Export of 3D Tolerancing & Annotation Features

This document informs about the conversion of **3D**EXPERIENCE platform 3D Tolerancing & Annotation features in a representation into a Version 5 CATPart or CATProduct document using the downward compatibility batch.

Important:
All modifications made to **3D**EXPERIENCE platform features will be applied to Version 5 features when the downward compatibility batch is ran again.

This page discusses:

- Conversion as Result
- Conversion as Specifications

Conversion as Result

The table below describes the conversion effect on **3D**EXPERIENCE platform3D Tolerancing & Annotation features that can be translated to Version 5 with the **As result** option selected, using the downward compatibility batch.

3DEXPERIENCE platform Feature Types	Conversion Effect
Basic dimension	Converted although not all modifications can be performed: ◦ Features cannot be edited. ◦ Features cannot be copied or included in a power copy feature. ◦ Features cannot be mirrored. ◦ Features cannot be involved in Version 5 3D Tolerancing & Annotation features. Features can be deleted individually. **Important:** For **3D**EXPERIENCE platform text features set as parallel to screen, this property is not converted. The text features are displayed as created.
Constructed Geometries	
Coordinate dimension	
Datum	
Datum reference frame	
Datum target	
Datum target non semantic	
Dimension non semantic	
Extraction View	
Flag Note	

3DEXPERIENCE platform Feature Types	Conversion Effect
Geometrical tolerance non semantic	
Note Object Attribute	
Roughness	
Semantic dimension	
Semantic geometrical tolerance with datum reference frame	
Semantic geometrical tolerance without datum reference frame	
Text	
View	
Weld	
Restricted area	
Principal and complementary annotations	Converted (in case of light content)
Capture	Converted to CATIA Version 5 with links to bodies, surfaces under bodies, geometrical sets, ordered geometrical sets, or product instances. The visibility of bodies is considered for current 3D shape only. The assembly FTA captures do not manage visibility of bodies of other 3D parts or 3D shape representations of the common product assembly.

Important:

- In a representation context, where all the **3D**EXPERIENCE platform features and the associated geometries are in the same representation, features are converted in an **Annotation Set Result** under the **Partbody**.
  Existing links with the associated geometry are imported.
- In an assembly context, where all **3D**EXPERIENCE platform features and the associated geometry are not in the same representation and linked through an

engineering connection, features are converted in an **Annotation Set Result** under the product containing the engineering connection.
Existing links with the associated geometry are not imported.

This behavior is also applied for combined contexts (representation and assembly) where all features are converted in an **Annotation Set Result** under the product containing the engineering connection of the assembly context.

- **3D**EXPERIENCE platform features converted as result in Version 5 cannot be filtered in 2D Layout for 3D Design views or generated in Drafting views.

You can export the assembly annotations as result ARM annotations or as result Version 5 product. For more information, see Downward Compatibility.

Conversion as Specifications

The table below summarizes **3D**EXPERIENCE platform 3D Tolerancing & Annotation features and whether they can be converted **As specifications** using **Downward Compatibility** batch in Version 5 using the **Convert Part as Specification** option.

Important:

- When at least one feature in the data (that is not necessarily a 3D Tolerancing & Annotation) can only be converted **As result**, then all features in the data will be converted **As result**.
- When an assembly context is converted as specification, the external geometries are stored as isolated external references.
- 3D Tolerancing & Annotation features converted **As specifications** can be read as from Version 5-6 R2013 using the **CAT_FTA_CATBackAsSpec** variable and without this variable for further releases.

3DEXPERIENCE platform Features	Conversion of Version 5 Features using Downward Compatibility
Basic dimension	As specifications
Capture	As specifications
Constructed Geometries	As specifications
Coordinate dimension	As specifications
Datum	As specifications
Datum reference frame	As specifications

3DEXPERIENCE platform Features	Conversion of Version 5 Features using Downward Compatibility
Datum target	As specifications
Datum target non semantic	As specifications
Dimension non semantic	As specifications
Extraction View	As specifications
Flag Note	As specifications
Geometrical tolerance non semantic	As specifications
Note Object Attribute	As specifications
Restricted area	As specifications
Roughness	As specifications
Semantic dimension	As specifications
Semantic geometrical tolerance with datum reference frame	As specifications
Semantic geometrical tolerance without datum reference frame	As specifications
Text	As specifications
View	As specifications
Weld	As specifications
User surface, group of surfaces, and geometric component	As specifications
Attribute link	As specifications
Other dimensions	As specifications
Associative position	As specifications
Associative orientation	As specifications
Construction geometry	As specifications

3DEXPERIENCE platform Features	Conversion of Version 5 Features using Downward Compatibility
Principal and complementary annotations	As specifications
Capture	As specifications
Roughness	As specifications
Flag note	As specifications
Annotation set	As specifications