TRANSLATE JT <> CATIA COMPOSER

USER GUIDE

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Overview of TRANSLATE

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.

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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 website for more detail.

PUBLISH

The creation of documents enriched with 3D content

See our website for more detail.

VISUALIZE

Visualization for Augmented (AR), Mixed (MR) and Virtual (VR) Reality applications

See our website for more detail.

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The JT – Catia Composer Translator

The translator may be installed on a number of machines each accessing a central network-floating license.

Theorem's Visualise 3D product for JT to Catia Composer is a direct converter between Siemens JT parts and Catia Composer .smg format. It enables the user to convert all forms of mechanical design geometry, as well as assembly and attribute information, between these two systems.

The JT-Catia Composer Visualise 3D can be used interactively or in a batch mode, from a standard GUI Interface, offering combined viewing, data filtering and translation capabilities.

Primary Product Features

- Converts all types of geometry, wire frame, surfaces, trimmed surfaces (faces) and solid models
- Converts assembly structure between the systems
- Converts attribute data including colour and layer information
- The conversion process can be run Interactively or in Batch mode

Primary Product benefits?

- Direct conversion between JT and Catia Composer reduces processing time, simplifies integration and retains accuracy of the model
- The integrated viewing capability enables visual verification, pre and post translation
- By converting all forms of geometry no data is lost, eliminating the time required to recreate missing data
- With over 20 years industrial use, Theorem's product robustness and quality is well proven, reducing your business risk

This document will focus specifically on guidance for the use of the Visualise 3D for JT-Catia Composer product. For information regarding any of Theorem's product ranges please contact sales@theorem.com

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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 www.theorem.com/documentation 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 www.theorem.com/documentation

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 www.theorem.com/documentation

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Using the Product

Running the Product

Once configured and licensed, the product is ready to be run.

- Interactively from within Catia Composer
    - The Interactive Interface provides a direct method of Translating JT data into Catia Composer.
        - For a full guide to this process, please see our “Catia Composer Interactive” demonstration video located here.

- Batch via Catia Composer Sync
    - The Catia Composer Sync Interface offers a Desktop Environment that allows the batch processing of multiple JT files into Catia Composer
        - For a full guide to this process, see the Catia Composer Command Line (Sync)” demonstration video located here.
        - This product requires an additional license

- Via the Catia Composer Sync Enterprise Command Line
    - The Command Line Interface provides a direct method of invoking the translator. It can be used via a DOS shell or called via a third party application as part of a wider process requirement.
        - For a full guide to this process, please see the Catia Composer Batch (Enterprise Sync)” demonstration video located here.
        - This product requires an additional license

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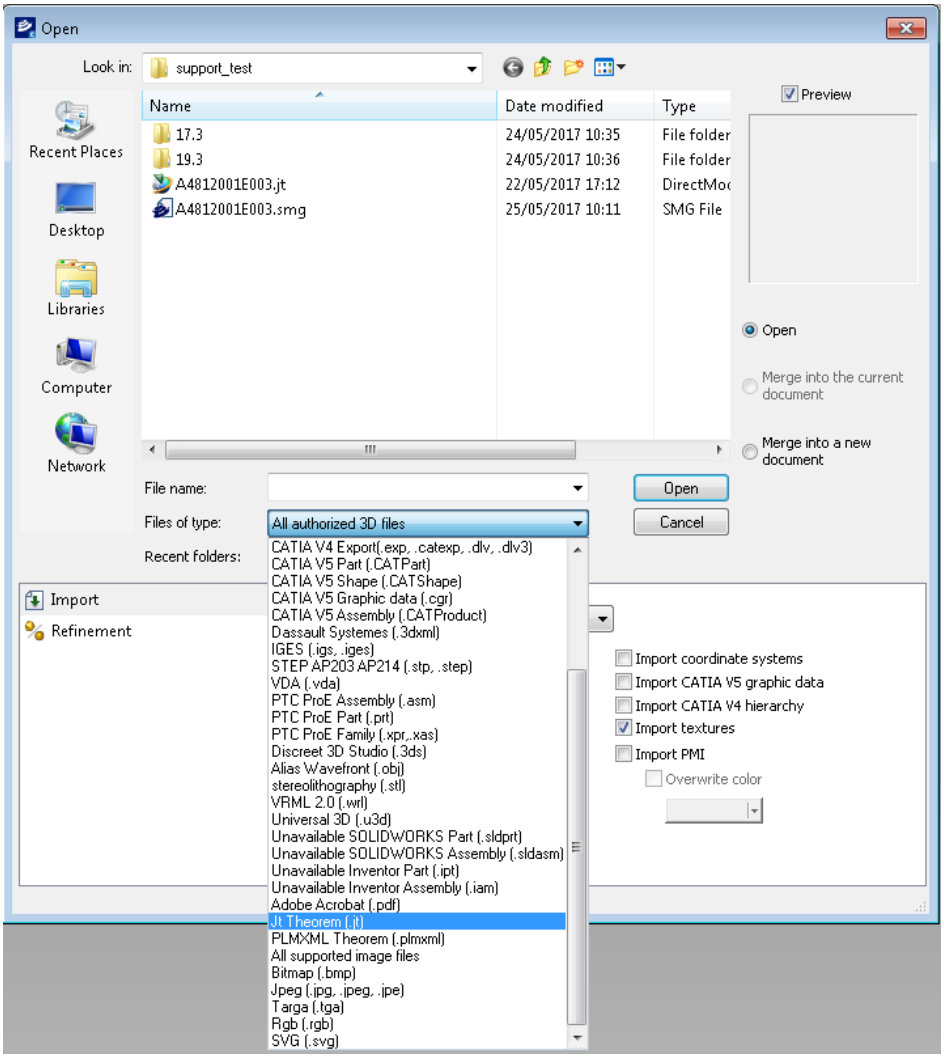
Using the Catia Composer Product

Once the Theorem JT-Catia product has been installed, the options to select the “Jt Theorem (.jt) format and the “PLMXML Theorem (.plmxml)” format will be added to the “Open” “Files of type” list.



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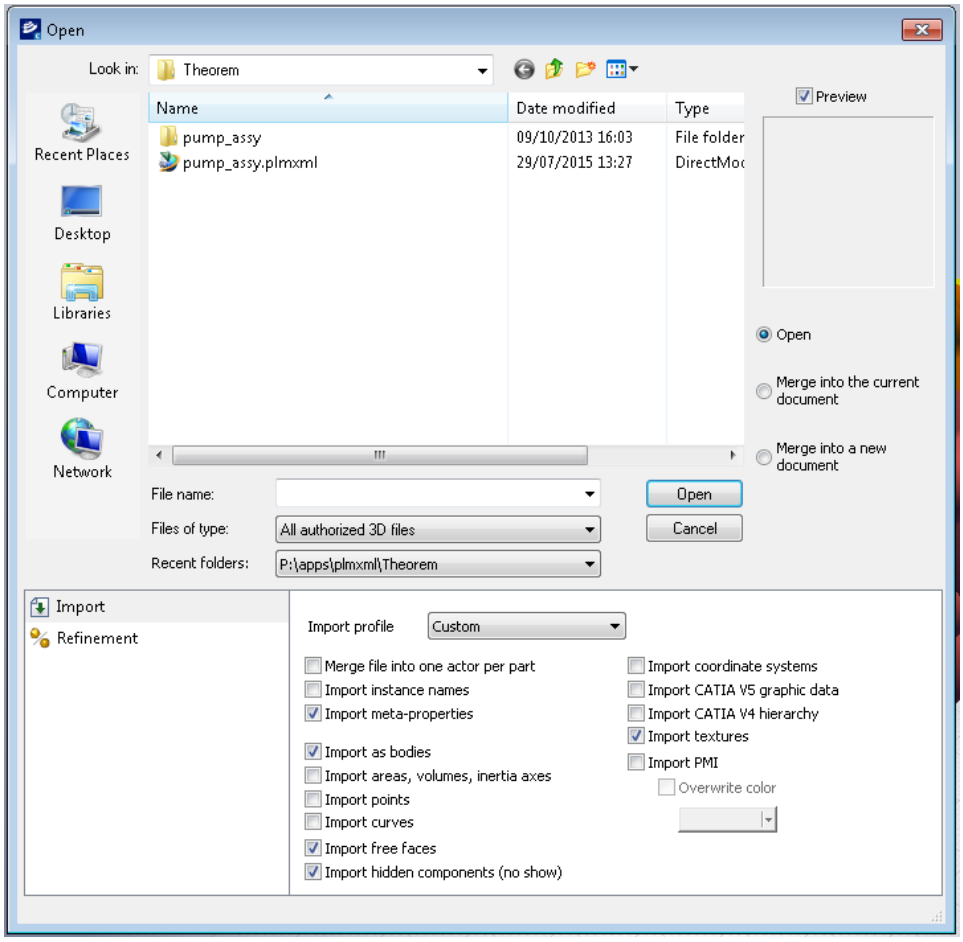
The file can be opened as a new document or can be merged into the current or a new document by selecting either “Open”, “Merge into the current document” or “Merge into a new document”.



The import options at the bottom of the page will allow you to define how the JT data is opened, for instance the import of points, curves or pmi.

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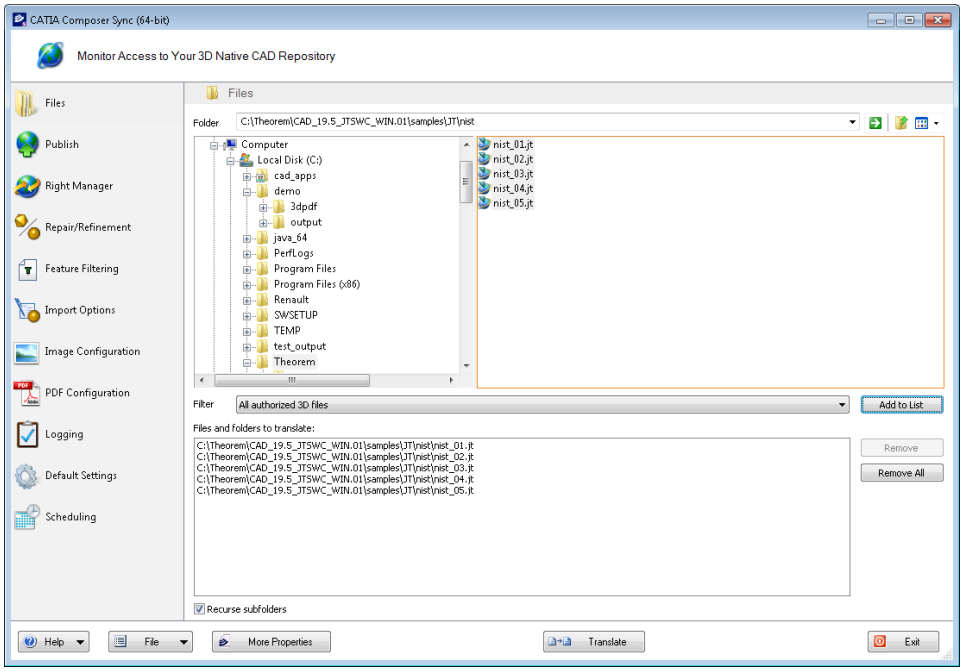
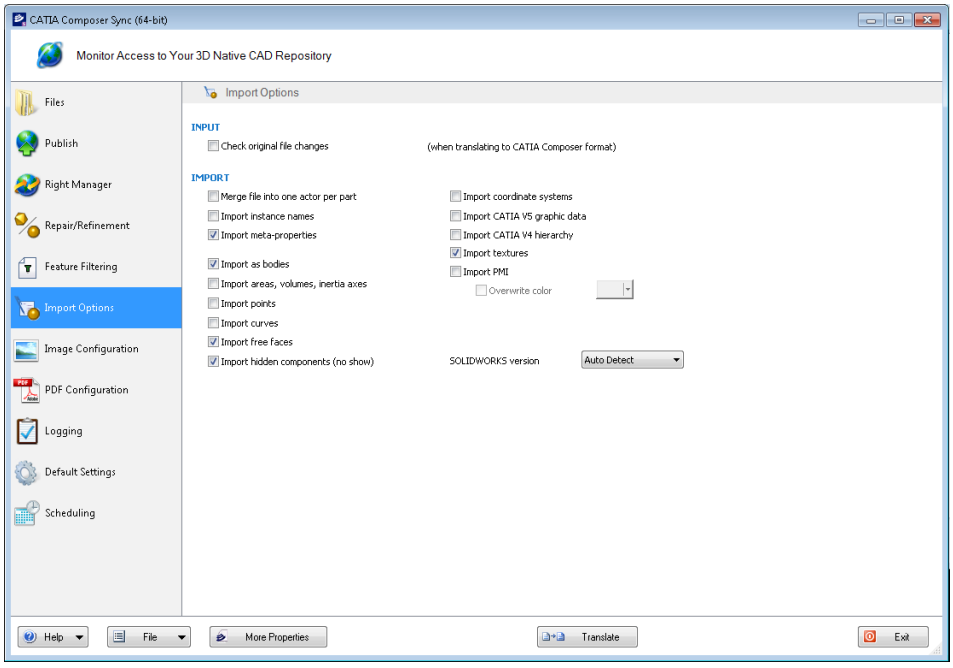
Using the Catia Composer Sync Product

The Catia Composer Sync product allows you to create batch translations of multiple files. The batch files can be translated immediately (Translate) or can be saved as a Catia Composer Sync batch (.seeb) file to be executed later.



The “Import Options” are the same as the Catia Composer product.



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Using the Catia Composer Enterprise Sync Product

This product allows the user to run the translator from the command line, thus enabling the translator to be incorporated into any other script or programme. The command line syntax is:-

%TS_INST%/bin/ComposerConverter.exe filename.jt

By default the output .smg file will have the same name as the jt file and will be created in the same directory.

Large Assembly Processing

Efficient Large Assembly Processing (LAP) is now afforded via the following scripts :

Run the following script to use the LAP process:

(For CATIA Composer or SolidWorks Composer to run)

%TS_INST%\bin\CATIA_Composer_lap.bat <JT or PLMXML assembly>

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