Protege GX Version 4.3.322

Release Notes

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Contents

Introduction

This document provides information on the new features, enhancements and resolved issues released with:

- Protege GX software version 4.3.322
- Protege GX SOAP Service version 1.6.0.7
- Protege GX Web Client version 1.47.0.56
- ICT Data Sync Service version 2.0.10.19
- Protege GX Single Record Download Service version 1.0.0.4

A full release history for previous versions is also included.

Important Note on Software / Firmware Compatibility

The release of Protege GX version 4 introduced cross controller operations, which enables controllers to operate as a unified system and share hardware resources. This makes all physically connected items on a controller accessible and usable by various functions and records within Protege GX. Version 4 also introduced many new features that were unavailable in previous versions.

In order to use these features, you must also be using a Protege GX DIN Rail Controller or Protege GX PCB Integrated System Controller (PRT-GX-PCB) running firmware version 2.08.583 or above.

If you are running an earlier version of the firmware, or if you are using an older PCB Controller (PRT-CTRL-GX), these features are not available. If you are running firmware version 2.08.583 or later with an earlier version of the software, it will result in unexpected operation.

	Firmware 2.08.499 and below	Firmware 2.08.583 and above
Below software version 4.0.128	❌ Cross controller operations and new features not available	❌ **Software/Firmware versions incompatible. Controller will not accept programming downloads**
Software version 4.0.128 and above	❌ Controller download will not be allowed if any cross controller links are made in programming. All new features will be ignored.	✅ Feature available

For more information about cross controller operations and how its functionality affects the operation of Protege GX, refer to AN-180: Cross Controller Operations. We strongly advise that you read this document thoroughly before proceeding with the upgrade.

Supported Operating Systems

Operating System	Edition	Architecture
Microsoft Windows Server 2019	Standard, Datacenter	64-bit
Microsoft Windows Server 2016	Standard, Datacenter	64-bit
Microsoft Windows Server 2012	Standard, Datacenter	64-bit
Microsoft Windows 11	Pro, Business, Enterprise	64-bit
Microsoft Windows 10	Professional, Enterprise	32 / 64-bit
Microsoft Windows 8.1	Professional, Enterprise, Ultimate	64-bit

SQL Server Compatible Versions

The Protege GX application uses a non-proprietary open SQL database engine to store and share information. The software is compatible with SQL 2008, 2012, 2014, 2016, 2017 and 2019 in Standard, Express, and Enterprise editions.

The Express edition is a scaled down, free edition of SQL Server that includes the core database engine and functionality. The Express version of SQL supports up to 10 GB.

For your convenience, the setup files for SQL Server 2014 (SP2) and 2016 (SP2) are included as part of the full distribution package.

Note: SQL Server 2014 (SP2) for 32-bit installation or SQL 2016 (SP2) for 64-bit installation.

Firmware Versions

The Protege system is a high-performance integrated system. To ensure your installations are running at the optimal performance we recommend that all installed modules are using the latest firmware releases.

For a complete list of current firmware versions, please refer to the ICT website (www.ict.co/Firmware).

Firmware updates are available online from the ICT website or through your distribution channel. If you are having difficulty downloading any firmware or finding the appropriate version, please contact the ICT Technical Support team.

Upgrading Protege GX to the Latest Build

To upgrade to the latest version, you may be required to uninstall the previous version first. The installer will inform you if this is the case.

1. Prior to performing an upgrade, you should always back up your database:
   - Open the Protege GX application and log in using an operator account with administrative permissions, or at minimum the ability to perform system functions.
   - Select **Global | Global Settings** from the main menu.
   - Under the **Main Database Backup** options, select **Backup Now**.

   Wait for the backup to be completed before proceeding.

2. Run the installation for the server:
   - Run the supplied setup file (setup.exe) and follow the onscreen instructions.
   - When the installer is launched, it looks for the previous version of Protege GX installed on the local workstation and upgrades it to the latest build.
   - Progress is displayed as the database is upgraded and the application installed.

3. Run the installer again on each client machine to update the client interface.

Detailed installation instructions can be found in the Protege GX Installation Manual.

Upgrading the Protege GX SOAP Service

To upgrade the SOAP service, simply run the new installation file provided by ICT and follow the onscreen prompts.

Upgrading the Protege GX Web Client

To upgrade the web client, simply run the new installation file provided by ICT and follow the onscreen prompts.

Upgrading the ICT Data Sync Service

To upgrade the data sync service to a new version, simply uninstall the existing service and install the new version.

1. In the Windows settings, navigate to the **Apps & features** section.
2. Locate the ICT Data Sync Service in the list of apps.
3. Click on the app and click **Uninstall**.
4. When the service has been uninstalled successfully, run the new installer provided by ICT.

Upgrading the Single Record Download Service

To upgrade the single record download service to a new version, simply uninstall the existing service and install the new version.

1. In the Windows settings, navigate to the **Apps & features** section.
2. Locate the Protege GX Single Record Download Service in the list of apps.
3. Click on the app and click **Uninstall**.
4. When the service has been uninstalled successfully, run the new installer provided by ICT.

Protege GX Software Version 4.3.322

Feature Enhancements (4.3.322)

The following enhancements have been made to existing features in this release.

OS Support

- Protege GX is now supported on the Windows 11 operating system (Pro, Business and Enterprise editions).

Limiting Cards/Credentials per User

- Added the ability to restrict the number of cards which can be assigned to each user to one. To apply this limitation to the whole site, enable the **Display only one card slot** option in **Global | Sites | Display**.
- Added the ability to limit the number of instances of a credential type which can be assigned to each user. When programming a credential type in **Sites | Credential types | General**, you can set the **Credential limit per user** to a number from 1-10, or leave it as unlimited.

  It is not possible to enable card or credential limits if there are any users with more than the desired limit currently assigned. Delete any excess credentials from users before enabling these settings.

Issues Resolved (4.3.322)

The following issues were resolved with this release.

- Resolved an issue where some text in the second language was displayed with excess quotation marks.
- Resolved an issue where the data sync service sometimes created duplicate user records when two instances of the service were running at the same time.

  This fix requires ICT Data Sync Service version 2.0.10.18 or higher.

- Resolved an issue in the Chinese language build where column headers were missing from event and muster reports.
- Resolved an issue where adding and immediately deleting a user record while a full download was in progress could cause the single record download service to fail and not recover.

  This fix requires single record download service version 1.0.0.4 or higher.

- Resolved an issue where the single record download service could not successfully install a self-signed certificate on the controller in environments with operating systems prior to Windows 10.

  This fix requires single record download service version 1.0.0.4 or higher.

- Resolved an issue where the download service failed to start.
- Reinstated the **Download retry delay** setting in **Sites | Controllers | Configuration**.
- Resolved an issue where the download service was continually crashing when attempting to download a large user database including Suprema biometric credentials.
- Resolved an issue where the SOAP service was not respecting the nStart and nNumberOfRows parameters when getting user reports.

  This fix requires SOAP service version 1.6.0.7 or higher.

- Resolved an issue where some UI translations in second language versions were incorrectly reverted to English.
- Resolved an issue where updating the **Password** fields in **Sites | Controllers** would result in multiple unnecessary save prompts.

- Resolved an issue where attempting to delete a credential type from a new, unsaved user record would result in the first credential type on the list being deleted, regardless of which one was selected.

Protege GX SOAP Service (1.6.0.7)

Feature Enhancements

- Added support for the KeySecure integration.

Issues Resolved

- Resolved an issue where the SOAP service was not respecting the nStart and nNumberOfRows parameters when getting user reports.

  This fix requires Protege GX version 4.3.321.3 or higher.

Protege GX Web Client (1.47.0.56)

Feature Enhancements

- The web client now prevents editing of fields while the record list is loading. This prevents operators from entering data until all records have been loaded.
- The web client now shows a 'Saving' popup while it is saving a record.
- Added the ability to view and enter inactivity periods for credential types. If the user does not use the credential to access a door during this period, it will be disabled.

  Inactivity periods can be applied to credentials in individual user records, or as a default setting for each credential type.

  This feature requires Protege GX version 4.3.319 or higher.

- Added the ability to view elevator floor status in the web client.

  This feature requires Protege GX version 4.3.321 or higher.

Issues Resolved

- Resolved an issue where attempting to load events for a specific user would result in endless loading.
- Resolved an issue where event reports could not be created in the web client.
- Resolved an issue where saving a report record in the web client would remove operators assigned to that report.
- Resolved an issue where user PINs were displayed in plain text even when the operator had **Show PIN numbers for users** disabled.
- Resolved an issue where the default Administrator role could be edited in the web client.
- Resolved an issue where recurring calendar actions configured in the web client would recur on Mondays, even when they were programmed to recur on a different day.

ICT Data Sync Service (2.0.10.19)

Issues Resolved

- Removed log4net dependency.
- Resolved an issue where the event log file was not being created, causing the service to continually restart without syncing any data.
- Added a warning to advise the operator that user PINs are updated on every sync when the **Require dual credential for keypad access** option is enabled.
- Resolved an issue where duplicate user records were being created when a custom field was used as the unique ID.
- Resolved an issue where duplicate user records were being created when two instances of the data sync service were running at the same time. Improved error handling in the data sync service.

  This fix requires Protege GX version 4.3.320.1 or higher.

- Resolved an issue where multiple instances of the same access level assigned to a user with overlapping schedules were not imported correctly.

Protege GX Single Record Download Service (1.0.0.4)

Issues Resolved

- Resolved an issue where adding and immediately deleting a user record while a full download was in progress could cause the single record download service to fail and not recover.
- Resolved an issue where the service could not successfully install a self-signed certificate on the controller in environments with operating systems prior to Windows 10.

This fix requires Protege GX version 4.3.320.9 or higher.

Previous Software Release History

This section includes information on the changes and enhancements made in earlier versions.

Protege GX Software Version 4.3.319

Feature Enhancements (4.3.319)

The following enhancements have been made to existing features in this release.

Programming Efficiency

- When a site has only one controller, the **Controller** field in the toolbar is automatically set to this controller. This improves efficiency when programming records such as programmable functions, services and expander modules.

Failed Login Attempt Events

- Protege GX can now generate events whenever there is a failed login attempt on the thick client. This enables you to audit and report on failed attempts to access the software. To enable this feature, check the **Save failed operator login events to event database** option in **Global | Global settings**.

   The new events are:
   - `Operator login failed attempt: Unknown operator`
   - `Operator login failed attempt: Incorrect password: <OPERATOR NAME>`
   - `Operator login failed attempt: No role access: <OPERATOR NAME>`

Credential Types

- Added the ability to set an inactivity period for each credential type assigned to a user. If the credential is not used within this period, it will be disabled.

   Inactivity periods can be set individually for each credential assigned in **Users | Users | General**, or you can set a default inactivity period for the credential type in **Sites | Credential Types**.

For more information, see Application Note 276: Credential Types in Protege GX.

Login Page

- The **Server** field on the Protege GX login page now includes a dropdown menu, allowing you to select previously used server addresses. The **Clear** button allows you to delete the currently selected address from the dropdown.

Photo ID

- It is now possible to display a user's credential types on a Photo ID card template. For example, this allows you to include custom card numbers, license plates and User IDs on user cards.

For more information, see Application Note 149: Creating a Photo ID Template in Protege GX.

Language Support

- Added Danish as a supported language.
- Added Chinese (Simplified) as a supported language.
- Updated Russian translations.

Issues Resolved (4.3.319)

The following issues were resolved with this release.

- Resolved an issue where the **Service Port** field was not visible in the second language.
- Resolved an issue where the 3 badge latch door 8 hours and User Key Watcher ID columns could be duplicated in user reports, and would be impossible to delete.
- Resolved an issue where Protege GX would stop receiving live events from controllers, requiring a restart of the event service.

- Resolved an issue where holiday date formats would be changed unexpectedly, preventing the software from correctly converting the date format.
- Fixed an issue where some user cards which were about to expire would not be included in the Cards about to Expire user report.
- Resolved an issue where emailed reports were not being sent when a custom TLS certificate was in use.
- Resolved an issue where a controller's username and password could be displayed in event reports.
- Resolved an issue where recurring calendar actions would end before the set date.
- Resolved an issue where floors could not be filtered by record group when being added to an elevator car record.
- Resolved an issue where for some Windows regions the time was incorrectly displayed in 12hr format instead of 24hr format.
- Resolved an issue where operators with roles that could not access the <not set> record group were not able to set User IDs, making it impossible to add new users.

- Resolved an issue where enabling the **Autopopulate User ID Credential Value** option could cause controllers to drop offline.
- Resolved an issue where emailed reports were not translated correctly.
- Resolved an issue where deleted record groups were not removed from some types of records, which caused lists to load slowly for operators who only had access to specific record groups.
- Renamed the **Last Month** field in the report email tab to **Previous Calendar Month** to more accurately describe the effect of the setting.
- Resolved an issue where a SOAP GetRecord call would return an empty PIN record for users when the site had **Require Dual Credential for Keypad Access** and **Allow PIN Duplication** enabled.
- Removed the **Email** and **File Export** tabs from the user search page.
- Resolved an issue where user reports for All Users By Access Level would not be automatically emailed.
- Improved the performance of status page loading on large sites.
- Resolved an issue where changing a schedule on a disarming area group would also change the schedule on the arming area group, and vice versa.
- Resolved an issue where increasing the size of the user image column on a status page would not resize the photo ID images.

- Resolved an issue where muster reports which included the record group column would not be automatically exported or emailed if at least one user did not have a record group set.
- Resolved an issue where the **Solid**, **Gradient** and **Null** tabs did not appear above the color picker in the card template editor and other locations. This could prevent operators from selecting the background, border and/or foreground colors for objects.
- Resolved an issue where adding more than one custom field column to an event report caused file exports and emails to fail.
- Fixed a regression where alarms were sent to all workstations instead of following the programmed alarm routing rules.
- Amended and updated textual display in the user interface, including fixes to spelling, grammar and capitalization.

- Resolved an issue where legacy credentials were stored in plain text in a config file.
- Resolved an issue where the server could become unlicensed when the computer restarted.
- Resolved an issue where event reports could not be created in the web client.
- Resolved an issue where the required Visual C++ 2017 Redistributable prerequisite was not installed.

- Resolved an issue where clicking the **Load default report layout** button for a user report could cause the client to crash.
- Resolved an issue where operators with the Guard or End user role presets could not view elevator floors on status pages and floor plans.
- Resolved an issue where attendance reports would not run using the Summary report layout.
- Resolved an issue where the All users not in events report could return users who were included in events.
- Resolved an issue where the **Unlock latched** and **Extended lock time** options were not displayed correctly in the calendar action programming.
- Resolved an issue where some programming tabs did not appear in second language builds.
- Resolved an issue where navigating away while a report was loading could cause a memory leak, resulting in the client crashing.
- Resolved an issue where the All users not in events report did not return correct data when exported.
- Resolved an issue where some password entry fields were not masked.
- Resolved an issue where custom field data was not loaded correctly in event, user, muster or attendance reports.
- Resolved an issue where the search functionality in the online help was not functioning.
- Resolved an issue where the **Load events** button on the **Events** tab was returning an error.

Protege GX Software Version 4.3.308

Note: The installer for this version will automatically install ODBC Driver 17 for SQL Server on your workstation before beginning the Protege GX installation. This is required for the User PIN Encryption feature described below. No action is required from you.

New Features (4.3.308)

The following new features are included with this release.

User PIN Encryption

By default, the Protege GX database stores user PINs in plaintext, allowing operators with the appropriate permissions to view and edit PIN codes. However, on some high security sites it is vital that only one person has access to a user's PIN code: the user themselves. The **Encrypt User PINs** option in **Global | Global Settings** allows you to permanently encrypt PINs for all users, with the following effects:

- User PINs are encrypted in the SQL database using the SQL Always Encrypted feature.
- Protege GX operators can no longer view PINs defined by users.
- Protege GX operators can no longer manually enter PINs for users.
- Randomly generated PINs expire immediately, requiring users to define a new PIN the first time they log on to a keypad.

Warning: User PIN encryption is **permanent** and can only be reversed by restoring a database backup taken before encryption was implemented.

For more information, see Application Note 306: Configuring User PIN Encryption in Protege GX.

Single Record Download Support

Normally when you save a record in the Protege GX software, the Protege GX Download Service performs a full download to each controller that requires the change. In contrast, the Protege GX Single Record Download Service uses a differential download process, only downloading the specific records and fields that have changed in the database.

This service runs in parallel to the existing download service, providing an independent path for single-record changes that need to be downloaded to the controller in a timely fashion. Record changes downloaded by this service are typically received by a controller in under 30 seconds. This reduces download times considerably, especially on large sites with many controllers.

The single record download service receives updates for changes to user, access level and schedule records and immediately downloads these changes to the associated controllers. All other changes are handled by the standard download service as normal.

The Protege GX Single Record Download Service must be installed separately. For more information, see Application Note 309: Single Record Downloads in Protege GX.

Feature Enhancements (4.3.308)

The following enhancements have been made to existing features in this release.

Autopopulate User IDs

- When site security enhancements are in use, you can now enable the **Autopopulate User ID Credential Value** option in **Global | Sites | Site Defaults**. When you first enable this feature, all existing user records that do not currently have a User ID are assigned a unique number based on their Database ID. From then on, all new user records will be automatically assigned a unique, randomly generated 8-digit User ID. It is still possible to override the pre-generated ID with a custom value.
- Even when the **Autopopulate User ID Credential Value** feature is not in use, you can type the word SYSTEM into the User ID credential to automatically generate a unique 8-digit value when you save the user record.

For more information, see Application Note 275: Configuring Site Security Enhancements in Protege GX.

User Reports

- After running a user report, you are able to filter and/or group the results using the column headers, or by adding a text filter on any column. Now this layout can be saved for an individual operator by clicking the **Save Report Layout** toolbar button, and will be displayed automatically whenever the operator opens that report.
- In addition, a layout can be saved as a default for all operators using the **Save Default Report Layout** toolbar button. Operators can load this default layout using the **Load Default Report Layout** toolbar button.
- Any filter criteria used by the saved default report layout can now be viewed on the user report setup page. This field shows the current filter criteria and provides a button to navigate directly to the loaded report view so that you can edit the filters as necessary.

Alarms

- Added the ability to set whether comments are required, optional or not permitted when acknowledging alarms. This can be set in the **Events | Alarms** programming for each alarm.
- The available options are:
  - **Must**: Comments must be entered when acknowledging alarms
  - **Optional**: Operators may leave a comment when acknowledging alarms
  - **Never**: There is no prompt to leave a comment when acknowledging alarms

User PIN Security Enhancements

- Added the ability to restrict operators from generating new user PINs in the security level programming.

Language Support

- Added Turkish language support.

Low Level Elevator Integration

- Added the ability to configure the credentials required for elevator access. The options are: card, card or PIN, card and PIN, and PIN only.

Delete User Photos

- Added the ability to delete user photos.

KONE Destination 880 Integration

- The following access level options are now available in the software when the KONE integration is in use:
  - Enable Normal Call
  - Enable Handicap Call
  - Enable Priority Call

- Enable Empty Car Call
- Enable Space Allocation Call

Issues Resolved (4.3.308)

The following issues have been resolved with this release.

- Fixed an issue where the User ID credential type was available as a door type credential, even when site security enhancements were not implemented.
- Resolved an issue where the event filter programming displayed additional options in breakout windows that were not available in the main window.
- Resolved an issue where the 'All Users not in Events' user report type was not returning correct details.
- Fixed an issue with the date/time sorting in events and reports.
- Resolved an issue where the text of some buttons could be cut off in second languages.
- Resolved an issue where random numbers appeared before the 'Do you want to log out' message in Canadian French.
- Fixed an issue where central station reports were not populating inputs and areas.
- Resolved an issue where the 'Confirm New Password' text was truncated in Canadian French.
- Resolved an issue where, when a copy of an existing controller was created, programmable functions were not copied to the new controller.
- Resolved an issue where exported or emailed muster reports were being sorted incorrectly.
- Resolved an issue where exported or emailed muster reports were being formatted incorrectly.
- Resolved an issue where exported or emailed muster reports which included custom fields did not include users without those custom fields configured.
- Resolved an issue where automatically exported attendance reports were missing information.
- Resolved an issue where manually unlocking elevator floors from a status page or floor plan did not function, and generated a 'System Assertion 51' event.
- Resolved an issue where times could not be set to PM for some Windows regions.
- Fixed an issue where only 100 events were being displayed on a status page event window.
- Fixed an issue where seconds were not shown for event times in event reports or on the status page.
- Fixed an issue where event reports would not display more than one custom user field.
- Resolved an issue where connecting a microphone and speaker to a SIP workstation could cause Protege GX to crash.
- Fixed an issue in the Princeton Identity integration where users beyond the first were not enrolled correctly in the Princeton system.
- Resolved an issue with the graphical schedule display not being filled correctly with some Windows languages.
- Resolved an issue where multi-selecting and deleting credential types from a user record caused the user interface to crash.
- Resolved an issue where no scroll bar was displayed when selecting a record group in the user find tool.
- Resolved an issue where the saved report filter details were not displaying correctly and would generate an error in the **Reports | Setup | Events** page.
- Resolved an issue where editing a visitor record prevented the visitor card from being made available when the visitor signed out.
- Fixed an issue in the Suprema Biometric integration with user credentials not being added correctly.
- Resolved an issue where extended/predefined custom user fields were not being populated in exported user reports.
- Resolved an issue where attendance reports did not display events from the correct period.
- Resolved an issue where the device status could not be retrieved via the SOAP service.
- Resolved an issue where copying a controller caused additional phone number records to be generated.
- Resolved an issue where default column widths were not set correctly in event reports.
- Resolved an issue where the field time and logged time for alarm popups were out by several hours (the logged time was incorrect).

- Resolved an issue where the **Schedule** dropdown in **Users | Users | Access Levels** was displayed as transparent.
- Resolved an issue where columns were missing from manually exported event reports.
- Resolved an issue where some popup windows were cut off at the bottom.
- Resolved an issue where the report filter editor was difficult to read in the dark theme.
- Resolved an issue where some column text was cut off in automatically exported attendance reports.
- Resolved an issue where fields on the **Events | Actions** page were not being enabled/disabled correctly based on the **Type** of action.
- Resolved an issue where the alarm counter in the status bar did not display any number of alarms above 10.
- Resolved an issue where it was not possible to generate a central station report for reporting services with a space at the end of the name.
- Resolved an issue where security level restrictions were not followed on status pages.
- Resolved an issue where pressing any key when the Type field in **Monitoring | Setup | Status Page Editor** was open would crash the client.
- Resolved an issue where the **Read Card** function did not function correctly with 26 bit DESFire cards.
- Resolved an issue where emailed event reports would not be sent to operators when Windows Authentication was in use.
- Resolved an issue where the controller export feature was not working correctly and displayed an error.
- Resolved an issue where records exported to CSV did not have the data aligned correctly with the column headers.
- Resolved an issue where copying an access level record did not also copy the records assigned to it (e.g. doors, area groups, etc.)
- Resolved an issue where the date pickers in **Programming | Apartments | Users | Access Levels** did not follow the material design theme.
- Resolved an issue where the 'Save to Database' action was able to be edited for new sites beyond the first.
- Resolved an issue where a floor plan would not update record statuses correctly when it was opened from a link on another floor plan.
- Resolved an issue where right clicking on a camera icon in an event report did not function correctly.
- Resolved an issue where the **User Last Active** field would not be updated when the user used a credential type to gain access.
- Resolved an issue which occurred when an operator was acknowledging an alarm and a second alarm popped up. The first alarm window incorrectly lost focus on the alarm which was being acknowledged.
- Resolved an issue where the schedule graphical display was not operating correctly in Protege GX when French Canadian was set as the Windows language.
- Resolved an issue where some objects on a floor plan would sometimes be displayed as gray icons, even though they were online.
- Resolved an issue where the 'Save Changes' dialogue would appear on the **Users | Users | Access Levels** tab even when there were no changes to save.
- Resolved an issue where, when editing a schedule in a breakout window on a system with a 24 hour time setting, afternoon times would be incorrectly changed to morning times.
- Resolved an issue where some areas would not appear on a floor plan, even though they should have been visible to operators.
- Resolved an issue where the **Service Port** field was missing from the DVR programming when using the second language.
- Resolved an issue where saving an event report with a blank email time could cause the client to crash.
- Resolved an issue where user PINs sent from the software could not be used by controllers with firmware version 2.08.788 or earlier.

Protege GX Software Version 4.3.285

New Features (4.3.285)

The following new features have been included in this release.

Fast User Disable

This software version, alongside the accompanying controller firmware (2.08.1002), completely overhauls the method Protege GX uses to disable user records. In the past, when an operator disabled a user the change would go out to controllers as a regular download - which on large sites could take a considerable amount of time. With this version, the server instead sends a 'User Disabled' command to the relevant controllers, prompting them to immediately update the user record in their internal databases.

This makes disabling a user record nearly instant, preventing unauthorized parties from continuing to gain access after their record has been disabled at the server.

Princeton Identity Biometrics Integration

A new biometric integration is available with Princeton Identity. Princeton Identity Iris scanners can now be used with Protege GX as Biometric Readers, providing quick identity verification at a door.

For detailed instructions on configuring and using this biometric integration, see Application Note 297: Princeton Biometric Integration with Protege GX.

Saving Report Layouts

After running an Event Report, you are able to filter and/or group the results using the column headers, or by adding a text filter on any column. Now this layout can be saved for an individual operator by clicking the **Save Report Layout** toolbar button, and will be displayed automatically whenever the operator opens that report.

In addition, a layout can be saved as a default for all operators using the **Save Default Report Layout** toolbar button. Operators can load this default layout using the **Load Default Report Layout** toolbar button.

Any filter criteria used by the saved default report layout can now be viewed on the Event Report Setup page, General tab. This field shows the current filter criteria and provides a button to navigate directly to the loaded report view so that you can edit the filters as necessary.

Custom Field Select in Report Setup

With this version we have added the ability to select specific additional fields to be included in any report produced. When you are setting up a report you can now select the columns (fields) that the report will retrieve and display data for, and customize the order in which these fields are displayed.

The following extensions are available:

- User and Attendance Reports can now include any User field in the system, including any Custom Fields programmed.
- Event Reports can be configured to include almost any other record field in Protege GX, including all user and custom fields.

Compliance Types

Protege GX Compliance Types allow you to control access to doors based on compliance requirements, extending the existing functionality of Credential Types. Any custom requirement - from regulatory certifications to site safety training - can be used as a credential alongside standard cards and PINs to improve compliance on site.

Possible applications for Compliance Types include:

- Health and Safety Training that users are required to complete periodically.
- Completion of company or job site induction.
- A certain class of driver's license or vehicle certification.
- Industry Training certificates or qualifications.

Compliance Types can be configured with Start and Expiry Dates, warning periods, user feedback and hard or soft failure, making this a flexible feature that can meet a range of site specific requirements.

Compliance Types can also be used in conjunction with one another with AND/OR logic to provide complex access decisions at the door. For example, to gain access to a certain door, a user may need to possess Training A AND Training B OR Certification C.

For detailed instructions on configuring and using Compliance Types, see Application Note 286: Programming Compliance Types in Protege GX.

Multiple Download Servers

As the Protege GX system grows in size, the time taken for data to be downloaded to controllers increases. In situations where expedited updates are required, such as adding new user records via a Visitor Management System, delays can be troublesome. This version introduces the ability to implement additional Protege GX Download Servers to share the load. With a second server performing downloads to controllers, the same data is transferred twice as fast as when using a single download server.

Controllers can be separated between multiple download servers in any combination, meaning that a few higher priority controllers can be served by a dedicated server, while other controllers are served by another server with standard downloading times.

For detailed instruction on configuring and using additional download servers, see Application Note 290: Setting up a Secondary Protege GX Download Server.

Feature Enhancements (4.3.285)

The following enhancements have been made to existing features in this release.

Report Enhancements

- Implemented a new **Operator Permissions Report**, which lists the following details for each operator record: Name, Role, Creation Date and Last Modified Date.
- Added a Last Month option for emailed or exported Event Reports. This will retrieve all events for the month before that in which the report was run. For example, running a report on February 12th will retrieve all events for the month of January.
- Implemented the following new User Reports:
  - **All Users by Access Level**: This report lists all users sorted by the Access Level(s) currently valid within the dates specified for the report. The primary sort filter is Access Level, and the secondary sort filter is User, so users will be grouped by Access Level. This provides an easy way of seeing which users have particular Access Levels, and when these Access Levels are set to expire.
  - **Access Levels by User**: This report inverts the previous, sorting all currently valid Access Levels by the users they are assigned to. The primary sort filter is User, and the secondary soft filter is Access Level.
- Emailing and exporting Event Reports now respects the **Number of Events** setting in the report setup. Where large numbers of events must be emailed, the reports are broken down into 'blocks' of 10,000 events and emailed as separate files so as not to exceed attachment size limitations in email systems.
- Improved the performance of report generation when retrieving more than 10,000 events.
- Improved field name references when adding additional fields to reports.
- The **Open After Export** option available when exporting reports from the Print dialogue now functions correctly.

Alarm Popup Window

- A new option has been added for dismissing the Alarm popup window: Until next alarm or popup frequency. When the popup window is dismissed in this way, it will not be displayed again until there is a new alarm, or else until the Popup Frequency for that operator has passed.
- The **Popup Frequency** is set in the Role for the operator (**Global | Roles | Display**) and ranges in time from 15 seconds to 10 minutes.

Status List Filters

- Additional Door and Area status filters are now available for selection in Status Lists. Previously you could only filter by locked/unlocked status (for doors) or armed/disarmed status (for areas). You can now filter Status Lists using the following door/area statuses:
    - **Door Status Filters**: Locked Only, Unlocked Only, Forced Open Only, Left Open Only, Closed and Unlocked Only.
    - **Area Status Filters**: Armed Only, Disarmed Only, In Alarm Only, Alarms in Memory Only, Exit Delay Only, Entry Delay Only.

SOAP Service

- Added the ability to create, program and use Function Codes via the SOAP Service.

Performance Improvements

- Improvements have been made to the speed at which pages load in the User Interface for operators who have Security Level/Record Group restrictions. Previously the Record Group checking and filtering slowed down the process of retrieving information about the records the operator should have access to, and therefore which records should be displayed.

Vingcard Visionline Integration

- Enabled Encode card functionality for Vingcard Visionline integrations.

Aperio Integration

- Updated the Aperio Integration to record when the Inside Push Button has been pressed to toggle in and out of Privacy Mode.
- Updated the Aperio Integration so that when the inside handle is turned, a relevant Request to Exit event is generated.

Issues Resolved (4.3.285)

The following issues have been resolved with this release.

- **Alarms**
    - Fixed an issue where the Alarm popup window became stuck on top of the Alarm Acknowledge window if new alarms arrived while an operator was in the process of acknowledging existing alarms.
    - Fixed an issue where Alarm Routing and Workstations setup were not working as intended.
    - Fixed an issue where Alarm Routing to Workstations was failing.
    - Fixed an issue where the 'Acknowledged by' and 'Time to acknowledge' fields were not being populated when an alarm was acknowledged.
    - Fixed an issue where multi-selecting alarms to be acknowledged was not clearly highlighting/displaying the selected items.
- **Credential Types**
    - Fixed an issue were Credential Types could not be created.
    - Fixed an issue where enabling 'Unique Value' for a Credential Type was not setting the correct flag in the Database so this setting was not taking effect.
- **Cybersecurity**:
    - Data Service interface requests have been updated to improve operator access controls.
    - No longer denies access to Site ID 0 for site bound tables.
- **Download Service**:
    - Fixed an issue where the **Maximum Packet Size** for download to the controller was set to unlimited instead of 242128 bytes. This would cause the download to fail and unexpected behavior on the controller.
    - Fixed an issue where fetching large volumes of data caused the error 'Failed to load Site Data' to be presented by the Download Server.
    - Fixed an issue where Phone Numbers were not being downloaded to controllers.

- **DVR Integrations**
  - Fixed an issue where Camera PTZ presets were not working for custom DVR integrations.
  - Fixed an issue where Camera Custom Actions were not working for custom DVR integrations.
  - Fixed an issue where a 'Cannot connect to DVR' message window was hidden behind the camera popup window so that it could not be dismissed.
  - Fixed an issue with the DVR2 service not relaying DVR events to the Protege GX Event Service correctly.
  - Fixed an issue where the camera list retrieved from an NVR/DVR was being truncated at 300 cameras.
- **Floor Plans**
  - Fixed a regression where Floor Plans were not displaying additional Event Report tabs.
  - Fixed an issue with displaying elevator floor statuses on a Floor Plan.
- **Language Support**
  - Fixed an issue where the User Interface was not displaying translated text correctly in a number of places when logged in using the second language.
- **Operators**
  - Fixed an issue where a non Administrator operator was receiving an error on login.
  - Fixed an issue where an operator with the End User role preset was being incorrectly informed that the license would expire in two weeks.
- **Outputs**
  - Fixed an issue where the maximum Activation Time for outputs was not correct.
  - Fixed an issue where activating Outputs from the System Navigator extension was not working.
- **Reports**
  - Fixed an issue where event reports were being restricted to 10,000 records after applying filtering.
  - Fixed an issue where a generating a Muster Report with certain options set would cause the User Interface to hang or crash when the Muster Report was run or viewed on a Status Page.
  - Fixed an issue where the User Interface crashed when selecting page tabs in the Event Report setup.
  - Fixed an issue where the Date in exported reports was always showing in US format.
  - Fixed an issue with the 'All Users who have Access to the Selected Doors' User Report not returning correct data.
  - Fixed an issue with Muster Reports where selecting the report type 'Detail' would cause the User Interface to crash.
  - Fixed an issue where the User Extended Fields were available in the Report setup even when they were not enabled in the Site settings.
  - Fixed an issue where the default columns were not being added to newly created Event Reports.
  - Fixed an issue where emailed reports with no operator settings were failing to send.
  - Fixed an issue with the 'All Users about to Expire' User Report never loading any data.
  - Fixed an issue where emailed or exported reports were not following the expanded or collapsed layout in the same way that reports sent from the Print Report dialogue were.
  - Fixed an issue with reports where setting the maximum events to Unlimited did not actually allow unlimited records to be retrieved. This was occurring for exported, emailed and manually run reports.
  - Fixed an issue where running an All Users Report for a large number of records would give a 'System out of Memory Exception' error.
  - Fixed an issue where Attendance Reports were completing but not returning all data.
  - Fixed an issue where executing a Muster Report was causing the User Interface to crash.
  - Resolved an issue that prevented running reports after the first time they are run in the user interface.
  - Fixed an issue where Event Reports were failing to be exported or emailed if they included User Custom Fields.
  - Fixed an issue where the Central Station Report would not export input and area report maps and would only show user details.

- **SOAP**
  - Fixed an issue where SOAP was failing to update Apartment records.
  - Fixed an issue where event injection via SOAP was always returning a False acknowledgement.
  - Fixed an issue where unlimited client connections were breaking the SOAP interface.
  - Fixed an issue where acknowledging alarms via SOAP would cause the Data Service to crash.
- **Status Pages**
  - Fixed a number of minor display issues in Status Page event windows:
    - Removed additional columns for Cencon when the integration is not enabled.
    - Fixed an issue where the event window did not display the most recent event at the top of the list.
    - Fixed an issue where the default column widths became reduced making events unreadable.
  - Fixed an issue where a Status Page would not load correctly and would present the error message 'Can't find column ID 2'.
  - Fixed an issue where, when adding a filter to a column on a Status Page, the field would lose focus when the mouse button was released, preventing text entry.
  - Fixed an issue where an exception was being reported when loading Status Pages.
- **Suprema Biometrics Integration**
  - Fixed an issue where the Default Facility Code set for the Suprema Biometrics integration would not be downloaded or take effect if changed from the system created value of 100.
  - Fixed an issue with the data sent from a Suprema Biometric reader being incorrect where a User has a Database ID higher than 65535. The integration now supports Database ID numbers greater than 65535.
- **User Interface**
  - Fixed User Interface presentation issues relating to window sizing, list scrolling and pages not updated to the new Material Design UI.
  - Eliminated a number of unnecessary textual items presented in the User Interface, such as system strings, image filenames, time and date strings and some unnecessary numbers.
  - Tidied up minor grammatical and spelling errors and capitalization inconsistencies.
  - Fixed an issue where changing between records on a list (e.g. inputs) would not update the record that was currently selected.
  - Fixed an issue where changing tabs on the Services programming page did not update the page correctly and displayed incorrect data.
  - Fixed a regression that removed all but one Bar Code format options from the Card Template Editor.
  - Fixed a regression that prevented custom event colors from being applied to events.
  - Fixed an issue where the Save to Database Action was able to be edited for any new Sites added into Protege GX.
  - Fixed incorrect module lists in the Add Expander wizards.
  - Fixed an issue where using the **Find** tool in the Sites menu was crashing the User Interface.
  - Fixed an issue where if an operator was denied access to a page, the color scheme was not being correctly followed.
  - Fixed and issue where text on buttons was being truncated in second languages.
  - Fixed an issue where door records would display missing values / blank fields.
  - Fixed an issue where User Reports were being sorted incorrectly by the textual value of the date/time instead of the actual date/time.
- **Users**
  - Fixed an issue where webcam capture of a user image was causing a memory leak and crashing the User Interface.
  - Fixed an issue where the User Interface would crash when a large number of user downloads was pending (>25000), such as following a bulk import via Data Sync or Batch Add Users.
  - Fixed an issue where, with Site Enhanced Security settings enabled, the UserID Credential Type could be changed and/or deleted from a user.

- Fixed an issue where enabling Site Enhanced Security for the second time would not add the User ID Credential type to any user records that did not already have it applied.
- Fixed an issue with right clicking on raw credential data to add to a user record, where the data was being assigned to an incorrect Credential Type.
- Fixed an issue where user photos were taking a long time to load on cloud hosted systems.
- Fixed an issue where photos could not be added to user records.
- **Visitor Management System**
  - Fixed an issue with the Visitor Management module where a new Visitor User would not be assigned the Record Group as set in the VMS Workstation settings.
  - Fixed an issue with the Visitor Management module where, when adding a new Visitor User and not supplying values for Custom fields, the fields on the user record would incorrectly populate with data retrieved from the first user in the database.

ICT Data Sync Service (2.0.10.7)

New Features

- The Data Sync Service now 'soft fails' when a linked record cannot be found in the database. For example, if the user import CSV references an Access Level that does not exist, Data Sync will now import the user without the Access Level assigned instead of failing to import the user altogether.
- Import processing speeds have been improved. The time taken to sync records for both the add and update processes has been reduced immensely.
- Implemented local caching of imported data to reduce the time it takes to re-sync a record.
- Implemented a new option called **Validate Against Last Sync** which, when enabled, checks the row that is currently being synced against the rows that were imported on the previous sync to see if any changes have been made.
- Implemented a new option called **Log Errors Only** which, when enabled, logs only events at an error level in the log file and/or the Windows Event Viewer.
- Added a new option to **Move Files on Error** when the **Delete Import Files When Complete** option is enabled. Previously, files that generated an error during the sync remained in the import directory and were re-synced when the service restarted. With this option enabled, files that generate errors are moved into a separate file directory so that they are not re-synced until an operator fixes the issue with the files.
- Added a **Delete Sync History** button to allow data to be re-imported when using the **Validate Against Last Sync** option (this deletes the linecheck.dat file which keeps a list of lines from the previous import).

Feature Enhancements

- The **Delete Records Not Present in Import File** option now uses the history of the previous sync and the current sync to determine which records to delete. In the previous build this option was not working for record types where the ParentID is the ControllerID and this issue has now been resolved.
- Cache data is now being written to file at the end of each sync and is read back to memory on the first sync. This prevents the need to fill the cache again if the service is stopped and restarted.
- Added handling to rebuild the lastsync.dat file if it contains rubbish data.

Bug Fixes

- Fixed an issue where if multiple Unique Fields had been configured, only the **Name** field was being used to check if the record already existed.
- Fixed an issue where if there were GroupData elements with the same UniqueIdentifer values in the CSV, the elements were removed from the AddRecord request.
- Fixed an issue where Data Sync was not checking for further import files if the previous file directory was empty when importing multiple record types.
- Fixed an issue where user Access Levels were not being removed when the data was removed from the import file.

- Fixed an issue with the **Group Data Before Import** option where, if the data in the import file contained different data for the same field (for the same record) then records were failing to add or update.
- Fixed an issue where if the DeleteRecord field was mapped, it would not be loaded to the UI and then was subsequently removed from the mapping when clicking Save.
- Fixed an issue related to syncing users where if the ImageID field was mapped, user records were not being updated in Protege GX if the data in the import file was modified.
- Fixed an issue where 'Removing Data...' events were being unnecessarily logged, causing the user update process to run slowly.
- Fixed an issue where the **Delete Records Not Present in Import File** option was not working when the **Validate Against Last Sync** option was enabled.
- Fixed an issue where, if blank data was sent as a reference to another record (e.g. The name "" was sent as an Access Level assigned to a user) the record would fail to import instead of Data Sync logging an error and proceeding to import the record with the valid data only.
- Fixed an issue where Data Sync was failing to find referenced records (e.g. an output assigned to a Programmable Function) if the ControllerID in the settings.xml file was assigned by setting the DefaultValue to the Database ID of the Controller in Protege GX.
- Fixed an issue related to user import where, if the ImageID field was mapped to import photos for existing users, and the user data in the import file had no image to import, then Data Sync was logging an event that read "Removing image from user..." instead of skipping photo import for that user.
- Fixed an issue where user images were not being updated in Protege GX if the user record was originally imported without a photo assigned.
- Fixed an issue where if a user already existed in Protege GX with a photo assigned, user data (e.g. PIN) was not being updated if the user image remained the same on resync.

Protege GX Software Version 4.3.264

New Features (4.3.264)

The following new features have been included with this release:

Protege GX User Interface Refresh

The Protege GX User Interface has been completely revamped to utilize Google's Material Design language and concepts. This is a fundamental change and incorporates a number of new design features with a whole new look and feel about it to bring the User Interface in line with current Software, Web page and Mobile Application practices being implemented worldwide.
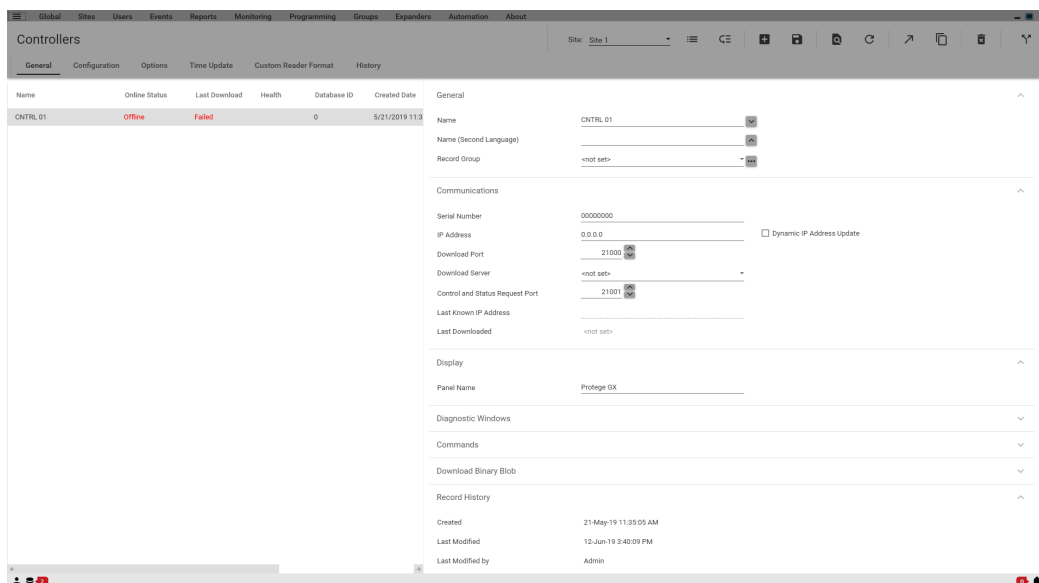
Items that have changed include:

- Page layouts and color schemes. The whole Protege GX color scheme has been changed to match design guidelines and highlights the ICT red color by default.

  In addition, there are now Color palettes and Light and Dark display themes selectable from the Home page. The chosen palette and theme are saved for each individual Operator login.

- Button Icons (Save, Add, Refresh etc.) have changed to incorporate the icons contained in the Material Design library.
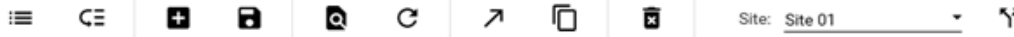
- Time and Date pickers have changed to new easy to use calendar and clock face selectors.
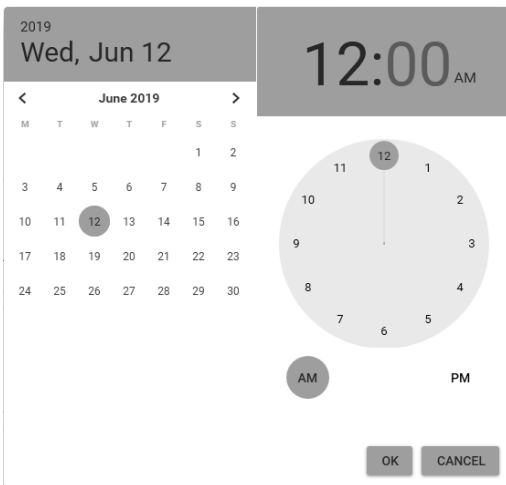
- The slider bar for numerical values has been removed and replaced with Increment/Decrement arrow buttons for easier data entry.
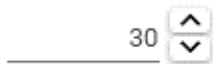
System Navigator

A tree structured System Navigator has been added to provide easy navigation within the system. This gives an operator the ability to navigate the system without using the traditional menu structure, with the option to branch out or hide this tree view at any point, regardless of what page is currently displayed in the User Interface.

Note: The System Navigator window will automatically close when switching between Sites.

The System Navigator is displayed in three main branches (Controllers, Access Levels and Programming) and under each of these are the sub level records that pertain to the top branch. For Controllers this includes all the items that are physically or logically attached to the controller record i.e. expanders, Inputs and Outputs, Programmable functions, services etc. The Access Level branch displays the access levels and the associated records each contains i.e. Doors, Door Groups, Floors, Users etc.

In addition to easy navigation, the System Navigator also gives quick reference to what records are linked to others. For example:

- It displays what Doors are contained by an Access Level.
- It displays what Inputs or Trouble Inputs are linked to an Area.
- It displays what Users are assigned to an Access Level.

Left clicking on any record navigates the Main Interface window to the relevant page and highlights that record. Right clicking on a record will perform the same as above and in addition will open the normal control window (if it exists) for that item.

(e.g. Right Clicking on a Door will bring up the Door page, highlighted to the door that was clicked and bring up the Door control window).

Enhanced Communication Security

Transport Layer Security version 1.2 (TLS 1.2) has been implemented and allows for greater security on communications between the Protege GX Data service and SQL, between a workstation client and the Protege GX server, and communication to/from the Protege GX Web client.

- Transport Layer Security 1.2 is a cryptographic protocol that incorporates certificates and allows digital devices to communicate securely over a network. It is designed to provide privacy and data integrity, plug vulnerabilities and protect against eavesdropping.
- SSL/TLS is used to encrypt the SQL Database connection channel, using dynamically created DB server-side certificates automatically accepted by the Protege GX Services by default. Third party certificates can optionally be installed and configured for use.

TLS 1.2 authentication is now the default security setting when you run the Protege GX installer. The security options during installation are now:

- Windows Authentication
- TLS 1.2 Authentication
- No Authentication
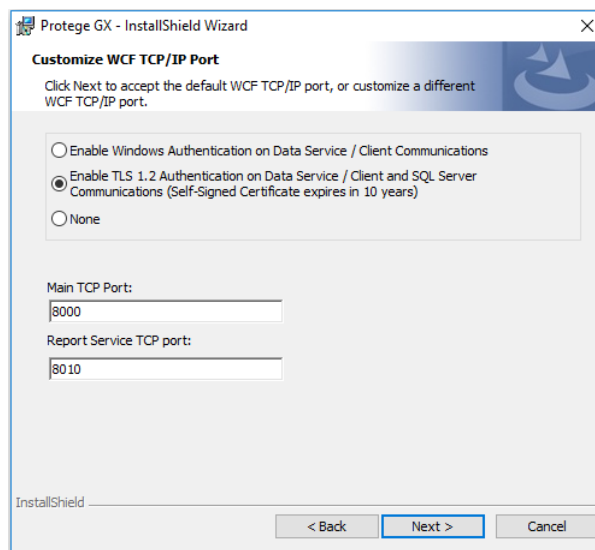
For more information on configuration and operation of this feature, please see the relevant Application Note available on the ICT Website (www.ict.co).

Language Support

Added language support for Czech.

Feature Enhancements (4.3.264)

The following enhancements have been made to existing features in this release:

Protege GX Software Attendance reports

- Attendance report processing and calculations have been improved to handle unexpected or incorrectly sequenced card badges better.

User Reports

- Added a title field for the report similar to Event Reports so the end recipient can easily identify the report being presented.
- Added the Access Level Expiry date as a selectable item to display in a User report.

Card Template Editor

- It is now possible to add any Custom Field to a User card template.

Custom Credential

- Custom Credentials are now checked for duplicate values and an error message will be displayed on saving the user record if a duplicate exists. The default setting for this is "enabled" and this can be turned off for individual credential types where required.

Camera devices on Floor plans

- You can now add a camera device to a floor plan. Clicking the icon will bring up the normal camera window for the specific camera selected.

PIN Complexity checking

- On a site where PIN complexity has been enabled with users existing prior to this setting change, when adding a Card number from a RAW read event the User's PIN is checked and an error message displayed if the complexity requirements are not met.

Topaz Signatures

- Signatures imported using a Topaz reader are now formatted with a transparent background. This allows the image to be scaled as much as possible on a Card Template without overlapping and blocking other fields.

Door Statuses

- Door statuses and their icons on a status list have been updated to include the following states:
  - Unknown
  - Closed and Locked
  - Closed and Unlocked (By User, Access, Schedule, Area, Function etc)
  - Open and Unlocked (By User, Access, Schedule, Area, Function etc)
  - Left Open - Door Sense not sealed
  - Left Open - Bond Sense not sealed
  - Forced Open
- Operator configurable "Floor Plan Symbol" records have also been updated to include image placeholders for these 7 states.

Operator Timeout

- You can now specify an Operator timeout that is less than 60 seconds.

Issues Resolved (4.3.264)

This release resolves a number of issues relating to the Protege GX Software:

Protege GX Software

- Fixed an issue where the automatic file export of an Event Report was not working if Days to Export were not set on the "Email" tab of the report setup.
- Fixed an issue where two separate Events reports would be generated if both "Email" and "File Export" settings were enabled.
- Fixed an issue where the controller filter (drop list) would not list newly created controllers that had been added using SOAP or Web client.
- Fixed an issue where the UI would intermittently freeze up when resizing the Door window while adding doors to an Access Level.
- Fixed an issue where the database ID for Trouble Inputs with a ModuleType of "Door" was offset by 1.
- Fixed an issue where when logged in using the second language the copy user function displays a blank list of users to copy from.
- Fixed an issue when exporting controller records where an error window was displayed if the controller name field was selected for export.
- Fixed an issue where the photo holder on a card template would only display on one side of the card although a photo holder on both sides of the card had been applied.
- Fixed an issue where the ModuleAddress and ModuleOutput reference of an output were swapped on records listed using the "Find" tool.
- Fixed an issue where if an access level that contains a Salto door was added to a user more than once, the Salto service would fail to synchronize.
- Fixed an issue where image data was not removed from the database when a new image is uploaded to an image field or when a user with an image loaded was deleted.
- Fixed an issue where a door would not unlock according to the unlock schedule (with a qualify output applied) if the host controller of the door and the host controller of qualify output were not the same.
- Fixed an issue where a card number was able to be added with preceding zeros and this was not triggering a "Duplicate Facility/Card number" error message.
- Fixed an issue where if an event report was run and the time period was set to "Last October", the StartDate and EndDate fields were incorrectly populated with dates in November.
- Fixed an issue where the UI would crash if "Save Report Filter" was selected prior to executing a User report.
- Fixed an issue where a User Report set to run daily with the time period set for "Today (since midnight)" would not automatically update the start time to reflect the current day (since midnight).
- Fixed an issue where Calendar Actions were not visible to operators whose role was set to the preset "End User" role.
- Fixed an issue where an operator, with a role that is assigned the Preset of "Administrator", was unable to create Record Groups. However, the Operator was able to delete record groups.
- Fixed an issue where the Alarms page was not sorting alarms by their Alarm Priority correctly.
- Fixed an issue where the event report filter "All Events" displays different columns on a Status Page and a manually executed Event Report.
- Fixed an issue where a Facility Code could be added with leading zeros which was not being picked up as a duplicate Facility/Card error.
- Fixed an issue where certain operator actions would not produce a record in the event log. These included:
  - Adding Biometric readers
  - Changing an event type color
  - Adding Shift types
- Fixed an issue where an Emailed or File Exported User report would not filter by the Record Group set on the report or the Record Group of the Operator record set in "Run report as Operator".
- Fixed an issue where an error message was displayed when navigating to Reports > Setup > User when no User reports already existed.

- Fixed an issue where the User Expiry Date/Time displayed on a Card Template was displayed in dd/mm/yyyy regardless of the system Locale and Date/Time setting of the PC.
- Fixed an issue where the Download service fails to start on a fresh installation.
- Fixed an issue where Custom Field values from Drop Box lists were missing from User Reports.
- Fixed an issue with the Arkiv Video Service where the list of cameras was not populating.
- Fixed an issue where the UI would crash when the fingerprint enrolment process had timed out.
- Fixed an issue where exporting Smart Reader records would cause the UI to crash.
- Fixed an issue where the Calendar displayed incorrectly when configuring Time and Attendance reports.
- Improved the process for card printing to speed up the print operation.
- Fixed an issue with the Suprema integration where consecutive finger enrollments was causing the User Interface to lock up or crash.
- Fixed an issue with the Suprema integration where if a finger enrollment timed out this was causing the User Interface to lock up or crash.

Protege GX Data Sync Service (2.0.6.5)

New Features

- Transport Layer Security (TLS) has been implemented and is now the default security setting when installing the data sync service. See "Enhanced Communication Security" in Protege GX New Features earlier in this document for more information.

Feature Enhancements

The following enhancements have been made to existing features in this release:

- Added an allowance to import Duplicate PINs via Data Sync if the Site Security settings in Protege GX are set to allow PIN Duplication.
- Added the option to set the Resync time in seconds.
- Added an error message when the HostControllerRef field is not mapped for a record that requires it for successful import.
- Added backward compatibility to support `<Security mode="None"/>` for Protege GX versions 4.2.x. The Data Sync Service default on installation is to use Transport Layer Security (TLS).
- For those using TLS, localhost is still supported in the address field. Data Sync will automatically retrieve the host name in the background.
- Added a new log file named "license.log" created in the logs directory (in the installation folder). This tracks the license related calls made to SOAP and/or GXSV.exe.

Issues Resolved

The following issues have been resolved in this release:

- Fixed an issue where if an empty data mapping was present the service would wait for the resync time to elapse and attempt to sync the same record type again instead of skipping to the next record type.
- Fixed an issue where the import would fail when assigning a Controller level record to a Site level record (e.g. adding a Door to an Access Level) to a database where there was more than one Site.
- Fixed an issue where the 'Service will restart at...' message was displaying the next sync time incorrectly if the units were set to 'Hours'.
- Fixed an issue where Input Types were not being imported as SOAP was receiving the wrong ParentID.
- Fixed an issue where Door Type Credential Types were being displayed incorrectly.
- Fixed an issue where a 'Restart Sync Failed' exception was raised when records with more than one Unique Field were being synced.

Protege GX Software Version 4.2.251

New Features (4.2.251)

The following new features have been included with this release.

Additional Lock Outputs

It is now possible to program up to 5 additional Lock Outputs or Output Groups on a door, allowing control of additional locks, indicators, door actuators or opening devices. Each additional output or group can have an individual activation time and individual delay on time. For more information please refer to the Protege GX Operator Reference Manual.

User PIN Management - PIN Complexity

Protege GX now allows for complexity settings on User PINs within a Site. PINs can now be configured with the following settings to improve security and PIN management:

- Default PIN Length
- Minimum PIN Length
- Maximum Sequential Digits
- Maximum Repetitive Digits

Dual Credential - Visual Feedback

It is now possible via commands to control the color of the reader LED when waiting for a second credential to be presented, e.g. Card & PIN. This gives a cardholder visual feedback to indicate if the first credential has been read and the reader is waiting for the second credential. Ideal in noisy environments where the beep from the reader can be hard to hear.

Commands set in the Door Type:

- **DualCredPendingOnColor = x** (where x = numerical value for the color as per table below)
- **DualCredPendingOffColor = x** (where x = numerical value for the color as per table below)
- **DualCredPendingOnTime = x** (where x = number of seconds to display OnColor)
- **DualCredPendingOffTime = x** (where x = number of seconds to display OffColor)

Note: Only works on **tSec** Readers with RGB LEDs.

OFF	0
RED	1
AMBER	2
ORANGE	3
YELLOW	4
LIME	5
GREEN	6
MINT	7
TURQUOISE	8
CYAN	9
SKYBLUE	10
COBALT	11
BLUE	12
VIOLET	13
PURPLE	14
MAGENTA	15
CRIMSON	16

Time Settings

Major changes have been made to Time settings and how these operate in Protege GX. The Protege GX server will continue to take its Time Zone from the system locale setting within the Microsoft Windows Operating System it is installed on. However, Event Logged Time and Acknowledged Time are now stored as UTC time zoned times, and are converted to local times based on the Operator's Time Zone setting, with the following exceptions:

- Live event Actions use the UTC time.
- Field Times remain unchanged and use the local Controller time.
- Send Muster Report by E-mail uses the configured Muster Report's Time Zone.
- Send Attendance Report by E-mail uses the configured Attendance Report's Time Zone.
- Send E-mail will try to match the recipient email address to a known Operator email address, and if found will use the configured Operator's Time Zone.

- Descriptions have changed for Time-to-acknowledge, from Field Time --> Acknowledge Time to Logged Time --> Acknowledge Time.
- Controller Online and Offline events will use the configured Controller Time Zone setting if NTP is enabled, otherwise these will use the Protege GX server time zone.
- A read-only Current Server Time field has been added below the Time field for emailed and exported Event, Attendance, Muster and User Reports. It will only be loaded/refreshed on page load.
- A 'Time Zone setting has been added to Operators, Attendance Reports and Muster Reports. The current Use Server Time Zone value will use the current time zone of the Protege GX server.
- For Operators, the time zone set will only affect what Logged Time and Acknowledged Time is displayed for events.
- For Muster Reports and Attendance Reports, the time zone set will determine what the report displays. Currently this is used to resolve ambiguity around what local Field Time should be used for retrospective periods like 'previous half hour' and 'last week'. For example, if a report is run for the previous half hour at 3:15 PM PST with a time zone setting for EST on the report, the report will use the equivalent local time in the EST time zone (6:15 PM) to calculate the 'previous half hour' starting from 5:45 PM.

Note: This release only uses the base UTC offset of the time zone and does not adjust for configured Daylight Savings records.

Event data prior to upgrade will not be altered but display of this data will be adjusted as though it had been – old event Logged Time and Acknowledged Time will appear to be incorrect.

Video Integrations

Protege GX now integrates with the following Video systems:

- Nx Witness
- DVTel (FLIR) v8.0
- Onvision

These integrations enable you to:

- View live video footage from programmed cameras.
- View historic and archived video footage.
- Embed cameras into a status page using the Protege GX Status Page Editor.
- Link a camera to a door, an input, an area, or any record using the filter and camera assignment.
- View live or archived video footage directly from an event associated with a camera.
- Launch a camera view window when a specific event occurs.
- View Motion Detected and Camera Input events within Protege GX.
- Send PTZ pre-set commands to the NVR system in response to a Protege GX event filter.

For more information on configuration and operation of this feature, please see the relevant Application Note available on the ICT Website (www.ict.co).

Language Support

Protege GX is now available with Swedish, Norwegian and Finnish as the second language option.

Feature Enhancements (4.2.251)

The following enhancements have been made to existing features in this release.

Access Level Door Type

- This feature replaces the Override Door Type commands introduced in Controller Firmware 2.08.0822. This now allows for these settings to be configured via a drop-box in the Protege GX software on a Door Type and an Access Level.

Access Level Output

- Added the ability for an Access Level Output to be toggled On/Off by successive activation events. When enabled, this setting disables the Time to Activate Output and Activate Output until Access Level Expiry settings.

Access Level Usage Restriction

- This feature replaces the Commands introduced in Controller Firmware 2.08.0822 where an Access Level could be limited to a certain number of Access Granted swipes for a particular time period. This is now able to be set directly on the access level via the Protege GX User Interface.

Antipassback Reset

- Added the ability to right-click on a user record and Reset Antipassback.
- Added the ability to reset Antipassback using the Protege GX SOAP service.

Apartment Users

- Added the ability to add an Access Level to an Apartment user.

Aperio Integration

- Added a Low Battery Trouble Input for Aperio Locks.

Controller Offline status

- Extended the time before a controller is marked as Offline to a minimum of 1 minute. Configurable up to 60 minutes via the Controller Offline Grace Time setting in Sites | Controllers | Configuration. This reduces the chances of repeated Offline/Online events and possible email alerts for controllers on 'flaky' connections.
- Added a visual Controller Connection Stability bar graph on the controller page. This can be Enabled/Disabled via Global | Sites | Show Controller Stability Bar Graph.

Module Wizard improvements

- Several improvements have been made to the Add Module Wizard. Each specific module within module types can now be selected, for example PRT-ZX16-DIN or PRT-IO84-DIN. The Configure Module pop-up window now presents inputs and outputs for the specific module and the wizard also correctly adds the Trouble Inputs for each individual module.

Status Lists – Elevator Car Floors

- When adding an Elevator Car to a status list, all Floors linked to the Elevator Car are added.

Suprema Integration

- Suprema Biometric Integration has been updated to include support for the FaceStation 2 and BioLite N2 devices.

Issues Resolved (4.2.251)

The following issues have been resolved in this release.

- When adding a user record directly from the event log the photo dimensions and the record history details are now set correctly.
- The date-selection pop up for Attendance reports 'Prompt for date' now works correctly.
- The Save Report Filter button now works correctly for filtered reports.
- Fixed a bug where Input Bypassing was sometimes being sent to the incorrect controller.
- Reporting services now correctly fall back and restore between Primary and Secondary Reporting services.
- Records are now correctly named when using the Copy Controller wizard.
- Text boxes and descriptions are no longer truncated for languages other than English.
- Camera pop-up for Door Entry requires verification now works correctly.

- Activate Access Level Output is now selectable for Salto Sallis doors/smart readers.
- Elevator with Destination Reporting now correctly denying or granting a user access depending on Area Status.
- Rotated objects on Floor Plans and Card Templates are no longer locked to their original orientation. These can now be easily moved around and placed correctly.
- Fixed errors when multi selecting Trouble inputs to change module address.
- Fixed and issue where record groups were stopping Floors from being added to Access Levels.
- Smart Readers now show in the usage tab of the Doors they are assigned to.
- Adding a signature from a Topaz reader using second language now works correctly.
- Fixed an issue where adding Card details from a Raw Read event incorrectly set the Facility/Card details to 0:0.
- Fixed an intermittent issue when adding an F2F8 module via the wizard where associated items (Doors etc.) were not also being added.
- Fixed an issue where controllers added via SOAP were not showing correctly in the drop down and linked items were showing as <not set>.
- Fixed an issue when upgrading from version 4.2.195 or earlier that inadvertently reset Input Type options to default for input types named "Fire" or with the second name of "Fire".

Protege GX Web Client (1.45.0.7)

New Features (1.45.0.7)

The following new features have been included with this release.

Reset Antipassback

- Added the ability to click the + symbol on a user and reset Antipassback from presented menu.

Language Support

- Added language support for Finnish, Swedish, Romanian and Norwegian.

Access Levels

- Added the ability to select a schedule for access levels assigned to a user.

Issues Resolved (1.45.0.7)

The following issues have been resolved in this release:

- Protege GX Status pages are now displayed correctly.
- User Photos uploaded from a Webcam via the Web Client are now correctly stored.
- Fixed an issue where operators could not see Event Types in Event Filters.
- Fixed login delay issues for operators with high database IDs.
- Fixed an issue with User Start and Expiry dates defaulting to the creation date. Now defaults to current date.
- Fixed an issue with User Start and Expiry times and Inactivity settings not being copied when copying when using the copy function.

Protege GX Software Version 4.2.228

New Features (4.2.228)

The following new features have been included with this release.

User PIN Management - Duplication and Expiry

User PINs have two new management features in the Protege GX System:

- Duplication of User PINs is now possible when using another unique identifier (such as an employee code) to identify Users.
- User PINs can now be set to automatically expire and a procedure to select a new PIN is available from LCD keypads.

This can be used in systems that require periodic renewal of User PINs for enhanced security, and large systems where requiring a unique PIN for all Users in the system is not practical. Users will be required to enter their extra identifier (such as Employee ID code) as part of the PIN renewal process.

For more information on configuration and operation of this feature, please see the relevant Application Note available on the ICT Website (www.ict.co).

Event Database Management

Protege GX now allows management of the Event Database directly from the User Interface. It can be configured to automatically purge the live database to a backup to manage the amount of space remaining on disk. The purged events can either be permanently deleted or saved to a separate backup file for review at a later date.

Under the **Global | Global Settings** menu, the Event Database may now be managed with the following settings:

Event Database Settings

- Purge Events Older Than: A timeframe can be selected from which to have the server automatically remove events from the current Events database each day (at the selected Purge Start Time).
- Purge Start Time: The time of day the Events database purge will be run. Select a time of low system activity to maximize operator experience as the Event Purge process is memory and CPU intensive on the server.
- Generate Differential Events Backup: When enabled this option will create a unique backup file for the events that are being purged that can be restored for later review if required.

Event Database Backup Settings

- Select a backup option: The Differential backup file can be saved to local disk, Network Drive or FTP location.
- Event DB Backup Path: Location of selected backup option where the backup file will be saved.

Periodic Photo Export

User Photos can now be periodically exported to a directory. This feature can be used to share images captured within Protege GX with third party systems such as HR or badge printing systems.

The frequency, location and file name options can be configured under **Global | Sites | User Photo Export**.

User Photo Export can be managed with the following settings:

General Settings

- Enabled: Selecting Enabled will allow the Photo Export to run.
- Export Folder: The disk location that User Photo files will be saved to.
- Export Photo Format: The image format the User Photo files will be saved in.

Schedule Type Settings

- Start Manually: The export is required to be started manually using the Export User Photos Now button.
- One Time: The export will be run once. If selecting this option, you will also need to enter the start date and time in the One-time Occurrence Start Time field.
- Recurring: The export will run on a recurring basis. If selecting this option, you will also need to enter the frequency and duration.

User Access Level Schedule

Schedules can now be added directly to the Access Level on the User and can be configured on the Access Levels tab when navigating to **Users | Users**.

This feature now provides flexibility for Users that require the access to the same Doors within a selected Access Level, but at different times of day or week.

Feature Enhancements (4.2.228)

The following enhancements have been made to existing features in this release.

Reader Expanders

- The F/2F Module is now available as a selection during the Add process, to automatically add the Inputs, Outputs and Trouble Inputs for the module.

User Import

- Extended characters are now imported correctly in User Names when importing Users from a CSV file.

Users

- Credentials can now be used as a field to search for User records.

Cameras

- H.264 or MJPEG RTSP streams can now be selected as Camera Types for direct Camera connections.

Access Levels

- Access Levels now contain a Commands field.

Services

- Services now contain a Commands field.

Schindler Integration

- The Site Code Format option 'Generic Wiegand' has been added to the Schindler HLI.

Licensing

- The Licensing page now shows the number of Licenses of each type currently being used, including Concurrent Client Licenses.

Issues Resolved (4.2.228)

The following issues have been resolved in this release.

- Access Level Outputs now correctly associate with Keypads in Keypad Groups for download to Controllers.
- Salto SHIP synchronized Access Level names now contain the full Database ID of the Access Level to eliminate conflict in Input Names in Pro Access.
- Salto SHIP connected Doors can now be viewed in Floor Plans by all Operators, not the Admin Operator only .
- The Host dropdown in the Visitor Management Client Interface no longer overlaps the keyboard when there are multiple Hosts to be listed.
- Operators that are restricted to one or more Record Groups can now correctly add new Record Groups.

- When adding a new Input Expander, up to 16 Inputs can now be automatically added when clicking Save.
- Apartment records now have the correct Ready Output set when being added for the first time.
- Automated User Inactivity updates no longer create "Record Modified" History events.
- When adding a new Controller, selecting the Copy From Existing Controller now copies all records related to the original controller.
- Speed enhancements have been made to the loading of the Doors, Areas, Programmable Functions and Elevator Cars pages.

Protege GX Web Client (1.44.0.46)

New Features (1.44.0.46)

The following new features have been included with this release.

Report CSV Export

- Reports run from the selection under the Monitoring tab can now be exported as CSV in addition to the existing CSV format.

User Access Level Schedule

- Schedules can now be added directly to the Access Level on the User and can be configured on the Access Levels tab when navigating to **Users | Users**. This feature now provides flexibility for Users that require the access to the same Doors within a selected Access Level, but at different times of day or week.

Issues Resolved (1.44.0.46)

The following issues have been resolved in this release:

- Operators with a database ID larger than 100 are now able to retrieve reports correctly.
- Resolved an issue where empty values in any of the User Card Inactivity fields caused SOAP to fail.
- The Polish version of the Web Client now sends the correct User Start and End Dates.
- User Credential Types now display correctly.

Protege GX SOAP Integration Service (1.5.0.24)

Issues Resolved (1.5.0.24)

The following issues have been resolved in this release:

- Operators with a database ID larger than 100 are now able to retrieve reports correctly.
- Operators with a database ID larger than 100 can now correctly make a call to the GetTableIDNameMapping schema.
- An Access Level can now successfully be added without assigning a Schedule and Access Direction to a Door.
- An Access Level can now successfully be added without any GroupData fields in the call.
- Access Levels are now correctly filtered by Site for assignment to a User.
- Doors are now correctly filtered by Site for assignment to a Door Group.
- Areas are now correctly filtered by Site for assignment to an Area Group.

ICT Data Sync Service (2.0.4.0)

Feature Enhancements (2.0.4.0)

The following enhancements have been made to existing features in this release:

Image ID Import

- Image Blob data is now a supported format for importing User photos into Protege GX.
- CPU Usage has been reduced making the import process more time efficient.
- Added warning events for Doors to advise the user they are missing compulsory fields from their mapping.

Issues Resolved (2.0.4.0)

The following issues have been resolved in this release:

- The Configuration Tool no longer crashes when the field mapping met certain conditions.
- The Conversions feature now saves correctly after a blank row is inserted.
- The Conversions feature now outputs the correct value instead of making unnecessary multiple conversions.
- Controller level records can now be imported successfully as the SOAP ParentID is being passed the Protege GX Controller ID instead of the Site ID.
- The Delete Import File When Complete option no longer deletes files prior to being synced if they are placed in the directory while the service is running.
- The Delete Import File When Complete option no longer logs the unnecessary 'Restart Sync Exception' error.

Protege GX Software Version 4.2.216

New Features (4.2.216)

The following new features have been included with this release.

Data Sync Service V2

The Data Sync Service now provides a more flexible method for importing user data, allowing more fields to be imported and greater control over formatting of the input data.

As of Protege GX version 4.2.194, all previous versions of the Data Sync Service will not operate.

The Data Sync Service is now a licensed feature within the Protege GX software. Systems using the previous Data Sync Service must obtain a new license and upgrade their Data Sync Service installation, along with associated components.

For further information please see the ICT Data Sync Service Upgrade Guide and the ICT Data Sync Service Integration Guide.

User / Card Inactivity

The Protege GX software now allows configuration of automatic functionality for the following actions after a selectable period of days, hours or minutes has elapsed with no activity:

- Disable of specific User Card
- Disable Of User Record
- Deletion of User Record

The following new fields are available to configure this feature:

- Users -> Card Numbers
  - Card Last Used/Modified: Shows date and time that the card was last granted access or modified by an operator within the system.
  - Inactivity Period: Optional setting enabling you to set a time in minutes, hours or days to check for card activity/inactivity. If there is no card activity within the set time period the card is disabled.
- Users -> User Disable/Deletion
  - User Last Active: Shows date and time that the User was last granted access to a door or keypad within the system.
  - Disable Period: Optional setting enabling you to set a time in minutes, hours or days to check for User activity/inactivity. If there is no User activity within the set time period the User Record is disabled.
  - Delete Period: Optional setting enabling you to set a time in minutes, hours or days to check for User activity/inactivity. If there is no User activity within the set time period the User Record is deleted.
- Global -> Sites -> Site Defaults -> User Card Inactivity Defaults
  - Disable Inactive User Card: Optional setting enabling you to set a time period in minutes, hours, days, weeks, months, or years to test for User Card inactivity. Any new User added to the system will automatically have these defaults applied.
- Global -> Sites -> Site Defaults -> User Inactivity Defaults
  - Disable Inactive Users: Optional setting enabling you to set a time period in minutes, hours, days, weeks, months, or years to test for User inactivity. Any new User added to the system will automatically have these defaults applied.
  - Delete Inactive Users: Optional setting enabling you to set a time period in minutes, hours, days, weeks, months, or years to test for User inactivity. Any new User added to the system will automatically have these defaults applied.

Periodic Report File Export

All Report types can now be configured to periodically export a file, in addition to being sent as an email.

The export can be performed daily at a selected time, or periodically. This is particularly useful for exporting report data (such as Time and Attendance data) to third party systems.

Feature Enhancements (4.2.216)

The following enhancements have been made to existing features in this release.

Protege GX Software

End User License Agreement

- The Protege GX EULA agreement has been updated. This will be displayed during the installation process.

Users

- Access Levels: The User Interface will now allow multiple instances of the same access level with different expiry times in the same user to be entered.

Credentials

- Raw Read Events: New Events for Credentials have been added, allowing display of invalid credential data equivalent to a raw card read.

Salto SHIP Integration

- User Expiry: The Salto tab for Users now contains User Expiry start and end times that can be used.

Apartments

- Batch Add: Apartments can now be batch added to the system.

System

- Manual Event DB Backup: Event Database backups can now be started from the Protege GX User Interface. The files can be saved locally to disk, or to a mapped network path, or to an FTP server.

Protege GX Web Client

Users

- User / Card Inactivity: The Web Client will display the User / Card inactivity fields as described in the Feature Enhancements for this version of the Protege GX Software.

Protege GX SOAP Service

Record Template Requests for Data Sync Service

- The Soap Service will now expose the template for all records via the TableSchema API. This is used by the Data Sync Service to allow full flexibility in mapping records for import.

Issues Resolved (4.2.216)

The following issues have been resolved in this release.

Protege GX Software

Reports

- The All Visitors by Date Report now generates results.
- User Reports are now filtered by the operator Record Group before an email is sent.
- Attendance Reports now email correctly even if Users in the User List for the report have been deleted.
- The Cards About To Expire User Report no longer includes expired user records.
- Email reports containing non-alphabetical characters (e.g. ':') are now sent correctly.

- Central Station Report now correctly shows the ID for Expander Trouble Inputs.
- 64 bit Systems can now load greater than 2GB of event data when running reports

Users

- The Graphic View now correctly shows door access periods when the 'All Doors' option is selected in the user Access Level

Function Codes

- The Action Group can now be correctly deleted from the Function Code.
- Function Code Record History now contains all modifications

Status Pages

- The Status Page Event view now loads recent events more quickly.

Trouble Inputs

- The Trouble Input copy function now copies the correct Input value.

Salto SHIP Integration

- Potential duplication of Door Groups is now resolved by the addition of up to 6 digits of Database ID in the exported Input name.

Controllers

- Copying from an existing controller now correctly copies associated Inputs, Outputs, Trouble Inputs and Keypads.

Apartments

- Controller health status is now correctly cleared when updating Apartment Keypads.
- Apartment Users are now not shown in the regular Users list

Protege GX Software Version 4.2.201

New Features (4.2.201)

The following new features have been included with this release:

Function Codes

This feature allows you to specify a single key-press Function Code (0-9) plus credential sequence at a specific reader to allow a user to perform a specific function, e.g. to arm an Area or latch unlock a Door.

Any manual commands possible in the software can be achieved with a Function Code.

Scenarios include:

- Cleaners using a Function Code to disarm all internal doors to Latch Unlocked so as not to have to badge/PIN at each door, and to prevent door alarms.
- Users using a Function Code to turn on/off all lights in a building at a reader.
- Users entering a Function Code to prevent timing out when triple badging plus entering a PIN to arm a building.

To set up a Function Code:

- In the **Sites | Function Codes** menu, add a name, assign it a digit from 0-9, and select colors to show acknowledgment (Start of Function, Success, Failure) at the reader.

  Note: Function Code LED colors require PRT-RDM2-DIN-485 firmware 520 or above, and tSec Reader hardware version 100 or higher with firmware 228 or above.

- Add an Action by selecting a Device Type (Door, Area, Output), and assigning an Action, Schedule, and Timeout.
- In the Doors menu, assign the Function Code to a door. Add the Action for the door (e.g. Lock), and select the side(s) of the door it may be used on.

Inovonics Wireless Receiver Module

- The new Inovonics Wireless Receiver Module (PRT-IVO-IF) facilitates integration between Protege GX and Inovonics wireless devices. It works with the Inovonics EN4200 Echostream repeater to translate incoming Inovonics signals so they are understood by Protege controllers.

Key features of the PRT-IVO-IF module include:

- The ability to connect to the Protege GX controller via RS-485 network or Ethernet
- A web interface for easy network setup and boot mode for firmware updates
- Firmware upgrade via Trivial File Transfer Protocol (TFTP)
- The linking of Inovonics devices, e.g. wireless PIRs and remotes, to inputs
- The linking of Inovonics remotes to users for access control

For further information, please refer to the Inovonics Wireless Receiver Module Installation Manual, available on the ICT Website (http://www.ict.co).

Arkiv Video Management System Integration Service

- The Arkiv VMS now integrates with Protege GX via the Protege GX Arkiv Video Integration Service. The integration service enables control of Arkiv VMS cameras and the viewing of live and historical video footage via the Protege GX user interface.

Further details on this service can be found on the ICT Website (http://www.ict.co).

Axxon Video Management Integration Service

- The Axxon VMS now integrates with Protege GX via the Protege GX Axxon Video Integration Service. The integration service enables control of Axxon VMS cameras and the viewing of live and historical video footage via the Protege GX user interface.

Further details on this service can be found on the ICT Website (http://www.ict.co).

Feature Enhancements (4.2.201)

The following enhancements have been made to existing features in this release:

Protege GX Software

Access Levels

- Access Levels can now be qualified by the direction a user can pass through a door (Entry, Exit, or Both) in the Doors and Door Groups lists.

Areas

- Ready Output and/or Ready Output Group can now be configured to turn on when all inputs or trouble inputs in an area are closed and the area is ready for arming.
- Pressing Stay arm or Force arm again on a keypad once Stay arming or Force arming has started will now switch to Instant Stay arming or Instant Force arming, respectively.

Central Station Reporting

- SIA over IP (DC09) and CID over IP (DC09) have been added to the ReportIP service.
- Area, user, input and trouble input database IDs are now included in the packet sent to ArmorIP when reporting an event.

OTIS Integration Changes

- Call Registration is now supported for OTIS elevator integration.
- Special user features (Users | Users | Options) are now supported for OTIS elevator integration. These include: User is a VIP, Vertigo, Split Group Operation, Vertigo 2, Cart Service and CIM Override.
- Dispatch Reporting for OTIS elevator integration now includes the elevator car assigned to the user, as well as direction of travel.
- PIN entries are now supported for OTIS elevator integration.

Suprema Biometric Readers

- Protege GX integration with Suprema has been extended to include the use of Suprema version 2.x biometric readers (including the W2 model reader).

Reports

- Muster Reports now include the Duration option 'Last 4 weeks'.
- File Export is now available for Reports. This feature can be configured in a similar manner to E-mail Reports, and is designed for automatic export of a report (such as an Attendance Report) for use by a third-party system. For more information, please go to the ICT Website (http://www.ict.co).

Issues Resolved (4.2.201)

The following issues have been resolved in this release:

Protege GX Software

Reports

- The position of a column is now saved if it is moved after clicking 'Save Report Filter'.
- The Reports Grid View Filter String is no longer lost if entered before all events have finished loading.
- The sort order (ascending, descending) inside a column is now saved after clicking 'Save Report Filter'.

Controller Wizard

- The 'Assign Reader Beeper to Door Alarm Configuration' option is now used correctly.

Controller Copy

- Global Records that were not previously copied with the controller record are now copied.

Operators

- Guard or End User Role Preset based operators can now access Manual Commands correctly.

Status Pages

- Events lists with a user image shown will now display more quickly.

Users

- A User PIN can now be deleted.
- Events tab record count while loading has been reinstated.

Trouble Inputs

- The controller for Door Trouble Inputs is now set correctly when saving the record.

Doors

- Events tab record count while loading has been reinstated.

Protege GX Web Client

Users

- User Copy now works correctly.
- Batch Add Users now sets the Reporting ID correctly.
- A User PIN can now be deleted.

Operators

- Guard or End User Role Preset based operators can now access Status Pages correctly.

Protege GX Software Version 4.2.194

New Features (4.2.194)

The following new features have been included with this release:

Keywatcher Touch Integration

Protege GX now allows integration with KeyWatcher Touch keyboxes in conjunction with the Protege GX KeyWatcher Integration Service. Users from Protege GX can now be synchronized to the KeyWatcher system, and selected events will be retrieved from the KeyWatcher system to allow a single point of management for both systems. License(s) are required.

For more information on configuration and operation of this feature, please see the relevant Application Note available on the ICT Website (www.ict.co).

User Record Modified History Report

Monitoring of operator behavior, whether for internal review or external reporting, is now available with the Record History Modified report. Each modification to a user, such as to card number or access level, will be shown chronologically in the report.

This report is available as a new Report Type under User Reports and is selectable at run time or can be configured to be run for specific time periods.

Users: PIN+1 Duplicate Checking

User records with the 'Treat PIN+1 as Duress' option selected are now checked for duplicate values upon being saved. If a duplicate value is found, an error message is now displayed and the PIN must be changed before the user can be saved.

Feature Enhancements (4.2.194)

The following enhancements have been made to existing features in this release.

- The Protege Mobile App correctly displays values for inputs, outputs, areas and doors from inside the Protege GX Web Client interface. This has now been extended to show event reports, and to allow push notification in the service. Refer to Application Note AN-201 Protege GX Push Notification Setup for instructions on configuring push notifications.

Issues Resolved (4.2.194)

The following issues have been resolved in this release:

Protege GX Software

- Non-printable ASCII characters in Credentials raw data events are now displayed as '.'.
- The 'summary'-type emailed report in Time & Attendance now shows user names in XLS attachment, as per thick client display.
- The **Users | Attendance** tab now no longer allows 'Delete Event' operations.
- PINs are now either shown or hidden in emailed user reports, based on the 'Show PIN' setting for the operator being emailed.
- Operators without administrator preset are now able to access all manual commands as per their specific role settings.
- Floors can now be controlled from floor plans for operators with the 'End User' preset.
- Recurrences on a weekly basis will now save correctly in Calendar Actions.

- Creating a reader expander on the Expander | Reader Expander page now automatically populates the door inputs (excluding bond sense).
- The issue has been resolved of controller bond sense input being automatically assigned to door programming and causing issues to door opening/closing events.
- The graphic view in Access Levels now displays correctly.
- The Event windows in status pages have been optimized to improve initial loading time.
- The problem with the Download Server stopping at midnight and requiring a manual restart has now been resolved.
- Controllers with recent changes are now prioritized to be downloaded immediately, speeding up response times for activity on site.
- Download calculation speed is now improved to a lower wait time when downloading to multiple controllers.
- The number of parallel downloads is now increased to 4 x number of machine processors, to lower wait time when downloading to multiple controllers.
- Resolved issue with record details not displaying correctly when using the Find tool in conjunction with sorting records by name.

Protege GX Web Client

- Columns on status pages now display full title width.
- Photo upload now works correctly for all sites.
- User reports now load correctly when the report contains access levels not in the operator's record group.
- Enterprise muster reports will now report correctly in multiple languages.
- Issue resolved for existing operators with a password policy applied.
- When saving access levels, operators are no longer prompted with an additional 'unsaved changes' dialog box.
- Non-admin operators can now add users correctly.
- Adding cards to new and existing users from the **Monitoring | Events** page now works correctly.
- Clicking on a display name in User Search now opens a new tab, not a new window in some browsers.
- The Export button in Reports pages now exports the events correctly.

Protege GX Software Version 4.2.187

New Features (4.2.187)

The following new features have been included with this release:

VingCard VisiOnline Integration

Integration with the VingCard Visionline Wireless Locking System is now available for managing back of house staff access to electronic hotel locks directly from the Protege GX interface.

Event Report Dynamic Loading

The following new features have been added to the Event Report functionality in Protege GX:

- Events in Event Reports are now displayed continuously as the report is being executed and the report can be filtered or reordered during this process.
- A Cancel button has been added to the Event Report section. If the required event(s) have already been displayed, the Cancel button can be used to stop loading further events.
- The Unlimited setting no longer provides the limitation of loading 100,000 events. An Out of Memory warning will appear if an event report so large that it fills up all of the available memory on the client machine.
- Loading progress is displayed on the report while Events are still being loaded.

Programming Mode for Programmable Functions

A Programming Mode has been added to the Automation | Programmable Functions menu. This filtering functionality enables you to toggle between either a Local or Global Programming Mode.

- Local mode limits the inputs, outputs and areas connected to the same controller.
- Global mode displays all inputs, outputs and areas on the site with the Controller ID, Module Type and Module Address.

Feature Enhancements (4.2.187)

The following enhancements have been made to existing features in this release:

Protege GX Software

Record Group Filtering

- Operator events in event reports can now be filtered by record group.
- Live event windows in status pages are now filtered by both the record group(s) of the operator and the event filter in the selected event report.

Central Station Reports

- For every controller where cross-controller operations are being used, a Central Station Report now displays all inputs in areas that the reporting service is assigned to.
- The reporting output format for a Central Station Report has been simplified, and the CSV and HTM outputs have been adjusted to match more closely.
- Duplicate Reporting ID values are now allowed for areas in the same site that are reported on different services.

Record History

- The History tab for users, access levels and doors now record a complete history for every modification made by an operator. Any particular transaction can be viewed in further detail to assess the old value and new value of the field that has been modified.

Video Integrations

- All Protege GX video integrations now use an external video service which is installed and configured separately to Protege GX. The existing built-in integrations remain for legacy installations. Visit the ICT Website (http://www.ict.co) for full information on new and updated video integrations.

Events

- Adding, modifying and deleting symbols on floor plans now generates an event.

Maximized Client Window

- The time and date are now displayed in the bottom right hand corner of the Protege GX client window when maximized.

Controller Options

- The Duplex Inputs option can now be found by navigating to Sites | Controllers and selecting the Options tab.

Active Directory User Import

- A Synchronization Period setting is now available. This sets how frequently the Active Directory server is queried for User details.
- Disable GX Users if AD Users are Disabled and Disable GX Users if AD Users are Deleted settings are now available. This allows Users to be kept or removed from the Protege GX database as AD Users change, depending on site requirements.

Protege GX Web Client

- Calendar Actions can now be accessed by navigating to **Sites | Calendar Actions**.

- The new User Search feature enables operators to easily locate users within Protege GX based on details such as card numbers, access levels and other options attributed to users.

Protege GX Data Sync Service

- The EasyLobby Visitor Management System file format may now be imported for synchronization.

Issues Resolved (4.2.187)

This release resolves a number of issues:

Protege GX Software

- The Name (Second Language) field of both the Event Server and Download Server are showing correctly in the Estonian installation of Protege GX.
- Corrected an issue of displaying the incorrect Controller ID on Status Pages.
- Corrected an issue with Automation functions not being downloaded from the database to the controller.
- An Event Filter with the Record Group field assigned as <not set> can now be deleted.
- User Selected Floor on Elevator Using Floor Group events now display the floor name.
- Users already added to Cencon Locks will no longer generate User Already Exists errors in the Cencon Synchronisation Status.
- Report Map option reinstated in Contact ID Services.
- Operators without access to all record groups can no longer see the Include All options in access levels.
- The Event Purge feature no longer times out on large databases, which could cause the Protege GX Services to restart in certain conditions. An Event Purge Time setting is how available to schedule this operation at an optimal time.
- Report IP services now save the IP address field correctly when being modified after initial creation.
- Operator Logged In and Operator Logged Out events now show in the Event Search.

- Status lists now display the correct controller name in the Controller column on sites with more than one controller.
- Elevator records are now assigned to the correct host controller.
- Device status is now requested from all controllers when the Protege GX services are started. This in combination with PRT-CTRL-DIN firmware 752 or above will prevent the device status from becoming unknown in status pages.

Protege GX Web Client

- Multiple credential types can now be correctly created by navigating to **Users | Credential Types.**
- Custom Tabs (when navigating to **Users | Users**) can now be seen by all operators, including those restricted by record group.
- Photo ID images (when navigating to **Users | Users**) can now be added correctly. Under certain install conditions, the web client did not have access rights to upload the files.

Protege GX Data Sync Service

- User PIN records are no longer cleared if no PIN is imported for a user. This allows a User PIN to be added from the Protege GX client after users have been imported.

Protege GX Software Version 4.2.181

New Features (4.2.181)

The following new features have been included with this release:

Hold Up Area Walk Test

Designed for high security environments such as those found in the banking industry, this feature enables an area to require a walk test of the assigned inputs whenever it is disarmed. This allows you to test and verify specific inputs (including panic buttons) by fully arming and disarming the area to its 24 hour/ tamper state, without triggering false alarms. The results of the walk test are sent to the monitoring station you have configured in the Contact ID or Report IP service.

For detailed instructions on configuring the Hold Up Area Walk Test feature, please refer to the Application Note AN-197: Protege GX Hold Up Area Walk Test available on the ICT Website (http://www.ict.co).

Schindler Elevator Integration

Integration with Schindler elevator systems with the controller is now available in the Protege GX software. This integration includes support for Special Operating Mode (SOM) functionality.

For detailed instructions on configuring Schindler elevator HLI integration with SOM operation, please refer to the Application Note AN-196: Protege GX Schindler Elevator HLI Integration with SOMs available on the ICT Website (http://www.ict.co).

Suprema Biometrics Integration

Integration with Suprema biometric readers has been updated to include support for the W Series and all Suprema biometric readers running firmware version 2.

Credential Types

Credential types enable the Protege GX system to use different forms of user identification for access control. This feature extends the current functionality beyond the existing card, PIN and biometric formats to include credentials such as license plates and bar codes.

Credential types are created within Protege GX and applied to custom door types as the entry or exit reading mode. The third party device or software used to collect the credential data is configured as a smart reader with the data being sent through to the controller via the onboard RS-485 reader ports or via Ethernet.

This feature supports Unicode, UTF8, ASCII, Numeric, Hexadecimal, Wiegand and TLV data formats.

For more information on configuration and operation of this feature, please see the relevant Application Note available on the ICT Website (www.ict.co).

Language Support

Installations are now available with Greek, Russian and Italian as the second language option.

Mobile Web App Connectivity

The Protege GX SOAP Service (version 1.5.0.15) and the Protege GX Web Client (version 1.40.0.0) can now interface with the Protege Mobile App.

Feature Enhancements (4.2.181)

The following enhancements have been made to existing features in this release:

- Reporting IDs are no longer modified when migrating from version 3 to version 4 and monitoring stations will continue to receive the same IDs.

- When adding inputs and trouble inputs using the wizards, you can now select a default mapping scheme for assigning reporting IDs. If duplicate reporting IDs are found between linked controllers, health status messages are displayed.
- When generating central station reports, you can now reset all inputs and trouble inputs reported by a particular service to the values associated with a specific mapping scheme.
- A record group must be assigned to each event filter in event reports. Event reports no longer use their own record group to filter the events shown in reports.
- Added a Pulse Reader Beeper on REX option (**Programming | Doors | Inputs**). When enabled, the reader associated with the door produces a double beep when the REX button is pressed.
- Added a Maintain REX option (**Programming | Doors | Inputs**). When enabled, the door stays unlocked for as long as the REX button is held down.
- Added a REX Time Different to Lock Time option (**Programming | Doors | Inputs**). When enabled, you can configure the REX Activation Time which unlocks the door for a specified duration when unlocked using the REX button. This overrides the time set for the Door Lock Activation Time.
- Added a Relock on Door Open option (**Programming | Doors | Options**). When enabled, the door lock reactivates when the door sense detects that the door is open.
- Added a Schedule Overrides Latch option (**Programming | Doors | Options**). When enabled, the door operates based on the schedule assigned, even if the door is latched open.
- Deny Entry and Deny Exit options have been added for door lockdown.
- Door Left Open Alarm Time now handles values over 4 minutes.
- Added a Read Non ICT Programmed Sector Data option (**Expanders | Smart Readers | Reader**). When enabled, non ICT programmed sector data cards are processed when presented to Aperio Locks.
- You can now restart elevator HLI services using the Restart HLI button (**Controllers | Configuration**).
- Added a Dynamic IP Address Update option (**Sites| Controllers | General**). When enabled, the incoming IP address of the controller is detected by the event server, and the IP address field is automatically updated.
- Added a Weekly Test Report option (**Sites | Controllers | Options**). When enabled, the test report is sent once a week based on the day of the week selected.
- Added a Report Short Duration Module Communication Failure option (**Sites | Controllers | Options**). When enabled, module communication failure trouble events are always generated.
- Added an Advanced UL Operation mode (**Sites | Controllers | Options**). When enabled, the Protege GX system runs in UL compliance mode.
- Added a Do Not Wait for Dial Tone When Modem Dials Out option (**Sites | Controllers | Options**). When enabled, modem dialing occurs even when no dial tone is detected.
- Added a TCP/IP Port field to configure the TCP/IP port used when an intercom service is selected.
- The Alarm NZ IP reporting protocol is now referred to as CSV IP. The CSV IP Username and CSV IP Password fields have been added and display when the Report IP Service is selected and is set to use the CSV IP protocol.
- Added a KLES Input LED field (**Programming | Inputs | Areas and Input Types**). This field defines the LED of the PRT-KLES keypad used to display the state of the input in the specified area.
- Added a Max Invalid PIN Entry Attempts option (**Expanders | Keypads | Configuration**). This defines the maximum number of invalid PIN entries allowed before the user is locked out of the keypad.
- Added a Show Time and Attendance Detail option (**Expanders | Keypads | Options 1**). When enabled, the keypad displays time and attendance information for a specific duration when a user presents valid credentials at the associated card reader.
- Lockout Keypad Time now handles values beyond 4 minutes.
- Reader 1 and Reader 2 formats are now set to HID 26/34 Bit by default when creating new reader expanders.
- Added a Dual Authentication Pending Output option (**Expanders | Reader Expanders | Reader**). This defines the output that activates when the first credential is presented.
- Added a Dual Authentication Wait Time option (**Expanders | Reader Expanders | Reader**) menu. This defines the maximum time allowed between presenting the two credentials.

- Added an Enabled Enhanced Smart Reader Outputs option (**Expanders | Reader Expanders | Reader**). When enabled, you can control the LED and buzzer outputs of an ICT RS-485 reader as independent outputs when connected to the specified reader port.
- You can now reset loiter areas using manual commands when User Loiter Time Expired events are generated.

Issues Resolved (4.2.181)

This release resolves a number of issues:

- Event reports now successfully send to multiple operator emails.
- Resolved an issue with event reports being emailed with missing events.
- Corrected an issue with event reports showing a 'cannot find name' error.
- Corrected an issue with event reports not filtering correctly when emailed.
- Resolved an issue where exporting reader expander programming was not working correctly.
- Resolved an issue with door, area, and elevator car status not updating correctly in floor plans.
- Corrected an issue where controller encryption did not work correctly in certain circumstances.
- Central station report map now displays event codes in decimal.
- You can now import unlimited users from active directory.
- You are no longer able to accidentally cancel the controller wizard when creating a new site.
- The events tab now displays correctly in the Polish floor plan screen.
- Corrected an issue with incorrect options being disabled when a reader port is operating in ICT RS-485 mode.
- The bond sense input is no longer automatically assigned when doors are created using the controller wizard.
- Resolved an issue with the apartments menu not working correctly.
- Corrected an issue with REX inputs not being assigned correctly on migration.
- Muster reports now refresh correctly based on the refresh rate specified.
- Icons are now set up correctly when alarms are acknowledged.
- Reporting ID is now correctly calculated for users irrespective of record group associations.

Protege GX Software Version 4.1.158

New Features (4.1.158)

The following new feature has been included with this release:

- Card Template Editor can now copy user data from one custom field to another.

Feature Enhancements (4.1.158)

The following enhancements have been made to existing features in this release:

- The alarm pop-up window can be moved.
- Searching events from the Users window can now be canceled.
- When viewing events from the Users window they are now displayed as they are discovered, with the newest events at the top.
- When using event reports, record groups are added against the event filter and not the report itself, and event filters can have one or more record groups assigned when adding them to the report.

Issues Resolved (4.1.158)

This release resolves a number of issues:

- Improvements to performance when viewing status lists.
- The Activate Access Level Output option is now available when using ICT RS-485 readers.
- The Reader Area Control Area option is now hidden when using ICT RS-485 readers.
- When multi-selecting door records and updating fields, all records now update correctly.
- Camera pop-ups no longer conflict with alarm pop-ups.
- Cross controller logic control programmable functions are now correctly monitored by all controllers.
- When using the SALTO integration, the Program Card button can no longer be clicked until the user data is saved.
- Areas with only trouble inputs assigned are no longer hosted on the wrong controller.
- Selecting save repeatedly when updating doors no longer causes existing records to be overwritten.
- Event Reports no longer return only 1000 events when viewed by the Admin user.
- Operators with full access can now view the Doors page correctly.
- Large photos can now be down sampled without reducing quality.
- The time zone has been added to the Cencon Audit Trail report times.
- When multi-selecting user records and assigning an access level, all records now update correctly.

Protege GX Software Version 4.1.150

New Features (4.1.150)

The following new features have been included with this release:

Protege GX Software

- A Programming Mode option has been added to the Programming | Doors menu. This option enables you to select either Local or Global Programming Mode.
- Using Local mode limits the Inputs, Outputs and Areas assigned to the Door to the items connected to the same Controller.
- Global mode displays all Inputs, Outputs and Areas on the site with the Controller appended to the record name.

Protege GX Web Client

- Filters can now be added when configuring the report setup for Event Reports.

Feature Enhancements (4.1.150)

The following enhancements have been made to existing features in this release:

Protege GX Software

- Legacy DVR DLLs have been removed from the Protege GX installation file. Please contact your DVR supplier or technical support if you require these files.
- REX and Door Position inputs are now automatically assigned when running through the Add Controller Wizard and the Add Reader Expander Wizard.
- Added an Unlock Door button to the direct camera pop-up window for user verification events.

Protege GX Web Client

- A Pay Code column has been added to the Time & Attendance Report.
- Column names can now contain the following brackets: (){}[].
- Device names are now displayed as 'Not Set', if the name is empty/not found within a Status Page.

The number of results displayed per page for Event Reports has increased from 1000 to 5000.

Issues Resolved (4.1.150)

This release resolves a number of issues relating to the Protege GX Software, the Protege GX SOAP Service, and the Protege GX Web Client:

Protege GX Software

- The Door States on status pages have been updated to closely reflect the actual security of the door. If the Lock Output is activated but the door is not closed and/or sealed, the door displays as Not Locked. The Secure door state has been changed to Closed.
- Improved operation of event reports.
- Improved operation of status pages.
- Corrected an issue with duplicate CID codes assigned to inputs and trouble inputs.
- Corrected an issue with user reports batch printing for smart card printing.
- Corrected an issue with DNS name resolution that occurred when a name is entered in place of an IP address for a controller.

- Improved operation of user reports.
- Corrected an issue with VMS barcode sign out.
- Resolved an issue with Exacq DVR camera pop-up.
- Resolved an issue where trouble inputs would not download to some controllers under certain conditions.
- Time and Attendance daily report types now correctly modify shift data when saved.

Protege GX SOAP Software

- Improved operation of event reports and events on a status page.

Protege GX Web Client

- Ampersands now correctly display in record group names.
- Read only fields unlock when the [+] button is clicked in the roles page.
- Event Reports sort correctly by Event ID.
- The Roles page displays the record groups list correctly.
- Time & Attendance reports correctly display the totals when sorted by users.

Protege GX Software Version 4.0.135

Feature Enhancements (4.0.135)

The following feature enhancements have been included with this release:

Protege GX Software

- Event loading in the User's menu now displays the number of available events in the event database and the current searching event IDs.
- Updated the Report IP service to allow for Poll Times of up to 24 hours.

Issues Resolved (4.0.135)

This release resolves a number of issues relating to the Protege GX Software and the Protege GX SOAP Service.

Protege GX Software

- Central Station Reports now display trouble input information.
- Corrected an issue where incorrect records were displayed by the Find function.
- You can now send multiple email reports of the same type simultaneously.
- Updated secondary menu group dropdown within the menu group programming page to correctly show menu groups instead of keypad groups.
- Updated the number of inputs created per apartment to 16.
- Reporting codes for trouble inputs no longer conflict with burglary input reporting codes.
- Resolved an issue where if a Cencon lock went offline, programming updates to online locks would not be possible.
- Corrected issues that caused some records to not download to all controllers correctly.
- Corrected an issue where Salto door groups could overwrite doors not generated by Protege GX, such as lockers.
- Programmable functions no longer display as Unassigned.
- The following records are now configured correctly during database migration:
  - Defer Warning Keypad Group
  - REX inputs
  - REN inputs
  - Existing Reporting IDs
  - Output Keypad Display Name
  - Keypad Trouble Input Name
  - Secondary Input Types

Protege GX SOAP Service

- Updated operator access rights to sites.
- Resolved an issue that caused user names to duplicate in Time and Attendance reports.

Protege GX Software Version 4.0.128

New Features (4.0.128)

The following new features have been included with this release.

Cross Controller Operations

This release of Protege GX introduces Cross Controller Operations. In Protege GX, Sites generally contain multiple Controllers that run independently of each other. Cross Controller Operations enables Protege GX Controllers to operate as one system and share hardware resources. This makes all physically connected items on a Controller accessible and usable by various functions and records within Protege GX.

For example, you are now able to assign Inputs for the REX and Bond Sense functions and Outputs for the Forced Open, Left Open and Lock functions from different Controllers to a single Door.

Cross Controller Operations happen entirely behind the scenes. Controller communications begin automatically when you assign items from different Controllers to the same record within Protege GX. The automated process reduces configuration and administration time.

How this Changes Protege GX

This feature has a major impact on many of the core functions within Protege GX. These functions include:

Outputs

Outputs are still managed per Controller and must have their Module Type and Module Address defined in Protege GX. However, you can now assign outputs to any function within the site that can activate/deactivate an Output.

Inputs

Inputs are still managed per Controller and must have their Module Type and Module Address defined in Protege GX. However, you can now assign inputs to any function within the site that can control an Input.

Trouble Inputs

Trouble Inputs are located on a single Controller but you can now assign them to any area within the site.

Keypads

You can now assign outputs to a keypad from any controller on site - not just the controller the keypad is connected to. Keypads must have a valid Area Group applied in order to determine which Controllers are required to communicate with each other for facilitating area access. This is because some Areas may have Inputs assigned to it from multiple Controllers.

Doors

You can assign a Door's Inputs and Outputs from any Controller on site.

Areas

You can assign Inputs and Outputs to an Area from any Controller on site.

Elevators

For low level integrations, elevator car buttons require outputs to enable users to select a floor. Additionally, destination reporting uses inputs to monitor which buttons in an elevator car a user selects to access a floor. Cross Controller Operations enables you to assign the inputs and outputs used from any controller on Site.

Services

Although some records are now able to operate independently of the hardware they belong to, all Services must have a controller specified when they are programmed. Despite operating off a single controller, the Protege GX Reporting Services are still able to report events from multiple Controllers.

Programmable Functions

Programmable Functions are no longer located on a specific Controller, enabling you to use a mixture of Inputs, Outputs and Data Values from within the site.

For more information about Cross Controller Operations and how its functionality affects the operation of Protege GX, refer to the Protege GX Cross Controller Operations Upgrade Guide available in this release package. We strongly advise that this document is read through thoroughly before proceeding with the upgrade.

Calendar Actions

Calendar Actions are a licensed feature that enable you to create Door and Output actions that override previously programmed Schedules for a specified duration. These actions can be set as one-offs or set to recur every day, week, month or year.

This feature allows the simple configuration of the following scenarios:

- Building cleaners come in at a later time one day during the week and require the lights and the HVAC system to be turned on when they would otherwise be turned off.
- Some employees plan to come into work earlier than usual and require the internal doors to be free access, the lights to turn on and the HVAC system to activate.
- Additional staff training is carried out once a week on a Wednesday night for four weeks. On these days the internal doors must be free access, the HVAC must remain activated and the lights must stay on until 8pm.

For detailed instructions, please refer to the Application Note AN-179: Configuring Calendar Actions and available on the ICT Website (http://www.ict.co).

Avigilon Control Center Version 5 Integration

Protege GX now integrates with the Avigilon Control Center Version 5 NVR system.

This integration enables you to:

- View live video footage from programmed cameras.
- View historic and archived video footage.
- Embed cameras into a status page using the Protege GX Status Page Editor.
- Link a camera to a door, an input, an area, or any record using the filter and camera assignment.
- View live or archived video footage directly from an event associated with a camera.
- Launch a camera view window when a specific event occurs.
- View Storage Alarm, Motion Detect and Low Disk Space HLI events within Protege GX
- Send PTZ preset commands to the Avigilon Control Center system in response to a Protege GX event filter.

Protege GX integration with Avigilon Control Center V5 is facilitated by the Protege GX Avigilon Control Center V5 Video Service.

For detailed instructions on configuring Avigilon integration, please refer to the Application Note AN-175: Protege GX Avigilon Control Center V5 Integration available on the ICT Website (http://www.ict.co).

Inovonics Integration

Protege GX Inovonics integration is a licensed feature that enables you to use Inovonics' detection devices as Protege GX Input Expanders within Protege GX. Communication between the two systems is facilitated by Ethernet.

This integration enables you expand the reach of your Protege GX system and gives you to opportunity to take advantage of the Inovonics wireless detection system.

For detailed instructions on configuring Inovonics integration, please refer to the Application Note AN-183: Protege GX Inovonics Integration available on the ICT Website (http://www.ict.co).

Redwall Integration

Protege GX Redwall integration is a licensed feature that enables you to use Redwall laser scan detectors alongside the Protege GX system. Integration enables Redwall modules to operate as Protege Input Expanders within Protege GX. Communication between the two systems is facilitated by Ethernet.

Integration with Redwall detectors enables you to take advantage of a highly reliable detection system that is capable of detecting a moving object's size, speed, and distance using a unique algorithm.

For detailed instructions on configuring Redwall integration, please refer to the Application Note AN-181: Protege GX Redwall Integration available on the ICT Website (http://www.ict.co).

Apartments

Apartments are a licensed feature that enable you to control and manage access to apartment suites within condominium complexes. This software feature is used in conjunction with the ICT EliteSuite range. The EliteSuite range is designed for multi-dwelling apartment complex management. A variety of end user keypad options provide centralized management, and the unobtrusive design is the perfect fit for modern residences. You can add a maximum of 248 apartments in Protege GX.

For detailed instructions on programming, please refer to the Application Note: AN-184 Implementing Apartments in Protege GX available on the ICT Website.

Allegion Smart Reader Integration

Allegion integration is a licensed feature that enables you to use the Allegion AD-Series of wireless locks within Protege GX. Allegion integration uses wireless technology that enables Protege GX to communicate with the locks via panel interface modules (PIMs) that are connected to the Protege GX controller.

For detailed instructions on configuring Allegion integration, please refer to the Application Note AN-182: Configuring Allegion Integration in Protege GX available on the ICT Website (http://www.ict.co).

Central Station Reports

Central Station Reports provide a report map for the Contact ID and Report IP services that can be supplied to the monitoring station.

Time Based Licensing

ICT has implemented time based licenses for all aspects of the Protege GX system. This enables ICT to provide demonstration licenses for specific feature upon request.

Microsoft SQL Server 2012 Support

Protege GX is now compatible with Microsoft SQL Server 2012 in the Standard, Enterprise, and Express editions.

Salto SALLIS Sector 13 Support

Salto SALLIS cards can be encoded with site/card information via the ICTEncoder Client. This defines the decryption key used with these cards. This ensures that the same card number is read by both SALLIS Wireless Locks and ICT Proximity Readers and removes the need for badging each card at a reader to retrieve their numbers.

For detailed instructions on configuring this, refer to the updated version of the Application Note AN-148: Configuring Salto SALLIS Integration in Protege GX available on the ICT Website (http://www.ict.co).

Aperio Sector 13 Support

Aperio cards can be encoded with site/card information via the ICT Encoder Client. This defines the decryption key used with these cards. This ensures that the same card number is read by both Aperio Wireless Locks and ICT Proximity Readers and removes the need for badging each card at a reader to retrieve their numbers.

For detailed instructions on configuring this, refer to the updated version of the Application Note AN-147: Configuring Aperio Integration in Protege GX available on the ICT Website (http://www.ict.co).

Feature Enhancements (4.0.128)

The following feature enhancements have been included with this release:

Protege GX Software

- Grid view report filtering now saves per report, per operator.
- Muster reports can now be sent to a specified email address based on an event.
- The controller name is now displayed in controller related events.
- The controller name and its database ID are now displayed in controller related events when emailed.
- All add, modify and delete events are now displayed in the event log for all records.
- Direct cameras now have the same functionality within Protege GX as DVR/NVR cameras.
- Once records have been added to an event filter, clicking the column header now sorts the column.
- Operator events are now able to generate alarms.
- A Default User Expiry Date/Time option has been added to the **Global | Sites | Display** menu. This option enables you to set a default start and end time for all user records.
- A Display Users In Groups option has been added to the **Global | Sites | Display** menu. This option enables you to view user records in group view from the **Users | Users** menu.
- A Background Update icon now sites in the Protege GX Status Bar and displays the active background operations. These operations include deleting an Access Level, a Schedule or a Salto Calendar. When one of these records is deleted, all other records tied to them cannot be modified. For example, if an Access Level assigned to a User is deleted, the User record won't be editable until the operation has completed.
- Various enhancements have been made to the Salto SHIP integration:
  - Protege GX now synchronizes with the Salto SHIP system much faster than in previous versions. This means that you are now able to add a user and program their card almost immediately. This only applies once an initial full download has taken place. Time for a full download is dependent on the size of the site. During this time, some integration features may be unavailable.
  - A Salto Status icon now sits in the Protege GX Status Bar. This enables you to view the current status of the integration.
  - A User Can Override Privacy option has been added to the **Users | Users | Salto** menu. When enabled, this option allows the User to access a room even when the door has been locked from the inside.
  - A User can Override Lockdown option has been added to the **Users | Users | Salto** menu. When enabled, this option allows the User to open the door if closed by lockdown.
  - A User can Lockdown Door option has been added to the **Users | Users | Salto** menu. When enabled, this option allows the User to initiate a Door lockdown.
  - An event is now generated when an operator cancels a Salto key.
  - You can now set the Salto Calendar option to Not Set.
  - A Salto Display Name field has been added to the Salto Doors, Salto Door Groups and Salto Calendars pages. This displays the name that the record has within Salto.
  - You can no longer add special characters to Salto record names within Protege GX. If you have applied special characters to any Salto record names, they are now automatically removed before the record is sent to Salto.
  - The multi-select function is now available for Salto Doors within the Salto | Doors menu.
  - The multi-select function is now available for Salto Door Groups within the Salto | Door Groups menu.

- You can now add Salto Door Groups to a status page for control.
- Record Group filtering has been implemented for Salto Doors, Salto Door Groups and Salto Calendars
- A Keypad Display Name field has been added for the following records:
  - Doors
  - Inputs
  - Areas
  - Trouble Inputs
  - Automation

  This defines name displayed on the keypad. As the first 16 characters are what a user sees from a keypad, these characters should be as descriptive as possible to ensure items are easily identifiable.

- Due to the globalization of certain records within Protege GX, Record Group filtering has been implemented for:
  - Doors
  - Areas
  - Schedules
  - Menu Groups
  - Door Type
  - Input Types
  - Phone Numbers
  - Floors
  - Elevator Cars
- The Include All options have been removed from the various Door, Area, Elevator and Floor Groups menus and are now configurable within an Access Level.
- All Door related Trouble Inputs have been removed from the Reader Expander and are now assigned directly to the Door. To facilitate this, a Door (DR) option can now be selected from the Module Type drop down for each of the Door Trouble Inputs. When this option is selected, the Module Address field is updated to allow you to select what Door the Trouble Input is associated with.
- A Keypad Groups section has been added to the Menu Groups menu. This enables you to filter menu groups based on the keypad group assigned to it and prevents downloading multiple menu groups per access level to legacy firmware.
- The User's Area Group option has moved from the **Users | Users | General** menu to its own tab within the **Users | User** menu.
- A Version 3 Settings section has been added to the **Sites | Controllers | Configuration** menu. This section is read-only and refers to the options that previously applied globally to a controller and is only relevant to PCB controllers.
- The Treat User PIN Plus 1 as Duress option is now configurable on an individual user level from the **Users | Users | Options** menu. If you are using a PCB controller with version 4.0 software or higher, enabling this option for one user enables it globally for all users.
- Global Antipassback has now been implemented. With several Controllers linked together, a User who badges at a Reader on one Controller to pass through an Entry Door into an Inside Area is able to badge at another Reader on a different Controller to pass through an Exit Door into an Outside Area. Due to this, the options for configuring Antipassback have moved from the **Sites | Controllers | Options** menu to the **Programming | Doors | Advanced Options** menu.
- As you are now able to assign any input from within the system to a door for the REX, REN, Door Sense, Bond Sense, and Beam sense functions, an Inputs tab has been added to the Programming | Doors menu to facilitate this. The original settings located in the **Expanders | Reader Expanders** menu are now ignored during normal operation. These options are only relevant for the offline operation of the Reader Expander.
- You can now set a ReportIP service as the backup for another ReportIP Service, a ContactID service or a SIA service.

- The Display options for Keypads have been moved from the **Sites | Controllers | General** menu to the **Expanders | Keypads | General** menu.
- All CID Mapping options have been removed from the services menu. Mapping is now generated using the Central Station Report function.
- Door types and input types are now created when a new site is added in Protege GX.
- A warning is now displayed when attempting to delete the last controller within a site.
- New Event Types have now been added to display the Reader Port if raw data is detected on a Reader Port that does not have a door associated with it.
- You are now able to apply multiple access levels to multiple users using the multi-select function.
- Changed all references to Avigilon within the user interface to Avigilon V4.
- An Options tab has been added to the **Programming | Daylight Savings** menu. This tab allows you to enable an option (Apply to All Controllers) that applies the daylight savings record to all controllers on site.
- As doors are now global across a site, a Door <DOOR_NAME><DOOR_ID> Unlocked by Access event has been added. This removes any association to a particular controller and prevents the Output on by Door Function Unlock event displaying for operators that do not have access to the record group of the controller the door's lock output belongs to.

Protege GX Web Client

- The User's Area Group option has moved from the **Users | Users | General** menu to its own tab within the **Users | User** menu.
- A Keypad Groups section has been added to the Menu Groups menu. This enables you to filter menu groups based on the keypad group assigned to it and prevents downloading multiple menu groups per access level to legacy firmware.
- The Include All options have been removed from the various Door, Area, Elevator and Floor Groups menus and are now configurable within an Access Level.
- A Keypad Display Name field has been added for Doors. This defines name displayed on the keypad. As the first 16 characters are what a user sees from a keypad, these characters should be as descriptive as possible to ensure items are easily identifiable.
- The Treat User PIN Plus 1 as Duress option is now configurable on an individual user level from the **Users | Users | Options** menu.
- An Options tab has been added to the **Programming | Daylight Savings** menu. This tab allows you to enable an option (Apply to All Controllers) that applies the daylight savings record to all controllers on site.
- A Change Password button has been added to the home page.

Issues Resolved (4.0.128)

This release resolves a number of issues relating to the Protege GX Software, Protege GX SOAP Service and the Protege GX Web Client.

Protege GX Software

- If an alarm is generated while a previous alarm pop up is open, the newest alarm is now displayed within the pop-up window.
- The Save Changes prompt window no longer displays twice after creating a security level and navigating to another page.
- The Use Antipassback option in the **Users | Users | Salto** menu now functions correctly.
- The Controller's build number now displays correctly in the Auto Address window.
- The Salto Outputs tab has now been removed from the **Users | Users** and **Users | Access Levels** menus.
- Emailed muster reports are now generated correctly.
- Entering a shift type with an invalid start and end time no longer results in the error message appearing twice upon saving.
- Fonts are now generated correctly in the card template editor.

- When adding a user field to a card template, the list of fields is now displayed correctly in the French, Polish, Estonian and Spanish User Interfaces.
- Deleting a user field from the card template editor now operates correctly.
- Certain circumstances no longer cause the download server to repeatedly try to download.
- Salto and security level related events are now displayed for all operators.
- A majority of the Protege GX Operator events are now able to be set as alarms.
- Protege GX no longer requires you to manually enter an alarm time when viewing archived camera footage after viewing the live camera feed first.
- Unexpected REX events are no longer generated when REX is disabled.
- The **Users | Attendance** tab is now correctly updated after a manually added In/Out event is deleted.
- Salto Calendars, Schedule and Access Levels are now all defaulted when deleted or are no longer in use.
- The Cencon status icon is now hidden if Cencon is not enabled.
- If you resize the image column of a status page's event window, it no longer returns to the default size after navigating away.
- The access level expiry function now operates correctly.
- The <Not Set> preset has been removed for roles.
- Resolved an issue where Salto locks would be removed from Salto inputs following a server reboot.
- Salto events now display correctly within Protege GX.
- The Salto Lock option is no longer for status lists if Salto integration has not been enabled.
- The Cencon Lock option is no longer for status lists if Cencon integration has not been enabled.
- An error is no longer displayed when attempting to open the Graphics View window from the **Users | Access Levels** menu when no access levels have been assigned.
- Cencon locks now update correctly.
- Items are now deleted properly from the Card Template Editor.
- The Protege GX DVR Service B now starts correctly following a Protege GX installation or upgrade.
- Exported records are now listed alphabetically.
- Multiple Time and Attendance reports can now be simultaneously emailed correctly.

Protege GX SOAP Service

- A non-default database server name is no longer cleared if you move between steps in the Protege GX SOAP Service installer window.

Protege GX Web Client

- Area names are now displayed correctly.
- The most recent events are now loaded first.
- Elevator cars now retrieved correctly by the elevator groups page.
- Security levels that are assigned to All Record Groups in Protege GX are now visible from the web interface.
- Event filter data for event reports now saves correctly.
- Status pages now support duplicate panels.
- Muster reports now operate correctly.
- Doors are now displayed correctly in the event filters page.
- User records are now saved correctly when they contain special characters.
- The Advanced Installer and Instant Arming options have been added to the **Groups | Menu Groups** page.
- Status lists now display records from all controllers correctly.
- Images added through the Protege GX software no longer display as missing image icons in the web interface.
- An error no longer occurs when changing whether a holiday repeats if more than one holiday is programmed.
- A scroll bar has been added to the History tab.
- The Keypad Groups list now populates correctly in the **Security Levels | Manuals Commands** menu.
- Dates are now shown correctly in attendance reports.

- Floor lists are now created correctly in the floor groups menu.
- The copy function now works as expected for holiday groups.
- The FindRecord function now selects the first record in the filtered list. Clicking Refresh selected the first record in the full list.
- The Acknowledged field displayed in a Status Page with Alarms now shows the correct time.

Previous SOAP Service Release History

Protege GX SOAP Service (1.6.0.5)

Feature Enhancements

- Added the ability to randomly generate user PINs via the SOAP service.
- When you update a user record, you can now instruct the SOAP service to immediately return the updated user record. If the user PIN has been updated by this SOAP call, this will allow you to view the newly updated user PIN.

For more information, see the Protege GX SOAP Service API Specification.

Issues Resolved

- Resolved an issue that occurred when the SOAP service attempted to write an error to the Windows Event Log without sufficient permissions. This caused it to generate an additional error and not report the original error.
- Resolved an issue where the SOAP service could time out (endless loading) when pulling user events. This issue affected the web client, and requires the corresponding Protege GX server version from this release.

Protege GX SOAP Service (1.6.0.1)

Feature Enhancements

- This version includes improvements for TLS 1.2 security.
- The SOAP installer now populates or overwrites the data server address with the current hostname instead of 'localhost' on installation or upgrade.
- Added the ability to create, program and use function codes via the SOAP Service.

Protege GX SOAP Service (1.6.0.0)

New Features

- Transport Layer Security (TLS) has been implemented and is now the default security setting when installing the SOAP service with options to select None or Windows Authentication. See "Enhanced Communication Security" in Protege GX New Features (see page 29) for more information.

Feature Enhancements

The following enhancements have been made to existing features in this release:

- Added the ability for the Protege GX SOAP service to check the Protege GX Data Service in order to validate license requirements.

Issues Resolved

The following issues have been resolved in this release:

- Fixed an issue where the SOAP service installer options of "Modify" or "Repair" would do nothing at all.
- Fixed an issue where SOAP was able to add Doors to a controller that did not exist in the database.
- Fixed an Issue where SOAP was able to insert a schedule record and apply it to another record that did not exist in the database.
- Fixed an issue where door type credential type fields were not exposed in the GetTableSchema API.

- Fixed an issue where the installer was not applying TLS settings when updating from version 1.5.0.30 or earlier.
- Fixed an issue where the GetStatusListStatus request was failing to retrieve data values assigned to variables.
- Fixed an issue where the Access level option "Use Access Level Door Type" was being set to "True" when adding access levels. This has been changed to "False" by default.

Previous Web Client Release History

This section includes information on the changes and enhancements made in earlier versions.

Protege GX Web Client (1.47.0.45)

New Features

- Added the ability to select a display theme (light or dark) and display color when you log in to the web client. Your selection will persist whenever you log in to the web client from the same browser.

Feature Enhancements

- Improved web security by preventing cross-site scripting (XSS).
- Upgraded jQuery to version 3.5.1 to include an internal security patch.

Issues Resolved

- Resolved an issue where the **Credentials** tab was sometimes not displayed in the users programming.
- Resolved an issue where attendance reports generated through the web client displayed the incorrect month.
- Resolved an issue where user reports displayed the **value** of drop down custom fields instead of the display text.
- Resolved an issue where user reports did not display the default value for custom fields if a user did not have that field configured.
- Resolved an issue where user photos could not be viewed or added through the web client.
- Removed an ellipsis button which caused a 404 error.
- Resolved an issue where in some instances the Web Client failed to apply the correct operator role and security level access restrictions, allowing operators to view or edit menus and programming that they should not have access to.
- Resolved an issue where event filtered reports were not displayed correctly via the Web Client.
- Resolved an issue where the **Operator Logged In** time was not being displayed correctly.
- Resolved an issue where HTTP headers were not set on web client pages.
- Resolved an issue where performing a user search using any binary option (checkbox) returned no records.
- Removed the 'Copy' button from the areas page.
- Resolved an issue where door records had blank names and could not be saved by operators with restricted site access.
- Resolved an issue where area records had blank names and could not be saved.
- Resolved an issue where the credential types page was not displayed correctly in Internet Explorer browsers.
- Resolved an issue where the access levels page was not displayed correctly.
- Resolved an issue where the controller drop down menu on the daylight savings page was empty.
- Resolved an issue where the export PDF function was not working on the user reports page.
- Resolved an issue where the user page did not include scroll bars when the users were displayed in groups.

Protege GX Web Client (1.47.0.35)

New Features

- Web Client Cookies now have the HTTPOnly flag set, and are also now regenerated uniquely for every session. Both of these changes help mitigate the risk of client side scripts accessing the protected cookies.

Feature Enhancements

- Added the ability to multi-select records to apply common setting changes.
- Added the ability to filter an Event Report by individual controllers.
- Improved performance of the User list to make loading and switching between large numbers of users quicker.

Issues Resolved

- Fixed minor display and presentation issues.
- Fixed an issue where the **Use Access Level Door Type** setting was being enabled by default when adding an Access Level via the Web Client.
- Fixed a number of issues relating to the Find tool:
  - Where clicking the Find button on the User page would simply just refresh the page.
  - Where the Find tool was not displaying User Custom fields as it does in the Protege GX User Interface.
  - Where a number of blank lines were displayed in the Find tool search list on the Areas and Output Groups pages.
- Fixed an issue where adding Enterprise Muster Reports would cause blank pages to be displayed.
- Fixed an issue with Attendance Reports not showing any data in the Web Client.
- Fixed an issue where the Name2 field was being incorrectly served to the Mobile App through the Web Client.
- Fixed a bug where the Areas page would incorrectly load a blank page with editable fields allowing a new Area to be created through the Web Client.
- Fixed a bug where the Elevators page would incorrectly load a blank page with editable fields allowing a new Elevator to be created through the Web Client.
- Fixed instances of Fast CGI Handler error messages by adding Microsoft Visual C++ Runtime 2015 x86 to the Web Client installer.
- Fixed an issue on User Reports where PINs were being starred out (****) for an Operator that had permissions to view PINs.
- Fixed an issue where adding a card to an existing from a 'Read Raw Credential Data' event was clearing the user's PIN and resetting any card expiry options.
- Fixed a number of issues with the User Custom Fields tab:
  - Where the User Custom Field tab was not displaying special characters correctly.
  - Where Time and Date values and date picker were not working correctly.
  - Where the Custom Fields would appear in a random order each time the page was loaded.
- Fixed an issue where the text entered and saved into a Command field was disappearing when the page was refreshed.
- Fixed issues with text display and minor inconsistencies in button positions.
- Fixed an issue causing slowdown in the Web Client.
- Fixed an issue where printing reports to PDF was failing.
- Fixed an issue with changes to the operator password policy not taking effect when saved.

Protege GX Web Client (1.47.0.16)

New Features

The following new features have been included in this release:

- The Protege GX Web Client has been completely revamped and updated to match the Protege GX User Interface changes outlined earlier in this document.
- The Protege GX Web Client Installer has been updated to utilize PHP version 7.3.6.

Feature Enhancements

The following enhancements have been made to existing features in this release:

- Operator Passwords now support the use of the special characters # and &.
- Updated Door Statuses and Icons on status pages.

Issues Resolved

The following issues have been resolved in this release:

- Fixed an issue where changing an Operator password actually changed the Admin Operator password and not the password of the logged in Operator.
- Fixed an issue where the Name and Name2 fields were being switched around when logging in using a secondary language.
- Fixed an issue where User properties were not saved using the Web Client if a Custom Field and Custom Field Tab existed in programming.
- Fixed an issue where language translations were displaying the incorrect second language value for installations where a different alternative language was used to log into the web client.

Previous Data Sync Service Release History

ICT Data Sync Service (2.0.10.12)

Feature Enhancements

- Added the ability to connect to the SOAP service using HTTPS.

Issues Resolved

- Resolved an issue where fields that were not mapped were being processed when syncing a record that already existed in Protege GX.
- Resolved an issue where user records were failing to update if they were initially synced without custom fields, and then synced again with custom fields added.

ICT Data Sync Service (2.0.10.7)

New Features

- The Data Sync Service now 'soft fails' when a linked record cannot be found in the database. For example, if the user import CSV references an Access Level that does not exist, Data Sync will now import the user without the Access Level assigned instead of failing to import the user altogether.
- Import processing speeds have been improved. The time taken to sync records for both the add and update processes has been reduced immensely.
- Implemented local caching of imported data to reduce the time it takes to re-sync a record.
- Implemented a new option called **Validate Against Last Sync** which, when enabled, checks the row that is currently being synced against the rows that were imported on the previous sync to see if any changes have been made.
- Implemented a new option called **Log Errors Only** which, when enabled, logs only events at an error level in the log file and/or the Windows Event Viewer.
- Added a new option to **Move Files on Error** when the **Delete Import Files When Complete** option is enabled. Previously, files that generated an error during the sync remained in the import directory and were re-synced when the service restarted. With this option enabled, files that generate errors are moved into a separate file directory so that they are not re-synced until an operator fixes the issue with the files.
- Added a **Delete Sync History** button to allow data to be re-imported when using the **Validate Against Last Sync** option (this deletes the linecheck.dat file which keeps a list of lines from the previous import).

Feature Enhancements

- The **Delete Records Not Present in Import File** option now uses the history of the previous sync and the current sync to determine which records to delete. In the previous build this option was not working for record types where the ParentID is the ControllerID and this issue has now been resolved.
- Cache data is now being written to file at the end of each sync and is read back to memory on the first sync. This prevents the need to fill the cache again if the service is stopped and restarted.
- Added handling to rebuild the lastsync.dat file if it contains rubbish data.

Bug Fixes

- Fixed an issue where if multiple Unique Fields had been configured, only the **Name** field was being used to check if the record already existed.
- Fixed an issue where if there were GroupData elements with the same UniqueIdentifer values in the CSV, the elements were removed from the AddRecord request.

- Fixed an issue where Data Sync was not checking for further import files if the previous file directory was empty when importing multiple record types.
- Fixed an issue where user Access Levels were not being removed when the data was removed from the import file.
- Fixed an issue with the **Group Data Before Import** option where, if the data in the import file contained different data for the same field (for the same record) then records were failing to add or update.
- Fixed an issue where if the DeleteRecord field was mapped, it would not be loaded to the UI and then was subsequently removed from the mapping when clicking Save.
- Fixed an issue related to syncing users where if the ImageID field was mapped, user records were not being updated in Protege GX if the data in the import file was modified.
- Fixed an issue where 'Removing Data…' events were being unnecessarily logged, causing the user update process to run slowly.
- Fixed an issue where the **Delete Records Not Present in Import File** option was not working when the **Validate Against Last Sync** option was enabled.
- Fixed an issue where, if blank data was sent as a reference to another record (e.g. The name "" was sent as an Access Level assigned to a user) the record would fail to import instead of Data Sync logging an error and proceeding to import the record with the valid data only.
- Fixed an issue where Data Sync was failing to find referenced records (e.g. an output assigned to a Programmable Function) if the ControllerID in the settings.xml file was assigned by setting the DefaultValue to the Database ID of the Controller in Protege GX.
- Fixed an issue related to user import where, if the ImageID field was mapped to import photos for existing users, and the user data in the import file had no image to import, then Data Sync was logging an event that read "Removing image from user…" instead of skipping photo import for that user.
- Fixed an issue where user images were not being updated in Protege GX if the user record was originally imported without a photo assigned.
- Fixed an issue where if a user already existed in Protege GX with a photo assigned, user data (e.g. PIN) was not being updated if the user image remained the same on resync.

Protege GX Data Sync Service (2.0.6.5)

New Features

- Transport Layer Security (TLS) has been implemented and is now the default security setting when installing the data sync service. See "Enhanced Communication Security" in Protege GX New Features earlier in this document for more information.

Feature Enhancements

The following enhancements have been made to existing features in this release:

- Added an allowance to import Duplicate PINs via Data Sync if the Site Security settings in Protege GX are set to allow PIN Duplication.
- Added the option to set the Resync time in seconds.
- Added an error message when the HostControllerRef field is not mapped for a record that requires it for successful import.
- Added backward compatibility to support `<Security mode="None"/>` for Protege GX versions 4.2.x. The Data Sync Service default on installation is to use Transport Layer Security (TLS).
- For those using TLS, localhost is still supported in the address field. Data Sync will automatically retrieve the host name in the background.
- Added a new log file named "license.log" created in the logs directory (in the installation folder). This tracks the license related calls made to SOAP and/or GXSV.exe.

Issues Resolved

The following issues have been resolved in this release:

- Fixed an issue where if an empty data mapping was present the service would wait for the resync time to elapse and attempt to sync the same record type again instead of skipping to the next record type.
- Fixed an issue where the import would fail when assigning a Controller level record to a Site level record (e.g. adding a Door to an Access Level) to a database where there was more than one Site.
- Fixed an issue where the 'Service will restart at...' message was displaying the next sync time incorrectly if the units were set to 'Hours'.
- Fixed an issue where Input Types were not being imported as SOAP was receiving the wrong ParentID.
- Fixed an issue where Door Type Credential Types were being displayed incorrectly.
- Fixed an issue where a 'Restart Sync Failed' exception was raised when records with more than one Unique Field were being synced.