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Document History

Revision	Update Information
1.0	Initial Release.





Product Codes

Product Code	Product Description
MC5JT-B1	CATIA V5 Multi-CAD <> JT Bi-direction CADverter
MC5JT-U1	CATIA V5 Multi-CAD > JT Uni-direction CADverter
MC5JT-A1	CATIA V5 Multi-CAD <> JT PMI Add-on Module for use with MC5JTB1
MC5JT-A2	CATIA V5 Multi-CAD > JT PMI Add-on Module for use with MC5JTU1
JTMC5-U1	JT > CATIA V5 Multi-CAD Uni-direction CADverter
JTMC5-A1	JT > CATIA V5 Multi-CAD PMI Add-on Module for use with JTMC5-U1

Supported Application Revisions

The following application revisions have been qualified with this release

Application	Revision
Siemens JT	JT file format from 6.1 to 10.0, default file format 9.5
CATIA V5	V5-6R2015, V5-6R2016, V5-6R2017

Supporting API's

The following supporting API versions are used

Application	Revision
JT Open	JTK version 9.0.0.0
CATIA V5 Multi- CAD (XCAD)	V5-6R2015, V5-6R2016, V5-6R2017



Supported Operating Systems

The following operating systems have been qualified with this release

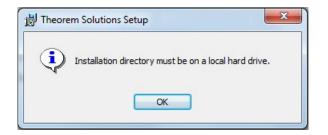
Operating System	Qualification Status
Windows 7 64bit	Qualified and fully supported for all supported CATIA V5 releases
Windows 8.1 64bit	Qualified and fully supported for all supported CATIA V5 releases
Windows 10 64bit	Qualified and fully supported for all supported CATIA V5 releases





Installation Process Considerations

Starting with version 20.0 of Theorem Solutions applications changes have been made to the installation process. These changes have transitioned from a JAVA based installer package to a standard Microsoft Installer (.msi) package. A current limitation of the Microsoft msi method is that the software cannot be installed directly on to either externally mapped or network drives when installed from a client machine:



Therefore, the installation must be performed to a drive that is local to the machine itself.

If you are attempting to install the software onto a network drive, then please refer to the configuration guide available from the following link http://www.theorem.com/documentation/Documentation/Client_Configuration.pdf.

Distribution Media

Product Code

CD images of the latest release are available from the following download site. The installation media for the bi-directional product is also the same media when installing a unidirectional variant.

LIRI for CD image download

Floadel Code	
MC5JT-B1	https://s3-eu-west- 1.amazonaws.com/theorem.software/CADverter_20.2/CAD_20.2_MC5 JT_WIN.01.msi
MC5JT-U1	https://s3-eu-west- 1.amazonaws.com/theorem.software/CADverter_20.2/CAD_20.2_MC5 JT_WIN.01.msi
JTMC5-U1	https://s3-eu-west- 1.amazonaws.com/theorem.software/CADverter_20.2/CAD_20.2_MC5 JT_WIN.01.msi

Note, the necessary software required for any of the specific add-on modules will be automatically installed with any of the base level installations. Therefore, it is not necessary to change the installation even if an additional add-on module license is purchased at a later date to the original installation.





In addition to the translator application itself there is also a mandatory requirement to install the prerequisite Theorem TXX Multi-CAD platform media into the CATIA V5 installation as part of the installation procedure. The TXX Multi-CAD platform media is related to each of the specific releases of CATIA V5 that is being used.

Prerequisite TXX Installation	URL for CD image download
CATIA V5-6R2015	https://s3-eu-west- 1.amazonaws.com/theorem.software/CADverter_TXX_Media/V5- 6R2015.THEOREM.win_b64.zip
CATIA V5-6R2016	https://s3-eu-west- 1.amazonaws.com/theorem.software/CADverter_TXX_Media/V5- 6R2016.THEOREM.win_b64.zip
CATIA V5-6R2017	https://s3-eu-west- 1.amazonaws.com/theorem.software/CADverter_TXX_Media/V5- 6R2017.THEOREM.win_b64.zip

CATIA V5 Media Installation Sequence

The installation of a CATIA V5 Multi-CAD based product must follow a specific installation sequence to ensure that the combination of base products and software updates provided by both Theorem Solutions and Dassault Systems are configured correctly. This includes the base level CATIA V5 installation, the Theorem TXX Multi-CAD platform, the CATIA V5 Service Pack and Hotfix level. Unless the installation sequence is strictly followed there is a potential risk that the CATIA V5 installation will not be configured correctly.

Therefore, the following CATIA application installation sequence MUST be strictly followed to ensure that the correct configuration and updates are available;

- 1. Install the base GA release of the required version of CATIA V5-6
- 2. Install the Theorem TXX platform media associated with the required version of CATIA V5-6
- 3. Install the required CATIA V5-6 Service Pack release
- 4. Install the required CATIA V5-6 Hotfix release

Note, the installation of the Theorem Multi-CAD translator can be undertaken at any point during this sequence.

Related Distribution Media

In addition to the translator software itself there are also two other related media distributions available. One is for the installation and configuration of the Theorem User





Interface. This is designed as a free-standing user interface for the translator allowing the user to navigate the file system and initiate translations either interactively or in batch using standard drag and drop techniques. The second media distribution contains the Theorem License Manager which is installed on the nominated license server(s) and manages the user access to the purchased volume of concurrent Theorem application licenses.

Product Code URL for CD image download

Theorem User Interface	https://s3-eu-west- 1.amazonaws.com/theorem.software/CADverter_20.2/CAD_20.2_UI _WIN.01.msi
Theorem License Manager	https://s3-eu-west- 1.amazonaws.com/theorem.software/LicenseManager/CAD_FLEXLM _11.14_WIN.01.msi





New Features / Enhancements

The following new features or enhancements have been introduced with this release

Multi-CAD CATIA V5 to JT (MC5JT)

Ref ID	New Feature / Enhancement Description
1	Support for CATIA V5-6R2017 has been implemented with this release
2	The CATIA V5 to JT export process now supports the creation of the assembly structure as using a PLMXML format file for the assembly with subordinate JT files for the components. This is selected using the JT configuration file option
3	The Theorem User Interface is supported for both interactive and batch processing of translations external to the CATIA V5 application
4	The Theorem JT Export page is now a separate tab in the Theorem menu within CATIA

JT to Multi-CAD CATIA V5 (JTMC5)

Ref ID	New Feature / Enhancement Description	
1	Support for CATIA V5-6R2017 has been implemented with this release	
2	The JT to CATIA V5 import process now supports the reading of the assembly structures using a PLMXML format file for the assembly with subordinate JT files for the components. This processing is restricted to be invoked in batch mode external to CATIA V5	
3	The Theorem User Interface is supported for both interactive and batch processing of translations external to the CATIA V5 application	
4	When axis systems are created in the V5 data they are created as hidden data by default. The user can control the visible creation state by the Theorem menu within CATIA.	
5	The Theorem JT Import page is now a separate tab in the Theorem menu within CATIA	





Known Limitations and Restrictions

The following limitations and restrictions have been identified during final testing prior to release

Multi-CAD CATIA V5 to JT (MC5JT)

- Ref Limitations and Restrictions
- ID

1	When processing CATIA V5 CATProduct assembly files with subordinate CATIA V4 ".model" files you must have the CATIA V5 cache mode enabled to export any of the V4 geometry. The V4 geometry will be exported as tessellated data only. This is currently a limitation of the Dassault Multi-CAD API's.	
2	The Theorem FLEXIm license manager for this release should be updated to the latest release available. See section on "Related Distribution Media"	
3	Added support for writing JT MONIKER attributes to JT output	

JT to Multi-CAD CATIA V5 (JTMC5)

Ref Limitations and Restrictions

ID

1	When both CAA and Multi-CAD versions of the V5-JT translator are installed in a common folder there is a conflict when trying to import JT files into V5. This is due to an issue with an existing dll that needs to be renamed %TS_INST%\Bxx\win_b64\code\dictionary\TSCjtcatia5Document.dico. Rename this file to be TSCjtcatia5Document.dico_caa_import
2	The Theorem FLEXIm license manager for this release should be updated to the latest release available. See section on "Related Distribution Media"
3	Account for JT part files that have different units when reading a PLMXML assembly.



Resolved Support Calls

The following list of Support Calls are resolved with this release

Support Call ID	Brief Description
CAS-01622-R9V7J0	Positioning of CV5-6 and JT data with constraints
CAS-01667-S2H5J8	Problems with Cache-Management
CAS-01828	Change the defaults for model view geometry blanking, extended PMI and Parasolid entity ids to "ON".Check the "pointstate" attribute for "Capture" views and if set to 0, reset the view extents based on the PMI or geometry (if no PMI).
CAS-02076-S9M8P2	Failure to process overriding colour information
CAS-02525-H8T9Q6	Multi-CAD JT->V5 translation crash
CAS-02532-N8K2V0	No desktop shortcut created
CAS-02670-K0L2T3	jt71_xcad_server issues
CAS-02721-Z6N3T4	Face colours missing in output JT file. Attributes are partially exported to JT file
CAS-02727-G8N1G5	Failure in processing native PLMXML data with subordinate JT data
CAS-02764-B2W7L3	Mass properties via xml configuration
CAS-02778-B8M0M2	Cannot open JT files in CATIA
CAS-02823-H5L9W5	Multi-CAD Cache Mode support for inserting the same JT file into multiple assemblies
CAS-02861-D6W7J2	JT to V5 Multi-CAD difference in output between File Open and Insert Existing Component
CAS-02922	Add full support of PMI polygons (store shape outlines instead of triangle outlines and facet solids for area fill) Add support of PMI glyphs
CAS-02927	Prevention of a large spike in JTBrep output when attempting to extrapolate a closed surface.
CAS-02949-S3M8H9	Missing axis systems when importing JT data to V5





CAS-02992	The creation of PMI user attributes has been changed to support Unicode strings
CAS-03003-V8F9H1	Output Geometry File Type missing from the UI
CAS-03047	Major changes to the method of selective display of model geometry in Views. For assemblies, the visible leaf node part instances are associated to the view. Previously a design group was used to display all the visible faces - additional change to cope with views in that are not at the top level of the assembly.
CAS-03122-C2G4P6	Question regarding TXX module for Catia V5 Multi-CAD Plugin
CAS-03125	Fix crash encountered whilst setting overriding materials after _geom nodes have been added into the JT structure Add support of PMI glyphs
CAS-03140	1.PMI User Attributes: process Unicode characters 0x2264 (<=) and 0x2265 (>=) as two separate characters because TcVis does not display them correctly.
	2. Extended Datum Target : Prevent crash if the string searched for the label and index is zero length.
CAS-03149	Reinstatement of Weld Symbols that were removed when JTTK 7.1 was introduced. The new code uses the new JTTK PMI classes.
CAS-03151	Remove override colour processing from the assembly read phase and add as a post-processing call. This improves efficiency as the override colours are only processed once instead of being processed for each node.
CAS-03167-Q4Z7N9	Failure to collapse JT assembly when import JT file to V5 with Multi-CAD translator running in batch mode
CAS-03204	Check that face 2D parametric edge curves are set to prevent a crash. If they are not set, make 3 attempts at increasing tolerances to regenerate the curves. If this fails, the face is rejected.
CAS-03216	Ensure that Model View names are unique for cases where the "modelviews" option is not being used.
CAS-03276	Fixes for "weld" parts.1. Fix to prevent the "number of shells" for a JT Brep from being used as a GCO id.2. Fix to obtain the weld parameters from the parent node rather than the root node for cases where weld parts are used in assemblies.
CAS-03334-Z4H3J8	No structure output for parts





CAS-03335-F5M2C9 No precise geometry exported for parts

