

TC = Test Case (provided by the OCX consortium)

Importer release notes	Exporter release notes
v0.9.1 - Release date: 22-Sep-2026	
Milestones Achieved - New get_active_object() helper to read the active CATIA object. Fixed and changed - Tree loading for external references is no longer recursive, which speeds it up. - Panel limits are logged correctly.	Milestones Achieved - Work in progress: linking panels and surfaces to external references on export. - New get_active_object() helper to read the active CATIA object. - Choice of whether to export ship particulars and endcuts. Fixed and changed - Null checks and logging when reading complex surfaces, so bad geometry no longer crashes the export. - Tree loading for external references is no longer recursive, which speeds it up. - History log now records the structure system name of each exported file. - Panel limits are logged correctly.
v0.9.1 - Release date: 21-Sep-2026	
Milestones Achieved - Detailed category mapping for imported elements (CategoryMapping). Fixed - Material assignment bug during import. - Minor importer fixes.	
v0.9 Release date: 14-Sep-2026	
Milestones Achieved - Structured error handling for import and export: an error catalogue with severity and text, guards that skip a failing element and continue, and a safety net so a crash ends the run instead of CATIA. A report at the end states whether the run completed, was cancelled or aborted. - UI overhaul: configurable output folder, debug checkboxes per element type, log cleared on every run. - Structure system is selected by double-click; import starts from the chosen structure system.	Milestones Achieved - Structured error handling for import and export: an error catalogue with severity and text, guards that skip a failing element and continue, and a safety net so a crash ends the run instead of CATIA. A report at the end states whether the run completed, was cancelled or aborted. - UI overhaul: configurable output folder, debug checkboxes per element type, log cleared on every run. - Validation log grouped by category, and several validation errors resolved. - FlangeEdgeReinforcement added to bracket parameters.

- Validation log grouped by category, and several validation errors resolved. - Curve extrapolation and contour-bound limits using extrude. - Panel support offset on import. - FlangeEdgeReinforcement added to bracket parameters. - Pipe stiffeners: cross-section area is compared with A to detect half-pipes. Fixed - Collars on panels with an offset are placed correctly. - Missing UI selection in the importer.	- Pipe stiffeners: cross-section area is compared with A to detect half-pipes. Fixed - Various export and validation fixes.
v0.8 - Release date: 8-Sep-2026	
Milestones Achieved - OCX schema 3.2.0 supported. - Redesigned main window with history tracking, a progress bar and logging to file. - Faster XML tree loading. - SRS (reference system) creation on import, plus contour-bound limits. - Physical product creation enabled on import. Fixed - Limit orientations corrected on import. - Stiffeners with wrong orientation caused by support surface normals: the support normal is now flipped toward the panel material, and the placed-section axis inversion is restored on import. - Licence validator looks for the admin account on the local machine. - Limits broken by the merge repaired.	Milestones Achieved - OCX schema 3.2.0 supported. - Redesigned main window with history tracking, a progress bar and logging to file. - Export requires a structure system to be selected. Fixed - Web and flange direction signs on exported inclinations now come from the support normal. - Licence validator looks for the admin account on the local machine. - Limits broken by the merge repaired.
v0.7.1 Release date: 28-Aug-2026	
Milestones Achieved - Basic sketch limits on import; orientation not yet correct. Fixed - Compartment import reworked and fixed. - Reference plane ID lookup improved. - Pillar limits improved. - Double offset on limits removed. - Smaller fixes for schema 3.1.0 import.	Fixed - Reference plane ID lookup improved. - Pillar limits improved. - Double offset on limits removed.
V0.7 - Release date: 25-Aug-2026	

Milestones Achieved - Stiffener limits, endcuts and stiffener offsets work. - Endcuts, slots and collars created on import. - Imported elements coloured by type. - Brackets and categories on import. - Schema 3.1.0 files can be imported. - Structure system creation; work in progress. Fixed and changed - Seam calculation removed; projection vector direction checked. - GUI updated.	Milestones Achieved - The whole SRS (reference system) is written to the file; SRS origin and reference planes are separated, with a check for dangling reference plane IDs. - Ship principal particulars read from design tables. - Panel category set automatically. - UnitsML no longer hardcoded. - More bracket parameters; inverted bracket limits re-enabled. Fixed and changed - ID gathering through the file reworked; offsets removed from limits that have none. - Slot panel lookup corrected. - Duplicate opening sections removed; some INI settings dropped. - Connection config bug fixed; broken panels on the NAOS model fixed. - GUI updated.
V0.6.3 - Release date: 9-Jul-2026	
Milestones Achieved - Schema validator enabled. - Compartments imported, including geometry. Creating Space objects waits on the Space Allocation API.	Milestones Achieved - Schema validator enabled. Changed - Large cleanup: unused topologyParser code removed, about 17,000 lines deleted, everything except geometry tidied.
V0.6.2 - Release date: 25-Jun-2026	
Milestones Achieved - Slot import rebuilt. - Stiffener U and V offset on import. - Trim curve check on import. - Main window reworked. Fixed - Slots not saved when the stiffener has no profile. - Geometry orientation fixes.	Milestones Achieved - Compartments exported, including compartments and structure in the same run, with a first mapping table. - Export options by structure type. - Main window reworked. Fixed - Circumarc centre calculation. - Geometry orientation fixes.
V0.6.1 - Release date: 9-Jun-2026	

Fixed Limit offset partly fixed; left side of curved surfaces and curves.	Fixed - Disconnected seams and disconnected LimitedBy references. - Duplicate 3D planes, and duplicate shells without 3D planes. - Limit offset partly fixed; left side of curved surfaces and curves. - Brackets no longer written as both a panel and a bracket. - GUID parameter renamed.
Milestones Achieved Parametric openings rebuilt to follow the OCX consortium best practice.	Milestones Achieved - Parametric openings rebuilt to follow the OCX consortium best practice. - New surface retrieval function; only non-planar faces are sent to the topological operator, which is faster. - New logic for extracting slot parameters. - Panel support offset written as a custom property.
V0.6 - Release date: 19-May-2026	
Fixed - Surface trimming on import. - Stiffener limits on import; still needs work.	
Milestones Achieved - Importer for OCX schema 3.2.0rc7. - Panels built from contours; sketch-based brackets with bracket parameters. - Slots and endcuts through UDFs, plus manual endcuts. - Openings: contour, elliptical and quote-unquote Mickey Mouse ear openings. - Limits: offset, offset and panel orientation, contour-bound plane limits, trim for surface limits, topological surface limits.	Milestones Achieved - Several schema versions selectable; file precision raised to 5 decimals. - Outer contours for all elements, including faces; ContourBounds for pillars and brackets. - NURBS surfaces read from the 3D representation and from bodies. - Stiffener inclination sampling. - Aluminium material; bracket cope radius. - Button to load the file into the tree. - Exporter and importer in one window.

• Stiffeners: planar and twisted; loft, inclination projected to the trace line. • NURBS: splitting, polyline fallback, CATIA functions replace the tinynurbs library. • Basic geometry: cone, cylinder, sphere, fill surface; closed surfaces for compartments. • Button to load the file into the tree. • Exporter and importer in one window.	
V0.5.8 - beta 2 - Release date: 18-Feb-2026	
Milestones Achieved • ContourBounds added for GridRef, PanelRef and SurfaceRef limits. SurfaceRef bounds are missing when linking to an existing surface.	Milestones Achieved • Exporter updated to OCX schema 3.2.0rc7. • ContourBounds added for GridRef, PanelRef and SurfaceRef limits. SurfaceRef bounds are missing when linking to an existing surface.
V0.5.7 - beta 2 Release date: Jan-2026	
Milestones Achieved • Resolving seam defects by adjusting tolerance specifications • Manual endcut initialization • Sketch-based brackets implementation Next Steps • Automatic endcut initialization using predefined data setup • Collars implementation	Milestones Achieved • Seam types: Implemented support for different seam type configurations using intersection and projection calculations between elements • Stiffener Endcuts: Full export capability now available; schema updates scheduled for upcoming versions • Slots, Collars and Openings: Major enhancements to functionality and reliability Next Steps • NURBS Import: Models containing complex NURBS surfaces to be exported and imported successfully • Stiffener Calculations: Enhanced accuracy for stiffener inclination angles and center of gravity (CoG) computations
V0.5.6 - beta 2 Release date: Dec-2025	

Milestones Achieved - Integration into CAA is largely complete; work on compartments is still ongoing - Improved orientation handling for curve limits - Implemented limiting of NURBS surfaces using boundary curves Next Steps - Further improvements to NURBS surface limiting (this functionality will also be reused for compartments) - Implementation of end cuts	Milestones Achieved - Improved accuracy of plate outer contours - Extended support for covered panels, including NURBS surfaces and non-SRS planes - Enhanced handling of complex NURBS surfaces - Implemented GUID persistence, ensuring identifiers remain consistent across exports Next Steps - Further refinement of seam calculations.
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V0.5.6 - beta 2 Release
date: Oct-2025

Milestones Achieved - Integration into the 3DEXPERIENCE platform has been completed, with further improvements planned for stiffener orientation and handling of more complex opening shapes Next Steps - Development is ongoing for slots with collars and end-cut functionality.	Milestones Achieved - Test Round 2.1 has been successfully completed, and work on Test Round 3 is in progress. Next Steps - NURBS-related functionality is currently under development. - Sketch-based seam capabilities are under development.
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V0.5.5 - beta 2 Release
date: June-2025

- Integration in 3DEXPERIENCE in progress - BETA version testing with client	ALPHA version testing with client
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V0.5.4 - beta 2 Release
date: Dec-2024

- Integration into 3DEXPERIENCE has begun - Successfully creating UI from active program - Successfully loading .3docx files - Stiffener orientation is fixed	- Added more opening types, including sketch based - Restructured and redesigned most of the code - Time improvement by optimizing certain functions - Added GUID functionality
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V0.5.3 - beta 2 Release
date: Sep-2024

• Complex compartments are successfully imported with closed surface and volume and CoG parameters • Knuckle panel improvements • Mapping is improved to have standard values	• Added multiple panel support • Successfully fetching data for openings • TC1-TC7 successfully exported and validated
<i>V0.5.2 - beta 2</i> Release date: Aug-2024	
• Slots are created successfully • TC8 is imported without slots and endcuts • Stiffeners are mapped and can be modified in the UI	• The exporter has been updated to schema version 3.0.0 • Extracting and formatting stiffener data • Fetching material, physical properties and class catalogue data • TC3 successfully exported and validated
<i>V0.5.1 - beta 2</i> Release date: Jul-2024	
• Works with schema version 3.0.0 rc3 • Stiffeners are successfully created on non-smooth surfaces • OCX Importer is successfully running in R2024x FD02 3DExperience Native client	• The exporter has been updated to support version 3.0.0 rc6 • TC1 and TC2 were successfully exported and validated • INI settings have been created to allow users to enter data
<i>V0.2.2 - beta 1</i> Release date: Jan-2024	
Works with schema version 3.0.0 rc3	/

Known issues: • OCX files covers 60% of OCX schema • Not all openings are being created; this is a work in progress	
<i>v0.2.1 - beta 1</i> Release date: Jul-2023	

Known issues: • Some panels are created with a duplicate which cannot be updated and needs to be deleted • Some OCX files may contain unsupported attributes or elements, we need more models to test with • Some OCX files may lead to 3DEXPERIENCE and/or AITAC OCX eXchanger crashing. We need more files to identify the cause. • Not all openings are being created, we're looking into the issue.	/
<i>v0.1.3 - release 4</i> Release date: Apr-2023	
• NURBS - implemented with limitations Structure • Stiffeners mostly done - added possibility to use existing SRS planes as Stiffener support • Stiffener on the free edge • Openings - creating parametric openings (Round, Oblong, Rectangular)	• NURBS - under development Structure • Basic implementation of panels
<i>v0.1.2 - release 3</i> Release date: Mar-2023	
• Sketch • NURBS - no solution available Structure	• Basic Geometry • Line, Arc, Circle, Polyline • Surface from closed 2d curve • NURBS - currently blocking issue Structure
• Panels mostly done - implementing usage of different types as supports and limits • Stiffeners mostly done	• Panel - basic implementation
<i>v0.1.1 - release 2</i> Release date: Nov-2022	

• Basic Geometry • Line, Arc, Circle, Polyline • Surface from closed 2d curve • NURBS Structure • Panel - basic implementation of panels • Stiffener - basic implementation of stiffeners • Bracket - implemented as panels • Opening - implemented as closed contours with 3d axis positioning	/
<i>v0.1.0 - Initial release</i> Release date: Sep-2022	