Release Notes – Version 26.01.03.x

GoAsset Version 26.01.03.x is a platform update that modernises the underlying technology. Day-to-day behaviour should remain familiar, but the foundations have been updated to improve long-term stability, supportability, and performance. This also provides a stronger base for ongoing development, allowing enhancements to be delivered more efficiently and enabling the use of newer supporting technologies as the product evolves.

Technology platform update – migration from .NET Framework 4.8 to .NET 10

This release upgrades the GoAsset technology platform from .NET Framework 4.8 to .NET 10.

What this means

- More consistent installations
  The .NET Framework can be sensitive to machine configuration. Moving to .NET 10 reduces those dependencies and improves consistency across client environments.

- Better performance on modern Windows
  The .NET 10 platform provides more efficient runtime behaviour and improved responsiveness, particularly on current Windows 10 and Windows 11 systems.

- Improved security and supportability
  The .NET 10 platform is Microsoft's current baseline for ongoing runtime and tooling improvements, providing a stronger foundation for security updates and long-term support.

- A cleaner foundation for future updates
  The upgraded platform makes it easier to maintain the application, diagnose issues, and introduce changes without destabilising existing functionality.

This is a foundational upgrade. Day-to-day behaviour should remain familiar, but the underlying platform has been modernised to support reliable delivery going forward.

Database platform baseline – updated to SQL Server 2016

This release updates the minimum supported database platform from SQL Server 2014 to SQL Server 2016. Most users will not notice a day-to-day change, but it strengthens the foundation the system runs on and helps keep GoAsset reliable as environments and supporting tools evolve.

For councils and teams that depend on reporting and sharing results, this uplift also supports common workflows:

- Power BI reporting – smoother integration for dashboards that summarise network condition, trends, and program outcomes.

- Web and data sharing – a more modern baseline reduces friction when publishing selected datasets to other systems or exchanging data with corporate platforms.

- Cloud and hybrid readiness (Azure) – supports modern deployment options and hybrid setups where the database or reporting stack is hosted.

This change primarily focuses on stability and compatibility, enabling better reporting and integration options without introducing avoidable platform constraints.

Deployment update – migration from Microsoft Installer (MSI) to MSIX

This release changes the GoAsset installer format from Microsoft Installer (MSI) to MSIX. The goal is a smoother, more predictable installation experience—particularly for organisations with managed desktops and multiple users who need to stay on the same build.

What this brings to users

- Cleaner installs and removals
  The installation is more self-contained, which helps reduce "left behind" files and configuration after upgrades or uninstall/reinstall cycles.

- More reliable upgrades
  The packaging model supports more consistent upgrades across machines, reducing install/upgrade issues caused by differences in local configuration.

- Installing from a hosted location (SharePoint / intranet / web)
  MSIX can be distributed via an App Installer (.appinstaller) file hosted on a shared location. Where permitted by your organisation's IT policy, users install from that location, and Windows can be configured to check for updates, keeping teams aligned on the current version with less manual coordination.

- Permissions and IT policy
  MSIX generally reduces machine-wide installer changes and often supports per-user installation, but whether end users can install it directly depends on your organisation's Windows/IT policies. In some environments, first-time installation may still require IT/admin involvement.

- Better fit for IT-managed rollouts
  MSIX is supported by modern enterprise deployment tools (for example, Intune), which can simplify rollout and update management across many devices.

From an end-user perspective, GoAsset should behave as normal after installation. This change primarily aims to simplify and improve the reliability of deployments and updates in real-world council environments.

Versioning and upgrade behaviour – introduction of Revision releases

GoAsset versioning is being extended from Major.Minor.Build to Major.Minor.Build.Revision.

Version number meaning

- Major = the release year

- Minor = the release month

- Build = the existing internal build identifier used within the release stream

- Revision = the consecutive NTRO GoAsset release number (incremented with each release)

Upgrade behaviour
Previously, each deployment synchronised the application version with the backend database version, and Major.Minor upgrades were managed through the established upgrade script set (shared across Builds within that Major.Minor line). That process remains in place.

From this release onward, the additional Revision component will be used to support application-only updates:

- When Major.Minor.Build changes, GoAsset will continue to apply the relevant upgrade scripts as required.

- When Major.Minor.Build stays the same and only Revision changes, the release will be treated as an application-only update and will not require a database upgrade.

This approach allows smaller bug-fix releases to be delivered more frequently with minimal operational overhead, typically without requiring database administrator (DBA) involvement.

Dashboard upgrade

GoAsset is progressively moving away from legacy Object Linking and Embedding Database (OLE DB) access and standardising on Microsoft.Data.SqlClient (SqlClient) for SQL Server connectivity. SqlClient is Microsoft's recommended driver for SQL Server across modern environments, including cloud and hybrid deployments (for example, Azure-hosted database services).

This release continues the Dashboard modernisation work. The current installation includes a preview of the rewritten Dashboards, which were previously the heaviest users of OLE DB connections. The rewritten Dashboards now run entirely on SqlClient, which should result in smoother loading and refresh behaviour, particularly in larger databases and high-usage environments.

Data model changes to support multiple modelling methods

GoAsset's underlying data structures are being realigned to support multiple modelling methods. The legacy modelling approach is based on Highway Development and Management (HDM) equations, and we are now preparing the application to introduce Austroads deterioration models.

To support this, existing structures have been extended to hold additional Austroads-related parameters, and new supporting structures have been introduced where required. These changes are foundational and are intended to enable the upcoming Austroads functionality without disrupting current operation.

Further details will be provided once the full Austroads modelling capability is available in the product.

Optimisation engine upgrade

GoAsset previously used legacy EBM (Expenditure Budgeting Model)-style optimisation libraries. This approach aligns with the network programming method used alongside HDM-III (selecting an optimal set of treatments under budget limits). As network sizes and scenario complexity increased, the legacy engine became increasingly constrained for large networks.

To improve scalability and provide a stronger optimisation foundation, the legacy engine has been retired and replaced with Google OR-Tools—an open-source operations research (OR) toolkit for solving large constraint and integer/linear programming problems. This upgrade is intended to support larger networks more reliably and to enable more flexible optimisation rules over time.