



Tetra4D Enrich

Version 2017

Release Notes

Details of new features, updated format support and bug fixes for Tetra4D Enrich

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Version 2017

Definition of Release Types

We define each release type as follows:

- **Major release:** A major release associated with an incremented release number (e.g. 2017) and an approximate 12 months product cycle.
- **Minor release:** An update between major releases that may include support for new file formats, new versions of currently supported formats, and bug fixes. These updates are Service Pack (SP), and are defined with an additional incremented number put aside the major release information (e.g. 2017.1 for the first Service pack of release 2017)
- **Out of cycle patch:** An unscheduled update. These contain few functional updates with the intention to limit impact.

Version Information

Item	Version Number
Tetra4D Enrich	2017.0.x

Notice that the third number is used to differentiate builds of the software, and may not be continuous.

Installation

This version can be installed over any prior installation of Tetra4D Enrich. For more installation information, please refer to the [Tetra4D Enrich Installation Guide](#) or visit our [support page](#).

Language Support Overview

Tetra4D Enrich provides support for multiple languages as noted in the table below. However, the language used is controlled by the local Adobe® Acrobat® installation. If there is a Tetra4D Enrich language option that matches the Acrobat installation, then that language is used; if not, Tetra4D Enrich defaults to English.

Tier 1 and Tier 2 are as defined by Adobe Systems.

Tier	Tetra4D Enrich Supported Languages
Tier 1	English, French, German, Japanese
Tier 2	Brazilian Portuguese, Italian, Korean, Spanish

Acrobat Pro Compatibility

The Tetra4D Enrich is a plug-in for Adobe Acrobat Pro. The following table provides information about tested version compatibility. Note that older versions of Tetra4D Enrich may work with newer Acrobat Pro releases, even if compatibility is not explicitly mentioned here.

Tetra4D Enrich	Compatible Acrobat Pro XI/DC Versions
2017	Acrobat DC: 2015.000.00000 - to 2015.006.30244 (Classic track) - to 2015.020.20042 (Continuous track) Acrobat 11.0.0 to 11.0.18

System Requirements

Please refer to the [Tetra4D Enrich Installation Guide](#) to access to the system requirements.

Licensing

Message for Tetra4D Enrich existing customers

Tetra4D Enrich 2017 is a major release, and requires a new license.

Even if you already installed and licensed the version 2016, you will need to change your license and activate the seats when **Tetra4D Enrich 2017** is installed.

Notice that if you are under regular maintenance, you should automatically receive information to retrieve your serial number for **Tetra4D Enrich 2017**, in an email from tetra4d.com.

Please carefully read the [Tetra4D Enrich Installation Guide](#) for explanations on how to activate your licenses.

New Tetra4D Enrich customers

You should automatically receive information to retrieve your serial number for **Tetra4D Enrich 2017**, in an email from tetra4d.com.

Please carefully read the [Tetra4D Enrich Installation Guide](#) for instructions on how to activate your licenses.

Note: Tetra4D Enrich will run in trial mode for 28 days after completing the installation, providing you with the ability to use the product temporarily without a serial number.

You will have full functionality of the software during the trial period. If you experience any problem during the installation and activation process, please contact support by visiting our [support page](#).

Information about the licensing management solution

The licensing management solution for **Tetra4D Enrich 2017** offers flexibility and autonomy to customers to manage their licenses:

- Licensing Tetra4D Enrich can be done directly by customers, without requiring customers to contact Tetra4D support
- Online and offline activations are supported
 - Online activation requires a few actions and is fully performed within the product (no support request, no email communication)
 - In case of offline activation, information to activate the seat has to be communicated through email via submitting a support ticket.
- Activation / deactivation is enabled making it possible to transfer a license from one system to another
 - In cases where a system / license is no longer used and has to be transferred to another one
 - The transfer can be performed directly by the customer

Note:

- The transfer of a license has to be occasional, and is allowed in case of:
 - Computer crash
 - Computer change

The Tetra4D support team is available to answer any questions and to assist whenever needed. To receive assistance from the support team, please contact support by visiting our [support page](#).

Format Support

This release supports reading the following 3D file formats:

Format	Version	Extensions
ACIS (SAT)	Up to v23.0	SAT, SAB
Autodesk Inventor	Up to 2017	IPT, IAM
CATIA V4	Up to 4.2.5	MODEL, SESSION, DLV, EXP
CATIA V5	R4 to V5-6R2016	CATDrawing, CATPart, CATProduct, CATShape, CGR
CATIA V6	2011 to 2013	3DXML
I-deas	Up to 13.x (NX 5), NX I-deas 6	MF1, ARC, UNV, PKG
IGES	5.1, 5.2, 5.3	IGS, IGES
Industry Foundation Classes (IFC)	IFC2x Editions 2, 3 and 4	IFC, IFCZIP
JT	Up to version 10.0	JT
Parasolid (X_T)	Up to v27.0	X_B, X_T, XMT, XMT_TXT
PRC	All Versions	PRC
PTC Creo	Elements/Pro 5.0 Parametric 3.0	ASM, NEU, PRT, XAS, XPR
PTC Pro/Engineer	Up to Wildfire 5	ASM, NEU, PRT, XAS, XPR
Rhino	4, 5	3DM
Siemens PLM Software NX	Unigraphics V11.0 to NX 11	PRT
Solid Edge	V19 - 20, ST – ST9	ASM, PAR, PWD, PSM
SolidWorks	Up to 2017	SLDASM, SLDPRT
STEP	AP 203 E1/E2, AP 214, AP 242	STP, STEP, STP.Z
Stereo Lithography (STL)	All Versions	STL
Universal 3D (U3D)	ECMA-363 (1 st to 3 rd editions)	U3D
VDA-FS	Version 1.0 and 2.0	VDA
VRML	V1.0 and V2.0	WRL, VRML

Updated formats support and Reader/Writer enhancements

This section presents the CAD Readers and Writers with related enhancements for the 2017 Tetra4D Enrich release.

CAD Reader: NX

- **Support for NX 11**

CAD Reader: SolidEdge

- **Support for SolidEdge ST9**

CAD Reader: SolidWorks

- **Support for SolidWorks 2017**

CAD Reader: STEP

The STEP reader has been enhanced in order to support the validation properties (STEP AP 242 standard).

The validation properties are meant to give the ability to validate a CAD data translation process (Conversion of a CAD file from one CAD system into a different CAD system, using STEP as intermediate format).

This new feature makes it possible to:

- Read the valuation properties that are present in an existing STEP file and expose them in the LOG file and in the data tree,
- Optionally, compute validation properties once the STEP file has been converted into 3D PDF, and generate a report that shows the results of the comparison between the read and the computed validation properties.

```
geometric validation property/bounding box corner point_X 110
geometric validation property/bounding box corner point_Y 320
geometric validation property/bounding box corner point_Z 805
geometric validation property/centre point_X -0.413513
geometric validation property/centre point_Y -0.105117
geometric validation property/centre point_Z 450.102
geometric validation property/surface area measure 816038
geometric validation property/volume measure 6.41094e+006
```

Read validation properties

```
-----
PRODUCT:LandingGearMainCylinder
-----
PART_LEVEL

READ          COMPUTED          STATUS
VOLUME(mm3)  6410936.86        6410909.93    OK
AREA(mm2)    816037.87         816039.55     OK
X_CENTROID(mm) -0.41             -0.41         OK
Y_CENTROID(mm) -0.11             -0.11         OK
Z_CENTROID(mm) 450.10           450.10        OK
```

Comparison report

Export 3D Data: STEP

The STEP export feature has been enhanced in order to support the writing of validation properties (STEP AP 242 standard).

The validation properties are meant to give the ability to validate a CAD data translation process (Conversion of a CAD file from one CAD system into a different CAD system, using STEP as intermediate format).

Export 3D Data: 3MF (3D Manufacturing Format)

A new standard format is provided by the version 2017: 3MF

The 3MF format is dedicated to the 3D printing, and support more information than STL:

- Colors,
- Material,
- Textures...

More information can be found on: <http://3mf.io/>

Export 3D Data: JT

- **Support for JT 9.5**

New features and enhancements

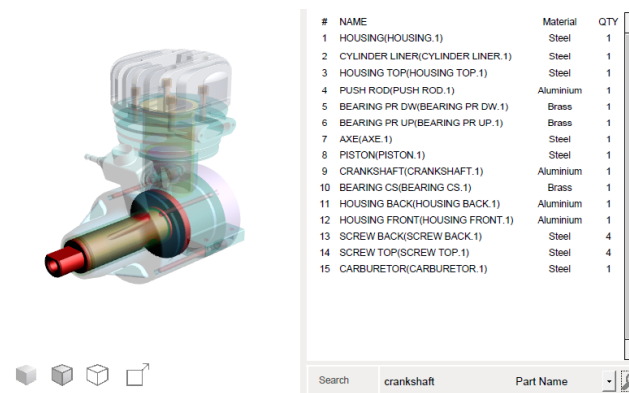
This section presents the new features and enhancements released with this new version of Tetra4D Enrich.

Search widget

The “Search” is a widget that can be inserted in the PDF document to enable search operations based on the 3D information that are present in the document.

The available search criteria can be set by the author of the PDF document in order to control what kind of Search will be accessible to the consumer of the document:

- **Part name:** The search will be performed on the names of the parts.
- **All attributes:** The search will be performed on all the attributes that are linked to the parts from the 3D annotation.
- **Attribute_Name:** The search will be performed on the selected attributes only.



Results when searching for “crankshaft” in the part names



Results when searching for “Aluminium” among all the attributes

Set populate method for text fields

The “Set populate method for text fields” feature allows you to define how to populate some text fields present in the PDF document. The supported methods are:

- **3D File attributes:** Attributes of the file that has been read to insert 3D information
- **CAD model attributes:** Attributes that are present in the 3D annotation
- **XML:** Information defined in an XML file

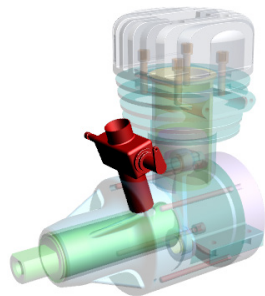
This feature makes it easy for example to define how a title block (having several different text fields) will be populated when the 3D CAD information will be added into the document. It is also suitable for template documents, since the text fields that have been assigned with a populate method will be updated when a Replace 3D is performed later.

Emphasize settings for Table and Search

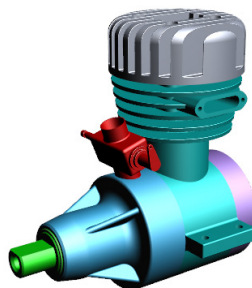
The Emphasize feature allows you to control how the results of the search are emphasized in the 3D annotation, and how the parts corresponding to a row selected in the table are emphasized.

There are three possibilities:

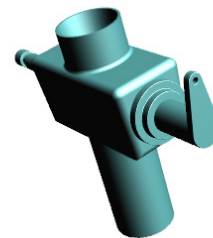
- **Emphasize with color and opacity:** The search results are emphasized by a color change while all the other parts remain displayed with opacity.
- **Emphasize with color:** The search results are emphasized by a color change while all the other parts remain displayed without any change.
- **Emphasize with isolate:** The search results are emphasized by an “isolate” operation (they remain visible and all the other parts are hidden). A “fit-all” operation is automatically performed in order to zoom to the emphasized parts



With color and opacity



with color



With isolate

Remark:

In addition to the emphasize mode, this features provides some additional setting:

- Emphasize Color,
- Level of opacity,
- Optional blinking mode.

Set unselectable parts (using the “Add 3D attributes” feature)

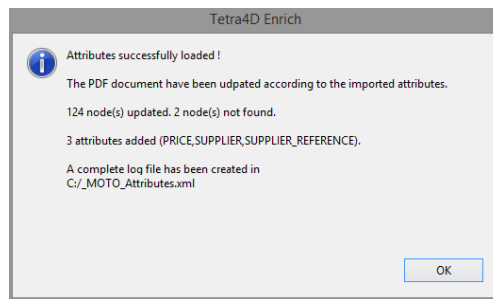
The XML file format used by the “Add 3D attributes” feature has been extended to give the ability to easily define unselectable parts (Some types of documents require to have some of the parts visible in the 3D annotation not being selectable from the 3D annotation).

The definition of this attribute is done through the XML file, by adding the following keys:

```
<NEW_ATTRIB name="IsSelectable" value="False" />
```

Add 3D attributes (from XML file): Management of errors

The Add 3D attributes features generates a Log file which provides the user with detailed information about the imported attributes and the mapping errors if any (the mapping key for the node that haven't been found are listed in order to help the user to manage the issues).



Localization: Chinese version (software)

Tetra4D Enrich 2017 supports Simplified Chinese language.

Help

A new Tetra4D Enrich menu has been added to redirect the user to various resources related to the usage of the product:

- Templates and material to create the templates,
- Getting started videos and guides.

Bug Fixes

The 2017 release of Tetra4D Enrich fixes several customers reported issues. Please contact support by visiting our support page if you have questions about any specific issue.