


# Release Notes (10.1.5 draft)

 **New for 10.1.5 (draft preview).** This is a preview of how the parent page will look in FrameworkX 10.1.5 (planned April 2026). The parent page is the current 10.1.4 version. Content under review.

## Update 5 - Version 10.1.5 (Current)

**Release Date:** April 2026

**Type:** Feature Release

**Headline feature:** Industrial Ontology support covering RDF / OWL 2 / SKOS / ISA-88 / ISA-95 / IOF. Every UserType, Tag, and member-def carries first-class semantic metadata. Import ontologies into your UNS, export to GraphDB, generate visual reports, and search semantically with MCP tools.

See the detailed how-tos:

- [Industrial Ontology Integration How-to](#). Overview of standards and the four pillars.
- [Import an OWL/RDF ontology into your UNS](#)
- [Export your UNS to RDF/OWL/GraphDB](#)
- [Generate a visual report of your UNS](#)

### New columns added:

- `UnsUserTypes`: `DisplayText`, `Labels`, `SourceIri`, `BaseUserType`, `Attributes`. UDT-level inheritance via `BaseUserType`. Runtime-mutable retentive `Attributes`.
- `UnsTags`: `Labels`, `SourceIri`, `Attributes`.
- UDT member-def: `SourceIri`.
- Asset Tree folders: unchanged in 10.1.5. Ontology metadata lives on the typed Tag.

### New tools and buttons:

- Designer wizard: **Solution Import Tags Graph / RDF file**.
- Designer toolbar: **Relationship Graph** button on the Asset Tree page (tooltip: *Generate Visual Graph of UNS*), plus **Open Visual Graph** on the UserTypes page.
- Solution Export tab: the **Export UNS** button (renamed from "Export Tags") with a Format selector covering all four W3C RDF formats — **RDF /JSON** (.rj), **JSON-LD** (.jsonld), **Turtle** (.ttl), and **N-Triples** (.nt) — alongside the FrameworkX-native **JSON** multi-file dump.
- MCP tools: `import_graph_model`, `export_graph_model` (accepts `format=rj|jsonld|turtle|ntriples` with case-insensitive aliases), `generate_uns_visual`, `promote_retentive_attributes`.
- Designer-side semantic search: `search_uns`, `get_objects` filter extensions.
- Runtime semantic search: `runtime_search_uns`, `runtime_get_object_context`, `runtime_find_by_iri`, `runtime_list_by_type`, `runtime_get_info` with `objType` discovery.

**Importer / exporter format asymmetry:** The exporter ships all four W3C formats. The importer in 10.1.5 reads RDF/JSON only; JSON-LD, Turtle, and N-Triples readers land in a follow-up release backed by dotNetRDF. Round-trip checks (export then re-import) must use `format="rj"` end-to-end. Publishing to a triple store works with any format.

**Additional 10.1.5 features:** GIS File Tag Importer (GeoJSON / Shapefile / KML/KMZ), AutoCAD File Tag Importer (DXF / DWG), GIS/CAD Display Generator, `UpgradeSolution.exe` command-line upgrader for 10.1.4 solutions, and Email/SMS script libraries (`MailKit`, `MimeKit`, `BouncyCastle.Cryptography`, `Google.Apis.Auth`) bundled by default for OAuth2 SMTP against Gmail and Microsoft 365 — no separate download needed.

### Upgrade process improvements:

- **Automatic backup preservation.** Every upgrade keeps a named backup of the pre-upgrade solution next to the upgraded file. After upgrading `Plant.dbsln`, the folder contains both the upgraded `Plant.dbsln` and `Plant_fs-10.1.dbsln` for rollback. Safe to delete once the upgrade is validated in your lab.
- **Failure safety.** If an upgrade does not complete, the original solution file is left untouched and the backup copy is preserved. The upgrade process never deletes or overwrites the source on failure.
- **Exception visibility.** The *Upgrade Concluded* dialog in the Solution Center now includes a clickable **Open log file** link when warnings are logged during an upgrade. Failure dialogs display the full path to `UpgradeLog.txt`. The `SolutionUpgrade.exe` command-line utility prints the per-run log tail directly to the console.

See [Upgrading Solutions Reference \(10.1.5 draft\)](#) for full details.

### Migration notes:

- New ontology columns are **additive**. Existing solutions upgrade transparently, no data migration required.
- `runtime_search_tags` was renamed to `runtime_search_uns` (no alias). External integrations sniffing the MCP tool catalogue should update.
- `Legacy_ParentTypeURI` and `GraphID` member workarounds (pre-2026-04-18 imports) are still read by the exporter during the 10.1.5 window for back-compat. Out by 10.1.6.
- 10.1.0 through 10.1.4 auto-upgrade to 10.1.4 transparently. Multi-version routing begins at 10.1.4 vs 10.1.5+.
- Solutions that upgraded silently on 10.1.4 and earlier may show a non-zero exception count on 10.1.5. This is a visibility change, not a behavioral one — the same legacy data condition was being silently skipped before. The upgrade still succeeds in the same scenarios it did before.

## Update 4 - Version 10.1.4b

**Release Date:** April 16, 2026

**Type:** Update Release

[Current Version: 10.1 Update 4b](#)

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## Update 3 - Version 10.1.3a

**Release Date:** March 10, 2026

**Type:** Update Release

[Current Version: 10.1 Update 3a](#)

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## Update 2 - Version 10.1.2

**Release Date:** Dec 22, 2025

**Type:** Update Release

[Current Version: 10.1 Update 2](#)

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## Update 1 - Version 10.1

**Release Date:** Oct 30, 2025

**Type:** Update Release

[Current Version: 10.1 Update 1](#)

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## Version 10.1

**Release Date:** Oct 1, 2025

**Type:** Initial Release

Services Packs and hot-fixes are made available in regular basis, this page logs those published updates.

For initial release, use the following channels for requests:

Issues & bugs: [support@tatsoft.com](mailto:support@tatsoft.com)

Feature Requests: [sales@tatsoft.com](mailto:sales@tatsoft.com)

Access for former versions (credentials required): <https://support.tatsoft.com>

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