



USER GUIDE

Unified Interface

Release Version: 24.0

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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, Defence, 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:



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.



PUBLISH

The creation of documents enriched with 3D content

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



VISUALIZE

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.





What is 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. Future deployments within the suite will include:

Technical Data Package - a feature that allows the user to combine multiple types of files into a single package.





Getting Started

Documentation The latest copy of this documentation can be found on our web site at: <u>http://www.theorem.com/Documentation</u>

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

Installation Media

The latest copy of Theorem software can be found via our web site at: <u>http://www.theorem.com/Product-Release-Notes</u>

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 CD or ZIP file download provided. Currently, there are 2 distinct installation stages that are required.



To install the Unified Interface, select the Unified Interface **.msi** file and follow the installation process. For a full guide to the process, please see our 'Translator Installation Process' demonstration video located <u>here</u>.



In addition, a Theorem Translator will also need to be installed. The installation process is the same as for the Unified Interface. For a full guide to the process, please see our 'Translator Installation Process' demonstration video located <u>here</u>.

License Configuration



In order for the translation to run successfully, the Theorem license file provided to you needs to be configured using FlexLM. For a full guide to this process, please see our 'FlexLM License Set Up and Configuration' demonstration video located <u>here</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.



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:







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.





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Export Assembly

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

Output			
CAD system format:	PDF 3DPDF		v
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:

		Lor Act	ivity 🔻				
	~	• • ×					
	ion	Model Nam	ie Sy	stem	Configuration	De	
	Direct	nist_ctc_03_asm	ie1_ci JT to 3Di	PDF	<default></default>	29/02/2016 1_	
	Direct	nist_ctc_04_asm	ie1_ci JT to 3DI	PDF	<default></default>	29/02/2016 15	:1.
	Visualise	nist_ctc_01_asm	ie1_ciJT		JTVisPMI	01/03/2016 12	:04
ś	Visualise	nist_ctc_04_asm	ie1_ciJT		JTVisPMI	01/03/2016 12	:04
7	Export	nist_ctc_04_asm	ie1_cl3DPDF		<default></default>	29/02/2016 15	:25
/ 8	Visualise	Landing_gear_li	nkag: JT		JTVisPMI	01/03/2016 12	:04
19	Export	Upper_Rod	3DPDF		<default></default>	02/03/2016 11	:05
				View The	Log		
Te Des	duct Church and		. 8	View the	Product Structure		
La PIO	duct structure •		or Logs 🔻 📕	Open ou	tout folder in File Ex	plorer	
00008:	Landing_gear_link	age_assy					ns 🔻
				Create ar	Audit Trail Package	e	
<u> </u>	Landing_gear_linka	age_assy (C:\The	orem\CAL	Re-proce	ss the translation		cage_7
` [155343 (15534)	3)		Stop all s	elected translations		
(S Visualise nist_ctc_04_asme1_ct JT JTVisPMI 01/03/2016 12:04 7 Export nist_ctc_04_asme1_ct 3DPDF <default> 29/02/2016 15:25 8 Visualise Landing_gear_linkag: JT JTVisPMI 01/03/2016 12:04 9 Export Upper_Rod 3DPDF <default> 02/03/2016 11:05 9 Export Upper_Rod Stop all selected translation 9 Export Translator Logs Create an Audit Trail Package Ins 9 155343 (155343) Stop all selected translations Stop all selected translations 9 Stop all selected translations</default></default></default></default></default></default></default>						
	axle_support-P	T (axle_support-	·PT)				
	`nge_AS (Lii	nkage_AS)	· · · · · · · · · · · · · · · · · · ·	Delete al	selected translatio	ns	
	*4ODEI	L (rod_01_MODE	iL) 🔗	Propertie	s		
		`t geom)	_				
		MODEL	funner rod si	upport-PT M	AODEL1		





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				
, te	JDPDF 3DPDF	ilter: All Files (*.*) 🗸		; ▼ View	i 🚹 Option
r Tra	From Active Configurations	te Modified	e Date Mo	Size Type	Name
ansla	NV zdofaulta V	2/2014 17:48	. 03/12/20	352 KB Cre	📙 nist_ctc_01
ator		2/2014 21:32	05/12/20	568 KB Cre	📕 nist_ctc_02
6		2/2014 19:33	. 04/12/20	796 KB Cre	🔲 nist_ctc_03
		2/2014 20:45	. 04/12/20	368 KB Cre	▼nist_ctc_04
		2/2014 03:47	. 09/12/20	460 KB Cre	* ctc_05
		3/2015 11:45	x 20/03/20	1 KB Tex	<i>٦</i> ٢
	From Active Configurations NX <default></default>	All Files (*.*) te Modified 2/2014 17:48 2/2014 21:32 2/2014 19:33 2/2014 20:45 2/2014 03:47 3/2015 11:45	 Filter: Date Ma 03/12/20 05/12/20 04/12/20 04/12/20 04/12/20 09/12/20 20/03/20 	Size Type 512 KB Cre 552 KB Cre 568 KB Cre 568 KB Cre 368 KB Cre 368 KB Cre 368 KB Cre 1 KB Tex	Name Name Name Name Name Name Name Name

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 Manager 🔻		
Translator: CATIA V5R24 -> 3DP	DF 🔹 🔛 🗙 🗋	0
Configuration	Description:	
<default></default>	CATTA V5 Read Write 3D PDE Entity Mask	General
New Option	Ontion Name	Value
	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 * 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.

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	-			
		5	⊚ × I	Mov	e To Corner		
		Action	Model Nar		Upper Right	Configuration	b.
		Direct	nist_ctc_01_asme		lower loft	<default></default>	29/02/2016 15:1
	2	Direct	nist_ctc_02_asme		Lower Leit	<default></default>	29/02/2016 15:13
	3	Direct	nist_ctc_03_asme	ш	Lower Right	<default></default>	29/02/2016 15:13
1	4	Direct	nist_ctc_04_asme	Mov	e To Side	<default></default>	29/02/2016 15:13
1	5	Visualise	nist_ctc_01_asme		Тор	JTVisPMI	01/03/2016 12:04
1	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		Pight	JTVisPMI	01/03/2016 12:04
		Export	Upper_Rod			<default></default>	02/03/2016 11
				Shift	Tab Position		
					Shift Left		
				⇒	Shift Right		

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



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

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

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











Navigating the Unified Interface

File Menu

Theorem Solutions	s Unified Interface
File 🔻	
X Options	About
Help	i Information
Exit	PHelp

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.
	oK X 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 dropdown menu

		Toggle Batch
Open the Configuration	📓 💸 🏹 Batch off	Mode on/off
Manager Panel	3DPDF 🖈	
Upen the Translator Settings	SDPDF From Active Configurations JT V5 Catia V5-6 R2014 V5 Creo 3.0 Creo Creo Configurations NX <default> V5 Configurations V4 V4 V4 V4 V4 V4 V4 V5</default>	Select your 'Favourite' translators and click the star at the top right to show only your favourites.
	INV <default> STEP <default></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.

Confirmatio	n		
Perform a Show a Control of C	II translatio	ns without confirmation. dialog when performing a CADverter transla	tion.
Default Out	put File Lo	cation	
Directory:	:\TEMP\Ou	tput	- 📂
If the output	file exists:	 Rename the new output file Rename the existing file Defer to the CADverter behaviour 	
Output File	Name		
🔲 Replace t	hese charac	ters:	with
Oo not ch	ange case	O Use lower-case only O 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	
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	9	
Output File: CAD System: Configuration:	C:\TEMP\UI Output\Landing_gear_linkage_assy.pdf 3DPDF	Browse
	Add to Batch Activities 🖌 Translate	Cancel







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





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.

File Browser 🔻						
📙 P:\QA Testing\InputFiles\JT\as1						
🧫 Desktop	*	Name	Size	Туре	Date Modified	
🔻 🂐 MyComputer		夑 rod_SLDPRT.jt	5 KB	DirectModel Document (.jt)	08/11/2006 12:59	
🕨 🚢 Local Disk (C:)		夑 bolt_SLDPRT.jt	11 KB	DirectModel Document (.jt)	08/11/2006 12:59	
🕨 🍰 DVD RW Drive (D:)		😻 bracket_SLDPRT.jt	15 KB	DirectModel Document (.jt)	08/11/2006 12:59	
🕨 👝 Removable Disk (E:)		夑 nut_SLDPRT.jt	8 KB	DirectModel Document (.jt)	08/11/2006 12:59	
🕨 👝 Removable Disk (F:)	=	plate_SLDPRT.jt	18 KB	DirectModel Document (.jt)	08/11/2006 12:59	
🕨 👝 Removable Disk (G:)						
🕨 👝 Removable Disk (H:)						
🕨 🛒 Disconnected Network Drive (I:)						
🕨 🚅 users (\\tscnas3) (L:)						
🕨 坖 cd_images (\\tscnas3) (N:)						
🕨 坖 nt_apl (\\tscnas3) (O:)						
💌 🚅 parts (\\tscnas3) (P:)						
🕨 퉬 @Recycle						
🕨 퉬 apps						
🕨 퉬 bosch_data2						
🕨 퉬 bvt_cadds_inv_prod4						
Listomers						
🕨 퉬 demo_material						
🕨 퉬 engineering-parts						
🕨 퉬 martin_test						
🕨 퉬 prod_test_parts						
👻 퉬 QA Testing						
🕨 퉬 Customer_Options_Testing						
👻 퉬 InputFiles						
🕨 퉬 3dxml						
🕨 퉲 CATIA V4						
🕨 퉲 CATIA V5						
🕨 퉬 Config Files						
🕨 퉬 Creo						
т 🏭 👻						
► 🏭 A						
🕨 퉬 amd_vise_assm_jt						
🔒 as1						
۰ ۲۵ ۲						
as1 Date modified: 03/10/2014 1 File folder Items: 5	15:3	1				

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.

퉬 P:\QA Testing\InputFiles\JT

ł





Optic	ons		
Optic	ons 🗸		
\checkmark	Group Folders		
\checkmark	Show Hidden files and folders		
	View as a CADDS file system		

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.

View	-
	Icons
	List
✓	Details

Filter

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

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.





È	Open
۲	Visualize Data
	Translate to 3DPDF
	Translate to CATIA V4
	Translate to CATIA V5-6 R2014
	Translate to JT
	Translate to NX10
	Translate to STEP
	Properties

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.

ا ()	ranslator Activity 🔻				
	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
1	Direct	nist_ctc_04_asme1_ct52	JT to 3DPDF	<default></default>	29/02/2016 15:13
1 🗸	Visualise	nist_ctc_01_asme1_ct52	Л	JTVisPMI	29/02/2016 15:25
16	Visualise	nist_ctc_04_asme1_ct52	Л	JTVisPMI	29/02/2016 15:25
√ 7	Export	nist_ctc_04_asme1_ct52 3DPDF <default> 29/02/2016 15:25</default>			29/02/2016 15:25

The results of activities are shown in the ID column:

- \checkmark means success.
- ? means completed with errors.
- X means errors and not completed.

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.



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

🏷 Translator Batch 💌				8	🛠 🏷 Batch ON 🛛 🗙
	X 🖀 🕨	• û S		бор	
ID Model Name	System	Configuration	Date		
Active Batch Translations				F	rom Active Configurations
🌔 90 Front_Wheel_Assembly J	T to 3DPDF	<default></default>	29/02/2016 11:27	JT	<default></default>
				NX	<pre></pre>
					Catia V5-6 R2014 🔹
				V5	<default></default>
				Cree	Creo 3.0
					<default> ▼</default>

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:

- \checkmark 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 Manager 🔻		
Translator: CATIA V5R24 -> 3DB	PDF 🗸 📑 🗙 🖂 🧚 🏦	0
Configuration	Description:	
New Option	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	
1		

Ribbon Too	olbar			
Translator:	CATIA V5R24 -> 3DPDF 🔻	X	*	畲

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

Fra	anslat Logs	D

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.

<pre>tivity: \$: Landing_gear_linkage_asy Translation: Direct Translation Log: Summary Options Copyright Theorem Solutions Limited * Copyright Theorem Solutions Limited * T - 30 EDF CADVerter Version 19.0.001 * T - 30 EDF CADVerter Version 19.0.000 = - 10.00000005 \protect Mon Oct 24 09:42:04 2016 Input JT Flie : C:\Theorem\CAD_19.0_JTPDF_WIN64.01\data\publish_3dpdf\defaultManifest.xml Mode : FUBLISH 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 :</pre>	Translator Log	s 🔻					
<pre>* Copyright Theorem Solutions Limited * * JT - 3D PDF CAUPerter Version 19.0.001 * **********************************</pre>	Activity: 5: Landing	_gear_linka	age_assy 🔹	Translation: Direct Translation Log: Summary			
<pre>Non 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:\Users\bcant\AppData\Roaming\theorem\cache\00000005\prg.xml etting 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 :- Curves 3959 3959 Surfaces 993 993 Planes 314 314 Faces 1307 1307 Edges 3375 3375 Vertices 2139 2139 Bsolids 25 25 Details 90 Dittos 108 6 102 Dimensions 11 11 3D Views 273 9 264</pre>	**************************************	Theorem	Solutions Lim	**************************************			
<pre>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 FDF File : C:\Temp\UI OutputLanding_gear_linkage_assy.pdf Progress File : C:\Users\bcant\AppData\Roaming\theorem\cache\00000005\prg.xml etting run time environment please wait Mode : FUBLISH 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 :- Trype</pre>	*******	********	********	*********			
<pre>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\00000005\prg.xml etting 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 :- True</pre>	Mon Oct 24 (09:42:04	2016				
etting run time environment please wait Mode : FUBLISH 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 :- 	Input JT File C:\Theorem\(3D PDF Fil Progress I	: CAD_19.0_ Le :C: File:C:	JTPDF_WIN64.0 \Temp\UI Outp \Users\bcant\	1\samples\JT\Landing_gear_linkage_assy.jt ut\Landing_gear_linkage_assy.pdf AppData\Roaming\theorem\cache\00000005\prg.xml			
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* 3DPDF file successfully created * * C:\Temp\UI Output\Landing_gear_linkage_assy.pdf *	***********						
* C:\Temp\UI Output\Landing gear_linkage_assy.pdf *	* 3DPDF file	91100899	fully created	*			
	* C:\Temp\UI	Output\	Landing gear	linkage assy.pdf *			
	*******	- C. (Temp () C. Cacpac, Landing_gen_linkage_absy.pdi					

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.





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.



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

Opti	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: 851	• 🍳 📓 🖬 Options •
▼ I as1 (P:\QA Testing\InputFiles\JT\as1.jt)	
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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)

(sele	ect a file to view)
(sele	ect a file to view)
000	03: 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.

Proc	duct Structure Find
Find:	rod
	Vode Names
	Property Names
	Property Values
	All AdvCompressLODLevel
	Match Case
	🗢 Previous 🔷 Next 📕 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:	 Geometry and structure Geometry only Structure only
Structure positioning:	 Assembly space Component space
Output	
CAD system format:	PDF 3DPDF
Configuration:	<default></default>
File name: C:\TEMP\UI Output\ 🏷 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.

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∡ Landing_gear_link	age_a	ssy (C:\Theorem\CAD_19.0_JTPD	F_WIN64.01\samp.
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▶ 👿 axle_support-f	D	Paste	
155343 (id5_1)	X	Delete	
▶ 🔽 356090_PART	E	Attach External File	
		Export from node	
	×	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 coordinate 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



Home View

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



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

	Event
١	/iewer

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 🛛

Start Time: 01 March 2016 09:53:30
Platform: Microsoft Windows NT 6.1.7601 Service Pack 1 Log File: C:\Users\bcant\AppData\Roaming\Theorem Solutions\Unified Interface
\1.0.0.17\application.log
01/03/2016 00.53.31 - Heing Property File: C:\Theorem\CND 19 0 HI MIN64 02\bin
\TheoremProps UI.txt
01/03/2016 09:53:31 - Validated translator: CATIA521_3DPDF
01/03/2016 09:53:31 - Validated translator: CATIA521_Read
01/03/2016 09:53:31 - Validated translator: CATIA524_3DPDF
01/03/2016 09:53:31 - Validated translator: CAIIA524_01
01/03/2016 09:53:32 - Validated translator: CATIA524 Read
01/03/2016 09:53:32 - Validated translator: CATIA5i NX10
01/03/2016 09:53:32 - Validated translator: CATIA51_Read
01/03/2016 09:53:32 - Validated translator: CATIA_JT
01/03/2016 09:53:32 - Validated translator: CATIA NX10
01/03/2016 09:53:32 - Validated translator: CATIA Read
01/03/2016 09:53:32 - Validated translator: CR2_Bead
01/03/2016 09:53:32 - Validated translator: CR3 3DPDF
01/03/2016 09:53:32 - Validated translator: CR3 Read
01/03/2016 09:53:32 - Validated translator: Inventor_JT
01/03/2016 09:53:32 - Validated translator: Inventor_Read
01/03/2016 09:53:32 - Validated translator: JT_3DPDF
01/03/2016 09:53:32 - Validated translator: JT_CATLA524
01/03/2016 09:53:32 - Validated translator: JT_STED
01/03/2016 09:53:32 - Validated translator: NI10 3DPDF
01/03/2016 09:53:32 - Validated translator: NX10 CATIA
01/03/2016 09:53:33 - Validated translator: NX10_CATIA524
01/03/2016 09:53:33 - Validated translator: NX10_Read
01/03/2016 09:53:33 - Validated translator: NX10_STEP
01/03/2016 09:53:33 - Validated translator: STEP JT
01/03/2016 09:53:33 - Valuated translator: STEP Pead
01/03/2016 09:53:33 - Validated translator: Write 3DPDF
01/03/2016 09:53:33 - Validated translator: Write CATIA
01/03/2016 09:53:33 - Validated translator: Write_CATIA524
01/03/2016 09:53:33 - Validated translator: Write_JT
01/03/2016 09:53:33 - Validated translator: Write NX10
01/03/2016 09:53:33 - Validated translator: Write_SIEP 01/03/2016 09:53:34 - Viewer plug-in version: CADViewer VSG Version 1 00 002
01/03/2010 03.33.34 - viewei prug-in version. CADviewei v36 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.

