

Schema version: 3.0.0

## OCX schema v3.0.0

### Governing principles for v3.0.0

- The main purpose of the schema is the exchange between designer/yard and classification society
- No major new functionality is added

### Objectives

- Extensive clean up the schema to make it more precise (optional items are made mandatory and duplicated concepts removed)
- Add a custom property object to provide flexibility

### What is a changelog

All notable changes to the OCX schema are documented [in this file](#) on GitHub. This document lists the notable changes proposed for OCX v3.0.0.

The format is based on [Keep a Changelog](#), and the OCX project adheres to the Python [PEP 440 versioning recommendations](#).

### Types of changes

- Added for new features.
- Changed for changes in existing functionality.
- Deprecated for soon-to-be removed features.
- Removed for now removed features.
- Fixed for any bug fixes.
- Security in case of vulnerabilities.

### How to read this document

Each committed schema change is a labelled section heading in the following format:

**[major.minor.micro{a|b|c|rc}N] – YEAR.MM.DD**

All changes are listed under each heading using the change type category listed above.

Schema version: 3.0.0

## OCX v3.0.0 changelog

### [3.0.0] - 2024.04.22

Bump to 3.0.0

Release tag: [v3.0.0](#)

The schema release version

### [3.0.0rc8] - 2024.04.16

Bump to 3.0.0rc8

Release tag: [v3.0.0rc8](#)

Release candidate for version 3.0.0

#### Changed

- [Add missing EdgeReinforcementRef to LimitedBy #139](#)

### [3.0.0rc7] - 2024.04.09

Bump to 3.0.0rc7

Release tag: [v3.0.0rc7](#)

Release candidate for version 3.0.0

#### Changed

- [Add type to Occurrence and OccurrenceGroup attribute 'type' #137](#)

### [3.0.0rc6] - 2024.04.04

Bump to 3.0.0rc6

Release tag: [v3.0.0rc6](#)

Release candidate for version 3.0.0

#### Changed

- [Add Occurrence attribute id, name and type #133](#)

### [3.0.0rc5] - 2024.03.22

Bump to 3.0.0rc5

Release tag: [v3.0.0rc5](#)

Schema version: 3.0.0

Release candidate for version 3.0.0

#### Changed

- [Positions #130](#)
- [Get rid of OpenCurve/ClosedCurve #129](#)
- [Simplify ocx:NURBS3D's and ocx:NURBSSurface control point representation #128](#)

#### **[3.0.0rc4] - 2024.03.11**

Bump to 3.0.0rc34

Release tag: [v3.0.0rc4](#)

Release candidate #3 for version 3.0.0

#### Changed

- [Downgrade databinding to Python 3.10](#)

#### **[3.0.0rc3] - 2024.03.08**

Bump to 3.0.0rc3

Release tag: [v3.0.0rc3](#)

Release candidate #3 for version 3.0.0

#### Fixed

- [ExtrudedSurface require both SweeCurve AND Sweep #125](#)
- [ConnectedBracketRef\\_T missing its ref. #123](#)
- [Enum encoding error for classification society name #122](#)

#### **[3.0.0rc2] - 2024.03.01**

Bump to 3.0.0rc2

Release tag: [v3.0.0rc2](#)

Release candidate 2 for version 3.0.0

#### Fixed

- [Inclination is unary, but shall be unbounded #115](#)
- [PlateCutBY has no type #116](#)
- [Change FreeEdgeCurve3D to be a choice between a CompositCurve3D or a ClosedCurve #117](#)
- [Fix wrong format on OCX date items and refType on EdgeCurveRef #120](#)

Schema version: 3.0.0

### [3.0.0rc1] - 2024.02.28

Bump to 3.0.0rc1

Release tag: [v3.0.0rc1](#)

Release candidate 1 for version 3.0.0

#### Fixed

- [Add type to Occurrence #98](#)
- [CellBoundary does not hav a refType #100](#)
- [Make SurfaceCollection unbounded #102](#)
- [Wrong cardinality on curves in CompositeCurve3D #103](#)
- [Remove SlotContour from Panel #109](#)

#### Changed

- [Modify Traceline and OuterContour to reflect the change of CompositeCurve3D #105](#)
- [Add SeamRef and HoleRef to Occurrence #107](#)
- [Make catalogue items to have a mandatory name #111](#)
- [Change UserDefinedBarSection to use CustomProperty #113](#)

### [3.0.0b7] - 2024.02.16

Release tag: [v3.0.0b7](#)

Bump to pre-release 3.0.0b7 ### Fixed \* [Typo in XRefPlanes #69](#)

#### Changed

- [Move Area from Surface to Plate #87](#)
- [Change serialization of Vector3 #86](#)
- [Cardinalities of LimitedBy #79](#)
- [Naming duplicate between the OCX schema nad UnitsML schema: the Length type #78](#)

#### Removed

- [#76 OcxItemPtr can be used in replacement for specific reference types](#)
- [Remove InnerContour from Plate #96](#)

#### Added

- [Add a Generic Key Value Concept #12](#)

### [3.0.0b6] - 2024.01.09

Release tag [v3.0.0b6](#)

Schema version: 3.0.0

Bump to pre-release 3.0.0b6

#### Changed

- #72 Cardinality of elements and xs:choice

### **[3.0.0b5] - 2023.12.05**

Bump to pre-release 3.0.0b5

#### Removed

Release tag v3.0.0b5

- #73 Remove license boilerplate

### **[3.0.0b4] 2023.11.10**

Release tag v3.0.0b4

Bump to pre-release 3.0.0b4

#### Fixed

- #70 Typo in Point3D

### **[3.0.0b3] - 2023.10.26**

Bump to 3.0.0b3

#### Fixed

- #60 Minor schema fixes

#### Changed

- #63 Cleanup CoordinateSystem
- #64 Cleanup FeatureCope

### **[3.0.0b2] - 2023.09.22**

Bumped to pre-release 3.0.0b2

#### Removed

- #56 Remove SectionRef from EndCutEnd
- #58 Remove unused substitution groups

### **[3.0.0b0] - 2023.09.20**

Bumped to pre-release 3.0.0b0

Schema version: 3.0.0

### Changed

- #51 LimitedBy BoundingBox: Use the contour start and end points instead
- #49 ReferencePlanes & FrameTable: Revert changes in Issue #36

### Removed

- #35 Remove the duplicate trace line definition on the Stiffener and Seam
- #50 Remove WebContour and FlangeContour from the schema

## [3.0.0a2] - 2023.09.08

### Changed

- #41 Make Length and Area mandatory on geometry entities
- #40 rename edgeReinforcement attribute
- #36 Resolve naming confusion of FrameTables
- #8 Root Point vs Trace Line Definition ### Removed
- #35 Remove the duplicate trace line definition on the Stiffener

## [3.0.0a1] - 2023.08.28

### Fixed

- #42 Fix bug in Hole2D
- #38 Broken link in ShipDesignation ### Changed
- #20 Compact representation of Point3D

## [3.0.0a0] - 2023.07.10

### Removed

- Delete SchemaChange documentation as we have converted to this CHANGELOG.md
- Remove substitutionGroup from entityRefBase and BoundedRef

### Fixed

- #3 Fix bug in CompartmentFace
- #4 Fix bug in CompartmentFace
- #16 and #17 Fix schema typos
- Rename functionType enumerator: DECK: Weateher deck -> DECK: Weather deck. (oca) (#16)
- Rename functionType enumerator: DECK: Tween deck -> DECK: Tween deck. (oca) (#16)
- Rename functionType enumerator: DECK: DECK: Weelhouse deck -> DECK: Wheelhouse deck. (oca) (#16)

Schema version: 3.0.0

- Rename attribute lenghtClass->lengthClass. (oca) (#16)
- Rename attribute of element XRefPlanes: isReveresed -> isReversed (oca) (#16)
- Rename PentetratingObject\_T -> PenetratingObject\_T. (oca) (#16)
- Rename liquidCargoType enumerator: chemichal -> chemical. (oca) (#16)
- Rename liquidCargoType enumerator: hydroclorid acid -> hydrochloride acid lubricationg oil -> lubricating oil. (oca) (#16)
- Rename liquidCargoType enumerator: lubricationg oil -> lubricating oil. (oca) (#16)
- Rename gaseousCargoType enumerator: liquified natural gas->liquefied natural gas. (oca) (#16)
- Rename gaseousCargoType enumerator: liquified petroleum gas -> liquefied petroleum gas. (oca) (#16)
- Rename itemRef enumerator: OccurenceGroup -> OccurrenceGroup. (oca) (#16)

#### Added

- [#2 Add public license to schema](#)
- [#5 Assign a valid schema URL](#)
- Add Hole2DContour to refType
- Include boilerplate Apache 2.0 license information to the Header attribute: license. (oca)

#### Changed

- [#7 Bulb profile definition](#)
- [#20 Add compact representation of points](#)
- Made FlangeWidth optional on BulbFlat element. (oca) (#7)

### [2.8.6\_fix] - 2022-10-06

Post release.

Release tag: [v2.8.6\\_fix](#)

#### Changed

- Added the UnboundedGeometry tag to CompartmentFace. (oca) (#3)