

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 restrictions, **you will stop receiving emails** from your Opto 22 devices unless you configure your email account with a new application-specific password (also called an app password—a long, randomly generated code) as described in this technical note. Without the new app password, email providers can consider your Opto 22 device a “less secure app” and not allow it to log into the email account.

For example, Google® Gmail® **stopped allowing less secure apps to access email accounts on May 30, 2022.** Depending on how you have your email set up (such as having a recovery email), you may not even know emails from your Opto 22 devices have stopped. To avoid missing important reports and alerts, make sure you configure the email accounts using the instructions in this document.

This technical note provides instructions for configuring Gmail and Yahoo® Mail® accounts to send emails from an Opto 22 device. If you use a different email provider, consult their documentation for instructions. Using similar instructions 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 can 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, error -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 do not find what you need on our website, contact Product Support (see [page 5](#)) 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)

Use the following procedure to configure a Gmail account that applications running on an Opto 22 device can use to send email notifications. Additionally, you can use similar steps to access other Google services via software used with your Opto 22 device (for example, read this [forum post about using Node-RED to move data in and out of Google Sheets](#)). Unless configured, these types of Google services stopped working on May 30, 2022.

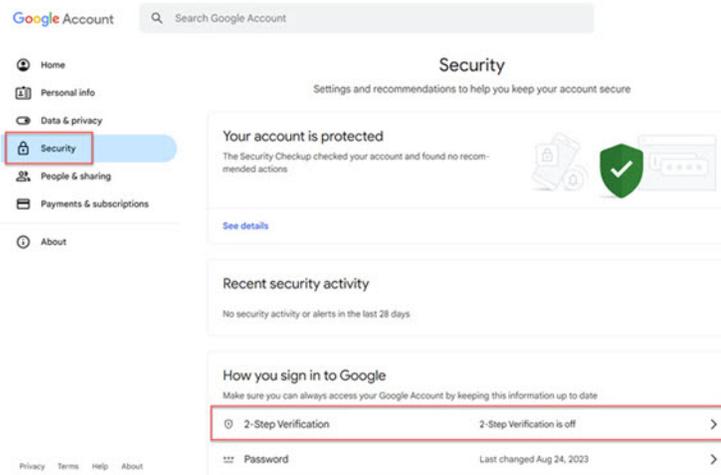
If you have more than one Opto 22 device sending email notifications, you may decide to give each device its own email address. That way the person who receives the email knows immediately which device it came from, and incoming emails can be automatically sorted into folders. For example, you might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

If you have questions or encounter any problems, see [this Gmail Help article](#).

To generate a Google app password:

NOTE: Before you begin, ensure you have a phone number to receive a code when setting up Google's 2-step verification.

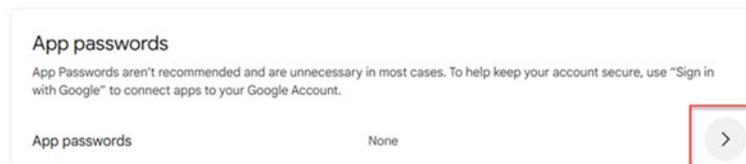
1. Go to <https://accounts.google.com>, and log into the existing account for your device (or you can create a new account).
2. In the left column, click **Security**.
3. Scroll down to the **How you sign in to Google** section, and click **2-Step Verification**. If prompted, enter your password.



4. If not already turned on, click **Turn on 2-Step Verification**. You may be prompted to enter your password again.
5. Set up the phone number for 2-step verification:
 - a. When prompted (or click **Add Phone Number**), enter the phone number you want to use.
 - b. Select **Text message** or **Phone call** from the drop-down menu.
 - c. Click **Next** (bottom right).
 - d. Enter the confirmation code received on the phone, and click **Verify**. This completes the 2-step verification setup.

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

6. On the 2-Step Verification page, scroll down to the App passwords section, and click the arrow (➤) icon.

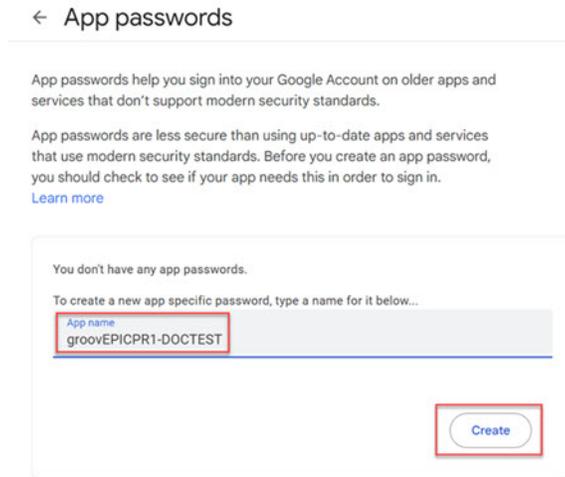


7. In the **App Name** field, enter a name for the device.

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 (such as *Opto 22 devices*). 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 going on site or downloading new logic to turn off that machine feature.

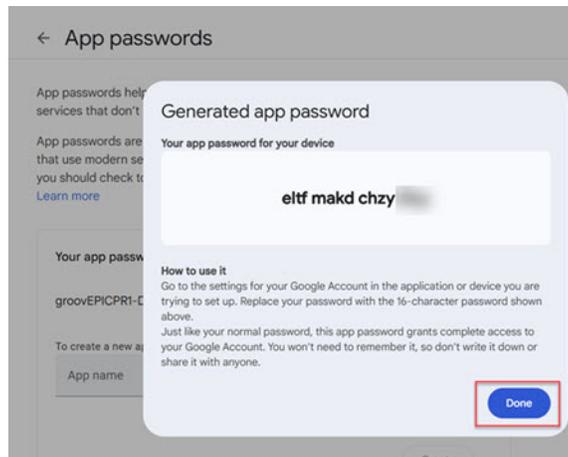
- 8. Click **Create**.



- 9. Contrary to the note on the page, **keep the generated password in a secure place**. You may need this app password when restoring factory settings or if the backup file fails or is lost. This is the only opportunity you have to obtain this app password. If you lose it, you will need to delete it and generate another.

You can also use this app password for any device you want to allow to use this Google account. For example, you may have more than one PAC Control strategy that uses the same email account. You may also use the same app password for *groov* View events, Node-RED emails, and Google services.

- 10. Click **Done**.



11. 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 app password you just generated. Note that this app password is only for your devices; for log-in by a human, you use the account password.

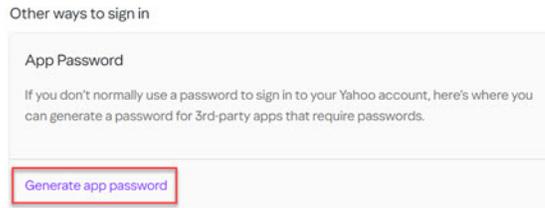
Configuring Yahoo Mail

To access your Yahoo Mail account on apps running on your Opto 22 device (such as PAC Control, Node-RED, or *groov* View), you need to generate and use an app password, which gives a non-Yahoo app permission to access your Yahoo account. Yahoo does not require 2-step authorization like Google does.

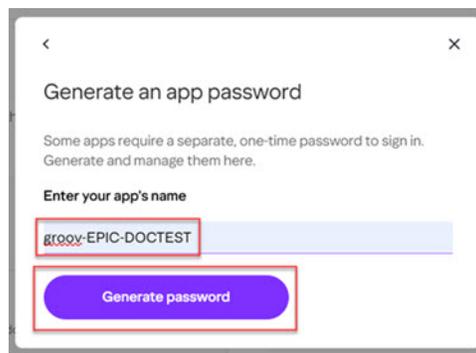
If you have questions or encounter any problems, see the [complete configuration instructions in Yahoo Help](#).

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** if you have existing app passwords).



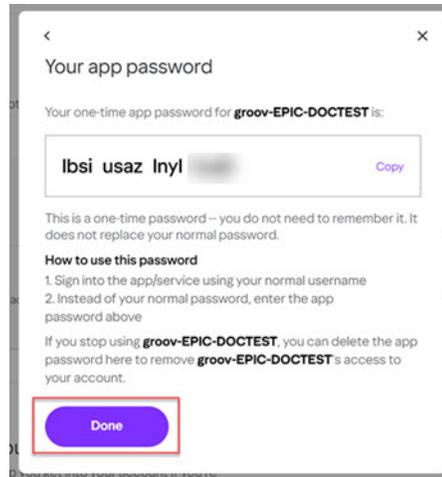
3. If prompted, click **Get Started**.
4. Enter a name for your app name (for example, PAC Control) in the text field.
5. Click **Generate password**.



- Contrary to the note on the page, **keep the generated password in a secure place**. You may need this app password when restoring factory settings or if the backup file fails or is lost. This is the only opportunity you have to obtain this app password. If you lose it, you will need to delete it and generate another.

You can also use this app password for any device you want to allow to use this Yahoo account. For example, you may have more than one PAC Control strategy that uses the same email account. You may also use the same app password for *groov* View events, Node-RED emails, and other services.

- Click **Done**.



- 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 app password you just generated. Note that this app password is only for your devices; for log-in by a human, you use the account password.

For Help

The following documents may have the helpful information you need:

Product	Document Title	Form number
PAC Control	PAC Control User's Guide	1700
	PAC Control Command Reference	1701
<i>groov</i> EPIC	groov EPIC User's Guide	2267
<i>groov</i> RIO	groov RIO Universal I/O User's Guide	2324
	groov RIO EMU Energy Monitoring Unit User's Guide	2372
<i>groov</i> 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 documents listed above, contact Opto 22 Product Support.

Phone: 800-TEK-OPTO (800-835-6786 toll-free in the U.S. and Canada)
951-695-3080
Monday through Friday, 7 a.m. to 5 p.m. Pacific Time

E-mail: support@opto22.com

Website: www.opto22.com

