERIENCE Start RCS server program .............................................................. 21
           3.3.2.1. Start Standard version RCS server program ......................................................... 21
           3.3.2.2. Start Extended version RCS server program ...................................................... 21
       3.3.3. 3DEXPERIENCE RRS connection operation .............................................................. 22
       3.3.4. 3DEXPERIENCE RRS stop operation ............................................................................. 23
       3.3.5. 3DEXPERIENCE Stop of RCS server program .......................................................... 23
           3.3.5.1. Stop Standard version RCS server program ....................................................... 23
           3.3.5.2. Stop Extended version RCS server program ....................................................... 24
       3.3.6. 3DEXPERIENCE RRS connection method using actual machine parameters .......... 24
       3.3.7. 3DEXPERIENCE Settings when the MOTOMAN model required when selecting the Manipulator is not displayed ................................................................................................. 25
4. Frequently Asked Questions

4.1. Corrective action when driver is installed with USB type key attached to PC
1. Introduction

This product is a software “RCS-Module” (hereafter called RCS-Module for DX200) that simulates a robot controlled by DX200 using the RRS (Realistic Robot Simulation) function of DELMIA V5 or DELMIA 3DEXPERIENCE.

Hereafter, when it is written as DELMIA, it is the contents common to V5 and 3DEXPERIENCE.

This document describes how to install and start RCS-Module for DX200.

For more information about DELMIA 3DEXPERIENCE RRS function, please contact Dassault Systèmes, a developer and distributor.

The RCS-Module for DX200 is available in the standard version that can be used with DELMIA V5 and 3D EXPERIENCE, and the extended version that can be used only with 3DEXPERIENCE.

The extended version RCS module supports spot welding simulation.

However, it is necessary to specify the simulation target in the configuration file (CTL file) when connecting RCS.

In addition, there are limits on the number of axes that can be simulated, as the following important matters.

<table>
<thead>
<tr>
<th>Table. 1 Standard version RCS and extended function version RCS module</th>
</tr>
</thead>
<tbody>
<tr>
<td>DELMIA V5</td>
</tr>
<tr>
<td>3DEXPERIENCE</td>
</tr>
<tr>
<td>Standard OLP</td>
</tr>
<tr>
<td>3DEXPERIENCE</td>
</tr>
<tr>
<td>Extended OLP</td>
</tr>
<tr>
<td>SPOT welding</td>
</tr>
<tr>
<td>CTL file</td>
</tr>
<tr>
<td>Simulation axis number limit</td>
</tr>
</tbody>
</table>

Please refer to the 3DEXPERIENCE manual for switching between the standard OLP and the function extension OLP.
1.1. **Operating environment**

In order to use the RCS-Module for DX200, it is necessary to prepare the following hardware and software in advance.

1.1.1. **Hardware**

- PC and monitor with Windows OS
- Hard disk space of 512 MB or more
- Hardware lock key (refer to Chapter 1.2)

1.1.2. **Software**

- Windows OS on which DELMIA V5 or 3DEXPERIENCE runs
- DELMIA V5 or 3DEXPERIENCE
- OLP for the version RRS-I of DELMIA V5
- OLP for the enhanced version RRS-I of DELMIA 3DEXPERIENCE

Note) For inquiries regarding OLP for the enhanced version RRS-I, please contact Dassault Systèmes, a developer and distributor.

1.2. **Hardware Lock Key**

For proper operation connect provided hardware lock key (USB type) to personal computer before using this software.

Check and execute <Check the computing environment> <Installation of driver> before connecting the key to USB port.

<Check the computing environment>

Multi-connection of USB type key is not available for one USB port because of hardware structure. Therefore, only one key should be connected to one USB port. When installing multiple offline software into one personal computer and multi-connecting USB keys, use the personal computer which is provided same numbers of USB ports as the number of software to be installed.

<Installation of driver>

Please install the driver after detaching the all sentinel hardware key from the personal computer.
Execute “¥SentinelDriver¥Sentinel System Driver Installer 7.5.9.exe” of installation CD-ROM.

**NOTE**

Be sure to install the driver.

When installing the driver, be sure to login in administrator mode in order to add files to system folder and input information in registry.

If a key is connected to personal computer before installing the driver, the message concerning the driver is displayed. In this case, and detach the key from personal computer and then install the driver.

1.3. **Software Terms of Use**

The rights and copyrights of this product are owned by us and are protected by the copyright law and the provisions of international treaties.

You shall not be able to use, manufacture, distribute, or publish using this product not described in the license agreement. All rights not expressly granted under the license agreement are reserved to us.
2. Installation

2.1. Installation of RCS-Module for DX200

2.1.1. Run setup program

Follow the steps below to install RCS-Module for DX200.

1) Insert the installation CD-ROM into the CD-ROM drive.
2) Installer will start. If it does not start, execute setup.exe in the CD directly.
3) Select your language, and proceed with the installation according to the installer.
4) Select the installation folder and complete the installation according to the installer.

![Figure 1 Select installation folder]

2.1.2. Installation folder

The RCS-Module for DX200 and robot parameters are installed in the following folder.

[Standard version RCS module]
<Installation folder>¥YASKAWA_RCS¥rrs¥
├ lib <manip file>
└ YASKAWA_ DX200
    ├ bin <RCS module>
    └ data <robot parameter>
【Extended version RCS module】
<Installation folder>¥YASKAWA_RCS ¥rrs_ex¥YASKAWA_ DX200¥
└ bin <RCS module>
└ lib <manip file>
└ data <robot parameter>

Note) After installation, please keep the folder "bin", "data" and "lib" in lower case without changing the name. Changing or capitalizing the folder name may cause malfunction of RCS-Module for DX200.
3. Connection operation of RCS-Module

To connect and simulate the RCS-Module for DX200 with DELMIA RRS, it is necessary to perform "Start RCS server program" and "RRS connection operation".

3.1. Prior confirmation

Prior confirmation is common to V5 and 3DEXPERIENCE.

3.1.1. setup rrs.servers

The following file in the DELMIA installation folder describes the RRS server definition for DX200. If the RRS server settings for DX200 are not defined in "rrs.servers", addition is required. Please refer to the DELMIA manual for details on how to edit "rrs.servers".

<table>
<thead>
<tr>
<th>V5</th>
<th>&lt;DELMIA install folder&gt;¥intel_a¥startup ¥rrs¥rrs.servers</th>
</tr>
</thead>
<tbody>
<tr>
<td>3DEXPERIENCE</td>
<td>&lt;DELMIA install folder&gt;¥win_b64¥startup ¥rrs¥rrs.servers</td>
</tr>
</tbody>
</table>

As an example, it is edit as follows.

```
# YASKAWA DX200 Servers
#
YASKAWA_DX200_Server1 YASKAWA_DX200 SOCKET localhost 5100
```

Figure 2 rrs.servers
3.2. DELMIA V5 RCS-Module connection operation

3.2.1. DELMIA V5 Setup of the RRS property

After the installation, it is necessary to set the installation location of the RCS module in DELMIA V5. To do so, please follow the procedure below:

1. In DELMIA V5, select [Tools]-[Options] to display the "Options" dialog box.
2. Click on [Ressource Detailing] in tree structure on the left side of the "Options" dialog box.
3. Click on the [RRS] tab on the right side of the "Options" dialog box.

After completing the above steps, the "Options" dialog box should look like the figure below.

![Options dialog box](image)

In the main section, set the directories for the [RRS$LIB directory], [RRS Servers File] and [RCSDATA$LIB directory].

Set the values as follows:

**RRS$LIB directory:**

<DELMIA installation folder>\intel\a\code\bin

**RRS Servers File:**

[Path to RRS Servers File]
3.2.2. DELMIA V5 Start-up of the RCS Server Program

To start the RCS server program, follow the procedure below:

1. Start a MS-DOS window.
   
   Click the [Start] button and point to [Program], then select [Accessory] [Command Prompt] to display a MS-DOS window.

2. Change to the folder in which the RCS server program was installed.
   
   Change the current folder to the folder where the RCS server program (rcssrv_YASKAWA_DX200.exe) is located. The following example is for the DOS command input and assumes that RCS serve program has been installed in C:¥YASKAWARCS:

   >c:
   >cd c:¥YASKAWA_RCS¥rrs¥yaskawa_dx200¥bin

3. Start the server program.

   Start the RCS server program (rcssrv_YASKAWA_DX200.exe). The argument "-tcp" and the port no. "5100" are required for the program. The following example is for the DOS command input and assumes that RCS serve program has been installed in C:¥YASKAWA RRS:

   >rcssrv_YASKAWA_DX200.exe -tcp 5100

   Using the default log-file: c:¥tmp¥rcssrv_YASKAWA_DX200.log
   Using the default pid-file: c:¥tmp¥rcssrv_YASKAWA_DX200.pid
NOTE) If the RCS server has been started in the past, the files "rcssrv_YASKAWA_DX200.log" and "Rcssrv_YASKAWA_DX200.pid" are created under the "c:\tmp" folder. Delete those files before starting the RCS server program (rcssrv_YASKAWA_DX200.exe); if those files exist, the server program would not start properly.

3.2.3. DELMIA V5 RRS Connection Operation
To perform RRS connection operation with DELMIA V5, follow the procedure below:

1. Start the DELMIA V5, and register the MOTOMAN robot in a workcell.
2. Change the workbench to [Workcell Sequencing] by selecting [Start]-[Ressource Detailing]-[Workcell Sequencing]
3. Press the [RRS Connect] button of the [RRS Connect] Toolbar, then click in the workcell on the robot to be connected. The RRS Server Selection dialog box will display. If the [RRS Connect] toolbar is not currently displayed, use the following procedure:
   Select: [View]-[Toolbars]-[RRS Connect]

To start the RCS server program, follow the procedure below:

Select: [View]-[Toolbars]-[RRS Connect]

4. In the RRS Server Selection dialog box, select the Yaskawa RRS server (YASKAWA_DX200_Server...) as the RRS Server and press [OK].
5. In the [Manipulator] field of the [RRS Properties] dialog box, select the same robot model as the Motoman robot registered in the workcell, then press the [OK] button.

6. The messages in following figure are displayed in the [RRS Message Window] on the robot with establish RRS connection. These messages confirm that the connection to the DELMIA-RRS/RCS Module is established.
NOTE1) The above message window shows "Initialized as default robot. Machine parameter file(s) not found". It means that since there had been no parameters for the subject manipulator, the RCS-Module has been started by the default parameters. To start the RCS-Module properly with the right parameters downloaded from the actual manipulators or provided by Yaskawa, it is necessary to prepare those files under "<Installation Folder>¥YASKAWA_DX200¥data" using proper names. (Refer to "Chapter 3.3.6").

NOTE2) When connecting the RRS, a WARNING dialog box appears, clearly indicating the upper limit of the positioning level (PL) for the subject RCS-Module. It is an indication to prompt the user's attention, and is not a failure indication.

3.2.4. DELMIA V5 RRS Disconnection Operation

To perform RRS disconnection operation with DELMIA V5, follow the procedure below:

1. The [RRS Disconnect Confirmation] dialog box can be displayed with the following operation procedure:
   
   Operation procedure: [View]-[Toolbars]-[RRS Connect]

2. Press the [OK] button on the [RRS Disconnect Confirmation] dialog box and the connection with the RCS-Module will disconnect.
3.2.5. DELMIA V5 Stop of the RCS Server Program

When closing the DELMIA V5, it is also required to terminate the RCS server program (rcssrv_YASKAWA_DX200.exe). To terminate the RCS server program, close the MSDOS window opened in Chapter 3.2.2.

3.2.6. DELMIA V5 RRS Connection Using Parameters of Actual Manipulator

To start the RCS-Module properly using the parameters downloaded from actual manipulator or right parameter provided by Yaskawa, prepare the parameters in the following procedure and perform DELMIA-RRS connection:

1. Change the name of the parameter file. The new file name should be conformed to the following rule:

<table>
<thead>
<tr>
<th>File names</th>
<th>Actual file names</th>
<th>New file name for MA01440_A00 with robot number 1 in the cell</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parameter file</td>
<td>ALL.PRM</td>
<td>MA01440_A00_01.prm</td>
</tr>
<tr>
<td>Tool data</td>
<td>TOOL.CND</td>
<td>MA01440_A00_01.tol</td>
</tr>
<tr>
<td>User defined frame file</td>
<td>UFRAME.DAT</td>
<td>MA01440_A00_01.uf</td>
</tr>
</tbody>
</table>

NOTE) Replace all the symbols "-" used in the robot type with "_".

2. Copy the file with a new name in the following folder.

   Copy to:
   
   `<Installation folder>\rrs\Yaskawa_dx200\data`

3. Perform the DELMIA V5-RRS connection operation.

4. Confirm that there is no warning in the [RRS Message Window] of the subject robot as follows:
3.2.7. DELMIA V5 Settings when the MOTOMAN model required when selecting the Manipulator is not displayed

If the target robot model name is not displayed in "Manipulator" in the RRS Properties dialog, it will be displayed in "Manipulator" by adding the robot model name to the "YASKAWA_DX200.manip" file.

Please refer to the DELMIA manual for details of "YASKAWA_DX200.manip" file.

When editing "YASKAWA_DX200.manip", since the sample is stored in the following RCS module installation folder, please edit this file based on it and store it in the specified DELMIA folder.

```<Installation folder>¥YASKAWA_RCS¥rrs¥
lib¥YASKAWA_DX200.manip```

1) Open YASKAWA_DX200.manip in a text editor.
2) Adds the model name to the manip file.

The following content is written in the file. Add to this list

Please add the robot model name you want as for the entry, the name is entered on one line without using a space and a symbol. Also, if "**REPLACE**" is described in the first line, the standard and the list will be replaced.
3) Finish saving the manip file.
4) Store the edited manip file in the specified folder of DELMIA.
3.3. DELMIA 3DEXPERIENCE RCS-Module connection operation

3.3.1. Setup CTL file (Only Extended version RCS module)

When making an RCS connection, the extended version RCS module reads the CTL file in the machine data folder.

The control group to be simulated is defined in the CTL file.

If no CTL file exists in the machine data folder, the RCS module returns an initialization error.

For the machine data folder path, refer to “3.3.6 3DEXPERIENCE RRS connection method using actual machine parameters”.

Table shows the CTL file name definition.

**Table. 4  CTL file definition**

<table>
<thead>
<tr>
<th>CTL file name</th>
<th>[ManipulatorType]_[2-digit robot number].ctl ex) MS00100_A00_01.ctl</th>
</tr>
</thead>
<tbody>
<tr>
<td>Install path</td>
<td>Same as machine data</td>
</tr>
</tbody>
</table>

Table shows the CTL file format.

**Table. 5  CTL file format**

<table>
<thead>
<tr>
<th>ITEMS</th>
<th>DATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>[CONTROLLER]</td>
<td>Required fixed phrase</td>
</tr>
<tr>
<td>ID=N</td>
<td>Required Assigned controller identification number. Can be set arbitrarily.</td>
</tr>
<tr>
<td>[ROBOT]</td>
<td>Required fixed phrase</td>
</tr>
<tr>
<td>TYPE=[ManipulatorType]</td>
<td>Name of Manipulator</td>
</tr>
<tr>
<td>NUMBER=N</td>
<td>Required Number of Manipulator (RB1,RB2, …) Describe the robot number of the simulation target.</td>
</tr>
<tr>
<td>[BASE]</td>
<td>Required fixed phrase</td>
</tr>
<tr>
<td>NUMBER=N</td>
<td>Can be omitted when not in use Number of Rail (BS1,BS2, …) This is required if the simulation target robot has a rail axis on the parameter file. If not exist this setting, the RCS module will generate an initialization error.</td>
</tr>
<tr>
<td>[STATION]</td>
<td>Required fixed phrase</td>
</tr>
</tbody>
</table>
NUMBER = \textit{N,M} \\
\text{Can be omitted when not in use} \\
\text{Number of Station (ST1, ST2, …)} \\
\text{When multiple stations are targeted during simulation, they are listed separated by commas.}

\text{[END]} \\
\text{Required fixed phrase}

The following shows an example of setting contents when configuring each control group.

\begin{itemize}
\item RB1

\begin{verbatim}
[CONTROLLER]
 ID=1
[ROBOT]
 TYPE=MS00100_A00
 NUMBER=1
[BASE]
[STATION]
[END]
\end{verbatim}

\item BS1 and ST1

\begin{verbatim}
[CONTROLLER]
 ID=1
[ROBOT]
 TYPE=MS00100_A00
 NUMBER=1
[BASE]
 NUMBER=1
[STATION]
 NUMBER=1
[END]
\end{verbatim}

\item RB1 and ST2(GUN2)

\begin{verbatim}
[CONTROLLER]
 ID=1
[ROBOT]
\end{verbatim}

\end{itemize}
3.3.2. 3DEXPERIENCE Start RCS server program

3.3.2.1. Start Standard version RCS server program

Start in the same way as DELMIA V5.
Please refer to "3.2.2 DELMIA V5 Start-up of the RCS Server Program".

3.3.2.2. Start Extended version RCS server program

Follow the procedure below to start the RCS server program.
Execute the following batch file
Follow the procedure below to start the RCS server program.

1) Execute the following batch file included in the installation folder of RCS-Module for DX200 with "Run as administrator".

<Installation folder>¥YASKAWA_RCS¥
YASKAWA_DX200_RCS_START.bat
Figure 12 start RCS server program

Note) If the port number of the RRS server to be used is different from that of the batch file, please edit "PORT_NO" of the batch file.

Figure 13 Port number setting

3.3.3. 3DEXPERIENCE RRS connection operation

Follow the steps below to connect RRS.

1) Start DELMIA and open a cell.

2) Press the "RRS Connect " button. Please refer to the DELMIA manual for details of operation.

3) Click the "OK" button in "RRS Server & Device Configuration Selection".

Figure 14 RRS Server & Device Configuration Selection

4) Set the folder of "RRS Properties" robot parameter and click "OK" button.
5) The connection result is displayed in "Messages Reporting".

3.3.4. 3DEXPERIENCE RRS stop operation

Follow the procedure below to disconnect from RRS.

1) Press the "RRS Connect" button.

3.3.5. 3DEXPERIENCE Stop of RCS server program

3.3.5.1. Stop Standard version RCS server program

Stop in the same way as DELMIA V5.
3.3.5.2. **Stop Extended version RCS server program**

When ending DELMIA, the RCS server program also needs to be ended.

1) Execute the following batch file included in the installation folder of RCS-Module for DX200 as "Run as administrator".

```
<Installation folder>¥YASKAWA_RCS¥
YASKAWA_DX200_RCS_STOP.bat
```

![Figure 17 Stop RCS server program](image)

3.3.6. **3DEXPERIENCE RRS connection method using actual machine parameters**

In order to start RCS-Module normally using the real machine data downloaded from the real machine robot or the real machine data provided by YASKAWA ELECTRIC, please prepare according to the following procedure and connect RRS.

1) Change the file name of the machine data files.

   Please replace "-" (hyphen) in file name to ".".

   The new name needs to be changed to a new file name according to the following rules.

### Table. 6  format of file name

<table>
<thead>
<tr>
<th>CTL file name</th>
<th>ManipulatorType_ [2-digit robot number].prm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Install path</td>
<td>Same as machine data</td>
</tr>
</tbody>
</table>

### Table. 7  Actual machine file name change table

<table>
<thead>
<tr>
<th>File names</th>
<th>Actual file names</th>
<th>New file name for MA01440-A00 with robot number 1 in the cell</th>
</tr>
</thead>
</table>
1 Parameter file | ALL.PRM | MA01440_A00_01.prm |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Tool data</td>
<td>TOOL.CND</td>
<td>MA01440_A00_01.tol</td>
</tr>
<tr>
<td>3 User defined frame file</td>
<td>UFRAME.DAT</td>
<td>MA01440_A00_01.uf</td>
</tr>
<tr>
<td>4 Spot Gun cond data</td>
<td>SGSPEC.DAT</td>
<td>MA01440_A00_01.gsp</td>
</tr>
<tr>
<td>5 Motor gun pressure data</td>
<td>SGPRS.CND</td>
<td>MA01440_A00_01.gpr</td>
</tr>
<tr>
<td>6 Clearance setting</td>
<td>SGCLARNC.DAT</td>
<td>MA01440_A00_01.gcl</td>
</tr>
</tbody>
</table>

2) Copy the file of the new name to the following folder.

\[\text{Table. 8 installation folder of Actual machine file}\]

<table>
<thead>
<tr>
<th>Standard version</th>
<th>RCS module</th>
<th>&lt;Installation folder&gt;¥YASKAWA_RCS¥rrs¥YASKAWA_DX200¥data¥</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extended version</td>
<td>RCS module</td>
<td>&lt;Installation folder&gt;¥YASKAWA_RCS¥rrs_ex¥YASKAWA_DX200¥data¥</td>
</tr>
</tbody>
</table>

3) Perform the RRS connection procedure, set the folder containing the parameters in "RCS Data Home Directory" and "Relative Robot Path" in "RRS Properties", and click "OK" button to connect.

\[\text{Figure 18 RRS Properties}\]

3.3.7. 3DEXPERIENCE Settings when the MOTOMAN model required when selecting the Manipulator is not displayed

If the target robot model name is not displayed in "Manipulator" in the RRS Properties dialog, it will be displayed in "Manipulator" by adding the robot model name to the "YASKAWA_DX200.manip" file.
Please refer to the DELMIA manual for details of "YASKAWA_DX200.manip" file. When editing "YASKAWA_DX200.manip", since the sample is stored in the following RCS module installation folder, please edit this file based on it and store it in the specified DELMIA folder.

\[
<\text{installation folder}>\text{¥YASKAWA\_RCS\¥rrs\_ex¥YASKAWA\_DX200¥lib¥YASKAWA\_DX200\_manip}
\]

<table>
<thead>
<tr>
<th>Standard version</th>
<th>&lt;Installation folder&gt;¥YASKAWA_RCS¥lib¥YASKAWA_DX200.manip</th>
</tr>
</thead>
<tbody>
<tr>
<td>RCS module</td>
<td>&lt;Installation folder&gt;¥YASKAWA_RCS¥lib¥YASKAWA_DX200.manip</td>
</tr>
<tr>
<td>Extended version</td>
<td>&lt;Installation folder&gt;¥YASKAWA_RCS¥rrs_ex¥YASKAWA_DX200¥lib¥YASKAWA_DX200.manip</td>
</tr>
</tbody>
</table>

5) Open YASKAWA_DX200.manip in a text editor.
6) Adds the model name to the manip file.
The following content is written in the file. Add to this list
Please add the robot model name you want as for the entry, the name is entered on one line without using a space and a symbol. Also, if "**REPLACE **" is described in the first line, the standard and the list will be replaced.

![YASKAWA_DX200.manip](image)

| ES165RD_JCO |
| ES200RD_JCO |
| MA01440_A00 |
| MA2010_A00 |
| MA2010_A10 |
| MC02000_J00 |
| NH00012_A00 |

**Figure 19 manip file**

Note) Replace "_" (hyphen) in file name to "\_\_".

7) Finish saving the manip file.
8) Store the edited manip file in the specified folder of DELMIA.
4. Frequently Asked Questions

4.1. Corrective action when driver is installed with USB type key attached to PC

1) Delete the drive registered as "unknown device" from Device Manager with USB type key attached to PC
2) Uninstall the driver (Sentinel System Driver 7.5.9) with [Add / Remove Programs]
3) Install the driver with the USB type key removed from the computer.

Note 1) Be sure to install the driver.
Note 2) When installing the driver, be sure to log in with administrator privileges when logging in.
DX200 RCS-Module for DELMIA
Installation Manual

HEAD OFFICE
2-1 Kurosakisiroishi, Yahatanishi-ku, Kitakyushu 806-0004, Japan
Phone +81-93-645-7703 Fax +81-93-645-7802

YASKAWA America Inc. (Motoman Robotics Division)
100 Automation Way, Miamisburg, OH 45342, U.S.A.
Phone +1-937-847-8200 Fax +1-937-847-6277

YASKAWA Europe GmbH (Robotics Division)
Yaskawastrasse 1, 85391 Allershausen, Germany
Phone +49-8166-90-100 Fax +49-8166-90-103

YASKAWA Nordic AB
Verkstadsgatan 2, Box 504, SE-385 25 Torsas, Sweden
Phone +46-480-417-800 Fax +46-486-414-10

YASKAWA Electric (China) Co., Ltd.
22F One Corporate Avenue No.222, Hubin Road, Huangpu District, Shanghai 200021, China
Phone +86-21-5385-2200 Fax +86-21-5385-3299

YASKAWA SHOUGANG ROBOT Co., Ltd.
No7 Yongchang North Road, Beijing E&T Development Area, China 100176
Phone +86-10-6788-2858 Fax +86-10-6788-2878

YASKAWA India Private Ltd. (Robotics Division)
#426, Udyog Vihar, Phase-IV, Gurgaon, Haryana, India
Phone +91-124-475-8500 Fax +91-124-475-8542

YASKAWA Electric Korea Corporation
9F Kyobo securities Bldg., 97, Uisadang-daero, Yeongdongpo-gu, Seoul, Korea 07327
Phone +82-2-784-7844 Fax +82-2-784-8495

YASKAWA Electric Taiwan Corporation
12F, No.207, Sec. 3, Belashin Rd., Shindian District, New Taipei City 23143, Taiwan
Phone +886-2-8913-1333 Fax +886-2-8913-1513

YASKAWA Electric (Singapore) PTE Ltd.
151 Lorong Chuan, #04-02A, New Tech Park, Singapore 556741
Phone +65-6282-3003 Fax +65-6282-3003

YASKAWA Electric (Thailand) Co., Ltd.
59, 1st-5th Floor, Flourish Building, Soi Ratchadapisek 18, Ratchadapisek Road, Huaykwang, Bangkok 10310, THAILAND
Phone +66-2-017-0099 Fax +66-2-017-0199

PT. YASKAWA Electric Indonesia
Secure Building-Gecung B Lantai Dasar & Lantai 1 Jl. Raya Protokol Halim Perdanakusuma, Jakarta 13610, Indonesia
Phone +62-21-2982-6470 Fax +62-21-2982-6741

Specifications are subject to change without notice for ongoing modifications and improvements.