

# **User Guide** Unified Interface

Product Category	CADTranslate
Product Group	Unified Interface
Product Release Version	27.1

Document Type	User Guide
Document Status	Released
Document Revision	1.0
Document Author	Product Manager
Document Issued	12/09/2024

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# About Theorem



Theorem Solutions is a world leader in the field of Engineering Data Services and Solutions. This leadership position stems from the quality of our technology and the people in the company. Quality comes not only from the skills and commitment of our staff, but also from the vigorous industrial use of our technology & services by world leading customers.

We are proud that the vast majority of the world's leading Automotive, Aerospace, Defense, Power Generation and Transportation companies and their Supply chains use our products and services daily. Working closely with our customers, to both fully understand their requirements and feed their input into our development processes has significantly contributed to our technology and industry knowledge.

Theorem Solutions is an independent UK headquartered company incorporated in 1990, with sales and support offices in the UK and USA. Theorem has strong relationships with the major CAD and PLM vendors, including; Autodesk, Dassault Systemes, ICEM Technologies (a Dassault company), PTC, SolidWorks, Spatial Technology and Siemens PLM Software. These relationships enable us to deliver best in class services and solutions to engineering companies worldwide.



# Theorem's Product Suite

Theorem have 3 main Product brands. These are:



## CAD**Translate**

Direct translation of 3D data to or from an alternate CAD, Visualization or Standards Based format.

See our <u>website</u> for more detail.



# CAD**Publish**

The creation of documents enriched with 3D content

See our <u>website</u> for more detail.



# Theorem XR

Visualization for <u>Augmented (AR)</u>, <u>Mixed (MR)</u> and <u>Virtual (VR)</u> Reality applications

See our <u>website</u> for more detail.



# The Unified Interface

The Unified Interface offers a Desktop Environment that allows CAD and Visualization data to be viewed pre and post translation.

The UI was conceived to create an environment that has the ability to incorporate CADverter products in a centralised hub along with the ability to view, navigate and manipulate CAD data. The interface has been designed to incorporate all the vital parts of CADverter into a modern intuitive environment that is fully customisable.

The UI can be set up to work in the way that suits the customers' requirements. Whether it is just to view and manipulate data, performing translations or to collaborate using information from disparate Web-based data sources.

Shipped with the UI are default methods of working e.g. Translation, Visualisation, and Data Exchange Navigator. These can be adapted to the way you want to work.

## **Primary Product Features**

- Easy to use Interface for data translations.
- File Browser window to quickly locate datasets that need translation.
- Drag and drop workflow to easily translate data into one of the available translators.
- Monitor and view status of completion.
- Create batch files containing multiple translation jobs.
- Export of batch files containing multiple jobs which can be Integrated with scheduling workflows.
- Viewer window to visualise datasets In 3D.
- Product Structure window to view the full structure of a dataset with the ability to edit and save.
- Configuration Manager to create configurations with various options for translations.

## **Primary Product Benefits?**

- Being a direct database converter all pre and post processing is eliminated, saving time.
- Reduce costs due to processing time and increase overall conversion success levels by filtering input data and focusing the conversion to only those elements required.
- Reduce costs and risks associated to accessing the wrong version of data by integrating the conversion
  process into a related business processes.
- With over 20 years of industrial use Theorem translation products robustness and quality is well proven, reducing your business risk.

This document will focus specifically on guidance for the use of the Unified Interface. For information regarding any of Theorem's product ranges please contact <u>sales@theorem.com</u>



# **Getting Started**

# **Documentation & Installation Media**

The latest copy of the User Guide documentation can be found on our web site at:

#### http://www.theorem.com/Documentation

Each product has a specific link that provides user documentation in the form of PDF and Tutorials.

The latest copy of Theorem software can be found via the link above and by searching for the specific product. Each product has a specific link to the Product Release Document, which contains a link to the download location of the installation CD.

Alternatively, you can request a copy of the software to be shipped on a physical CD.

### Installation

The installation is run from the .msi file download provided. For full details of the installation process, visit <u>www.theorem.com/documentation</u> and select UI from the product selection list.

## License Configuration

To run any product a valid license file is required. The Flex License Manager is run from the .msi file download provided. For full details of the installation process, visit <u>www.theorem.com/documentation</u>

## Using the Product

To use the product, follow the documented steps found in this document or follow the online video tutorials which can be found from <u>www.theorem.com/documentation</u>

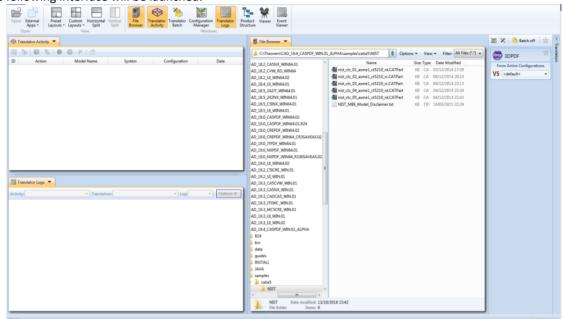


# Using the Unified Interface

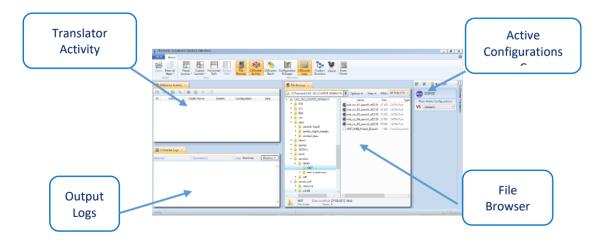
The Unified Interface can be started via the Start Menu – if a shortcut was added during installation.

Alternatively, the Unified Interface can be run via a Windows Explorer selection in: <UI\_installation\_directory>\bin\Unified\_Interface.cmd

The following interface will be launched:



The default layout is split into 4 primary areas, which can be altered to the users prefer:





# Performing a Translation

The simplest way to translate a file is to drag a file from the File Browser panel on to a compatible Active Configuration Translator. This will create a file based using the default configuration.

			📓 🛠   🇞 Batch off   🗙	
Options - View -	Filter: All F	ïles (*.*) 🔻	3DPDF 🔀	anslators
Name	Size	1	From Active Configurations	2
inist_ctc_01_asme1_ct5210_rc-	1,047 KB	CATIA Part	From Active Configurations	
📓 nist_ctc_02_asme1_ct5210_rc	3,062 KB	CATIA Part	V5 <default> ▼</default>	
nist_ctc_03_asme1_ct5210_rc ا	1,173 KB	CATIA Part		
<pre>* ctc_04_asme1_ct5210_rc</pre>	2,223 KB	CATIA Part		
95_asme1_ct5210_rc	1,299 KB	CATIA Part		
'최 Disclaimer	1 KB	TXT File		

On completion, the Unified Interface will display the activity information and details from the log file created during the translation, if requested, in the Translation Activity and Output Log panes, respectively.

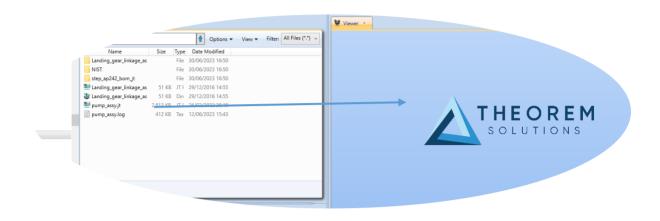
The generated output data can be located by selecting the translation from the Activity pane and opening the output folder:

	avity	•				
	a 📓 💺		×   🖻			
	Action	Model	Name	System	Configuratior	D,
6	Direct	nist_ctc_02_as	me1_ct5210	CATIA524 to 3DPDF View The Log	<default></default>	30/03/20
			°	View the Input File	Product Structu	re
				View the Output Fil	e Product Struc	ture
			<b>5</b>	Open output folder	in File Explorer	
				Create an Audit Tra	il Package	
			1	Re-process the tran	slation	
1				Stop all selected tra	inslations	
		_		Re-run all selected	translations	
	NDverter Logs •		×	Delete all selected t	translations	
	` ctc_02_a	ism Y Transla	tion: C 🖉	Properties		



# Visualising and Exporting via the Viewer

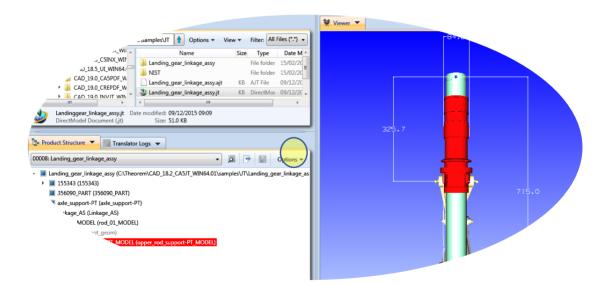
Select the Visualisation pre-set layout and from the file browser, drag and drop (or right click and visualise) a part into the Viewer, this will begin the visualisation process, the progress of which can be seen in the Product Structure window.



Once a part has been loaded into the viewer, the cursor can be used to manipulate the part. The basic default movement commands are:

- Left mouse button Rotate
- Scroll Wheel Zoom
- Scroll wheel button Pan

The check box in the Product Structure window signifies parts that are loaded in the Viewer. Clicking on a part in the viewer or the Product Structure tree highlights it. Ctrl + Click can be used to select multiple parts. Once the required parts have been selected, click export in the Product Structure panel to open the Export menu.





Alternatively, the export menu can be opened by right clicking on the Product Structure Tree or the part in the Viewer and choosing export from the Right Click Menu.

Export Assembly

- 🗆 🛛

Export Options	
ltems to export:	All items from node: top_pump_assy (C:\Program Files\T
Data content:	Geometry and structure
	<ul> <li>Geometry only</li> </ul>
	Structure only
Structure positioning:	Assembly space
	O Component space

Output			
CAD system format:	PDF 3DPDF		~
Configuration:	<default></default>		¥
File name:			
C:\TEMP\top_pump_	assy		
🏷 Export to Batch:			
		🖌 Export	🗶 Cancel

Select the desired options on what to export and click Export. The generated output data can be located by selecting the translation from the Activity pane and opening the output folder:

		Activ	vity 🔻				
	-	( 🔍 🔘 🗙					
	uon	Model Name	e Sys	tem	Configuration	De	
	Direct	nist_ctc_03_asmo	e1_ci JT to 3DP	DF	<default></default>	29/02/2016 1_	
	Direct	nist_ctc_04_asm	e1_ci JT to 3DP	DF	<default></default>	29/02/2016 15:1.	
	Visualise	nist_ctc_01_asme	e1_ctJT		JTVisPMI	01/03/2016 12:04	
ó	Visualise	nist_ctc_04_asme	e1_ctЛ		JTVisPMI	01/03/2016 12:04	
7	Export	nist_ctc_04_asme	e1_ct3DPDF		<default></default>	29/02/2016 15:25	
8	Visualise	Landing_gear_lir	nkagi JT		JTVisPMI	01/03/2016 12:04	
<b>v</b> 9	Export	Upper_Rod	3DPDF		<default></default>	02/03/2016 11:05	
-	duct Structure	- Hunsido	r Logs 🤜 📴		Product Structure tput folder in File Ex		
00008: 1	Landing_gear_li	nkage_assy		Create ar	Audit Trail Package	e ins 🔻	
	anding_gear_lir	nkage_assy (C:\Theo	orem\CAD 🛬	Re-proce	ss the translation	cage_r	
`	155343 (155			Stop all s	elected translations		
356090_PART (356090_PART)					I selected translatio		
axle_support-PT (axle_support-PT)							
`-age_AS (Linkage_AS)				Delete al	selected translation	ns	
	`4OE	DEL (rod_01_MODEL	.) 🔗	Propertie	s		
		<u>`t g</u> eom)	_				
MODEL (upper_rod_support-PT_MODEL)							



# Creating a New Configuration

The Configuration Manager panel can be launched via the Active Configuration Pane or from the Ribbon Configuration Manager Button:

				(	📓 🛠   🌔 Batch off
مز 🏠 Optio	ns ▼ \	/iew	Filter: All Files	(*.*) ~	3DPDF
Name	Size	Туре	Date Modified		
国 nist_ctc_01	352 KB	Cre	03/12/2014 17:48		From Active Configurations           NX <default></default>
📕 nist_ctc_02	668 KB	Cre	05/12/2014 21:32		
🛄 nist_ctc_03	796 KB	Cre	04/12/2014 19:33		, in the second s
<b>▼</b> nist_ctc_04	368 KB	Cre	04/12/2014 20:45		
• ctc_05	460 KB	Cre	09/12/2014 03:47		
יכ	1 KB	Тех	20/03/2015 11:45		

OR



Select the 'Configuration Manager' option from the ribbon menu at the top of the Unified Interface. This will then display the 'Configuration Manager' pane.

Configuration Manag	ger 🔻	
Translator: CATIA V5R24	1-> 3DPDF 🔻 🔝 🗡 🖂 🐇 🏦	0
Configuration	Description:	
<default></default>	CATIA V5 Read Write 3D PDF Entity Mask	General
New Option	Option Name	Value
	Retain Assembly Structure	
	Read PMI	
	PMI Level	All
	Read Captures	
	Read FTA Reference Geometry	
	Maintain CATIA V5 Instance Names	

The Configuration Panel allows new configurations to be created based upon all available options within the selected application. Selecting the New Configuration icon will allow the user to change any option. For details on each option, refer to the Translator's User Guide or click the help icon 🕐 in the Configuration Manager.



A configuration can be set as the active by clicking the yellow asterisk icon  $\stackrel{}{\star}$  Alternatively, it can be set as the Active Configuration setting for the translator must be changed to the required configuration on the translator toolbar:



Once this has been done the translation can be invoked in the same manner as standard translations, now with the new options used.

#### Common Configurations

A common configuration path can be set, so that users can use and create configurations available to others. To set the common configuration path, navigate to the Unified Interface installation bin directory and open **TheoremProps UI.txt.** 

Navigate to the following lines, unhash and amend as required.

- 26
- 27 # Common Configuration file settings Sets the directory that Common Configurations are stored
- 28 #Theorem.CommonConfigurations=
- 29 #Theorem.WriteToCommonConfigurations=true

Setting the first option (e.g. "Theorem.CommonConfigurations=T:\SharedConfigurations") will allow the user to see and use common configurations, whilst still allowing the user to view their personal configurations. Any new configuration created will be create in the user's local area.

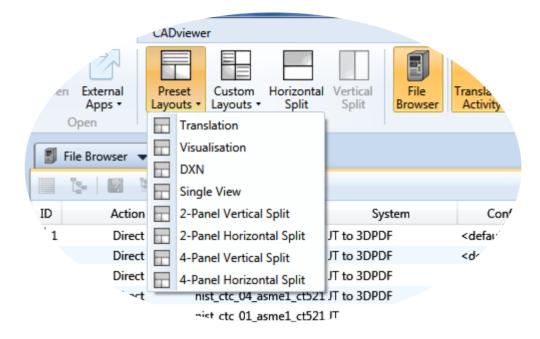
Setting "Theorem.WriteToCommonConfigurations=true" will allow the user to create configurations in the common area. Note that with this mode set, the user will no longer see the local configurations.



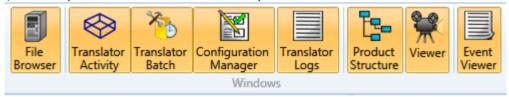
# Creating a Custom Layout

Creating a custom layout can be extremely useful as it allows the user to only have open the windows that they require and in an order that works best for them.

To create a custom layout select a pre-set layout that resembles the format you wish the UI to be displayed. Descriptions of each of these can be found on the Default Layouts page.



Toggle on/off the required windows from the Windows pane on the Home Ribbon tab.



When the required windows have been selected, they can be moved into the desired panel within the UI by clicking on the drop down arrow of the window

		Activity	▼			
			Move To Corner			
	Action	Model Nar		Upper Left Upper Right	Configuration	Ь.
	Direct	nist_ctc_01_asme			<default></default>	29/02/2016 15:1
Z	Direct	nist_ctc_02_asme	_	Lower Left	<default></default>	29/02/2016 15:13
3	Direct	nist_ctc_03_asme		Lower Right	<default></default>	29/02/2016 15:13
4	Direct	nist_ctc_04_asme	Mov	re To Side	<default></default>	29/02/2016 15:13
15	Visualise	nist_ctc_01_asme		Тор	JTVisPMI	01/03/2016 12:04
/ 6	Visualise	nist_ctc_04_asme		Bottom	JTVisPMI	01/03/2016 12:04
`7	Export	nist_ctc_04_asme		Left	<default></default>	29/02/2016 15:25
	Visualise	Landing_gear_lin		Right	JTVisPMI	01/03/2016 12:04
	Export	Upper_Rod		t Tab Position	<default></default>	02/03/2016 11
			Shin			
			<b>~</b>	Shift Left		
			⇒	Shift Right		



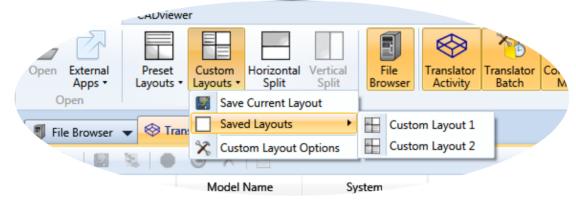
Once all windows are in the required position, select Save Current Layout from the Custom Layouts drop-down box.

- AUVIEV	ver		
Open External Apps • Layouts		Split Browser	Translator Activity
Open	Save Current Lay	yout	
📳 File Browser 👻 🚫 Tra		•	
	Custom Layout	Options	
Action	Model Name	System	Configur
•	nist_ctc_01_asme1_ct521	JT to 3DPDF	12
	4 (504	PT	

Enter a **unique** name and click OK to save.

> Custo	om Layout Name
	Layout Name: Custom Layout 2
	OK X Cancel

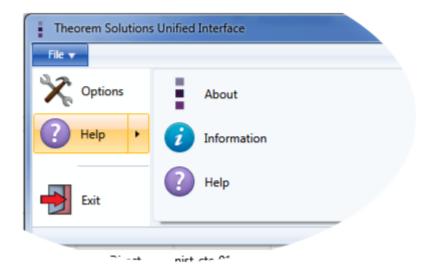
The saved layout can now be accessed from the Custom Layouts drop-down box





# Navigating the Unified Interface

## File Menu



Options will show the General Options for the UI that control what notifications are displayed:

> Unified Interface Opti	ons 📃 🔍 🗙
General	General Options
	Translation options
	Add notifications for translation issues.
	Add notifications for batch translation results.
	Show a message when creating a batch translation.
	V OK Cancel

Help Menu

- About displays information about the Unified Interface, including the version number.
- Information displays details about the user's system, including platform, process and system information and environment variables.
- Help Opens the Help file. Can also be opened by pressing f1, or clicking the Help icon in the top right corner.



# **Translator Panel**

The Translator panel is the collapsible panel found on the right hand side of the UI The translators shown in the panel correspond to available write legs and dropping files onto a translator box will write the file to that format, using the configuration shown in the down menu Toggle Batch Mode

		on/off
Open the Configuration Manager Panel	Batch off	
	30PDF 3DPDF	
/	From Active Configurations         JT <default></default>	
Open the Translator	NX <default></default>	
Settings	V5 Catia V5-6 R2014 <default></default>	Select your 'Favourite' translators and click the star at the top right to show only your
	Creo 3.0	favourites.
	🥨 САПА V4	
	From Active Configurations       NX <default></default>	
	CATIA V5-6 R2014	
	From Active Configurations JT <default></default>	
	NX <default></default>	
	👿 л 🔯	
	From Active Configurations	
	V5 <default> -</default>	
	INV <default></default>	
	STEP <default></default>	



#### Translator Options

This will allow the users to set general options for the translators. The user can change the output location and how the translator deals with writing to existing files. It also provides the ability to replace characters and alter the case of the output files.

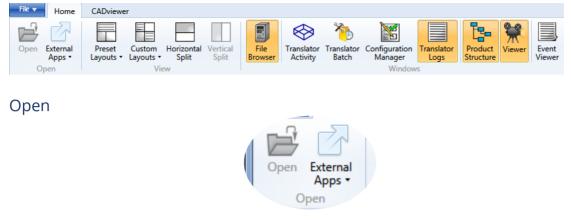
<ul> <li>CADverter Translation</li> </ul>	Settings				
Confirmation					
	<ul> <li>Perform all translations without confirmation.</li> <li>Show a Confirmation dialog when performing a CADverter translation.</li> </ul>				
Default Output File Lo	cation				
Directory: C:\TEMP\Ou	tput	- 📔			
If the output file exists:	<ul> <li>Rename the new output file</li> <li>Rename the existing file</li> <li>Defer to the CADverter behaviour</li> </ul>				
Output File Name					
Replace these charac	ters:	with			
O not change case	○ Use lower-case only ○ Use upper-case	only			
	🖌 ок	X Cancel			

The confirmation dialog will be shown when a translation has been actioned. The output path and configuration can be changed here and the file can be added to the batch activities.

➤ Translator Setti	ngs Confirmation	x
Translator Read		
Input Path: Input Name: CAD System:	C:\Theorem\CAD_19.0_JTPDF_WIN64.01\samples\JT Landing_gear_linkage_assy.jt JT	
Translator Write	3	
Output File: CAD System:	C:\TEMP\UI Output\Landing_gear_linkage_assy.pdf Bi 3DPDF	rowse
Configuration:	<default></default>	efine
	🗌 Add to Batch Activities 🛛 🖌 Translate 🛛 🗶 Car	ncel



# The Ribbon Bar



The file open area has two features:

- Open allows the selected file in the File Browser to be opened in its native external application. E.g. a CATPart will be launched in CATIA V5, a Word document in MS Word, etc.
- External Apps allows the user to configure external applications to work in conjunction with the UI.

#### Layouts

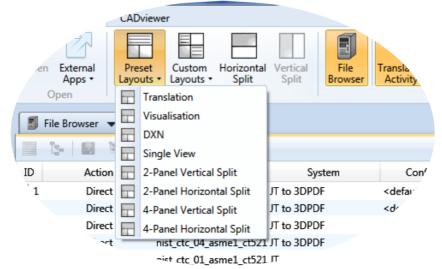
The configuration of all layouts is found in the view area of the ribbon toolbar.



This allows the user to specify the number of panes and the layout of those panes. It also allows the layout and content (see Windows Area) to be saved as a named Layout. These layouts can be modified, re-saved and deleted as required.

#### Preset Layouts

Shipped with the UI are three default layouts for working within the UI. Along with this are 5 pre-set layouts that give the full range of general layouts of the windows that can be used as a basis for creating a layout which can be further customised and saved as per the user's requirements.





#### Translation

This allows the user to drag and drop files from the File Browser into the Translator Panel to perform a translation. The Translator Activity window shows the status of the translations and the logs are shown in the Log Viewer.

#### Visualisation

This allows the user to drag and drop files from the File Browser into the Product Structure or Viewer Panel. The Product Structure window shows the structure of the visualised file whilst the logs for the visualisation activity are show in the Log Viewer.

#### Data Exchange Navigator

The DXN layout as shipped. This allows the user to select an existing assembly file from the Product Structure window drop down box and visualise and manipulate the data.

#### Single View

The Single View layout as shipped. Here all windows are displayed in one panel.

#### 2-Panel Vertical Split

The 2-Panel Vertical Split layout as shipped. Here all windows are displayed over two panels, split vertically.

#### 2-Panel Horizontal Split

The 2-Panel Horizontal Split layout as shipped. Here all windows are displayed over two panels, split horizontally.

#### 4-Panel Vertical Split

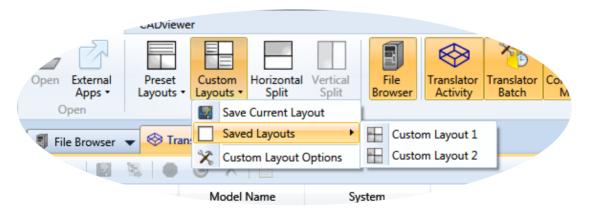
The 4-Panel Vertical Split layout as shipped. Here all windows are displayed over four panels, split vertically.

#### 4-Panel Horizontal Split

The 4-Panel Horizontal Split layout as shipped. Here all windows are displayed over four panels, split horizontally.

#### Custom Layouts

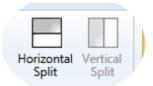
The custom layout dropdown gives access to 3 options.



The options are used for creating a creating a custom layout



Horizontal and Vertical Split



The Horizontal and Vertical Split buttons control whether the main split between the windows is vertical or horizontal. Note that in a Single Window View these options are not available.

# Windows

### File Browser



The UI File Browser is used similarly to Windows File Browser. It has an address bar, the left side is the navigation pane, allowing easy access through the folders. The main window is the main browser window displaying the current folder.

*	Name			
		Size	Туре	Date Modified
	變 rod_SLDPRT.jt	5 KB	DirectModel Document (.jt)	08/11/2006 12:59
	嫯 bolt_SLDPRT.jt	11 KB	DirectModel Document (.jt)	08/11/2006 12:59
	😻 bracket_SLDPRT.jt	15 KB	DirectModel Document (.jt)	08/11/2006 12:59
	變 nut_SLDPRT.jt	8 KB	DirectModel Document (.jt)	08/11/2006 12:59
=	岁 plate_SLDPRT.jt	18 KB	DirectModel Document (.jt)	08/11/2006 12:59
Ŧ				
	E	with support in	🥸 nut_SLDPRT.jt 8 KB	ynut_SLDPRT.jt 8 KB DirectModel Document (.jt)

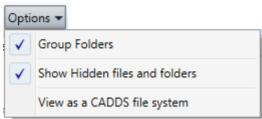


#### Address Bar

The address bar shows the current folder path; this can be entered manually for direct navigation. Clicking the arrow goes to the directory one level up.

P:\QA Testing\InputFiles\JT	

#### Options

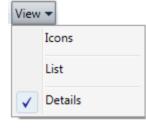


There are three options from the drop-down menu:

- **Group Folders** allow the user to select whether to group folders together, or to sort them in order with all other files.
- Show Hidden files and folders shows protected and hidden files. Warning: editing these files could cause your system to become inoperable.
- View as a CADDS file system is used when browsing a CADDS file system.

## View Options

Select whether to display files as Icons, in a list or in a view with details.



Filter

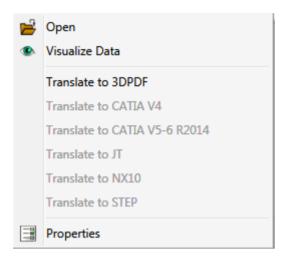
Set a filter to only display files that have compatible translators installed.

Filter:	All Files (*.*) 👻
	All Files (*.*)
	JT Files (*.jt)
	Creo Files (*.prt;*.asm;*.prt*;*.asm*;*.PRT;*.ASM;*.PRT*;*.ASM*)
	NX Files (*.prt)
	PDF Files (*.pdf)
	CATIA V5 Files (*.CATPart;*.CATProduct;*.CATShape;*.CGR)



#### Right Click Menu

Selecting a file in the File Browser and right-clicking shows the right click menu.



The available options are:

- **Open** the file in its default application
- Visualise Data in the Viewer
- Translate to... writes the file to compatible CAD systems
- Properties opens a window displaying properties about the file.

## **Translator Activity**



The Translator Activity window list all translation activities that have occurred. The list provides a translation ID, the type of action performed for a translation, the Model Name, the CAD system associated with the model, the configuration used (defined by the configuration manager) and the date of the activity.

1	Translator Activity 🔻				
	b 🛛 b				
ID	Action	Model Name	System	Configuration	Date
1	Direct	nist_ctc_01_asme1_ct52	JT to 3DPDF	<default></default>	29/02/2016 15:13
12	Direct	nist_ctc_02_asme1_ct52	JT to 3DPDF	<default></default>	29/02/2016 15:13
🖌 З	Direct	nist_ctc_03_asme1_ct52	JT to 3DPDF	<default></default>	29/02/2016 15:13
14	Direct	nist_ctc_04_asme1_ct52	JT to 3DPDF	<default></default>	29/02/2016 15:13
15	Visualise	nist_ctc_01_asme1_ct52 JT		JTVisPMI	29/02/2016 15:25
16	Visualise	nist_ctc_04_asme1_ct52	JT	JTVisPMI	29/02/2016 15:25
17	Export	nist_ctc_04_asme1_ct52	3DPDF	<default></default>	29/02/2016 15:25



The results of activities are shown in the ID column:

• **v** means success.

Ribbon Bar

- ? means completed with errors.
- X means errors and not completed.

Multiple activities can be selected using Ctrl + click or Shift + click.

The top bar of this window has the following functions that are available when an activity has been selected.



View the log displays the log file for the selected activity in the Translator Logs window.

**View Product Structure** opens the Product Structure window and loads the selected part and consequently it is loaded into the viewer. This is only available for Structure Action.

**Create an Audit trail package** allows the user to package all input and output files associated with the selected activity, along with the log files and a text file detailing the activities and command line options used, into a zip file.

Re-process the translation allows the user to perform the translation again with a different configuration.

**Stop** the current activity being performed.

Rerun all selected files activities with the same configuration.

**Remove** all selected activities.

Properties displays the properties of the activity.

Note that right clicking on an activity provides the same options, along with an extra option allowing the user to open outputted files in windows explorer.

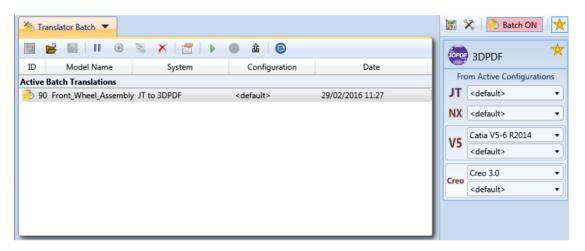


## **Translator Batch**



The Translator Batch window lists all batch translation activities that have been added to the batch. Files are added to a batch by switching on Batch Mode and performing a translation in the usual way. The list provides a translation ID, the type of action performed for a translation, the Model Name, the CAD system associated with the model, the configuration used (defined by the configuration manager) and the date of the activity.

Active translations are shown under the Active Batch Translations section and always have the pending icon



• When a batch activity has been performed, the activity will be transferred into the Translation Activity Window.

The results of completed activities are shown in the ID column of the Translator Activity:

- d means success.
- ? means completed with errors.
- X means errors and not completed.

The status of active Batch Translations are shown by:

- means ready for batch processing
- **II** means the file has been put on hold and is currently inactive.

Multiple activities can be selected using Ctrl + click or Shift + click.

#### Ribbon Bar

The top bar of this window has the following functions that are available when an activity has been selected.



**Put selected Activity on hold** to omit certain activities temporarily from a batch translation.

Release from hold to return the selected activity to the active batch list.

Remove all selected activities.

**Properties** displays the properties of the activity.

Run all active batch translations.



**Stop** the current batch activity being performed.

Export all active batch translations to a batch command file, which can be run externally to the UI.

Refresh the status of all activities.

Note that right clicking on an activity provides the same options.

# **Configuration Manager**



The Configuration Manager panel allows the user to edit the settings for both the read and write translators and save them in a configuration file. Configurations files can also be deleted.

Configuration	-> 3DPDF - Scription:		
<default></default>		Mask General	
New Option	Option Name	Value	
	Retain Assembly Structure		
	Read PMI		
	PMI Level	All	•
	Read Captures		
	Read FTA Reference Geometry		
	Maintain CATIA V5 Instance Names		

The top bar of this window has the following functions that are available

**Translator drop-down menu** allows the user to select which translator to manage the configuration of. Note that if the favourites toggle is activated on the Translator Panel, then only 'favourite' translators will be displayed here.

Add a New Configuration to create a new configuration with the same options used in the previous configuration

Delete selected Configuration will permanently delete the configuration.

Clear Options to revert to the translator default options.

Make Active to make the selected configuration the active configuration.

**Generate Visual & Export Options** for direct translator configurations so these options can be used when visualising and exporting data.



# **Translator Logs**

```
Translator
```

Logs

The Translator Logs displays the log files from all previous available translation activity. The activity can be selected and either the Summary file or tabulated information can be displayed for any of the translator processes.

```
Translator Logs 🔻
▼ Log: Summary ▼
                                                                           Options ≥
  * Copyright Theorem Solutions Limited
  * JT - 3D PDF CADverter Version 19.0.001
                                     4
  **********
  Mon Oct 24 09:42:04 2016
  Input
   JT File
  C:\Theorem\CAD_19.0_JTPDF_WIN64.01\samples\JT\Landing_gear_linkage_assy.jt
3D PDF File : C:\Temp\UI Output\Landing_gear_linkage_assy.pdf
   Progress File : C:\Users\bcant\AppData\Roaming\theorem\cache\0000005\prg.xml
Setting run time environment please wait ...
   Mode
               : PUBLISH
   Master XML : C:\Theorem\CAD_19.0_JTPDF_WIN64.01\data\publish_3dpdf\defaultManifest.xml
   Template File : C:\Theorem\CAD_19.0_JTPDF_WIN64.01\data\publish_3dpdf\publishDTT\template.pdf
  List of gco entities :-
            Total
                  Standalone Subordinate
  Type
  Curves
            3959
                               3959
  Surfaces
Planes
             993
                               993
  Planes
             314
                              314
  Faces
             1307
                               1307
                              3375
  Edges
             3375
  Vertices
             2139
                               2139
  Bsolids
                               25
             25
  Details
             90
  Dittos
             108
                     6
                               102
  Dimensions
                     11
             11
  3D Views
                               264
             273
                     9
                    ____
  *******
  * 3DPDF file successfully created
  * C:\Temp\UI Output\Landing_gear_linkage_assy.pdf *
```

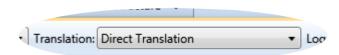
#### Activity List

Activity:	00001: as1 🔹
	00001: as1
	00002: as1
	00003: as1

Select an activity from the Activity drop-down list. These correspond to the list displayed in the Translator Activity window.



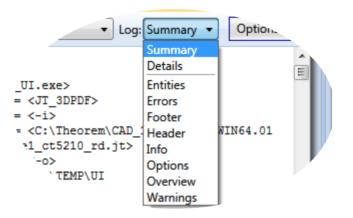
Translation



The Translation drop-down lets the user select what part of the translation activity they would like to view the logs for. The selection choice here varies on what action (shown in the Translator Activity window) has been performed:

- Direct will only show Direct Translation log. This details the activity from the full translation.
- Visualise will show Translator Read log & Structure Write. Translator Read details the activity from reading the file in its native format and writing it to Theorems Generic CAD Object (GCO). Structure Write details writing the GCO file into a format the Viewer can utilise.
- **Export** will show Structure Export & Translator Write, Structure Export details data from a visualised file to GCO file, and Translator Write will detail the GCO to the output format translation logs.

#### Log Type



The Log drop-down lets the user select what information they would like to see about regarding the selected translation:

- **Summary** an overview of the translation in text format, including the date of translation, files used, entity list and result.
- **Details** shows the full unformatted log file in XML format.
- Entities a table of all entities processed during translation.
- Errors a list of errors (if any) that occur during translation.
- **Footer** details of the output file.
- Header details of the input file.
- Info a list of all information processed by the translator.
- **Options** shows a list of all options used for the translation.
- **Overview** combines Header, Entities and Footer lists.
- Warnings a list of warnings (if any) that occur during the translation.



Options

Options 🛛		
	Refresh	
	Word Wrap text	
	Save As	

The options drop-down has the following options available:

- **Refresh** refreshes the currently displayed log file. This may need to be used when viewing a log that has recently completed.
- Word Wrap switches on/off word wrapping in the log files.
- Save as opens a dialog box that allows the user to save the currently displayed log file to a specified location.



# **Product Structure**



The Product Structure tab displays the assembly structure of a visualised part. The structure can be loaded from the selection bar if the part has already been visualised, or a new file can be dragged and dropped into the window.

The check box signifies parts that are loaded in the Viewer. Clicking on a part in the structure will highlight it, and all its sub-nodes in the structure tree and the Viewer.

00003: as1	•		Options 🔻
<ul> <li>Image: Image: Ima</li></ul>			
<ul> <li>AS1-works.SLDASM (AS1-works.SLDASM)</li> </ul>			
bracket.SLDPRT (bracket.SLDPRT)			
bolt.SLDPRT (bolt.SLDPRT)			
nut.SLDPRT (nut.SLDPRT-442)			
✓ bolt.SLDPRT (bolt.SLDPRT)			
📝 nut.SLDPRT (nut.SLDPRT-442)			
✓ bolt.SLDPRT (bolt.SLDPRT)			
nut.SLDPRT (nut.SLDPRT-442)			
bracket.SLDPRT (bracket.SLDPRT)			
✓ bolt.SLDPRT (bolt.SLDPRT)			
nut.SLDPRT (nut.SLDPRT-442)			
bolt.SLDPRT (bolt.SLDPRT)			
nut.SLDPRT (nut.SLDPRT-442)			
<ul> <li>Inut_bolt.SLDASM (nut_bolt.SLDASM-678)</li> </ul>			
bolt.SLDPRT (bolt.SLDPRT)			
📝 nut.SLDPRT (nut.SLDPRT-442)			
plate.SLDPRT (plate.SLDPRT)			
nut.SLDPRT (nut.SLDPRT)			
nut.SLDPRT (nut.SLDPRT-723)			
rod.SLDPRT (rod.SLDPRT)			

#### Selection Bar

Select a file that has been visualised to display its structure. When a file is loaded, you can clear it from the Product Structure and Viewer window by selecting (Clear View)

(select a file to view)	•	(select a file to view)
00003: ==1		(select a file to view)
00005; 851		00003: as1



#### Find

Finding specific parts within a large assembly can be tedious, click the Find icon 🔎 to open a window allowing specific parts to be easily searched. Alternatively click inside the Product Structure window and use the Ctrl + F shortcut.

Select the criteria you wish to search and matching parts will be highlighted, use 'Next' and 'Previous' to browse through matching parts, or highlight them all by clicking All.

D Proc	duct Structure Find
Find:	rod
	Node Names
	Property Names
	Property Values
	All AdvCompressLODLevel
	Match Case
	All

#### Export

A single part or assembly can be exported to a different format by selecting the node from the tree, clicking the right mouse button and entering "Export from node". Alternatively, the export button and entering can be clicked.



Export Assembly	
Export Options	
Items to export:	Export from node: rod_sa.SLDASM (rod_sa.SLDASM)
Data content:	<ul> <li>Geometry and structure</li> <li>Geometry only</li> <li>Structure only</li> </ul>
Structure positioning:	· · · · · · · · · · · · · · · · · · ·
Output	
CAD system format:	PDF 3DPDF -
Configuration:	<default></default>
File name: C:\TEMP\UI Output\ The Export to Batch:	rod_sa.SLDASM.pdf
	Export X Cancel

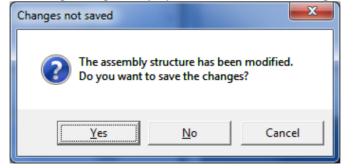
The Export Assembly interface will then open and the user can select which data content will be exported and whether the structure positioning of the exported node should be relative to the original assembly space, or to the selected component space.

The data can be exported to any CAD system format that has a compatible Theorem Translator installed with available configurations created by the user.

Save

When a part has been modified in the Viewer/Product Structure window, clicking the save icon will save any changes made.

The user will also receive a warning message if they try to clear the view after changes have been made.





#### Options

"View Model on Load" option allows the user to choose whether they would like the Product Structure to be automatically loaded into the viewer when loading the Product Structure. It is recommended to switch this option off when using DXN to export data from Large Assemblies as this means unnecessary parts will be loaded into the Viewer.

Options 🔻
View model on load

#### Right Click Menu

Right clicking on a node in the product structure tree displays the right click menu.

.ing_gear_linl	kage_	assy	• 0
∡ Landing_gear_link	age_a	assy (C:\Theorem\CAD_19.0_JTPD	F_WIN64.01\samp
<ul> <li>Linkage_AS (id</li> <li>upper_rod_sup</li> </ul>	9	Cut Copy	
<ul> <li> rod_01_MODE</li> <li> axle_support-F</li> <li> 155343 (id5_1)</li> </ul>		Paste Delete	
▶ 📝 356090_PART	B	Attach External File	
		Export from node	
	X	Centre in Viewer	
		Properties	

**Cut, Copy & Paste** lets the user move and copy existing nodes throughout the structure. Copying one part and pasting it under a different sub-assembly will use the original co-ordinate system of the part and then place it in the Structure relative to the sub-assembly co-ordinate system. Note that these features are only available with a DXN license.

Delete will permanently delete the node from the Product Structure.

Attach External File allows the user to import an external part, and place it into the specified location in the loaded structure.

**Export from Node** allows the user to export the selected node, as detailed above.

**Centre in Viewer** centres the selected node in the Viewer.

**Properties** displays the properties of that selected node, including all attributes and the Transform Matrix. New attributes can be added and deleted here as well as modifying existing attributes.



#### Viewer



The Viewer allows the user to view the contents of many different formats of CAD data, including assemblies. It can be used in conjunction with the "Product Structure" option to view single nodes of an assembly, the top level or sub-assemblies.



### **Right Click Menu**

There are further options that are available by right clicking in the Viewer window.

Environment Settings Export

Properties

Help

Spin Animation

#### Environment Settings

This allows the editing of the Light Intensity of parts loaded into the viewer and the highlight and background colours.

#### Export

Opens up the Export Assembly interface and the user can select which data content will be exported and whether the structure positioning of the exported node should be relative to the original assembly space, or to the selected component space.



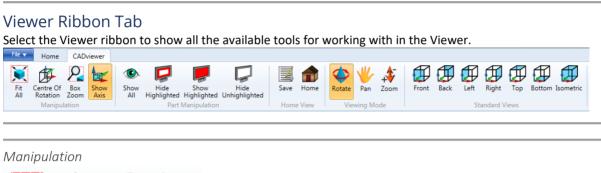
The data can be exported to any CAD system format that has a compatible Theorem Translator installed.

#### Properties

Displays the properties of that selected node, including all attributes and the Transform Matrix. New attributes can be added and deleted here as well as modifying existing attributes.

#### Spin Animation

Select this option to initialise the animated spin of the geometry following a rotate command.





- Fit All loaded part will be fitted to the screen size i.e. a zoom-in or zoom-out will be performed as necessary.
- **Centre of Rotation** click this button and then somewhere on the loaded part to define the clicked area as the new centre of rotation.
- Box Zoom allows the user to 'draw a box' and zoom into the selected area.
- Show Axis a toggle to show or hide the modelling coordinate axis system marker. The axis colours are Green, Red and Blue indicating X,Y,Z axes respectively.

#### Part Manipulation



- Show All shows all Geometry
- Hide Highlighted hides any geometry that is highlighted.
- Show Highlighted shows geometry that has been highlighted in the Product Structure tree.
- Hide Unhighlighted hides all geometry that is not highlighted.



Home View



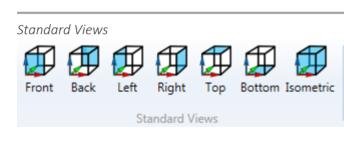
- Save saves the current view as the 'Home' view.
- Home reverts back to the 'Home' view.

Viewing Mode



These options define what default action of clicking and holding the left mouse button (or using arrow keys) when in the Viewer.

- Rotate rotates the part about its centre of rotation.
- **Pan** drags the part relative to the cursor movement.
- **Zoom** zooms in and out relative to the cursor moving up and down. Move the cursor down the screen to zoom-in or up the screen to zoom-out.



Displays the model as seen from the specified location.



## **Event Viewer**



The diagnostics of the UI are shown here including the Version, Start Time, Platform, Log File location and showing which Translator processes have been validated.

Event Viewer

		Options ⊗
* Theorem Soluti	**************************************	*****
Start Time: 01 M	**************************************	*****
	osoft Windows NT 6.1.7601 Service Pack 1 sers\bcant\AppData\Roaming\Theorem Solutions\Unified Inte ation.log	rface
)1/03/2016 09:53 TheoremProps UI	:31 - Using Property File: C:\Theorem\CAD_19.0_UI_WIN64.0 .txt	2\bin
01/03/2016 09 <del>.</del> 53	:31 - Validated translator: CATIA521_3DPDF	
	:31 - Validated translator: CATIA521_Read	
	:31 - Validated translator: CATIA524_3DPDF :31 - Validated translator: CATIA524_JT	
	:32 - Validated translator: CATIA524_01	
	:32 - Validated translator: CATIA524 Read	
	:32 - Validated translator: CATIA5i NX10	
1/03/2016 09:53	:32 - Validated translator: CATIA5i_Read	
	:32 - Validated translator: CATIA_JT	
	:32 - Validated translator: CATIA_NX10	
	:32 - Validated translator: CATIA_Read	
	:32 - Validated translator: CR2_3DPDF :32 - Validated translator: CR2 Read	
	:32 - Validated translator: CR3 3DPDF	
	:32 - Validated translator: CR3 Read	
	:32 - Validated translator: Inventor JT	
	:32 - Validated translator: Inventor Read	
1/03/2016 09:53	:32 - Validated translator: JT_3DPDF	
	:32 - Validated translator: JT_CATIA524	
	:32 - Validated translator: JT_Read	
	:32 - Validated translator: JT_STEP	
	:32 - Validated translator: NX10_3DPDF	
	:32 - Validated translator: NX10_CATIA :33 - Validated translator: NX10 CATIA524	
	:33 - Validated translator: NX10 CATLA524	
	:33 - Validated translator: NX10 STEP	
	:33 - Validated translator: STEP JT	
	:33 - Validated translator: STEP_NX10	
	:33 - Validated translator: STEP_Read	
	:33 - Validated translator: Write_3DPDF	
	:33 - Validated translator: Write_CATIA	
	:33 - Validated translator: Write_CATIA524	
	:33 - Validated translator: Write_JT :33 - Validated translator: Write NX10	
	:33 - Validated translator: Write_NXIU :33 - Validated translator: Write_STEP	
	:34 - Viewer plug-in version: CADViewer VSG Version 1.00.	002

Options allows the user to switch line wrap on/off and gives the option to save the Event Viewer log to a specified location.



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