

CADdoctor for NX

Installation Guide

Elysium Co. Ltd.

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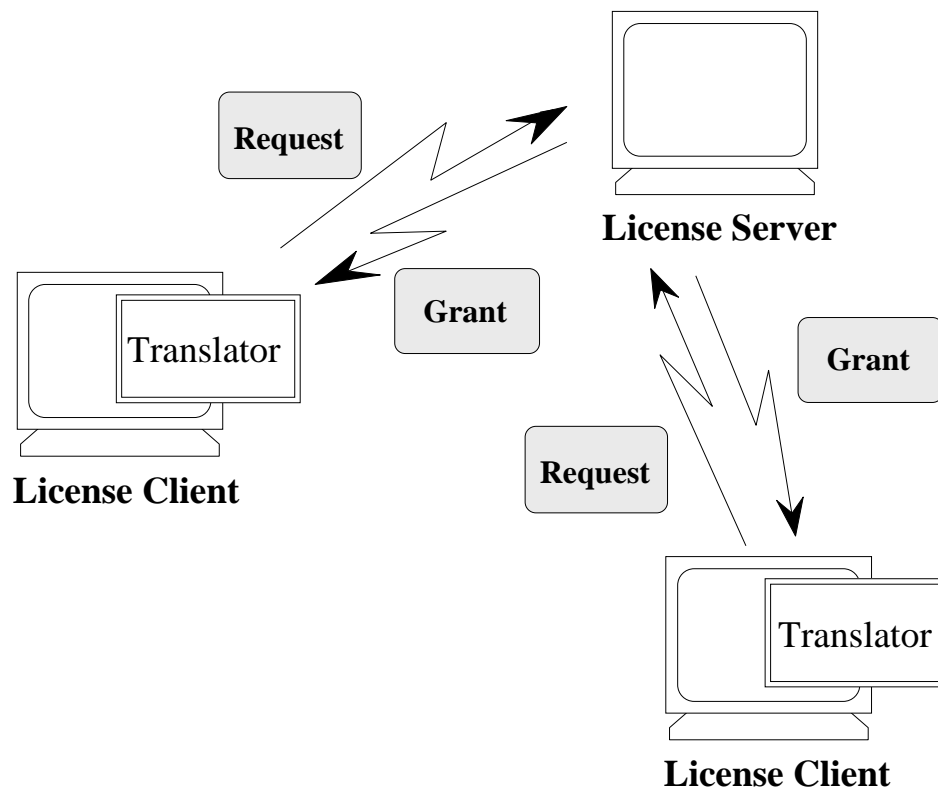
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1 Installation of License Server

The Elysium License Server enables the authorized use of Elysium Products on one or more computers within a network. The Elysium License Server manages software licenses for all Elysium products. The client-server architecture allows the user to run Elysium products on different machines on the network, authorizing the number and type of licenses for a particular product while monitoring expiration dates.

The Elysium License Server must be installed in the same network as the Elysium Products. The License Server can be installed independently or alongside of other Elysium products. Only one License Server is required for each network.

[Client-Server Architecture Overview]



Elysium License Server is a client-server based security program that controls access to all Elysium software products. The License Server must be properly activated prior to using other Elysium software products. The Elysium License Client (Translator) performs communication with the License Server and confirms that the License Server has a valid Elysium License file (elsec.dat) when the License Client starts. Elysium License file (elsec.dat) is created from the Elysium Password file automatically when you register the Password file with the Elysium License Server. Password file entries registered into the License file enables the Translator. Elysium or your local reseller may provide the Password file (*.elylic) generated based on your Machine ID to you. Translator program assigns the host name of the License Server and the port number to communicate as environment variables. For further information, please refer to the License Server User's Guide.

2 Installation of CADdoctor for NX

Following two methods are provided to install CADdoctor for NX;

- Installation using the installer
- Copy installation

2.1 Installation Using the Installer

This chapter explains how to install CADdoctor for NX using the installer.

Confirm that NX is installed to the machine that CADdoctor for NX will be installed and that following variables are assigned.

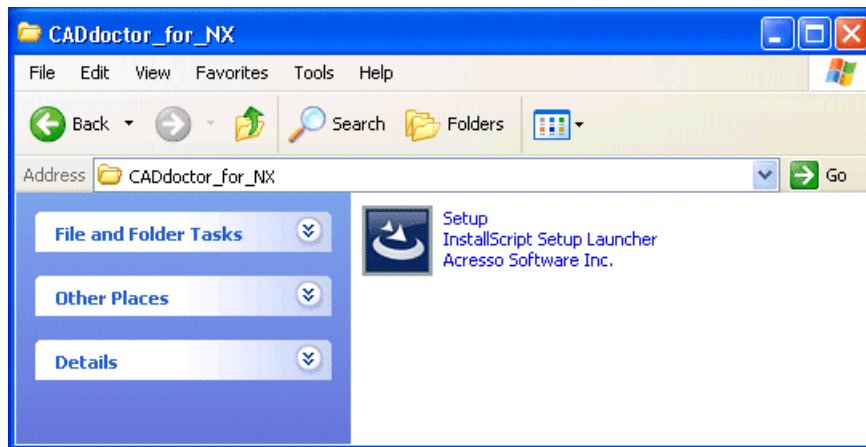
UGII_BASE_DIR
 UGII_ROOT_DIR
 UGS_LICENSE_BUNDLE
 SPLM_LICENSE_SERVER (for NX9)

Be aware that the installation of CADdoctor for NX may fail in an environment that multiple versions of NX are installed.

2.1.1 Installation

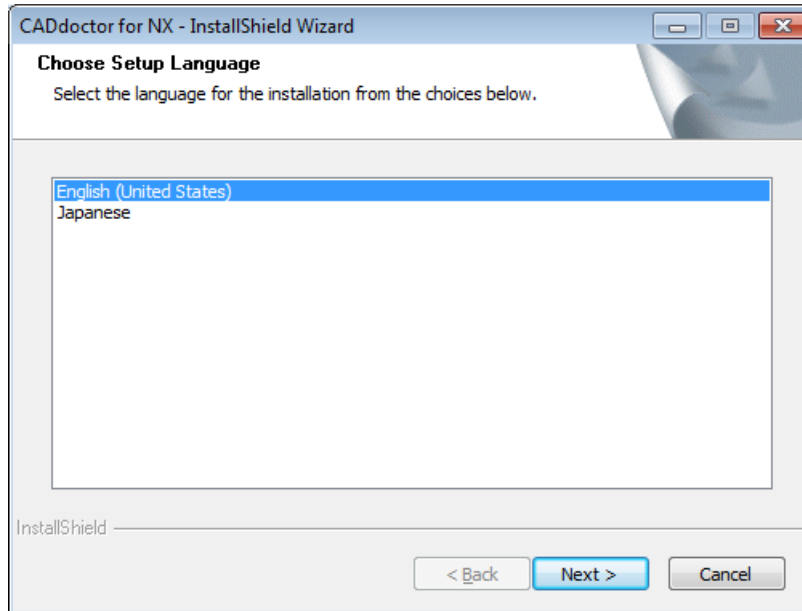
1. Start up installation program

You need Administrator privileges in order to install Elysium products.



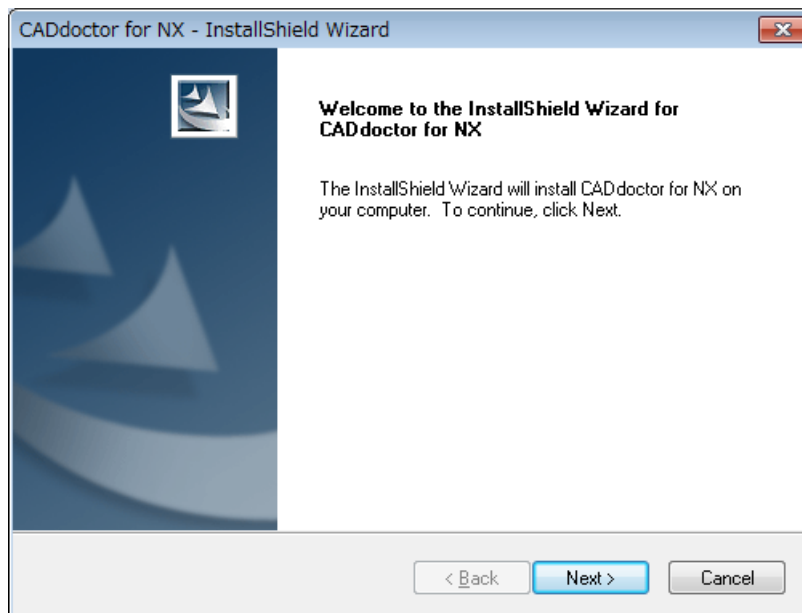
- Execute [CADdoctor_for_NX\setup.exe] in the installation media of CADdoctor for NX.
- Then, follow installation wizard instructions

2. Select language

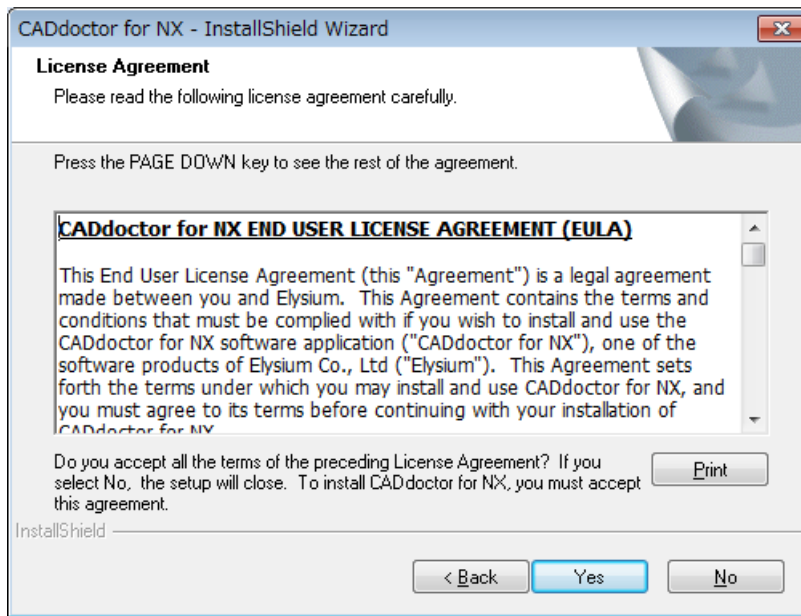


- Choose Language and click [Next].
- ※ If you use NX (English edition), choose “English”. If you use NX (Japanese edition), choose “Japanese”.

3. Setup CADdoctor for NX

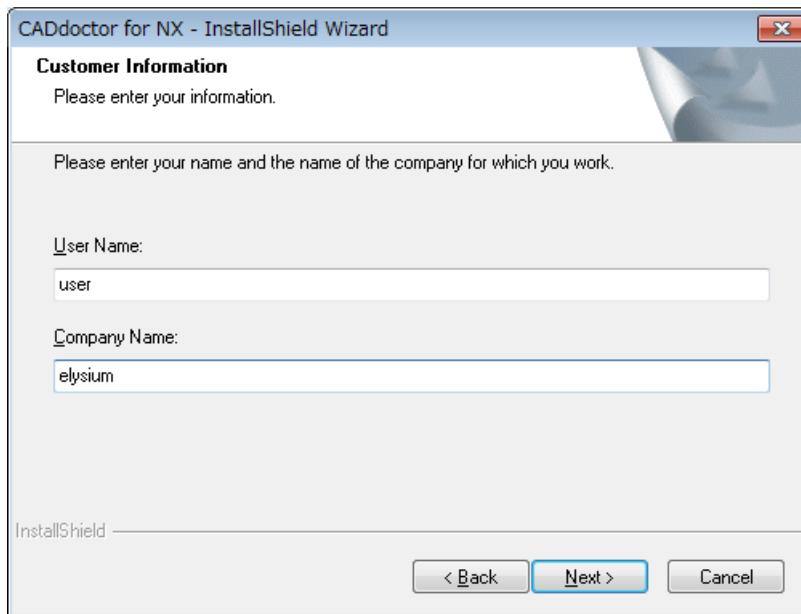


- Click [Next].



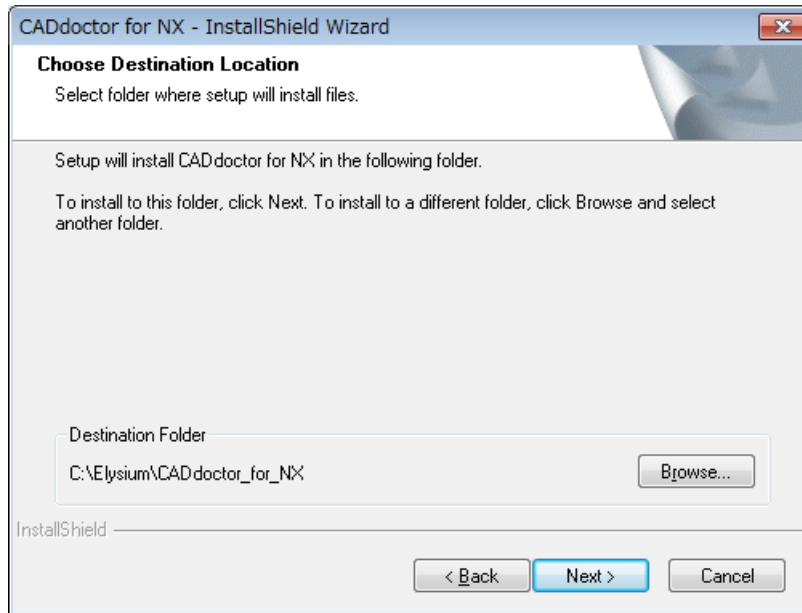
- Click [Yes].

4. Input customer information



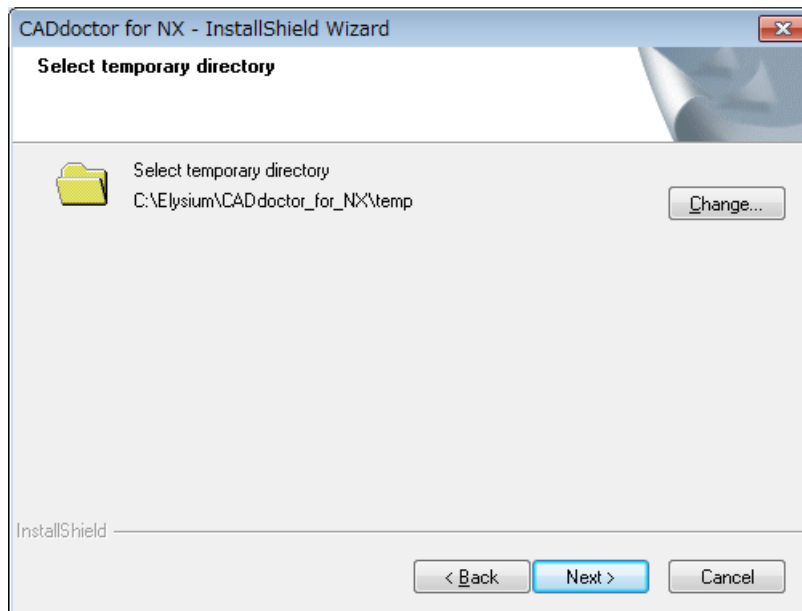
- Input user name and company name and click [Next].

5. Specify a folder in which to install



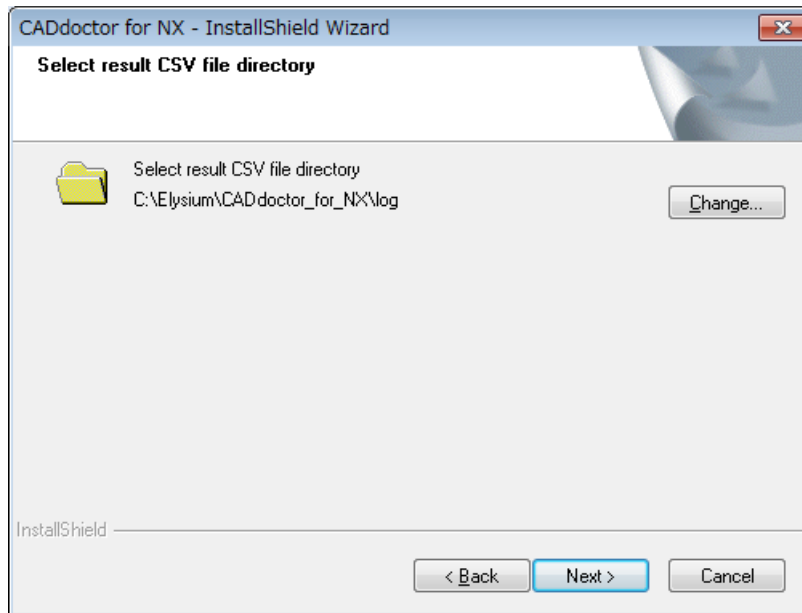
- Specify a folder in which to install and click [Next].

6. Specify a working directory



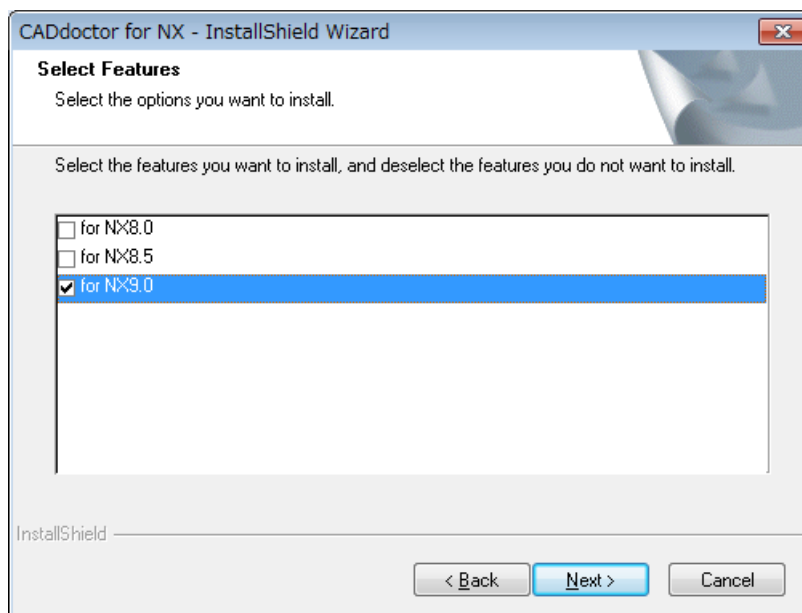
- Specify a working directory and click [Next].

7. Specify a directory in which results will be exported in CSV format.



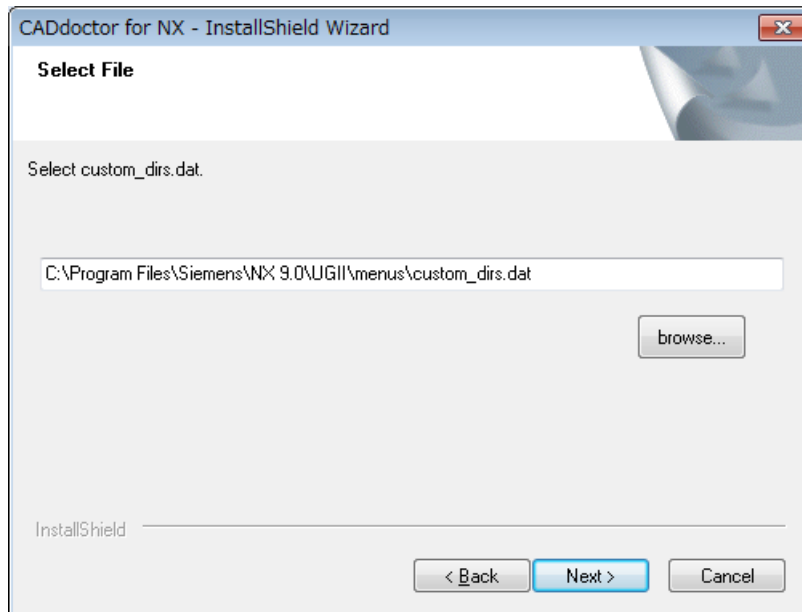
- Specify the directory and click [Next].

8. Select components



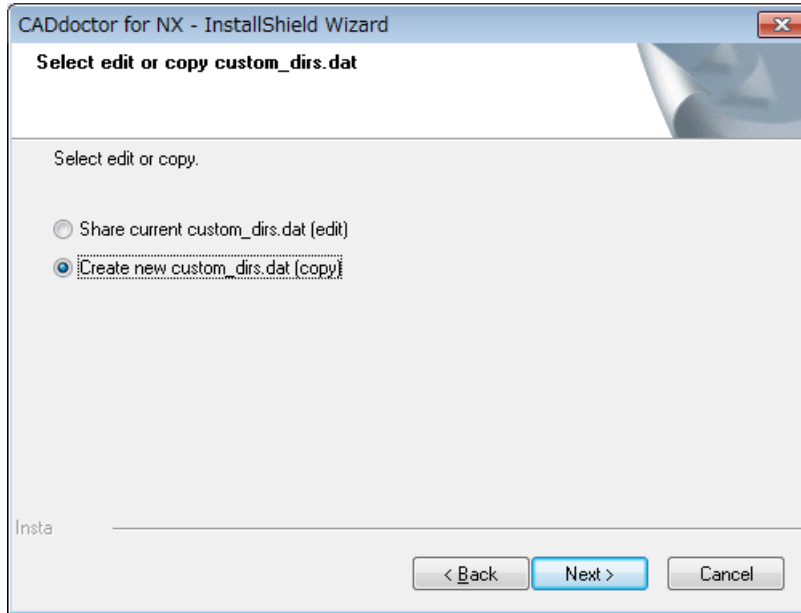
- Select components to install and click [Next].

9. Specify configuration file



- Reference the configuration file and click [Next].
 - ※ By default, path to 'custom_dirs.dat' will be displayed. The file exists in \$(UGII_ROOT_DIR)\menus\custom_dirs.dat after the installation of NX.
 - ※ If you use another 'custom_dirs.dat', click [browse...] and specify the file.

10. Select edit mode



- Select [edit] or [copy] and click [Next].

※ If [edit] is selected, CADdoctor for NX is enabled on NX without the boot batch of CADdoctor for NX.

※ If [copy] is selected, specified configuration file is not modified itself.

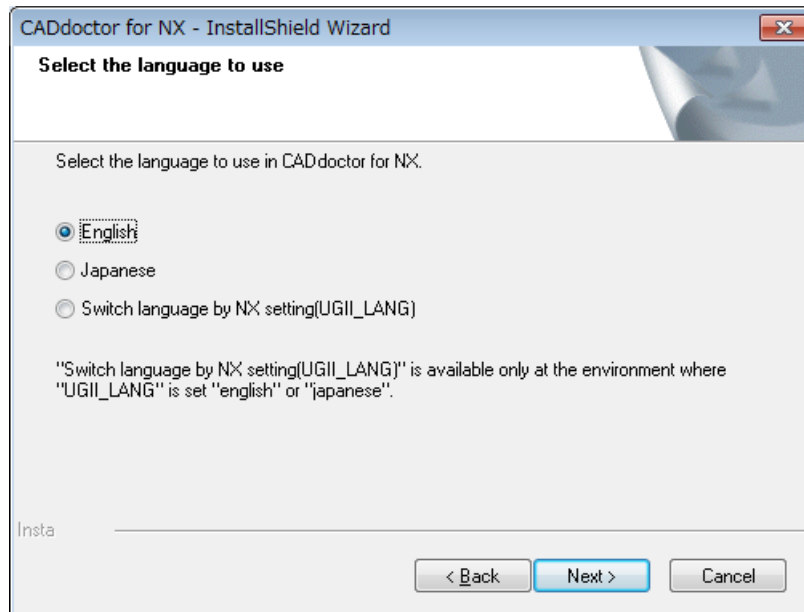
(Settings of CADdoctor for NX are added to the created copy of the configuration file. Customized information continues when CADdoctor for NX is activated.)

※ If Teamcenter is used, specify 'custom_dirs.dat' referenced when NX is activated from Teamcenter at 9. and select [edit].

NOTE) How to confirm which "custom_dirs.dat" is used for currently running NX

1. Start NX.
2. Select [Help] > [Log File] from the menu in NX.
The file displayed at "UGII_CUSTOM_DIRECTORY_FILE" in the dialog is used for currently running NX.

11. Select a language



- Select a language, and then click [Next].

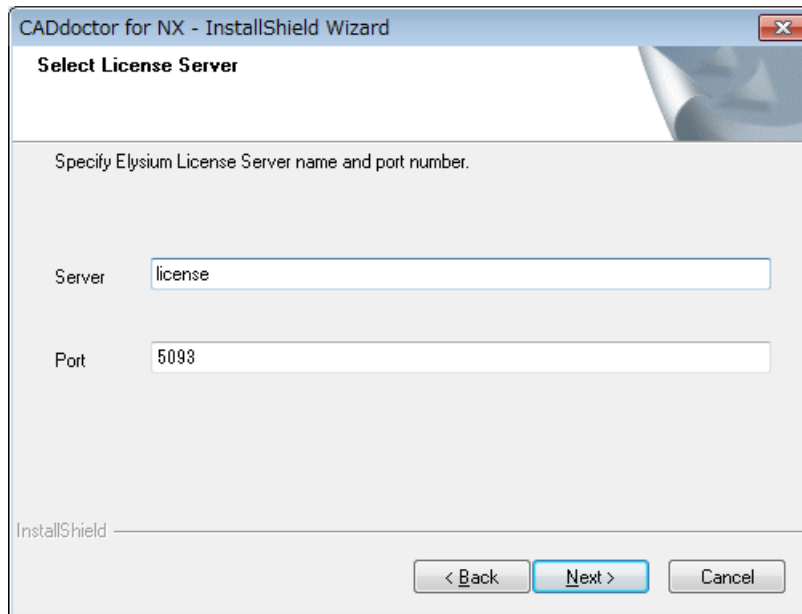
※ Please note that the language specified by an environment variable "UGII_LANG" will be applied when selecting [Switch language by NX setting (UGII_LANG)] option. (Japanese for the value "japanese" and English for "english.")

This setting can be changed after the installation by the following two steps.

1) Open "\config\custom_dirs.dat" file with a text editor, and write either of the followings; "japanese", "english" or "\$UGII_LANG", in the brackets "<Language Setting>" in the statement "C:\Elysium\CADdoctor_for_NX\<Language Setting>" located at the bottom of the file.

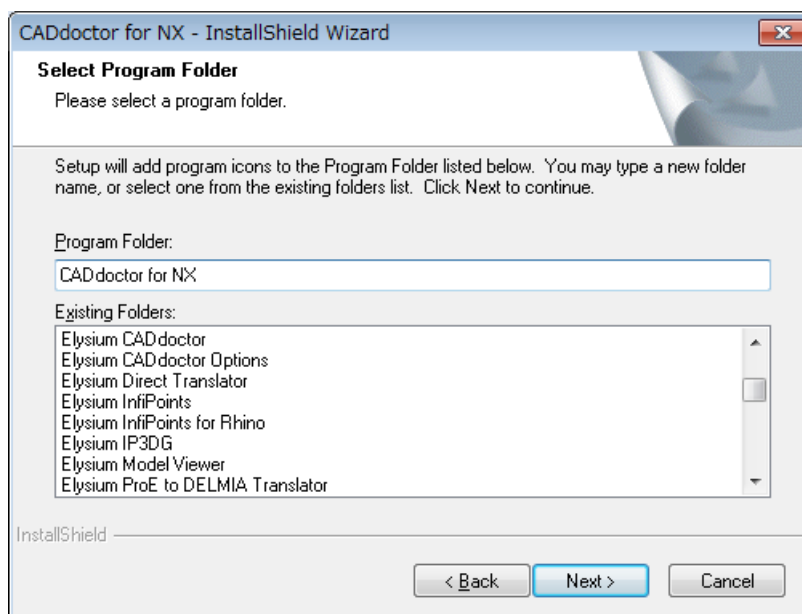
2) Open "\dll\language.txt" file with a text editor, and write either of the followings; "japanese", "english" or "UGII_LANG".

12. Input machine name and port number



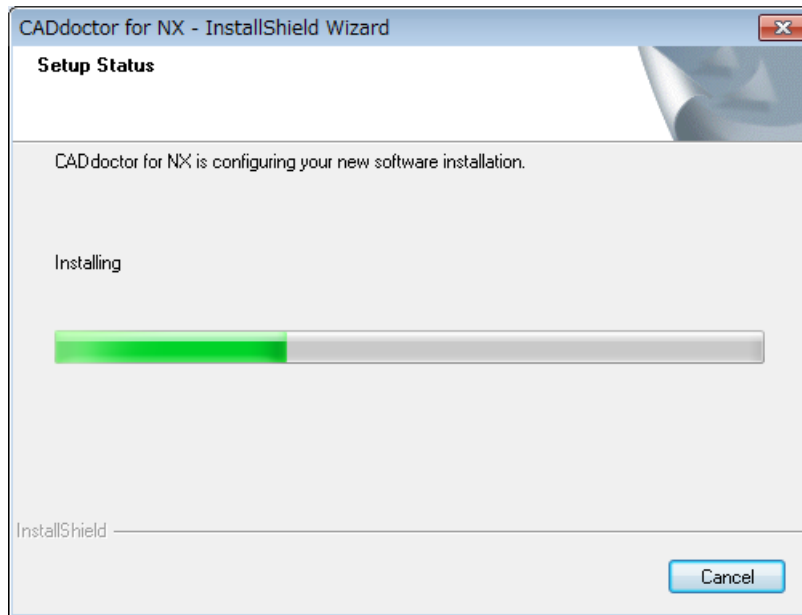
- Input the Name “Elysium License Server” and input the Port number which Elysium License Server uses (default:5093).

13. Specify the program folder

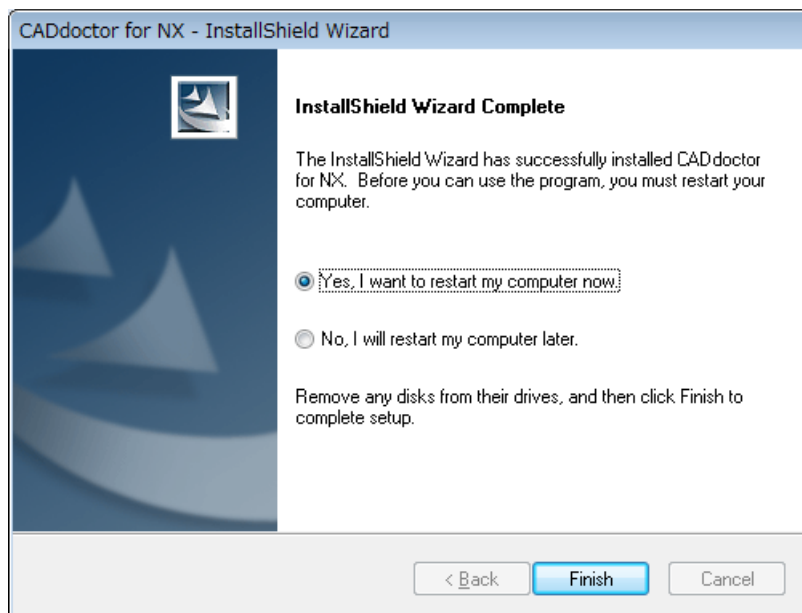


- Specify the program folder and click [Next] to start installation.

14. Installation



15. Installation has been completed successfully



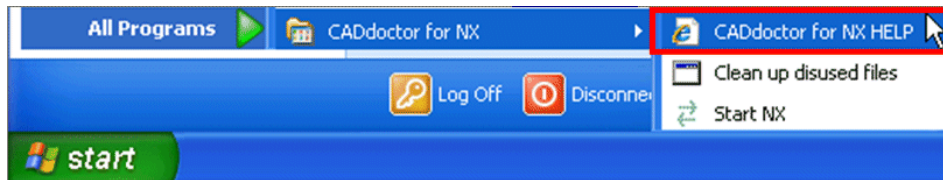
- You must restart your system for the configuration changes made to this program to take effect.
- Click 'Yes, I want to restart my computer now.' and click 'Finish'.

2.1.2 After installation

Start CADdoctor for NX from Start menu.



Read the online help to check how to use CADdoctor for NX. If the index of the online manual does not appear, please activate JavaScript.



2.2 Copy Installation

This chapter explains how to install CADdoctor for NX by copying files in the installation folder of existing CADdoctor for NX environment.

2.2.1 Install to the Same Path as Copy Source

1. Install CADdoctor for NX using the installer, for example, to the following folder.
This environment (hereafter “Computer A”) is the copy source for copy installation.

E.g.) C:\Elysium\CADdoctor_for_NX

2. Copy all the files in the CADdoctor for NX installation folder on Computer A to the same path on another computer (hereafter “Computer B”).
3. Modify the value for an environment variable “ELY_CDRNX_TEMP_DIR” if you wish to use other folder as the work folder.
Please ensure that expected CADdoctor for NX user(s) have edit permission on the specified folder.

E.g.) ELY_CDRNX_TEMP_DIR=C:\Elysium\CADdoctor_for_NX\temp

4. Modify the value for the folder path to the CADdoctor for NX installation folder, in

the environment file “custom_dirs.dat (*1)” if you wish to use CADdoctor for NX in a different language from the copy source.

(*1): You can check the file path to “custom_dirs.dat” by the value for an environment variable “UGII_CUSTOM_DIRECTORY_FILE” on Computer A;

- When installed with “Share current custom_dirs.dat [edit]” option:
System environment variable “UGII_CUSTOM_DIRECTORY_FILE”
- When installed with “Create new custom_dirs.dat [copy]” option:
Environment variable “UGII_CUSTOM_DIRECTORY_FILE” specified in the following file
<CADdoctor for NX Installation folder (Computer A)>\dll\StartNX.bat

Folder path is as follows for each language;

- To use CADdoctor for NX in English:
<CADdoctor for NX Installation folder>\english
 - To use CADdoctor for NX in Japanese:
<CADdoctor for NX Installation folder>\japanese
 - To use CADdoctor for NX in the language specified with an environment variable “UGII_LANG”:
<CADdoctor for NX Installation folder>\\$UGII_LANG
5. Set an environment variable “UGII_CUSTOM_DIRECTORY_FILE” on Computer B as follows, and specify “custom_dirs.dat” by its file path.
- When installed with “Share current custom_dirs.dat [edit]” option:
System environment variable “UGII_CUSTOM_DIRECTORY_FILE”
 - When installed with “Create new custom_dirs.dat [copy]” option:
Environment variable “UGII_CUSTOM_DIRECTORY_FILE” specified in the following file
<CADdoctor for NX Installation folder (Computer A)>\dll\StartNX.bat

2.2.2 Install to a Different Path from Copy Source

The procedure is basically the same as the copy installation to the same path as the copy source, except step 2 and 6.

1. Install CADdoctor for NX using the installer, for example, to the following folder.
This environment (hereafter “Computer A”) is the copy source for copy installation.

E.g.) C:\Elysium\CADdoctor_for_NX

2. Copy all the files in the CADdoctor for NX installation folder on Computer A to the same path on another computer (hereafter “Computer B”).

E.g.) D:\Elysium\CADdoctor_for_NX

3. Modify the value for an environment variable “ELY_CDRNX_TEMP_DIR” if you wish to use other folder as the work folder.
Please ensure that expected CADdoctor for NX user(s) have edit permission on the specified folder.

E.g.) ELY_CDRNX_TEMP_DIR=C:\Elysium\CADdoctor_for_NX\temp

4. Modify the value for the folder path to the CADdoctor for NX installation folder, in the environment file “custom_dirs.dat (*1)” if you wish to use CADdoctor for NX in a different language from the copy source.

(*1): You can check the file path to “custom_dirs.dat” by the value for an environment variable “UGII_CUSTOM_DIRECTORY_FILE” on Computer A;

- When installed with “Share current custom_dirs.dat [edit]” option:
System environment variable “UGII_CUSTOM_DIRECTORY_FILE”
- When installed with “Create new custom_dirs.dat [copy]” option:
Environment variable “UGII_CUSTOM_DIRECTORY_FILE” specified in the following file
<CADdoctor for NX Installation folder (Computer A)>\dll\StartNX.bat

Folder path is as follows for each language;

- To use CADdoctor for NX in English:
<CADdoctor for NX Installation folder>\english
 - To use CADdoctor for NX in Japanese:
<CADdoctor for NX Installation folder>\japanese
 - To use CADdoctor for NX in the language specified with an environment variable “UGII_LANG”:
<CADdoctor for NX Installation folder>\\$UGII_LANG
5. Set an environment variable “UGII_CUSTOM_DIRECTORY_FILE” on Computer B as follows, and specify “custom_dirs.dat” by its file path.
 - When installed with “Share current custom_dirs.dat [edit]” option:
System environment variable “UGII_CUSTOM_DIRECTORY_FILE”
 - When installed with “Create new custom_dirs.dat [copy]” option:

Environment variable “UGII_CUSTOM_DIRECTORY_FILE” specified in the following file

<CADdoctor for NX Installation folder (Computer A)>\dll\StartNX.bat

6. Modify all the values for the folder path to the CADdoctor for NX installation folder (Computer B) in the following files.

- Value for a parameter “csv_folder” (to specify the log folder) in the following five files

<CADdoctor for NX Installation folder (Computer B)>\<Either “japanese”, “english” or “\$UGII_LANG”>\dfa

- CADdoctor_for_NX_Checker.dfa
- CADdoctor_for_NX_Healer.dfa
- CADdoctor_for_NX_Profile.dfa
- CADdoctor_for_NX_Healer_Partial.dfa
- CADdoctor_for_NX_Profile_Partial.dfa

E.g.) (String Parameter) csv_folder: "D:\Elysium\CADdoctor_for_NX\log";

- Value to specify the dll file in the following file

<CADdoctor for NX Installation folder (Computer B) >\<Either “japanese”, “english” or “\$UGII_LANG”>\dfa\nxd_call_dll.dfa

E.g.) String (\$lib; "D:\Elysium\CADdoctor_for_NX\dll\cdnrnx_healer");

- Value to specify the dll file in the following file

<CADdoctor for NX Installation folder (Computer B) >\<Either “japanese”, “english” or “\$UGII_LANG”>\startup\nxdr_tool.utd

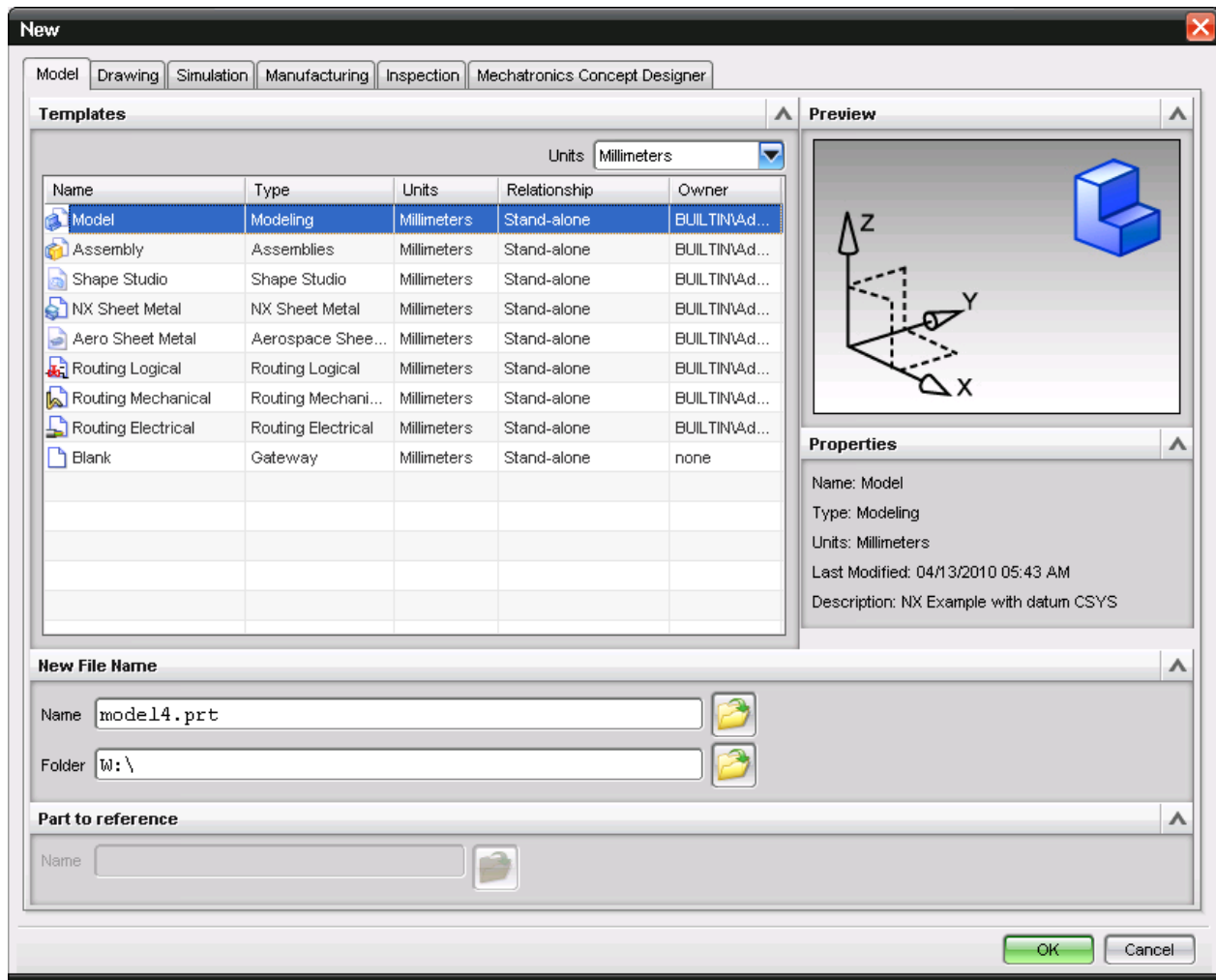
E.g) ACTION D:\Elysium\CADdoctor_for_NX\lib\nxd_ug2hl.dll

3 Template Function

You can specify assemblies and parts (template) for importing when you import the Neutral File to NX.

Before using, please check whether the custom template is already added to the "[File] - [New] " dialog.

- If the custom template is already added, please go to the 3.2 or 3.4 operation.
- If the custom template is not added, please go to the 3.1 or 3.3 operation.



3.1 How to add a custom template to NX (without Teamcenter)

This section introduces an example how to add your template to NX.

You can see the details in NX documents.

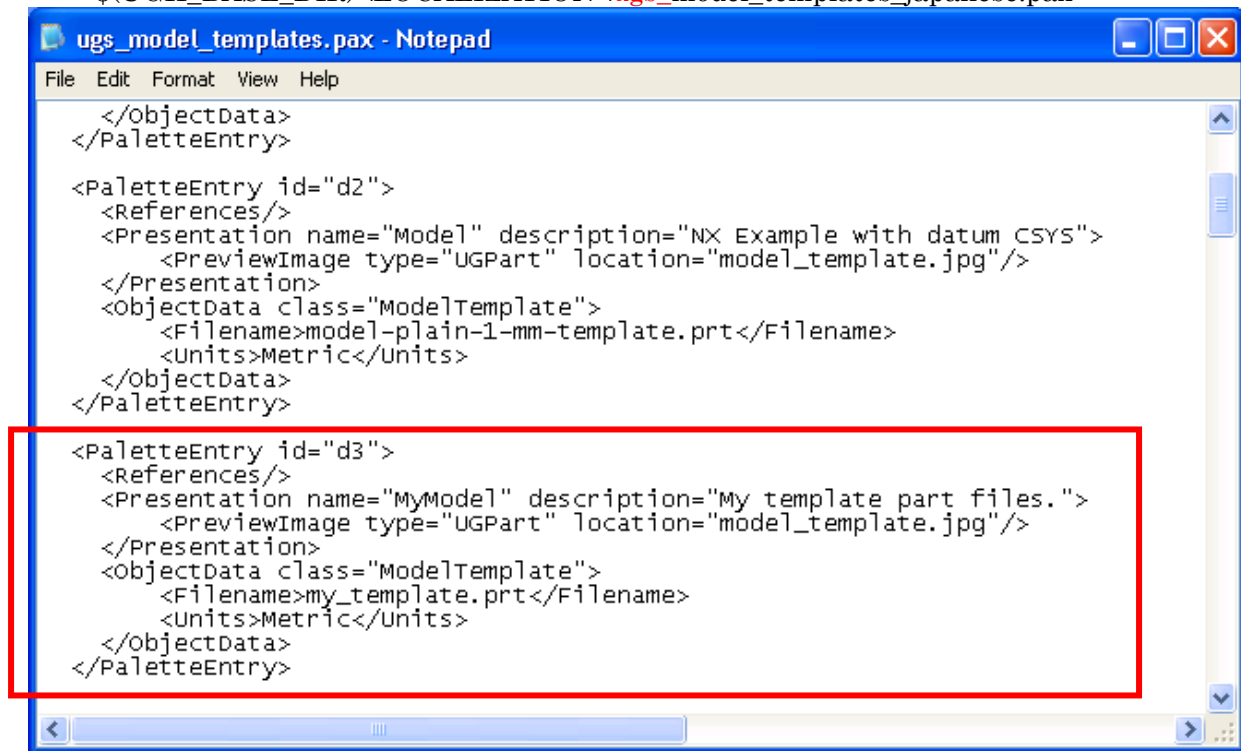
- 1) Please copy your template to the "\$(UGII_ROOT_DIR)\templates" folder.
ex) C:\Program Files\UGS\NX 9.0\UGII\templates\my_template.prt
- 2) Open the "\$(UGII_ROOT_DIR)\templates\ugs_model_templates.pax" .pax file.
Copy a complete <PaletteEntry> section and insert it where you would like it to appear in the template list.

Edit the <Filename> attribute so that it is pointing to the correct file.

Edit any other attribute (such as <Presentation> name and <Objectdata> class) as necessary.

If UGII_LANG=japanese, please open the following .pax file.

\$(UGII_BASE_DIR)\LOCALIZATION\ugs_model_templates_japanese.pax



```

</ObjectData>
</PaletteEntry>

<PaletteEntry id="d2">
  <References/>
  <Presentation name="Model" description="NX Example with datum CSYS">
    <PreviewImage type="UGPart" location="model_template.jpg"/>
  </Presentation>
  <ObjectData class="ModelTemplate">
    <Filename>model-plain-1-mm-template.prt</Filename>
    <Units>Metric</Units>
  </ObjectData>
</PaletteEntry>

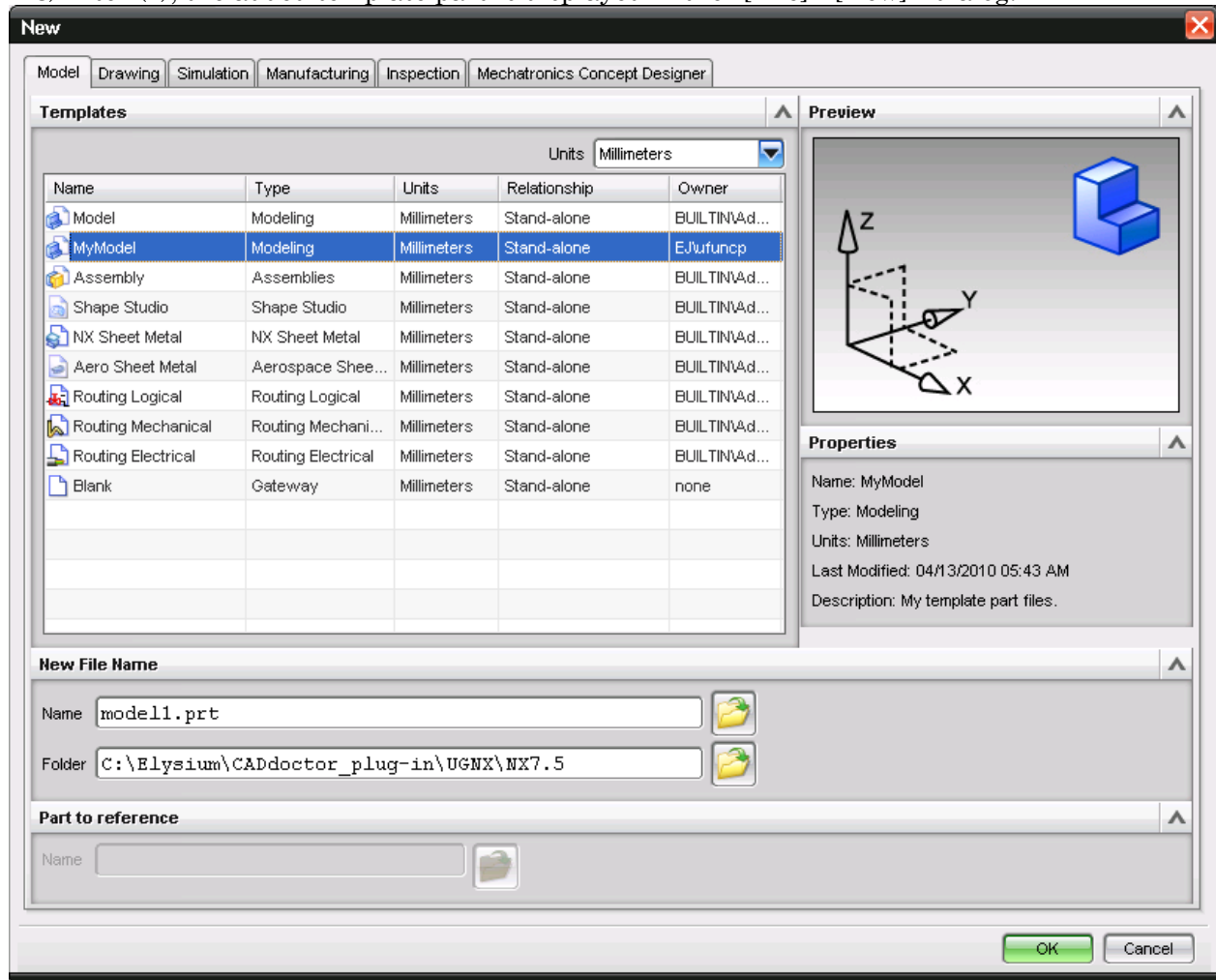
<PaletteEntry id="d3">
  <References/>
  <Presentation name="MyModel" description="My template part files.">
    <PreviewImage type="UGPart" location="model_template.jpg"/>
  </Presentation>
  <ObjectData class="ModelTemplate">
    <Filename>my_template.prt</Filename>
    <Units>Metric</Units>
  </ObjectData>
</PaletteEntry>

```

Details of a .pax file

XML Element	Attributes
PaletteEntry id	ID (Required) The IDs have to be unique.
Presentation name	The name of the template. (Optional)
Presentation description	Used to provide a more detailed description for each template. (Optional)
ObjectData class	Identifies the application that is associated with this template. (Required) Valid values are: ModelTemplate AssemblyTemplate DrawingTemplate SheetTemplate CaeFemTemplate CaeSimTemplate RoutingLogicalTemplate RoutingElectricalTemplate RoutingMechanicalTemplate NXSheetMetalTemplate AeroSheetMetalTemplate FlexPCDSSheetMetalTemplate StudioTemplate CamTemplate
Filename	The file name of the template part. (Required)
Units	The units of the template part. (Required) Valid values are: Metric English

3) After (2), the added template part is displayed in the "[File] - [New] " dialog.



3.2 How to specify the custom template to NX (without Teamcenter)

Edit following .ini file and you can specify the custom template.

ex) C:\Elysium\CADdoctor_plug-in\UGNX\NX8\ely_plugin.ini

[ENF2UFUNC]

UseTemplateFile=1

TemplatePart=my_template.prt

TemplatePartAppType=ModelTemplate

TemplatePartAppUnit=Metric

TemplateAsm=my_template.prt

TemplateAsmAppType=ModelTemplate

TemplateAsmAppUnit=Metric

* The above description does not include extra space.

* Following 7 elements are all required.

Details of each element

Name	Attributes
UseTemplateFile	0: Do not use the template. 1: Use the template.
TemplatePart	"Filename" in .pax file for Part.
TemplatePartAppType	"ObjectData class" in .pax file for Part.
TemplatePartAppUnit	"Units" in .pax file for Part.
TemplateAsm	"Filename" in .pax file for Assembly.
TemplateAsmAppType	"ObjectData class" in .pax file for Assembly.
TemplateAsmAppUnit	"Units" in .pax file for Assembly.

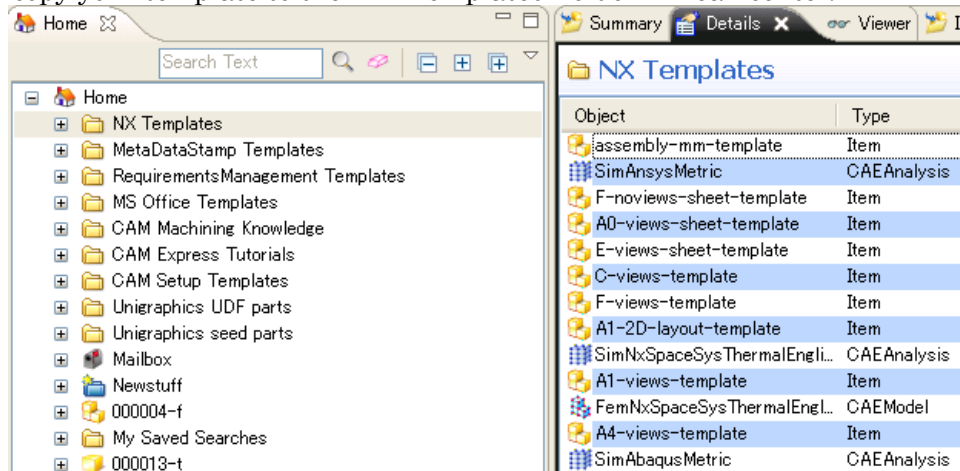
3.3 How to add a custom template to NX (with Teamcenter)

This section introduces 3 examples how to add your template to NX with Teamcenter. You can see the details in NX and Teamcenter documents.

If the custom template is already added, please go to the 3.4 operation.

A) Use "NX Templates" in Teamcenter

- 1) Please copy your template to the "NX Templates" folder in Teamcenter.

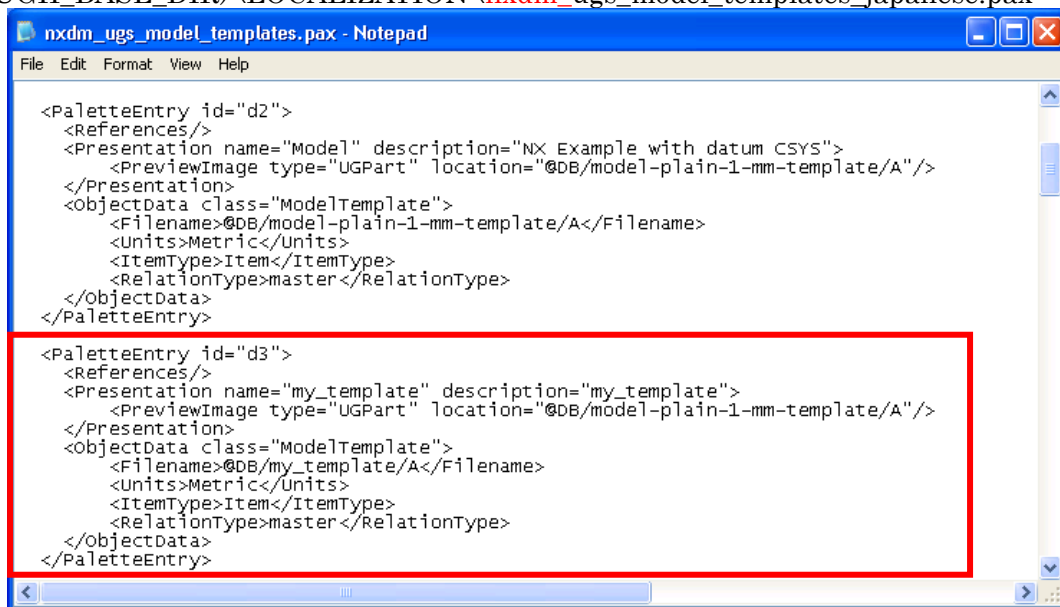


- 2) Open the "\$ (UGII_ROOT_DIR)\templates\nxdm_ugs_model_templates.pax" .pax file.

Copy a complete <PaletteEntry> section and insert it where you would like it to appear in the template list. Edit the <Filename> attribute so that it is pointing to the correct file. Edit any other attribute (such as <Presentation> name and <Objectdata> class) as necessary.

If UGII_LANG=japanese, please open the following .pax file.

\$ (UGII_BASE_DIR)\LOCALIZATION\nxdm_ugs_model_templates_japanese.pax



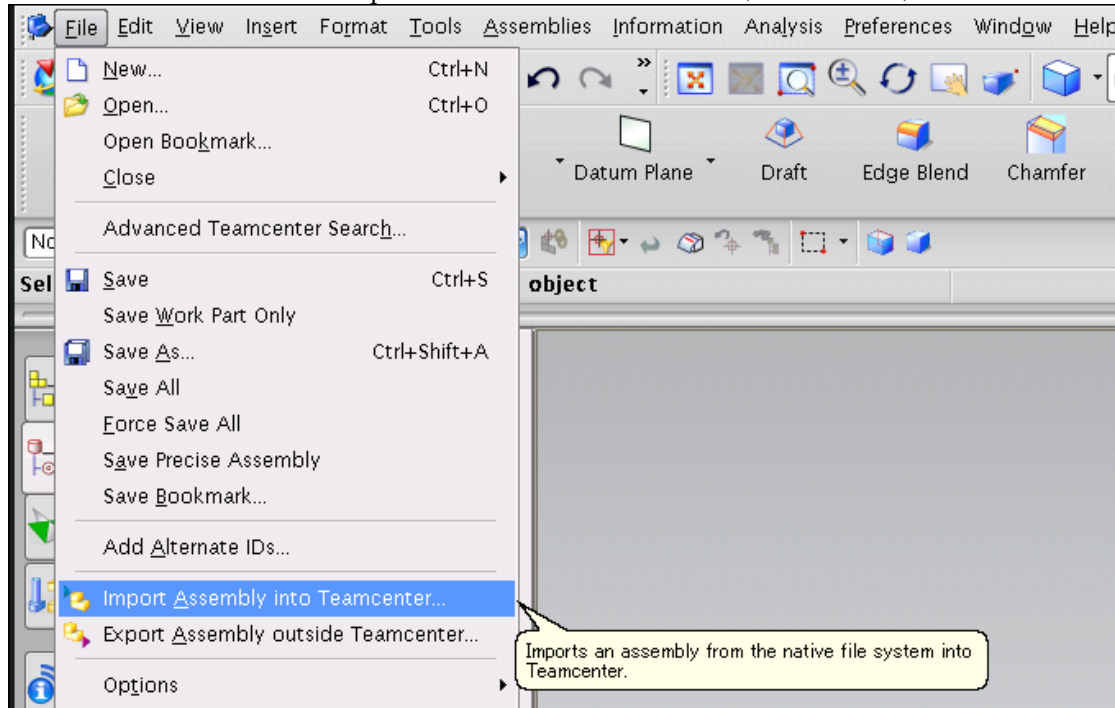
Details of a .pax file

XML Element	Attributes
PaletteEntry id	ID (Required) The IDs have to be unique.
Presentation name	The name of the template. (Optional)
Presentation description	Used to provide a more detailed description for each template. (Optional)
ObjectData class	Identifies the application that is associated with this template. (Required) Valid values are: ModelTemplate AssemblyTemplate DrawingTemplate SheetTemplate CaeFemTemplate CaeSimTemplate RoutingLogicalTemplate RoutingElectricalTemplate RoutingMechanicalTemplate NXSheetMetalTemplate AeroSheetMetalTemplate FlexPCDSSheetMetalTemplate StudioTemplate CamTemplate
Filename	The file name of the template part. (Required) @DB/Partname/PartRevision
Units	The units of the template part. (Required) Valid values are: Metric English

B) Use NX menu [File]-[Import Assembly into Teamcenter]

1) Use NX menu [File]-[Import Assembly into Teamcenter] and import your template file to Teamcenter.

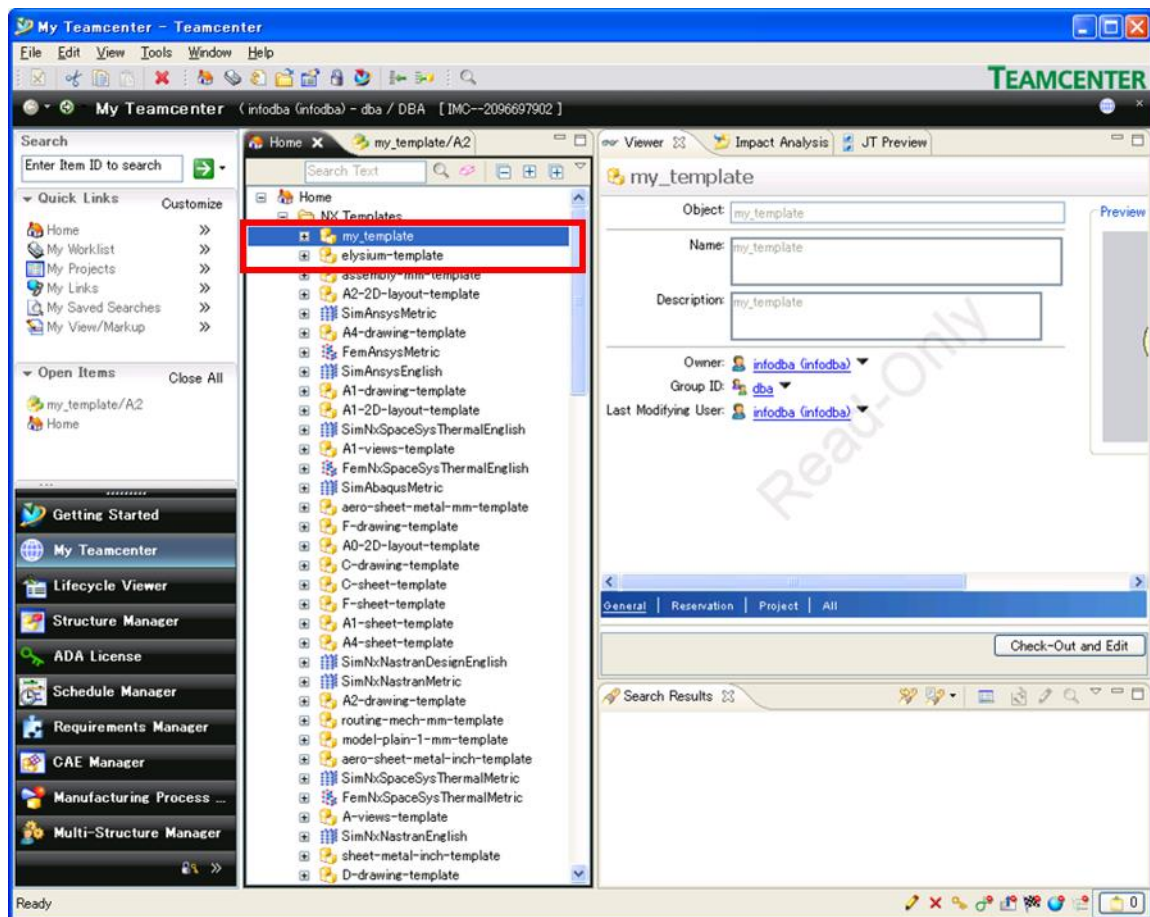
Then move it to the "NX Templates" folder in Teamcenter.(Refer to A-1)



2) Please edit the pax file.(Refer to A-2)

C) Use Teamcenter Command Prompt

- 1) Please copy your template to the "\$ (UGII_ROOT_DIR)\templates" folder.
ex) C:\Program Files\UGS\NX 9.0\UGII\templates\my_template.prt
- 2) Please edit the pax file.(Refer to A-2)
- 3) Please start Teamcenter from
Windows [Start] - [Teamcenter] - [tc_TCDB Command Prompt].
- 4) Please run following command.
"%UGII_ROOT_DIR%\templates\sample\tcin_template_setup"
-u=<username> -p=<password>
- 5) The custom template is added to the "NX Templates" folder in Teamcenter.



3.4 How to specify the custom template to NX (with Teamcenter)

Edit following .ini file and you can specify the custom template.

ex) C:\Elysium\CADdoctor_for_NX\ely_plugin.ini

```
[ENF2UFUNC]
```

```
UseTemplateFile=1
```

```
TemplatePart=@DB/my_template/A
```

```
TemplateAsm=@DB/my_template/A
```

* The above description does not include extra space.

* Following 3 elements are all required.

Details of each element

Name	Attributes
UseTemplateFile	0: Do not use the template. 1: Use the template.
TemplatePart	"Filename" in .pax file for Part.
TemplateAsm	"Filename" in .pax file for Assembly.

3.5 Precautions

1. Before using, please check whether the custom template is already added.
If the custom template is not added, please go to the 3.1 or 3.3 operation.
2. Before importing from CADdoctor, the top assembly needs be opened.
You need to specify the template manually for the top assembly in the "[File] - [New] " dialog.

3.6 How to specify the "Part Revision" to NX (with Teamcenter)

Edit following .ini file and you can specify the Part Revision.

ex) C:\Elysium\CADdoctor_for_NX\ely_plugin.ini

The default value is "AA".

Before importing from CADdoctor, the top assembly needs be opened.

You need to specify the Part Revision manually for the top assembly in the "[File] - [New] " dialog.

```
[ENF2UFUNC]
```

```
PartRevision=A
```

* The above description does not include extra space.

3.7 How to specify the "Part Type(Item Type)" to NX (with Teamcenter)

Edit following .ini file and you can specify the Part Type.

ex) C:\Elysium\CADdoctor_for_NX\ely_plugin.ini

The default type is same as the default of Teamcenter.

Before importing from CADdoctor, the top assembly needs be opened.

You need to specify the Part Type manually for the top assembly in the "[File] - [New] " dialog.

```
[ENF2UFUNC]
```

```
PartType=CAD
```

* The above description does not include extra space.

4 Customize functions

Edit .ini file and you can customize functions.

4.1 Heal IsolatedCurve

In default setting, IsolatedCurve is not healed.

Edit following .ini file and you can heal the IsolatedCurve.

ex) C:\Elysium\CADdoctor_for_NX\settings\ely_plugin.ini

```
[UFUNC2ENF]
```

```
SkipIsolatedCurve=0
```

* The above description does not include extra space.

4.2 Export DB_PART_NAME, DB_PART_NO to ENF

Edit following .ini file and you can export DB_PART_NAME, DB_PART_NO to ENF.

ex) C:\Elysium\CADdoctor_for_NX\ely_plugin.ini

```
[UFUNC2ENF]
```

```
ConvertPartName=1
```

```
PartNameRule=3
```

* The above description does not include extra space.