|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Event** | Setup of Teamcenter Production System (Azure Cloud)   * Teamcenter 12.2.0.15 * NX 12.0.2.9.13 * Teamcenter Visualisierung 12.2.0.15 * Active Workspace 5.0.7 * TC Micro Services 5.1.3 * PLM Easy 12.2.0.8 * SIDT NX12 | | | | |
| **Place** | Remote | | | | |
| **Period** | 13.09.2021 – 17.09.2021 | | | | |
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|  |  | |  |  | |
|  |  |  | | |
| **Protocol type** | 🞏 | Conversation-/Consultation Protocol | | |
|  | 🗹 | Installation-/Configuration-/~~Customizing~~-Protocol | | |
|  | 🞎 | Test Protocol | | |
|  | 🞎 | Programming Protocol | | |

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# Volocopter Configuration Setup

Notes:

For file path specification, **TC\_REPO** is used within this documentation to refer to the Volocopter configuration´s main directory "customization”. (For TCPROD: TC\_REPO = …\customization)

## Basic Setup Server

* PLMEasy aspects
* Dispatcher aspects

## Installation of Volocopter configuration

This chapter describes the installation of the Volocopter configuration. The configuration comprises the following components:

* 01\_Organization
* 02\_BMIDE
* 03\_Preferences
* 04\_Ruletree
* 05\_Queries
* 06\_Rendering
* 07\_Workflows
* 08\_Reports
* 09\_ClientCustomization
* 10\_ServerCustomization
* 11\_TC\_Data
* 12\_Dispatcher
* 13\_Attribute\_Mapping
* 16\_ServerAdministration
* 20\_PLMShare
* IRDC

Note, that **setenv**.**bat** in %TC\_REPO% main directory is initially called from within most of the installation scripts to source the current environment´s variables. Therefore, please ensure that values being set for **TC\_ROOT**, **TC\_DATA**, **TCVIS\_BIN\_DIR** and **TC\_ADM\_LOGIN** within the script correspond to the (installation) paths on the current system.

### 01 – Set up Organization

The organizational structure is set up in one step by executing a script. The script creates groups and roles (as well as their usage under certain groups) in Teamcenter. (For import of the actual users, command *make\_user %TC\_ADM\_LOGIN% -file="%~dp0user.csv* should also be embedded within “0\_make\_organisation.bat” or at the end of modularly called script “3\_make\_users.bat” – file “user.csv” to be provided by Volocopter)

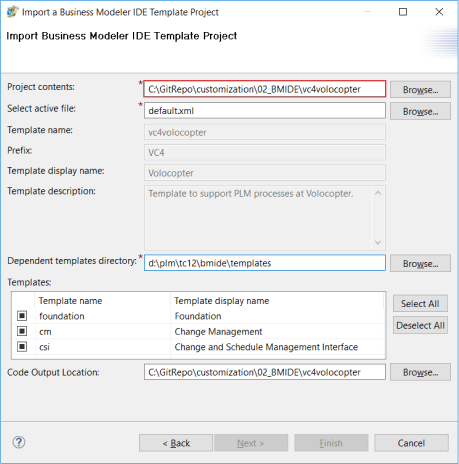
Step 1: Running 0\_make\_organisation.bat

* Open TC command prompt
* Run: TC\_REPO\01\_Organization\**0\_make\_organisation.bat**

### – Set up of BMIDE

Step 1: Import Volocopter template project from repository

* Open Business Modeler IDE
* File 🡪 Import 🡪 Import a Business Modeler IDE Template Project
  + Project Contents: Browse to “TCREPO\02\_BMIDE\**vc4volocopter**”



(Dependent templates need to be checked as shown in the figure)

Step 2: Generate Software Package

* In BMIDE, select “BMIDE” entry in menu bar and “Generate Software Package”
* For “Target Folder”, e.g. browse for: *%TCROOT%\bmide\workspace\12000.0.0\****vc4volocopter\_packaging****\full\_update*

(Folder can be created as target location for generated software package as these shall not be maintained within the repository where the BMIDE workspace itself is located)

Step 3: TEM – Deploy Template to database

* Run TEM as administrator (🡪 “tcsupport” credentials as this is the Teamcenter installation user)
* Within dialog “Feature Maintenance”, select “Add/Remove Features” and browse for previously generated software package
* Check “Volocopter” within the list in order to install the template by means of “Start” on the next page

Note: Once the template has been initially installed, any further change to the data model reflected in future software packages must be deployed using TEM option “Update Database (Full Model – System downtime required)”

### – Import of Batch LOVs

Batch-LOVs are maintained within *TCREPO\02\_BMIDE\vc4volocopter\output\wntx64\****vclovs***.

In this directory, an exclusive folder exists for any of the Batch-LOVs (e.g. folder “VC4\_LOV\_01”). These folders contain the LOV´s XML definition file (e.g. “VC4\_LOV\_01.xml”) being referred to in the import script as well as the “lang” folder. Moreover, any Batch-LOV´s folder also contains an Excel-Macro file which has been used for maintaining the actual LOV values and to automatically generate the XML definition file and “lang” folder.

Note: Please consider that manual post actions might be required in case LOV Values contain certain special characters. Both output XML-file and language-XML (e.g. VC4\_LOV\_01.xml and VC4\_LOV\_en\_US) may be subject to replacing characters as follows:

* REPLACE any "&" within XML with "&amp;"
* REPLACE any "–" (wide one...) by means of regular hyphen "-" [coming from VC input PDF]
* REPLACE any "." (thin one...) by means of regular period "." [coming from VC input PDF]

Note: Update for Excel-Macros required in terms of XML-file path, as TCREPO locations differs from system to system.

To simply deploy Batch-LOVs with already updated XML-file definitions using the Excel-Tool, a single script needs to be run.

Step 1: Running 0\_make\_organisation.bat

* Open TC command prompt
* Run:TCREPO\02\_BMIDE\vc4volocopter\output\wntx64\vclovs\**update\_all\_batch\_lovs\_DEVVM.bat**

### – Import of Preferences

All preferences can be imported in one step by executing an overall script. Based on their category and Teamcenter area, the preferences are grouped within multiple .xml-files. In case just a subset should be considered for import, the correspondingly non-required “*call preferences\_manager …*” lines can be temporarily commented out.

Step 1: Running \_vc4\_import\_preferences.cmd

* Open TC command prompt
* Run: TC\_REPO\03\_Preferences\ **\_vc4\_import\_preferences.cmd**

### – Import of Ruletree

The Volocopter-specific Ruletree can be imported in a single step using a script.

Step 1: Running \_vc4\_import\_ruletree.cmd

* Open TC command prompt
* Run: TC\_REPO\04\_Ruletree\ **\_vc4\_import\_ruletree.cmd**

### – Import of Queries

The import of Volocopter-specific queries can be accomplished by execution of a script. Optionally, certain queries not to be considered for import may be temporarily commented out in the .cmd‑file.

Step 1: Running \_vc4\_import\_queries.cmd

* Open TC command prompt
* Run: TC\_REPO\05\_Queries\ **\_vc4\_import\_queries.cmd**

### – Import of Stylesheets

For importing the rendering stylesheets, both an overall script and modular scripts for certain object types are provided.

(Preferences for stylesheet registration have been already imported in 21.2.4)

Step 1: Running \_vc4\_import\_all\_stylesheets.cmd

* Open TC command prompt
* Run: TC\_REPO\06\_Rendering\ **\_vc4\_import\_all\_stylesheets.cmd**

Script “*\_vc4\_import\_all\_stylesheets.cmd*” calls modular scripts such as “*\_vc4\_import\_stylesheets\_part\_software.cmd*” or “*\_vc4\_import\_stylesheets\_cm\_objects.cmd*”. When intending to just update stylesheet definitions for certain object types, these scripts can be executed in a TC command prompt right away.

### – Import of Workflows

For importing Volocopter specific workflows, a single script needs to be run.

Step 1: Running \_vc4\_import\_workflows.cmd

* Open TC command prompt
* Run: TC\_REPO\07\_Workflows\ **\_vc4\_import\_workflows.cmd**

**Note**: Whenever a workflow template makes use of “Signoff Profile” definition within a review task, please verify no duplicate signoff profile got created during import. If so, please make sure to manually remove the duplicates from the template.

**Note**: If templates are already existent and need to be overwritten with a newer version, please make sure that templates are not taken offline in mode “Edit”.

### – Import of Reports

Has been changed on VCDEV – review again and commit in case of any changes

### – Client Customization

Folder TC\_REPO\**09\_ClientCustomization** currently contains required configuration for custom release **status** **icons**.

Step 1: Copy content

* Copy and replace content (Folder “images” and file “customer.properties) of “*TC\_REPO\09\_ClientCustomization\portal\plugins\configuration\_12000.2.0*” in corresponding *%TC\_ROOT%* location of the server.

Step 2: Regenerate registry

* Open TC command prompt
* Change directory to *%TcRoot%\portal\registry*
* Run: *genregxml.bat*

### – Server Customization

Folder TC\_REPO\**10\_ServerCustomization** currently contains **textserver** changes.

Step 1: Copy content

* Copy and replace content (Folder “en\_US”) of “*C:\GitRepo\customization\10\_ServerCustomization\tc12\lang\textserver*” in corresponding *%TC\_ROOT%* location of the server.

Step 2: Delete client cache

* Open TC command prompt
* Run: *generate\_client\_meta\_cache -u=infodba -p=infodba -g=dba delete all*

[Note: Make sure to stop server manager and dispatcher services]

Step 3: Generate client cache

* Open TC command prompt
* Run: *generate\_client\_meta\_cache -u=infodba -p=infodba -g=dba generate all*

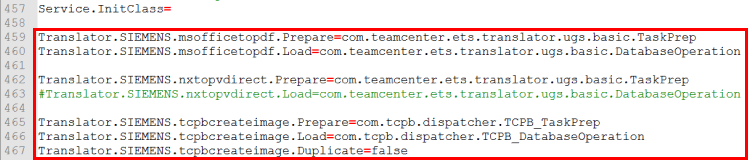
### – TC\_Data

### – Dispatcher

Dispatcher setup mainly comprises changes to “DispatcherClient” and “Module” directories within the dispatcher install location (%TC\_ROOT%\dispatcher).

Step 1: Dispatcher Client setup

* TCREPO\12\_Dispatcher\**DispatcherClient**\**bin**
  + File “**tsenv.bat**” to be copied to *%TC\_ROOT%\dispatcher\DispatcherClient\bin*
* TCREPO\12\_Dispatcher\**DispatcherClient**\**Conf**
  + File “log4j.xml” to be copied to *%TC\_ROOT%\dispatcher\DispatcherClient\conf*
  + File “Service.properties.**add**”:
    - Add “TCPBService” value to comma-separated line beginning with “import” at the top of "%TC\_ROOT%\dispatcher\DispatcherClient\conf\Service.properties"
    - Add “Prepare” and “Load” classes at bottom of file “Service.properties”, e.g.:



* TCREPO\12\_Dispatcher\**DispatcherClient**\**lib**
  + Contained .jar-files to be copied to *%TC\_ROOT%\dispatcher\DispatcherClient\lib*

Step 2: Module setup

* TCREPO\12\_Dispatcher\**Module**\**bin**
  + File “**moduleWinService.bat**” to be copied to %*TC\_ROOT%\dispatcher\Module\bin*
* TCREPO\12\_Dispatcher\**Module**\**conf**
  + File “translator.xml.**modify**” contains translator definitions being used as part of Volocopter processes
    - Used OOTB-Translators (i.e. NxToPvDirect) basically just need to be activated within %*TC\_ROOT%\dispatcher\Module\conf\translator.xml*

[isactive=true > also compare comment with instructions within “*translator.xml.modify”* for each translator section]

* Translators, not coming OOTB (msofficetopdf, tcpbcreateimage) require to copy the entire section within “*translator.xml.modify”* and move it to %*TC\_ROOT%\dispatcher\Module\conf\translator.xml*

[no restrictions regarding placement between existing translator sections in file]

* TCREPO\12\_Dispatcher\**Module**\**Translators**
* File “appendcpath.bat” to be copied to %*TC\_ROOT%\dispatcher\Module\ Translators*

[currently distinguished using environment suffix which needs to be removed…]

* Folder “docmgt\_translators” to be copied to %*TC\_ROOT%\dispatcher\Module\ Translators*
* Folder “msofficetopdf” to be copied to %*TC\_ROOT%\dispatcher\Module\Translators*
  + Currently contains multiple .bat-files > Please rename the file matching the current environment by removing its environment suffix (e.g. msofficetopdf\_**vcdev.bat** to be renamed to msofficetopdf.bat on DEV-system)
* Folder “tcpbcreateimage”
  + …\config
    - File “createimage\_env.properties” to be replaced in:

*%TC\_ROOT%\dispatcher\Module\Translators\tcpbcreateimage\config*

* + - File “export\_nx\_v10.ini” containing modified NX layer settings for export to be replaced in:

*%TC\_ROOT%\dispatcher\Module\Translators\tcpbcreateimage\config*

* + - The rest of the files (default.cdf etc.) should already be existing in the target directory
  + …\lib
    - Any of folders and .jar-files in this directory need to be copied and replaced in: %*TC\_ROOT%\dispatcher\Module\Translators\tcpbcreateimage\lib*
  + …\logic
    - Entire content (folder “stylesheets” and any of the .xml- and .properties- file) can be copied and replaced in:

%*TC\_ROOT%\dispatcher\Module\Translators\tcpbcreateimage\lib*

* + - Actual enhancements comprise:
      * Custom logic: report\_partbom.xml / report\_partbom.properties / Volocopter\_PartBOM.xsl
      * OOTB logics: nx2d, nx2step214
* Folder “nxtopvdirect”
  + File “nxtopvdirect.bat” needs to be replaced within %*TC\_ROOT%\dispatcher\Module\Translators\nxtopvdirect\*
* Folder “previewservice”
  + File “previewservice.bat” sets various variables
    - TC\_ROOT
    - TC\_DATA
    - LM\_LICENSE\_FILE
    - TC\_VVCP
    - …
* Folder “nxtocgmdirect” …

### – Attribute Mapping

### – Server Administration

### – PLM Share

### – IRDC

IRDC data model definition has been already deployed in 21.2.2. As part of this chapter, the document management templates with their released revisions and MSOffice datasets (incl. mapped exchange attributes) will be imported.

Once DMTemplates got imported, they can be referenced e.g. in folder “IRDC-DMTemplates” within “Home” of user “infodba”. The templates folder needs to be created – DMTemplate types can be searched using “General…” query.

Step 1: Running \_vc4\_import\_queries.cmd

* Open TC command prompt
* Run: TC\_REPO\IRDC\ **\_vc4\_import\_irdc\_dm\_template\_revisions.cmd**