Update 5e

Update 5e has been superseded by Update 5f (September 9, 2026). Update 5f contains everything listed on this page plus a set of corrections, including alarm history on PostgreSQL, Oracle and MySQL historians, tag and symbol mapping in the Designer, and OpenID Connect sign in on .NET Framework 4.8 solutions. **If Update 5e is installed, replace it with Update 5f.** See Update 5f. This page is kept for reference.

FrameworX 10.1 Update 5e is the **latest release in the 10.1 platform — delivered August 31, 2026**, as a free upgrade for every FrameworX 10.x customer. It follows Update 5d (August 11, 2026) and concentrates on HTML5 client performance, redundancy reliability on large redundant pairs, ontology and knowledge-graph import fidelity, display and symbol accuracy, and a set of security corrections.

Release Notes **Update 5e**

FrameworX 10.1 Update 5e — August 31, 2026

The Update themes:

- **Web client performance** — HTML5 clients start faster and remote clients see lower latency, with the connection sequence running in parallel and server responses reaching the client in a single network round trip.
- **Redundancy and Historian reliability** — the active server's memory stays bounded under heavy alarm-history load, redundancy settings are applied when the runtime auto-starts as a Windows service after a reboot, and replication behavior around a handover is documented and tunable through `/TimeAutoSwitch`.
- **Ontology and knowledge graph** — ontology import reports what it actually created, resolves relationships and member names consistently, and the exported knowledge-graph visuals render correctly and use the product's own terminology.
- **Displays and symbols** — display geometry survives the import/export round trip, custom symbols survive a 10.1.4 to 10.1.5 migration, popup displays keep a fixed custom position, and display parameters used inside a larger expression track live values again.
- **Designer and data** — Import Solution brings Templates and Tags in correctly, Dataset Table inserts respect SQL Server DEFAULT values on unmapped columns, and configuration pages sort alphabetically as soon as they open.
- **Devices and mobile** — Modbus master reads device identification data through function code 43, and the mobile client Settings screen is readable in Light mode.
- **Security** — a logon is refused when the server's user check fails internally, stored credentials can no longer be read or overwritten through the AI tools' grid edit path, and a security guard built on a parameterized display disables as configured.

See Update 5e - Detailed Release Notes for the complete item-by-item list.

Web client and performance

The HTML5 web client starts significantly faster, with the largest gains on internet and high-latency connections. The connection sequence runs its steps in parallel, the browser opens its communication channel while the page loads, and repeated round trips were removed from the startup path. Server responses now reach remote clients in a single network round trip, which improves the responsiveness of displays, trends, and reports over remote connections. Upgrades remain compatible with servers and clients from earlier 10.1.5 updates. Large array and matrix tags populate immediately again when a Display opens, and symbol Rotate animations no longer accumulate memory in the client.

Alarms, Historian and redundancy

On a redundant pair, the active server's runtime process no longer grows without bound under alarm-history load — a new server-side ceiling, `Alarm.HistoryQueryMaxRows` in `TServer.json`, bounds how many alarm-history rows a single query may load. Redundancy settings are now applied when the runtime auto-starts as a Windows service after a computer restart, with a new optional `/redundancywaittimeout:<seconds>` argument for machines whose network stack comes up slowly. Alarm History, Trend Chart, and Drilling Chart no longer fail with a SQL syntax error on branded builds. See **Breaking Changes and Deprecations** below for a change in replication behavior around handovers.

Unified Namespace, ontology and knowledge graph

Ontology import now reports what it actually created rather than what it planned to create, keeps member names consistent for the same property across UserTypes, classifies a class correctly instead of converting it into an Enumeration, and resolves a relationship to an object that is not declared in the file instead of silently storing it as plain text. Exported knowledge-graph visuals render in Firefox, show instance-of relationships in the Markdown diagram, and refer to UserTypes by their product name. Import Solution brings Templates and Tags in correctly.

Displays and Symbols

Display geometry is preserved on the import/export round trip across four separate paths, custom symbols survive a migration from FrameworX 10.1.4 to 10.1.5, and popup displays imported with a fixed custom position keep that position. Display parameters used as part of a larger expression track live values again, in pages and popups alike. Dynamics Get/Apply keeps its theme binding on transferred colors, the Asset Tree control no longer raises an exception when Localize is enabled, and enumeration-driven colors resolve correctly.

AI, MCP and automation

Re-importing a file or solution over existing content updates the existing objects instead of silently skipping them. The LinearGauge label, tick, and scale-bar colors are exposed on the JSON / MCP write path, so gauges authored from automation can match a legacy HMI palette. `TK.PreloadObject` preserves the object name's letter case.

Devices, mobile and platform

The Modbus master reads device identification data using function code 43. On the mobile client, the Settings screen connection fields are readable when the device is in Light mode. Clients that connect while the runtime is still starting no longer come up unlicensed on a correctly licensed machine, AutoStartClient detects a Rich Client that is already running instead of opening another window, and a runtime running as a Windows Service no longer starts the Run Tools as hidden background processes.

Breaking Changes and Deprecations

The handover replication drain barrier has been withdrawn. Alarm and Historian replication behavior around a redundant-pair handover is unchanged from 10.1.5c. The change introduced in Update 5d, which held a handover open until Alarm and Tag Historian replication finished draining, has been withdrawn together with its `SwitchDrainTimeoutSeconds` configuration key. A configuration file that still contains that key is accepted and the key is ignored. Rows recorded on the active node in the moments immediately before a handover may therefore not reach the other node.

On redundant pairs started with `/autoswitch`, use the existing `/TimeAutoSwitch:<seconds>` startup argument (default 60) to give replication time to finish before the restarting Primary reclaims the Active role. Increase it beyond the default for large Solutions, slow networks, or high alarm and data-logging rates.

Lifecycle and Support

Update 5e ships on **August 31, 2026** as a **free upgrade for every FrameworX 10.x customer**, with the platform's standard within-major-version 100% compatibility commitment — every 10.1.x solution opens and runs without migration or rework. See **Breaking Changes and Deprecations** above for a redundancy behavior change that may require a startup-argument adjustment on affected installations.

The full lifecycle policy, version support phases, and end-of-support dates for older FrameworX and FactoryStudio versions are documented on the Product Lifecycle and End of Support page.

Security note

This release contains security-relevant corrections. Upgrading is recommended for all installations.

One item requires action beyond upgrading: if you used the AI or MCP tooling against solutions that hold stored passwords, API keys, or database logon credentials on 10.1.5d or earlier, rotate those credentials.

Customers who need per-item detail — affected versions, severity, and required action — for patch management or supplier-assurance purposes can request it from **support@tatsoft.com**, along with the component manifest (CycloneDX) for the version they are running.

- Update 5e - Detailed Release Notes