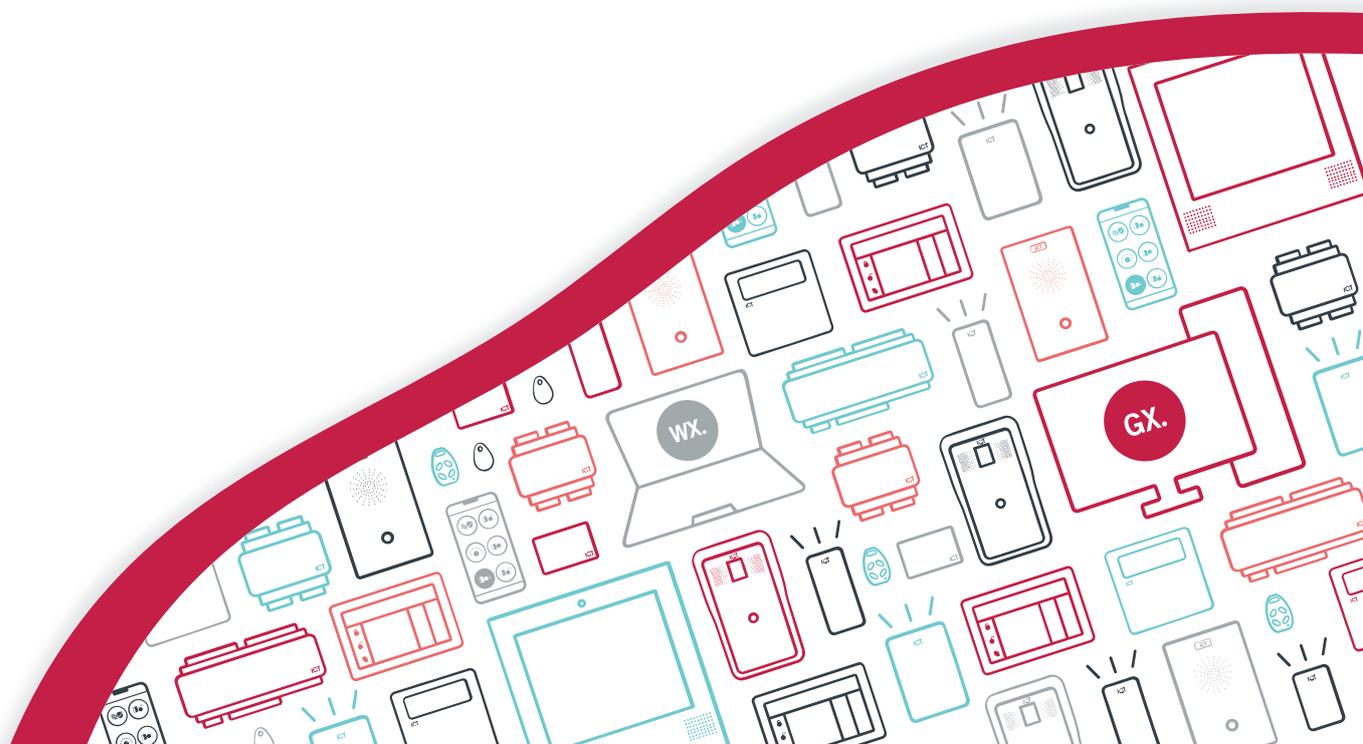




AN-243

Exporting and Emailing Reports in Protege GX

Application Note



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Introduction

Protege GX offers the ability to automatically export any report to a file or email it to specified addresses on a regular schedule. This is useful for auditing events and users, keeping up-to-date records of current site status and importing data from Protege GX into third-party systems.

In this application note we will cover some common scenarios:

- Export an attendance report once a day. This will be imported into an HR system to calculate employee payroll.
- Export a muster report every half hour to keep a record of the users currently on site.
- Email an event report to specified addresses once a week.

Prerequisites

- This feature requires Protege GX version 4.2.201 or higher.
- No separate license is required to export or email reports. However, some report types are licensed separately:
 - Attendance reports: PRT-GX-TNA
 - Muster reports: PRT-GX-MUST
- Emailing reports requires a compatible SMTP mail server.

The tested and supported SMTP servers are:

- Microsoft Exchange Server 2016
- Gmail when configured for less secure apps (see [this link](#))
- Yahoo

Programming Examples

Exporting Attendance Reports

Protege GX attendance reports are designed to be compatible with payroll and HR software, enabling you to integrate attendance data from Protege GX into payroll calculations. To achieve this, we will perform a daily export to a CSV file, which will be manually uploaded into the payroll system.

Before you begin, create the report that you want to export in **Reports | Setup | Attendance**. For more instructions, see Application Note 308: Time and Attendance in Protege GX.

1. Open the attendance report and navigate to the **File Export** tab.
2. Select **Enable file export**.
3. Set the **Report format** to CSV. This is the most common format used for import into third-party systems.
4. Set the **Time** that the report will be exported each day (e.g. 08:00 pm). This is based on the time zone of the Protege GX server, not the client you are currently using.
5. Enter the **Export directory**. This must be a location on the server or network that Protege GX can access.
6. Enable **Append unique ID to filename**. This prevents newer reports from overwriting existing ones before they can be uploaded to the third-party software.
7. Select the **Days to export** (e.g. Monday-Friday).
8. Click **Save**.

The CSV file should be updated at 8:00 pm every weekday.

Exporting Muster Reports

Protege GX muster reports give you a snapshot of the users who are currently on site. When there is a fire or other emergency it is useful to have a recent report on file to help responders determine everyone's status. In this example, we will export the muster report to a file every half an hour.

Before you begin, create the muster report that you wish to export in **Reports | Setup | Muster**. For more instructions, see the Setting up Reports section in the Protege GX help file (**About | Help**).

1. Open the muster report and navigate to the **File Export** tab.
2. Select **Enable file export**.
3. Set the **Report format** to PDF or XLS for easy human readability.
4. Enable **Export time is periodic**. With this setting enabled, the system will export the report multiple times per day based on the number of minutes in the **Time** field.
5. Set the minutes value in the **Time** field to 30 (the hours value does not affect the export time). This will export the report every thirty minutes.
6. Enter the **Export directory**. This must be a location on the server or network that Protege GX can access.
7. In this case we do not want to enable **Append unique ID to filename**, as the muster report is a snapshot in time and doesn't need to be saved long-term. Later exports will overwrite existing files.
8. Click **Save**.

The muster report on file should be updated every half an hour.

Emailing Event Reports

Event reports detailing access, alarms and other key events from the site may need to be emailed to key personnel regularly for auditing purposes. In this case, we will send a weekly event report on Friday afternoons to the building owner and security manager.

Before you begin, create the event filter and event report that you wish to send in **Reports | Setup | Event**. For more instructions, see the *Setting up Reports* section in the Protege GX help file (**About | Help**).

First, we must connect Protege GX to an email server. The following setup steps should be performed on the Protege GX server machine.

1. In Protege GX, navigate to **Global | Global settings**.
2. Open the **Email settings** tab.
3. Enter the IP address or hostname of an **SMTP mail server**.
4. For security, select **Enable SSL** and set the **SMTP port** to a TLS-enabled port (e.g. 587, 2525).
5. Enter the **SMTP login** and **SMTP password**.
6. Set the **Sender email address** and **Sender display name** to determine the name and address used for emails from Protege GX (for example, Protege GX Reporting Service).
7. Enter your own email address into the **Test email address** field.
8. Save and click **Test email settings**. You should receive a test email after a brief delay.

Next, we must add email addresses to the relevant Protege GX operators:

1. Navigate to **Global | Operators**.
2. Select the building owner and security manager operators and enter their **Email** addresses.
3. Click **Save**.

Finally, we can set up our event report:

1. Navigate to **Reports | Setup | Event**.
2. Select the event report and open the **Email** tab.
3. Under **Operators**, click **Add** and add the building owner and security manager.
4. Enable **Email report**.
5. Set the **Format** to PDF or XLS for easy human readability.
6. Set the **Time** to 4:00 pm. This is based on the time zone of the Protege GX server, not the client you are currently using.
7. Disable all days of the week except for **Friday**.
8. Set the **Period** to *Since report was last emailed* so that no events are missed from the weekly reports.
9. Click **Save**.

The selected operators should receive the event report in their inboxes once a week.

Troubleshooting

The date/time format in exported and emailed reports is incorrect (e.g. mm/dd/yyyy instead of dd/mm/yyyy)

The date/time format set on the Protege GX server determines the format for exported and emailed reports. If exported reports do not have the correct format, you need to check the regional settings on the server and ensure that they are being used by all accounts:

1. Open the **Control Panel** and navigate to **Region**.
2. Set the date and time formats to those you want to use.
3. In the **Administrative** tab, click on **Copy settings**.
4. Enable both **Welcome screen and system accounts** and **New user accounts**.
5. Click **OK**.

Exported/Emailed reports contain blank columns

This can be caused by the header and footer which provide additional details about the report, such as the report name and date of export. If these blank columns are interfering with automated imports and other processes, enable **Exclude report header and footer** to remove them.

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