

Genetec Macro - Automatically Generate Pins Macro

Automatically generates Pins for any Cardholders added to a specific Cardholder Group, typically used for alarm panels but can have other uses.

Notes(Revisions)

Once configured this Macro will run perpetually and will monitor the configured Cardholder group for any changes. Any time that a new Cardholder is created in this group, or a Cardholder is moved to this group, the Macro will check if that Cardholder has an existing Pin and if not it will generate one randomly and email it to the Cardholder.

This works for Cardholders created by an operator, Active Directory, or Import Tool, and should work for Cardholders created by any other type of integration. This also works for any Cardholder Groups nested under the configured Group. For example, if you had 10 Cardholder Groups which were synced to 10 different Alarm Panels at different buildings you could place all 10 of those Groups under a "master" group and then run the Macro on the "master" group. This would ensure that any Cardholders added to any of those 10 Alarm Panels will have Pin codes, without negatively impacting the separate Access Rules and Entity Mappings of each Cardholder Group.

The Macro will re-check all Cardholders each time the Macro is restarted because of a server reboot, just to verify all existing Cardholders have Pins.

All Cardholders receiving new Pins will need an Email address configured on the Entity. If a Cardholder is moved to the monitored group but does not have an Email address configured, no Pin will be generated until the issue is resolved. If that Cardholder was created by a user, an error will immediately pop up alerting that user to correct the issue:

Once the user adds an Email address for the affected Cardholder, the Macro will automatically resume the process of generating a new Pin and sending the Email.

If the Macro encounters errors, the error will be written to a log file, and a copy will be emailed to the configured Macro Admin user for real time reporting.

When generating a new Pin the Macro will check what groups the Cardholder is associated with and build a list of alarm systems that the Cardholder has access to, and include that in the notification email.

Default Execution Context Configuration

Monitored Cardholder Group

Select the Cardholder Group that you wish to monitor and create credentials for. If this field is left blank, the Macro will fail to run and will generate an error in the log file.

Pin Length

Configure the required length for new Pins that are generated. Genetec supports 1 to 15 digit pins, but it is not recommended to use Pins less than 4 digits in length. If a number is entered in this field that is less than 4, the macro will automatically default to 4 digits. If a number is entered greater than 15, the macro will default to 15.

Enable Notification Emails

If this flag is set to "off", no emails will be sent when new Pins are generated, or when there are errors with the Macro. Typically this is only used for testing purposes and should be left on during normal operations.

Notify Admin of All New Pins

If this flag is set to "on", whenever a new Pin is created for a Cardholder and an email is sent, the Cardholder Administrator will be copied on the email.

Cardholder Admin

If the "Notify Admin of All New Pins" flag is set to "on", Select the Cardholder Administrator from the system. This can be a Cardholder, Cardholder Group, or User Entity, as long as it has an Email address configured. If Notify Admin is on and this field is not configured the Macro will fail to run and will generate an error in the log file.

Email Subject

This field is used to configure the subject for the Email which is sent when a new Pin is generated for a Cardholder.

Additional Email Message

By default the new Pin Email will notify the recipient that they have been assigned a new Pin, what that Pin is, and the contact email for the Cardholder Administrator in case they have any questions. If you wish to include additional verbiage below that, you can include it in this field. The field only accepts one line of text, use the special marker {Enter} to create a newline.

Email Attachment Path

If you wish to include an attachment to the new Pin Email you can include the file path in this field.

Examples:

C:\Users\Administrator\Documents\Image.jpg

C:\Instructions.txt

Macro Admin

If the "Enable Notification Emails" flag is set to "on", select the system administrator in this field who should be responsible for receiving alerts about errors with the Macro. This can be a Cardholder, Cardholder Group, or User Entity, as long as it has an Email address configured. If Enable Notification Emails is on and this field is not configured the Macro will fail to run and will generate an error in the log file.

Log Output Folder

This field is used to specify the folder location for log files to be generated. The folder must exist, and the field must end with a "\". It is not necessary to specify a filename in this field, the Macro will generate a new log file in the configured folder each day with a naming syntax of "mm-dd-yyyy.txt". If this folder does not exist, the Macro will fail immediately upon running.

Examples:

C:\Logs\

D:\

Days to Keep Log Files

This field is used to specify how long to retain log files for. The macro will automatically delete any log files older than this once per day.

Configuring the Macro to run perpetually

Each time the Macro is ran it will run until it encounters a critical error or until the server is rebooted. To ensure that the macro is always running we need to configure the system to run the Macro any time it ends, and to run the Macro on server start up.

Configuring the Macro to run on server start:

Under System > Scheduled Tasks create a new Scheduled Task and configure it as shown below

- Status: Active
- Recurrence: On Startup
- Action: Run Macro
- Macro: (Select the Macro you have created and configured)

□

Configuring the Macro to run any time it ends or is stopped:

Under System > General Settings > Actions create 2 new actions and configure them as shown below.

Action 1 - Macro Aborted:

- When: Macro aborted
- From: (Select the macro you have created and configured)
- Action: Run a macro
- Macro: (Select the macro you have created and configured)
- Effective: Always

□

Action 1 - Macro Completed:

- When: Macro completed
- From: (Select the macro you have created and configured)
- Action: Run a macro
- Macro: (Select the macro you have created and configured)
- Effective: Always

□

Configuring the Cardholder Group to Building Name mapping

For this function to work, there are 2 criteria that must be followed. First your cardholder groups must start with building name designators, typically acronyms, as shown in the examples below:

"ELKS -"
"ELKN -"
"COL -"
"DAL -"

```
"Store 100 -"  
"Store 175 -"  
"Store 250 -"
```

*Please note that for this to work your naming, spaces, and hyphens must be consistent.

Second, you must create a Cardholder Group CustomField with a Data Type of Boolean and a name of "Intrusion Group":

□

And this CustomField should be "checked" on any Cardholder Groups which are associated with an Intrusion Panel:

□

If this CustomField is not present, or is not checked, the Macro will not map the group to a building name and it will not be included in the list emailed to the Cardholder

Configuring Building Name mapping reference

The macro as downloaded is configured to map Cardholder Groups to Prime building names. You must change this mapping to suit your installation. Once the Macro is imported, look for this section:

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In this section you will see multiple "if" statements and subsequent "return" statements, each pair correlating to a mapping of building identifiers and building names. Modify each group as shown below:

```
if (s.StartsWith("xxx"))  -Replace the text within the quotes with your identifiers as they are configured in your Cardholder Groups  
    return "xxx";        -Replace the text within the quotes with your building names
```

The macro is configured with 4 mappings by default, but you may create as many mappings as is necessary. At a minimum this section must include at least one mapping (the first "if / return" statement) and the final "else / return" statement. You may copy and paste as many "else if / return" statements as needed in between the first "if" and the final "else" statements. The order of these statements is not important as the Macro will alphabetize the building list before it is emailed to the end user.

Download Macro:

[Automatically Generate Pins.txt](#)

- [Macro](#)
- [Changes \(32\)](#)

Notes

Section 1

File

Section 2

Field 2

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Configuration Item - Automatically Generate Pins Macro - Prime Communications, Inc.

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