

CONFIGURING EMAIL APPLICATIONS FOR USE WITH OPTO 22 PRODUCTS

You can use many Opto 22 products to send email notifications to keep engineers and technicians aware of important conditions in your system. For example:

- You can send email through a PAC Control strategy running on a *groov* EPIC or SNAP PAC controller.
- Your *groov* View HMI can send event notifications via email.
- Your Node-RED flow on *groov* RIO or *groov* EPIC can send email.

IMPORTANT: Due to security changes, **you will stop receiving emails** from your Opto 22 devices unless you configure your email account with a new application-specific password, as described in this technical note. Without the new app password, email providers will consider your Opto 22 device a “less secure app” and not allow it to log into the email account.

For example, Gmail will **stop allowing less secure apps to access email accounts on May 30, 2022**. Depending on how you have your email set up (for example, whether you have a recovery email), you may not even know emails have stopped. To avoid missing important reports and alerts, make sure you configure the email account now as described below.

This technical note provides instructions for configuring Gmail and Yahoo accounts to send emails from an Opto 22 device. If you use a different email provider, consult them for instructions. Using steps similar to the ones in this technical note, you can also access other services from other applications used with your Opto 22 product.

Avoiding email or service failure

In addition to app passwords for better security, *security certificates* also play a role in making sure that email is delivered and other services continue. All providers of email or other services update their security certificates from time to time. When that happens, your email or other service will stop working until you either install a new certificate or update firmware that contains the new certificate.

Opto 22 updates certificates as soon as we know about new ones. If you see a security error (for example, -2104 in PAC Control) or have some other indication of a certificate issue, be sure to check for new [firmware on the Opto 22 website](#). If you cannot update firmware or don't find what you need on our website, contact Product Support (see [page 4](#)) for help.

Email and other services are useful with your Opto 22 products. Make sure you keep them working by setting up error handling procedures and other ways to be aware of communication failures.

Configuring Gmail (or other Google services)

The steps below are for configuring a Gmail account that applications running on an Opto 22 device can use to send email notifications. However, in addition to email, you can use similar steps to access other Google services via software used with your Opto 22 device. (For example, here's a [forum post on using Node-RED to move data in and out of Google Sheets](#).) These other Google services will also stop working on May 30, 2022, unless configured.

If you have more than one Opto 22 device sending email notifications, you may decide to give each its own email address. That way the person who receives the email knows immediately where it came from, and incoming emails can be automatically sorted into folders. For example, you might create an email address like *remoteEPICpumps@gmail.com* for an offsite controller and other addresses (for example, *ovenprocess@gmail.com* or *energymonitor@gmail.com*) for controllers in your main facility.

Here are the steps for configuring a Gmail account.

NOTE: You will need a phone number to receive a one-time 2-step verification code.

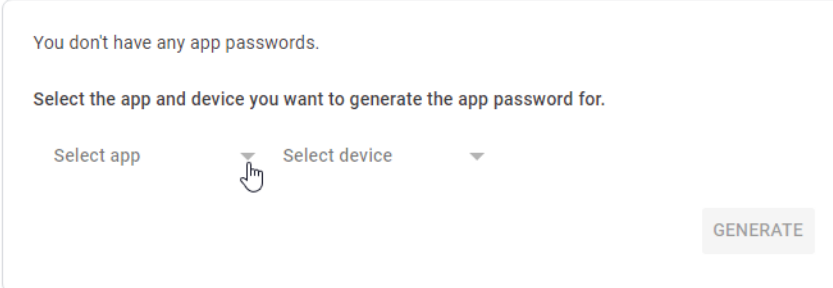
1. Go to <https://accounts.google.com>. Log into an existing account or create a new account if you wish.
2. In the navigation column at left, click Security.
3. In the box labeled Signing in to Google, click 2-Step Verification.
4. Click Get Started.
5. When prompted, enter your password.
6. Enter the phone number you want to use for 2-step verification, and select Text message or Phone call. Click Next (bottom right).
7. Enter the confirmation code received on the phone. Click Next.
8. Click TURN ON.

NOTE: Enabling 2-step verification automatically turns off the Less Secure Access setting. The app password replaces that access and is more secure.

9. Click the arrow to go back to the Security page. Under 2-step Verification, click App passwords. Sign in again.

← App passwords

App passwords let you sign in to your Google Account from apps on devices that don't support 2-Step Verification. You'll only need to enter it once so you don't need to remember it. [Learn more](#)



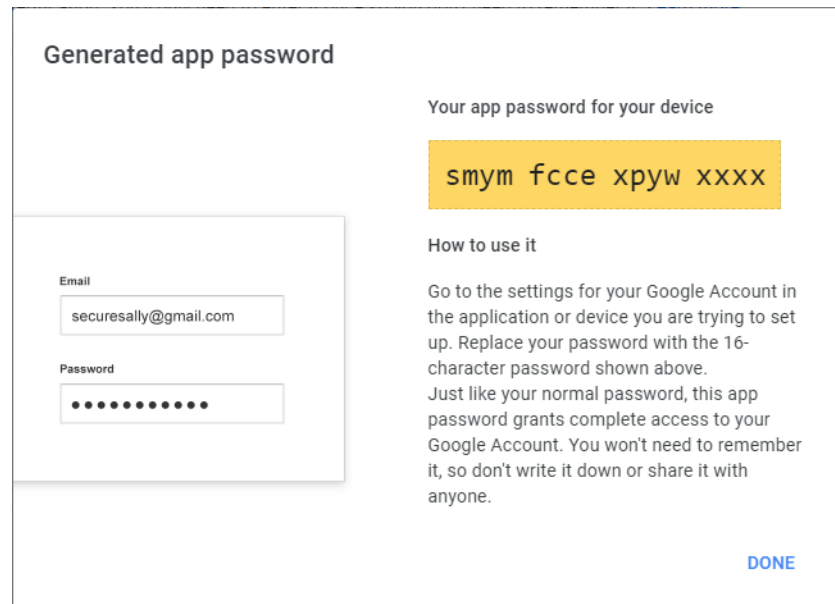
The screenshot shows a web interface for generating app passwords. At the top, it says "You don't have any app passwords." Below that, it prompts the user to "Select the app and device you want to generate the app password for." There are two dropdown menus: "Select app" and "Select device". A mouse cursor is pointing at the "Select app" dropdown. To the right of the "Select device" dropdown is a "GENERATE" button.

10. Click the Select app dropdown and choose Mail.
11. Click the Select device dropdown and choose Other.
12. Enter a name for the device.

Multiple devices can use the same password if they use the same address for sending email, in which case you can enter a generic name, for example, *Opto 22 controllers*. Or you can assign individual passwords under separate device names.

For example, suppose you are an OEM and are using the same email address for machines at all your customer sites. If you want to revoke email for one customer, you can go into your email account and simply turn off that customer's machine password, rather than having to go on site or download new logic to turn off that machine feature.

13. Click Generate.



14. Keep the generated password in a secure place so you can use it for any device you want to allow to use the account. (Ignore the text underneath the password about not needing to remember it.)
For example, you may have more than one PAC Control strategy that uses the same email account. Or you may use the same app password for *groov* View events, Node-RED emails, and Google services. In addition, you should keep the app password backed up and safe in case you need to restore factory settings or the backup file fails or is lost.
15. Click DONE.
16. In the software running on your Opto 22 device (for example, a PAC Control strategy), replace the usual login password for the Gmail account with the one that was just generated. Note that this password is only for your devices; for sign-in by a human, you use the same password you used before.

Configuring Yahoo Mail

A description and brief steps are included here. If you have questions or run into any problems, see the [complete configuration instructions in Yahoo Help](#).

To access your Yahoo Mail account on apps running on your Opto 22 device (for example, PAC Control, Node-RED, or *groov* View), you'll need to generate and use an app password. An app password is a long, randomly generated code that gives a non-Yahoo app permission to access your Yahoo account. Yahoo does not require 2-step authorization.

Use these steps to generate a Yahoo app password:

1. Sign in to your Yahoo Account Security page.
2. Click Generate app password or Generate and manage app passwords.
3. Enter your app's name (for example, PAC Control) in the text field.
4. Click Generate password.
5. Keep the generated password in a secure place so you can use it for any device you want to allow to use the account.

For example, you may have more than one PAC Control strategy that uses the same email account. Or you may use the same app password for *groov* View events, Node-RED emails, and Google services. In

addition, you should keep the app password backed up and safe in case you need to restore factory settings or the backup file fails or is lost.

6. Follow the instructions below the app password.
7. Click Done.
8. In the software running on your Opto 22 device (for example, a PAC Control strategy), replace the usual login password for the Yahoo account with the one that was just generated. Note that this password is only for your devices; for sign-in by a human, you use the same password you used before.

For Help

Other Documents

You may also find these other documents helpful:

For product	Document	Form number
PAC Control	PAC Control User's Guide	1700
	PAC Control Command Reference	1701
groov EPIC	groov EPIC User's Guide	2267
groov RIO	groov RIO Universal I/O User's Guide	2324
	groov RIO EMU Energy Monitoring Unit User's Guide	2372
groov View	groov View User's Guide	2027
SNAP PAC S	SNAP PAC S-Series Controllers User's Guide	1592
SNAP PAC R	SNAP PAC R-Series Controllers User's Guide	1595

Opto 22 Product Support

If you have problems using email or other services with Opto 22 products and cannot find the help you need in this document or the guides listed above, contact Opto 22 Product Support.

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