



**AN-149**

# Creating a Photo ID Template in Protege GX

Application Note



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# Creating a Photo ID Card

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The Protege GX card template editor allows authorized operators to create custom photo ID templates and define the layout and information included on a user's card or label.

The following instructions address the common features and setup of a photo ID card.

For more detailed instructions on how to use the tools and functions of the card template editor, please refer to the Protege GX Operator Reference Manual.

Photo ID is a separately licensed feature (order code: PRT-GX-PHOTO).

## Creating a Card Template

1. Navigate to **Users | Card Template Editor** and **Add** a new template.
2. Enter a **Name** to identify the template.
3. If you have an existing template that you would like to use as a base, select it in the **Copy From Existing** drop down list.
4. Click **OK**.
5. By default, the card orientation is set to portrait. To change the orientation enable the **LndScp** option in the toolbar on the right.
6. By default, only the front of the card is printed. To print both sides of the card enable the **Print Both Sides** option in the **Card Template Properties** section in the **Properties** pane on the right.
7. **Save** your new template.

## Adding Photo and Name Placeholders

1. Expand the **User Fields** section in the **Properties** pane on the right.
2. Click **Add** to open the **Select Fields** window.
3. Set the **Field Type** drop down selection to Photo Holder.
4. From the **Field** section below, click and hold **Photo Field 1**, and drag and drop it onto the template.
5. Once the photo holder has been placed, set the **Field Type** drop down selection to User Fields.
6. Drag and drop the **Name** field onto the template, then **Close** the Select Fields window.
7. Adjust the position and layout by selecting and dragging the fields as required.
8. The user field font and text size can be edited in the **User Fields** section in the **Properties** pane.
9. Additional text fields can be created in the **Text** section.
10. **Save** the template.

## Adding Credential Placeholders

Often it is useful to print a user's credentials on a card, such as their facility/card number, license plate or User ID. The process is different depending on whether you want to display a standard facility/card number or a custom credential type.

### Adding Facility and Card Numbers

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1. Expand the **User Fields** section in the **Properties** pane on the right.
2. Click **Add** to open the **Select Fields** window.

3. Set the **Field Type** to User Fields.
4. Click on the Card Number, Facility Number or Facility/Card Number and drag it onto the template.
5. Click **Close**.

## Adding Credential Types

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Credential types are only available for card templates in version 4.3.310.1 or higher, and include standard credential types and User IDs. Compliance types cannot be included.

1. Expand the **User Fields** section in the **Properties** pane on the right.
2. Click **Add** to open the **Select Fields** window.
3. Set the **Field Type** to Credential Type/Credential Value.
4. Select one or more credentials and drag them onto the template.

If the credential type includes a colon to separate the facility and card number, only the number after the colon (i.e. the card number) will be displayed. If there is no colon the entire credential value is displayed.

5. Click **Close**.

## Adding Images to the Card

Adding a picture, such as a company logo, can be achieved through two different methods.

- Directly from the images section of the card template editor.  
or
- Through the use of custom fields.

The following topics outline both methods.

### Adding an Image from the Card Template Editor

1. Expand the **Images** section in the **Properties** pane on the right.
2. Click **Add** to open the **Select Image** window.
3. Click the ellipsis [...] button to browse to and select the image. Then click **OK**.
4. To place your image, click and drag your cursor (which has now changed to a large + symbol) and draw a box on the template design surface.
5. Drag the square handles to resize as required. Use the circular handles to rotate the image.
6. Click **Save**.

### Adding an Image with Custom Fields

1. Create a new custom field tab:
  - Navigate to **Users | Custom Field Tabs** and click **Add**.
  - Enter a **Name** for the tab and click **Save**.

You could also use an existing custom field tab if you have a suitable tab already created.

2. Define the custom field:
  - Navigate to **Users | Custom Fields** and click **Add**.
  - Enter a **Name** for the custom field, such as Logo.
  - Select the **Tab** that the custom field will be listed under.
  - Set the **Field Type** to **Image**.

- If required, define the **Pixel** height and width of the custom field to match the size of the image.
- Click **Save**.

3. Add the image to each user record:

- Navigate to **Users | Users** and select the user to add the image to, or select all users (CTRL+A).
- Go to the custom field tab, and beside the new logo custom field click **Add Image**.
- Click the **[...]** button to browse to and select the image.
- Once the image has been acquired, click **Next**.
- Crop the image if required, then click **OK**.
- Click **Save**.

Right click a **Add New Image** or **Delete** to update the image selection.

4. Add a placeholder to the card template:

- Navigate to **Users | Card Template Editor** and select the required template.
- Expand the **User Fields** section and **Add** a new user field.
- From the **Field Type** drop down, select Custom Fields.
- Drag and drop your newly created Logo field onto the template, then **Close** the Select Fields window.
- Adjust the size and position of the custom field placeholder as required.
- **Save** the template.

# Adding Start and End Dates to a Photo ID Card

The card's expiry date will only be displayed if a **User Expiry Date** has been configured for the user.

1. Add the date values:
  - In the **User Fields** section, click **Add**.
  - Change the **Field Type** drop down to User Fields.
  - Drag and drop the **Current Date** and **User Expiry End Date** fields onto the template.
  - **Close** the Select Fields window.
  - Adjust the size and position of the fields as required.
  - The text font and size can be edited for each field in the **User Fields** section.
2. Add text to identify the placeholders:
  - As these placeholders will only display dates, some text should be added to the card to identify them. Expand the **Text** section and click **Add**.
  - Click and drag your cursor (which has now changed to a large **+** symbol) and draw a box on the template design surface.
  - In the **Text** section:
    - Replace the default <New Text> description with a suitable **Name**.
    - In the **Text** field, enter the text as you would like it to appear on the card, such as Valid From.
    - Select the desired **Font** and specify the **Font Size**.
    - Select any additional font options as required.
  - Add another text box for Card Expiry.

This process can be used to add any text fields that are required to be printed on the card.

3. **Save** the template.

# User Configuration

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## Adding a Photo to a User

1. Navigate to **Users | Users** and select the user to add the photo to.
2. In the **Photo** tab, click **Add Photo...**
  - If the image is already stored on the network, click the ellipsis [...] button to browse to the image. The image must be accessible from the server machine.
  - If the image does not yet exist, set the **Image Source** field to capture a new image. You can capture an image from a connected webcam, or from a Topaz signature pad.
3. When the image is selected, click **Next**.
  - To crop the image ensure the **Crop** option is selected. Move and resize the image frame as required.
  - To maintain the aspect ratio, ensure that the **Aspect** option is selected. Deselect this option to crop the image without the ratio restriction.
4. When your cropping selection is complete, click **OK**.
5. To change the width or height of the image, select **Photo Settings**.
6. Adjust the size settings as required, then click **OK**.

Click **Reset Display Size** to return to the default size of 300 x 400 pixels.

7. Click **Save**.

## Assign Photo ID Template to Users

This section describes how to assign the photo ID template to users, and the available card printing options.

1. Navigate to **Users | Users** and select a user, or use CTRL+A to select all users.

It is also possible to use the CTRL and Shift keys to select a range or series of users if required.
2. In the **Photo** tab, select the **Card Template** to assign to the selected users.
3. The **Stretch Image to Fill** option forces the image to stretch to the size defined in the **Photo Settings**.

Be aware this may result in distorted results as the aspect ratio may change.
4. Click **Save** to update selected users.

## Previewing the Photo ID Card

Before printing a card, it can be previewed, including comparing the output for different card templates.

1. Navigate to **Users | Users** and select a user to preview.
2. Go to the **Photo** tab.
3. In the **Photo ID** section, ensure that the required **Card Template** is selected.
4. Click **Preview**.

Note: The user must have a photo assigned in order to preview their photo ID.

## Print Functionality

To access the available print options:



1. Navigate to **Users | Users** and select the user to print a card for.

2. In the **Photo** tab, select **Print Card**.

Alternatively, hover over the arrow icon for further options. The available printing options are:

- **Print Card:** Print the card without reading or writing the credential (smart card number, magstripe or ICT sector). You will be prompted to select the printer to use.
- **Print & Read:** Print the card and read the card number to the user's credential field.
- **Print & Process Template:** Print the card and read or write the magstripe or ICT sector. The action taken depends on the settings in **Users | Card Template Editor | Card Encoding**.
- **Process Template Only:** Rad or write the magstripe or ICT sector without printing the card. The action taken depends on the settings in **Users | Card Template Editor | Card Encoding**.

Note: The magstripe and ICT sector can be configured in the photo ID template.

## Batch Print

It is possible to batch print cards for a number of users at once. Run a user report with the desired users, and click **Batch Print** to print cards for all users currently visible in the report.

Each user's card will be printed using the card template assigned in the user's Photo ID settings.

# Advanced Features

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## Adding a Signature Field to a Photo ID Card

Custom fields are operator-defined fields that can be displayed in a user record and outputs. In order to display and use custom fields, you must first create custom field tabs, to allocate a space for the custom fields to appear in the user interface.

Using custom fields, Protege GX can be integrated with Topaz Signature Pads, allowing a digital signature to be added to a user's access card.

The following does not address how to set up a Topaz signature pad. Before continuing, ensure that the [Topaz SigplusNet plugin](#) has been downloaded and installed.

1. Create a new custom field tab:
  - Navigate to **Users | Custom Field Tabs** and **Add** a new custom field tab.
  - Enter a **Name** for the custom field tab and click **Save**.

You could also use an existing custom field tab if you have one already created.
2. Create the custom field:
  - Navigate to **Users | Custom Fields** and **Add** a new custom field.
  - Enter a **Name** for the custom field, such as Signature.
  - Select the **Tab** created above.
  - Set the **Field Type** to Image.
  - If required, you can define the **Pixel** height and width of the image.
  - Click **Save**.
3. Assign a signature to each user:
  - Navigate to **Users | Users** and select the user to assign a signature to.
  - Select the **Custom Field Tab** and click **Add Image**.
  - Set the **Image Source** to Topaz and click **Acquire**.
  - Use the Topaz tablet to draw the signature.
  - Click **Save Image**.
  - The signature can then be cropped if required.
  - Click **OK**.
  - The signature now appears under the new custom field tab. Click **Save**.
4. Add a placeholder to the card template:
  - Navigate to **Users | Card Template Editor**.
  - Using the same template, expand the **User Fields** section and **Add** a new user field.
  - From the **Field Type** drop down, select **Custom Fields**.
  - Drag and drop your newly created Signature field onto the template.
  - **Close** the Select Fields window.
  - Adjust the size and position of the signature placeholder as required.
  - **Save** the template.

## Adding a Mask to a Card Template

Masks can be used to isolate areas of the card where printing should be avoided. This is typically to allocate space for card technologies such as a magnetic stripe or smart card chip.

1. In the card template editor, expand the **User Fields** section and click **Add**.
2. Change the **Field Type** drop down to Mask, then drag and drop the required field onto the template.
3. By default, the mask will be placed over the area where the relevant component is located.
4. **Close** the Select Fields window.
5. Adjust the size and position of the mask as required.
6. Click **Save**.

## Adding a Barcode to a Card Template

Barcodes can be configured to display either a user's database ID, facility number or facility/card number.

1. In the card template editor, expand the **User Fields** section and click **Add**.
2. Change the **Field Type** drop down to Barcode.
3. Select the required **Custom Field** to be displayed on the card.
4. Select the type of barcode to be displayed, and drag and drop the placeholder onto the template.

Protege GX offers the following formats:

- Code 128
  - Code 128 (Extended)
  - Code 39
  - Code 39 (Extended)
  - EanUP (13)
  - EanUp (8)
  - Upc (A)
  - Upc (E)
  - GSI (Expanded)
  - GSI (Limited)
  - GSI (Omnidirectional)
  - GSI (Stacked)
  - GSI (StackedOmnidirectional)
  - GSI (Truncated)
  - Interleaved 2 of 5 (Generate Checksum)
  - Interleaved 2 of 5 (No Checksum)
5. **Close** the Select Fields window.
  6. Adjust the size and position of the barcode field as required.
  7. Click **Save**.

## Card Encoding

The **Card Encoding** section allows you to encode ICT secured MIFARE (diversified MIFARE) cards or print magstripes, if the card printer is capable of encoding cards. These processes take place if the operator selects **Print & Process Template** or **Process Template Only** when printing a user card from **Users | Users | Photo**.

- **ICT Sector:** Enable this option to instruct the card printer to read or write cards with ICT secured MIFARE (diversified MIFARE) encoding.

Contact ICT for more information about card encoding.

- **Process:** The process that will take place when the card is printed:
  - **Read:** When the card is printed, the encoder reads the existing credential and enters it in the user's **Facility/Card Number** field.
  - **Write:** When the card is printed, the encoder writes the credential from the user's **Facility/Card Number** field to the card. The facility and card number must match those included in the `encoder.ini` file.
- **Magnetic Stripe:** With this option enabled, when the card is printed the printer can also write a magstripe based on user data. Ensure that you have included the appropriate mask in the **User Fields** section above.
- **Track1-3:** Set the data that will be written to each track of the magstripe. The available fields are those from the **Users | Users | Extended** tab.

## Card Printing Actions

The **Card Printing Actions** section allows the template to modify the user record when the card is printed. This can be used with the fields in the **Users | Users | Extended** tab. For example, you could configure the card template to update the **Badge Type** field with the type of card that is being printed.

The **Extended** tab is only visible when the option to **Display Predefined Custom Fields in Users** is enabled under the **Global | Sites | Display**.

The available actions are:

- **Update User Field with Print Date:** The date of printing will be written to the specified user field.
- **Update User Field with Value:** A specific string or value will be written to the specified user field. The **Value** type depends on the type of user field selected (for example, the **Expiration Date of Badge** field requires a date input).
- **Copy Value Between User Fields:** The data in one user field will be overwritten with information from another user field. The two fields must have the same type (e.g. both text or both date). User custom fields defined in **Users | Custom Fields** can also be entered here.

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