Configuring Shift Reports in Protege GX

Application Note

ICT®eSecurity.

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Contents

Rotation and Overnight Shifts

Industries such as law enforcement, security, health care and manufacturing often require operations to be run 24 hours a day, 7 days a week. This practice typically sees the day divided into shifts.

Protege GX can be used to create shifts that run during the day, run overnight and rotate over a set period of time. Using the Time and Attendance feature, single shifts can be added to an attendance report and viewed directly from the user interface.

Version Compatibility

The following software version or higher are required for this functionality:

Software	
Protege GX Software	3.2.69.6

Scenario

In this example we will be using a scenario that is based in a factory environment that requires operations to be carried out 24/7. The staff in the factory have been split into four teams of ten and are required to work six days on and two days off.

The company has created three, eight hour shifts that are rotated between the teams over a twenty-four day period:

- **Morning shift** (07:00 - 15:00)
- **Afternoon shift** (15:00 - 23:00)
- **Overnight shift** (23:00 - 07:00)

    Each shift has two ten minute paid breaks and one thirty minute unpaid break.
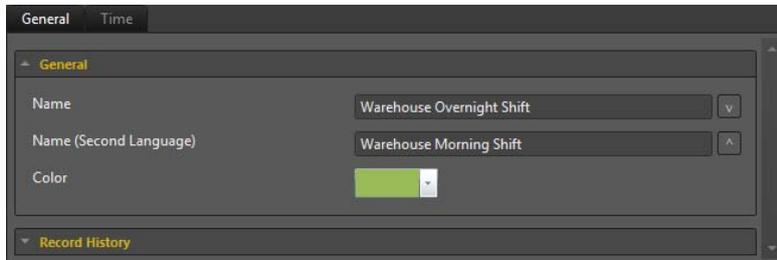
Using the Time and Attendance function in Protege GX, we are going to be configuring the overnight shift and pulling a report on one particular day.

Configuring the Report

Creating the Overnight Shift Type

1. With the Protege GX application open, navigate to **Reports | Setups | Shift Type**.

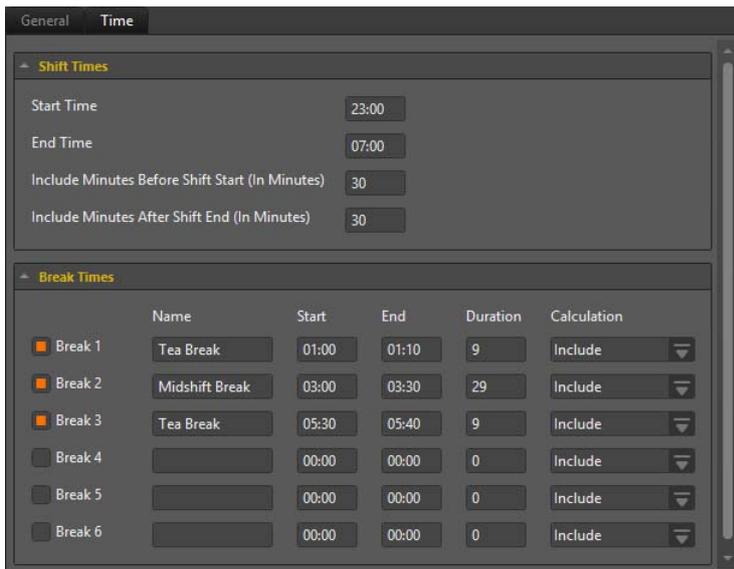2. Click **Add** and enter a **Name** for the shift.

    To follow the scenario, we have entered Warehouse Overnight Shift for the name.

3. Select a **Color** to identify the shift.

4. Select the **Time** tab.

5. Enter a **Start Time** and **End Time** for the shift.

    To follow the scenario, we have set the Start Time to 23:00 and the End Time to 07:00.

6. If you want to view a certain amount of time before and after the shift, enter the desired values in the **Include Minutes Before Shift Start** and **Include Minutes After Shift End** fields.

    This will allow us to view whether an employee has arrived early or left late.

7. The **Break Times** section allows you to configure up to six break periods during the shift. To create a break period:

    - Select one of the break options
    - Enter a **Name** for the break
    - Set a **Start** and **End Time**
    - Enter the **Duration**. The duration is the time between the start and end time. For example, when the start time is 01:00 and the end time is 01:10, the break duration is 9 minutes.
    - Select whether to **Include** to **Exclude** the break from the final calculation. If a lunch break is unpaid, you would select to exclude it so the break will be processed as a time deduction. For shorter (paid) breaks, you would choose to include the break.

8. Click **Save**.

Adding the Shift to an Attendance Report

In order to view the information we're looking for, we now need to add the shift to an attendance report.

1. Navigate to **Reports | Setup | Attendance**.

2. Click **Add**.

3. Enter the **General** details:

- **Name**: The name of the attendance report.

- **Record Group**: Defines the record group that the report is assigned to.

- **User Source**: Determines where the users for the report will be sourced from. Choose from:

    We have selected the User List option.

    - User List - to select specific users

    - Access Level - to select all users belonging to a certain Access Level

    - Record Group - to select all users that are part of a certain Record Group

- **User Record Group**: If choosing Record Group as the User Source above, select the Record Group to use.

- **Report Type**: Defines the method in which the time is calculated. Choose from:

    We have selected the Shift First and Last User Event option.

    - Daily First In Last Out - to use the first **entry event** and the last **exit event** each day to determine attendance and the hours included. Any events in between are ignored, meaning any time spent offsite such as breaks is not deducted.

    - Shift First In Last Out - to use the first **entry event** and the last **exit event** each day <u>and</u> additional entry/exit events during the day. Protege then pairs the various entry/exit events with any defined shift and break times to calculate the hours worked.

    - Daily First and Last User Event - to use the first and last **user event** each day to determine attendance and the hours included. Any events in between are ignored, meaning any time spent offsite such as breaks is not deducted.

    - Shift First and Last User Event - to use the first and last **user event** each day <u>and</u> the additional events during the day. Protege then pairs the various entry/exit events with any defined shift and break times to calculate the hours worked.

- First Scan In – to show the earliest entry time for each day
- Last Scan Out – to show the latest exit time for each day
- First Scan In and Last Scan Out – to show the earliest entry time and the latest exit time for each day
- Late In – to show the earliest entry time for each user for the days where the entry time was late (after the grace time has been applied)
- Top 10 Late In - to show the users with the 10 highest number of Late In entries
- Late Out – to show the latest exit time for each user for the days where the exit time was late (after the grace time has been applied)
- Early In – to show the earliest entry time for each user for the days where the entry time was early (after the grace time has been applied)
- Early Out – to show the latest exit time for each user for the days where the exit time was early (after the grace time has been applied)
- Absent - to show the users with no time entry data for any of the days covered by the report
- Top 10 Absent - to show the users with the 10 highest number of days absent

The **Unscheduled Days Worked (excluding Public Holidays)** and the **Public Holidays Worked** options cannot be enabled when configuring an attendance report based on a shift. Enabling these options may cause the report to generate unexpected results.

- **Report Print Template:** Defines the level of detail to include in the report. Choose from:

  We have selected the Detail option.

  - Summary - to show a daily summary for each user
  - Detail - to show a detailed breakdown for each user each day, including start, break, and end times, and the corresponding in and out calculations for each event.
  - Summary ICT - to output the report in a CSV format that shows a detailed breakdown of users start, break and end times, and the corresponding in and out calculations for each event
  - Summary MYOB - to output the report in a CSV format that shows a breakdown of the in and out calculations for each event that can be directly read into the MYOB program

- **Grace Time:** Defines the time (hours:minutes) before the user is considered to be late or early and the excess time deducted from the hours reported. For example, if a user is 2 minutes late returning from a break and the grace time is set to 3 minutes, the time is not deducted from the total hours worked. However if that user is 5 minutes late returning from a break and the grace time is set at 3 minutes, the entire 5 minutes is deducted from the total hours worked.

- **Normal Pay Code**: Allows you to specify a pay code for normal working hours.

4. Enter details of the **Period** for which to include data:

   We have selected the Prompt for Date option.

   - **Period**: Choose from the previous one, two, or four weeks, or select custom period to define a specific start and end date.
   - **Starting**: Determines which day of the week the report is to start from. For example, selecting Monday and a one week report, will display data from 00:00am on Monday to 11:59pm Sunday.
   - **Start Date**: If using a custom period, determines the date the attendance report is to start from.
   - **End Date**: If using a custom period, determines the date the attendance report is to stop at.
   - **Prompt for Date**: When configuring the report, if a custom period is configured the Prompt for Date option can be selected. This brings up a date prompt each time the report is executed.

5. Click the **Shift Times** tab to select the shift you want to report on.

6. Set the **Shift Type** to **Rotation**.

7. Set the **Rotation Length** and **Rotation Start Date.**
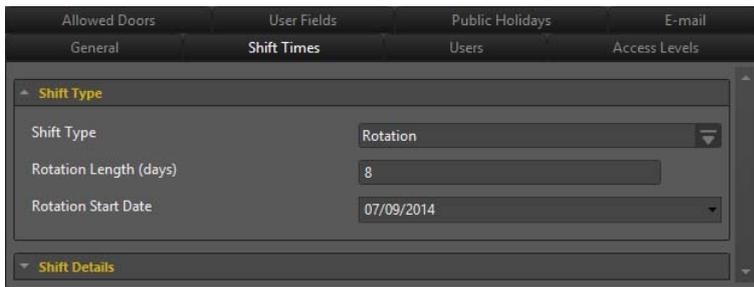
8. From the **Shift Details** section, click **Add** to assign a shift to the report.
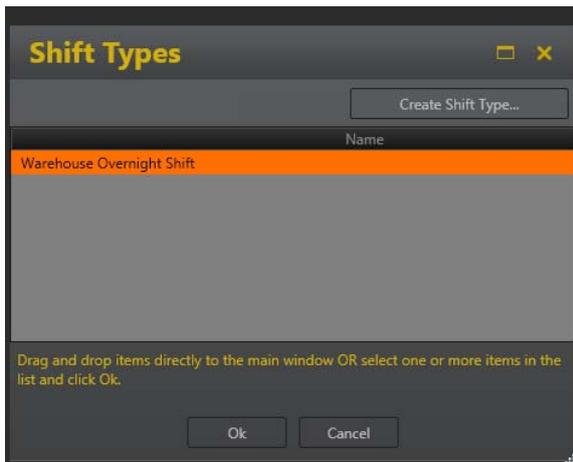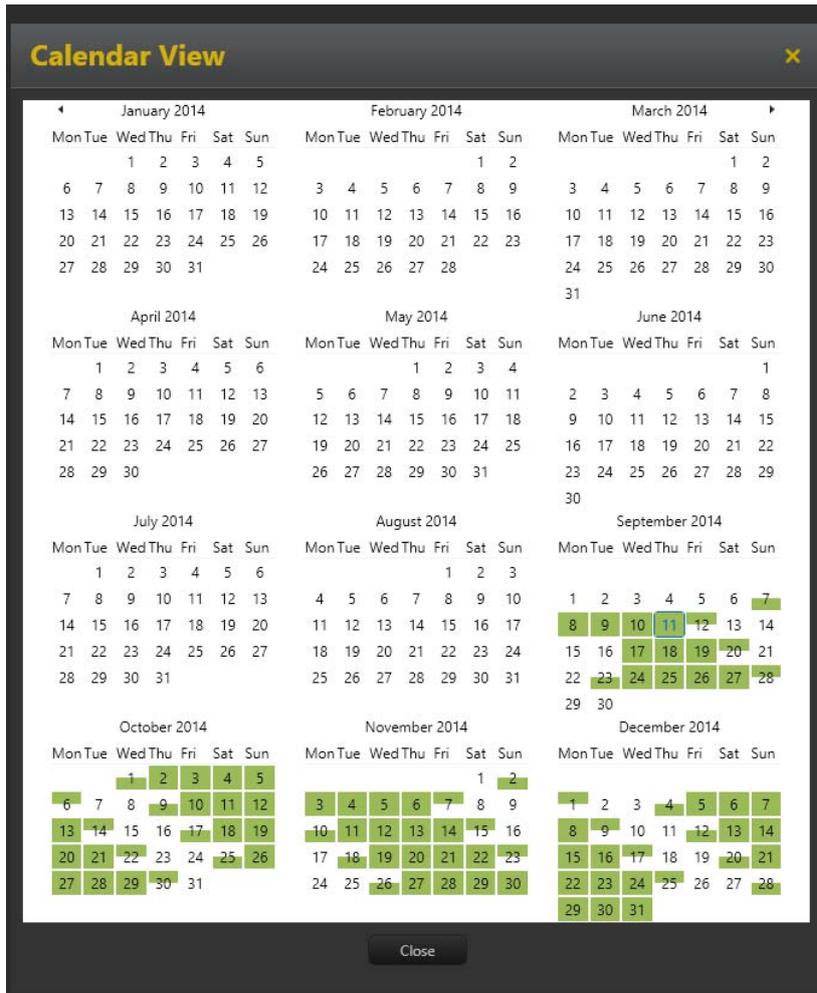

9. Select the **Shift** you want to add and click **Ok**.

    The shift will appear in the Shift Type table and display the color, name, start and end times and the break times configured.
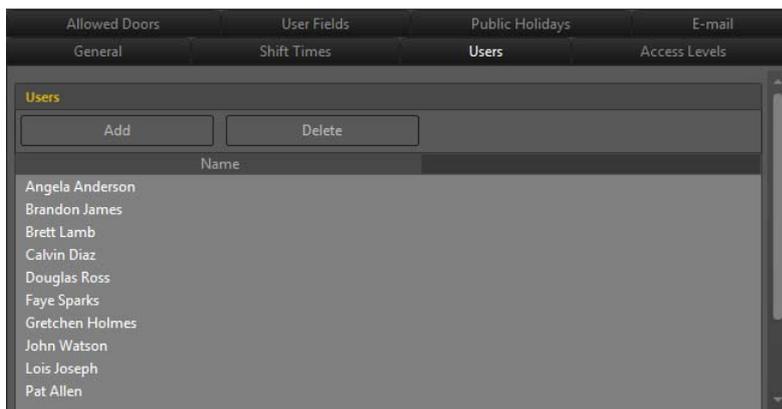
10. From the drop down, select the Shift and click the days that the shift applies to.
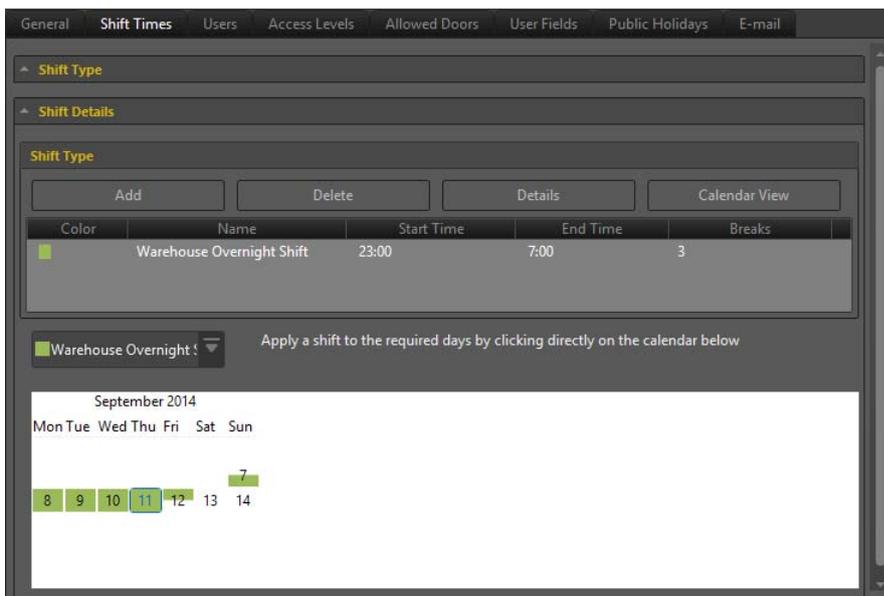
11. Using the **Calendar View**, we can see how the shift will operate over and extended period of time.

12. If you have chosen **User List** as the User Source for the report, click the **Users** tab to define which users to report attendance for.

13. If you have chosen **Access Level** as the User Source for the report, click the **Access Levels** tab to define which access levels to report attendance for.
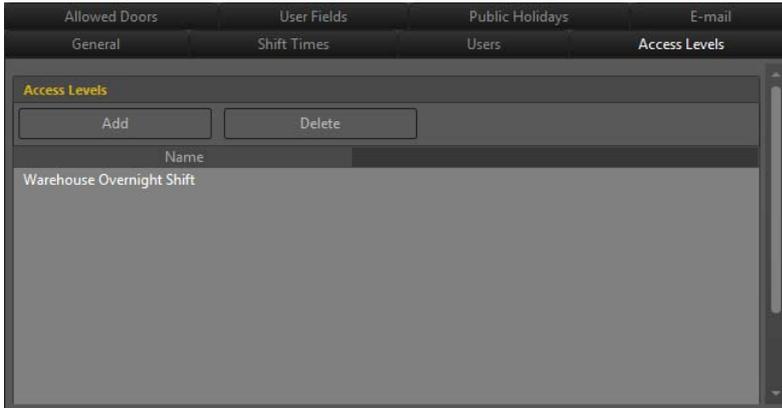
14. Click the **Allowed Doors** tab to define the doors and to select the direction (Entry, Exit, or Both) that will be used to track attendance.
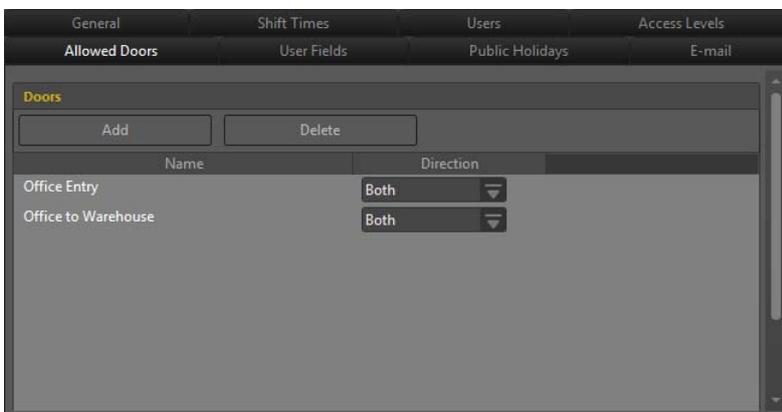
- **Both**: Use for a door that serves as both a clock in and clock out point. When a user enters these doors they are identified as being onsite (clocked in). When they exit these doors, they are identified as having left site (clocked out)

- **Entry**: Use for access points that are only used to clock in

- **Exit**: Use for access points that are only used to clock out

15. Click the **User Fields** tab to define an employee code and add additional user data by selecting the Protege GX custom fields and extended custom fields required by the third party system.
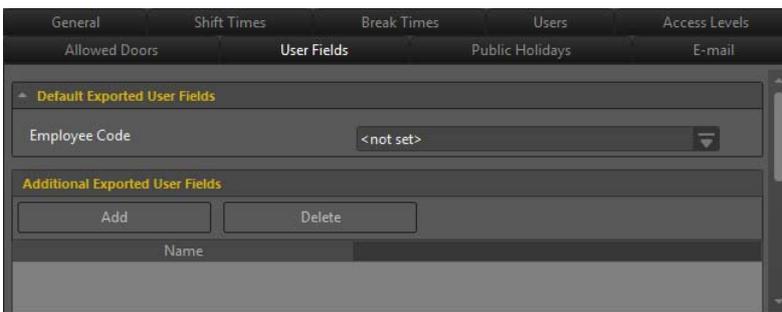
16. Click the **Public Holidays** tab to add holidays to run against the Public Holidays Worked option. This allows the report to differentiate between a public holiday and an ordinary work day in the report.

If you require the the shift to run over a public holiday, it must be set from the **Shift Type** column.

17. Click the **Email** tab to enter details of who and when the report should be emailed to.

- **Operators**: Add the operator(s) to send the report to.
- **Email Report**: Select to enable email. Note that the operator must have an email address defined under their operator settings and the SMTP server must be defined under the Global settings or the email will fail to send.
- **Report Format**: Defines the format of the file format if the report that will be sent. Choose from PDF, CSV, Text, or XLS.
- **Time**: Defines the time and day(s) that the report will be sent.

18. Click **Save** to save the report.

Viewing the Report

1. To view the report, navigate to **Reports | Attendance**.

2. Set the **Attendance Report** to the one just created.

3. Click **Execute.**

   As we have enabled the Prompt for Date option, we need to set the Start and End Date.

4. Click **OK.**

   The report will be displayed in List View.

5. Use the arrow (⊕) symbol to expand the records.

   Now we can see the when the user came into the building, we they took their breaks, and when they left.

6. Drag the **Date** and **User Name** fields onto the report to further filter the results using **Grid View.**

7. Viewing the report in **Grid View** allows us to:

- **Resize columns** by hovering the mouse over the edge of the column header until it forms a double-headed arrow then dragging the column to the required size. We can also use the right-click menu to automatically resize your columns for the best fit.

- **Reorder columns** by dragging and dropping a column header to a new position in the grid.

- **Remove columns** by dragging them down from the column header section into the list. When a red delete icon appears over the column header, release the mouse to remove the column.

Printing the Report

1. To print the report, click the **Print** button.

2. A **Print Preview** window will open. From here you can review, save, email and export the report.

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