Steps to Google Workspace Security

Enforce Secure Practices

- ❏ Set password requirements **(Priority)**
- ❏ Enforce multi-factor authentication **(Priority)**
- ❏ Use physical security tokens/keys (Yubikeys) for admin and high-value accounts
- ❏ Allow users to enroll in Google's Advanced Protection Program
- ❏ Turn on security alerts
- ❏ Limit email fraud
- ❏ Set up auto-deletion of old emails
- ❏ Use objectionable content filters to block harassment

Manage Users

- ❏ Onboard new team members efficiently **(Priority)**
- ❏ Offboard departing team members quickly **(Priority)**
- ❏ Convert shared emails to Google Groups/Collaborative Inbox **(Priority)**
- ❏ Create groups to manage access
- ❏ Audit users regularly
- ❏ Monitor for suspicious behavior
- ❏ Isolate your superadmin accounts

Manage Documents

- ❏ Turn on Shared Drive (formerly Team Drive) **(Priority)**
- ❏ Limit Sharing Settings
- ❏ Turn on alerts for Drive document sharing

Manage Devices

- ❏ Use Mobile Device Management to enforce your data & device use policy

Sign into your Google Admin console...

Enforce Secure Practices

1. Set password requirements **(Priority)**

Set a password length requirement of at least 12 characters. From the admin dashboard, go to Security > Password management, and set a higher minimum password length as well as strength (complexity) requirements. Warn your users that a password policy change is coming, and then be sure to check the box that says “Enforce password policy at next sign-in”.

You can also monitor the strength of user passwords. Click Security > Password monitoring from the dashboard. You will be able to see password length and strength ratings for each user. If someone is using a weak password, you can contact that user individually and ask them to change their password; or you can enforce organization-wide rules to increase password length for everyone.

2. Allow and enforce multi-factor authentication **(Priority)**

First, you will have to allow users to turn on multi-factor authentication - or 2-step verification (2SV), as Google calls it. From the G Suite Admin Console Dashboard, go to Security and then:

- Click on “Basic Settings”
- Scroll to the Two-Step Verification setting
- Click “Allow users to turn on 2-step verification”
- Click “Save Changes”

Once you have allowed users to turn on 2SV, you can enforce 2SV. Be warned that any users that have not turned on 2SV by the deadline you set will be locked out of their account. We recommend giving your domain users a heads up well in advance!

To enforce 2SV, from the G Suite Admin Console Dashboard, go to Security and then:

- Click on “Basic settings”
- Scroll to the Two-Step Verification setting
- Click “Go to advanced settings to enforce 2-step verification”
- Select an organizational unit (you may want to consider making and then excluding a group of those who haven’t turned on 2SV yet, so they don’t get locked out)
- Select a start date for enforcement!

Pro-tip: To make 2SV more convenient, we recommend turning on “Let users avoid repeated 2-Step Verification on trusted devices”. (Instructions here under Step 4: Select enforcement options.)

To make 2SV the most secure, you can force users to use an authentication app or a physical token. More details available under Step 4: Select enforcement options > Select a 2-Step Verification method to enforce, here.

3. Use physical security tokens/keys (Yubikeys) for admin and high-value accounts

Security keys are small hardware devices that are used for second factor authentication. They help to resist phishing threats and are the most secure form of 2SV. Make sure there is a spare security key stored in a safe place so that even if your primary key is lost or stolen, you can still access your account. Save backups codes in a password manager or locked safe. If you are an abortion access organization, reach out to us for funding for security keys!

4. Allow users to enroll in Google’s Advanced Protection Program

Google’s Advanced Protection Program can help protect users from targeted attacks. Google explains, “Targeted attacks could be low volume, carefully crafted, phishing attacks, often personalized to individuals, and can be hard to distinguish from legitimate activity. This makes targeted attacks the hardest to protect against. The Advanced Protection Program is specifically designed to thwart targeted online attacks on Google accounts.” We recommend enrolling your super admin account and any other highly targeted accounts in the Advanced Protection Program. Learn more and enroll users here.

The Advanced Protection Program requires the use of security keys for two-step verification. If you are an abortion access organization, reach out to us for funding for security keys!

5. Turn on security alerts

As an admin, you can keep an eye out for suspicious activity on users’ accounts. Google Workspace offers a variety of reports, including suspicious login activity alerts, mobile device alerts, and other administrative changes alerts. From the Admin Console, go to Menu > Security > Security rules. Sign up for the suspicious login activity alert under “Reports” by clicking “Manage Alerts” and setting it to “ON.”

Take a few moments to write down a plan for what you’ll do if you get a security alert and cannot verify that the activity is legitimate. One option is to immediately call, text, or message the user

(outside of Google Workspace) to confirm their activity. If you can't confirm that it was actually them, suspend their account and lock them out of Apps until you're sure the account hasn't been compromised.

6. Limit email fraud with advanced security settings

Phishing is one of the most common attacks on small nonprofits. Google Workspace offers default warnings against phishing and scams that are robust. You can increase your security even more with a few different email settings:

- Turn on enhanced pre-delivery message scanning.
- Turn on attachment protection
    - Go to Apps > Google Workspace > Gmail > Safety > Attachments
    - Turn on "Protect against attachment with scripts from untrusted senders"
    - Turn on "Protect against anomalous attachment types in emails"
- Turn on links & external images protection
    - Go to Apps > Google Workspace > Gmail > Safety > Links and external images
    - Turn on "Identify links behind shortened URLs"
    - Turn on "Scan linked images"
    - Turn on "Show warning prompt for any click on links to untrusted domains"
- Authenticate your email domain and prevent spoofing by using DKIM, SPF, and DMARC. (Here's a cool video that explains DMARC and why it's so hard to authenticate emails!) Documentation that will guide you through setting them all up is at https://support.google.com/a/topic/9061731?hl=en&ref_topic=9202.
    - Configure SPF Records to help prevent spoofing. Configure it from your Admin console.
    - Enhance security for outgoing email by authenticate your email domain with DKIM (DomainKeys Identified Mail Standards)
        - From your admin console, click Apps > Google Apps > Gmail > Authenticate email. If you have multiple domains, select which one you want to make a key for, then click "Generate new record." The domain will automatically be added to the DNS records if you bought your domain from a Google Apps partner. Otherwise, you'll have to add it manually. Finally, turn it on by going to Apps > Google Apps > Gmail > Authenticate email, and clicking "Start Authentication."
    - Once you have SPF & DKIM records set up (it may take 48 hours to authenticate your DKIM), you'll be able to use DMARC to enhance security for forged spam.
- Once you have set up DKIM, SPF, and DMARC, you can go back to Apps > Google Workspace > Gmail > Safety and scroll to the Spoofing and authentication section.

7. Set up auto-deletion of old emails

If regular email deletion after a certain number of months or years is part of your data retention plan, you can turn on email deletion for all users in the Google Workspace Admin Console. You can customize the length of time after which all emails are deleted, and whether they are moved to the trash folder first or permanently deleted right away. You can exempt emails with specific labels from this rule.

8. Use objectionable content filters to block harassment

You can configure Gmail's objectionable content filters to either block, quarantine, or add a notification to any messages that contain words you have designated as objectionable. To set up an objectionable content rule, start at the Admin console and go to Apps > Google Workspace > Gmail > Advanced settings. Find the Objectionable content setting and click Configure, Edit, or Add another. You can choose to have the rule apply to inbound, outbound, or internal messages. (Internal messages are those sent from someone @yourdomain to another person @yourdomain.) Next, edit the custom objectionable words list. Save your list, and then specify what you'd like to happen when emails contain these words. You can choose to modify, reject, or quarantine a message when conditions are met. If you quarantine the message, it is sent to a designated admin email, where it has to be approved, denied, or is automatically deleted after 30 days. You can modify the message by changing the subject line (for example, adding [POTENTIAL HARASSMENT] before the subject) or changing the recipient (for example, sending it to a harassment@yourdomain email address). For full details, see Google's support page on the topic here.

Manage Users

9. Onboard new team members efficiently **(Priority)**

When you add a new user, let "minimum access required" be your guide: only give the users the bare minimum of permissions they need to do their work. Take a few moments to open a spreadsheet and think about all the categories of users (staff, volunteer, board member…) or, if your organization is small enough, write down the roles of everyone in the organization. Who needs to get an @yourdomain email when they start? Who needs access to certain Drive documents, but not an email? Create a flow chart or a checklist for new team members in each category. Bring this document to your next team meeting to get team input and buy-in so you can consistently manage new Google Workspace account provisioning.

Pro-tip: Create a Google Form for new users to submit when they need a new account. Ask for first name, last name, personal email, and role, and any other information you need to create a new account with the right permissions.

10. Offboard departing team members quickly **(Priority)**

If the email account is staying active but not being used, set up an away message and any forwarding rules, and change the password. If the email account is transferring to a new owner, change the password.

If the email account will no longer be used, you have two options for offboarding a user.

- Suspend a user: You will have access to all documents and emails, and will have to continue paying for this user.
- Delete a user: This permanently removes all documents and emails, except for documents created in Shared Drives. You have 20 days to reverse the deletion before it is permanent.

Pro-tip: If you delete or suspend a user, you can add their email address as an alias to another account so that important emails aren't missed.

You can use Google Workspace's endpoint management system to make sure departed employees are logged out of all their devices.

11. Create groups to manage access

If you find yourself with consistent groups of people who need the same level of minimum permissions to do their work, you can control their access more efficiently by categorizing users or devices into organizational units.

You may also want to create Google Groups to manage access to Drive documents. You can create Google Groups and give appropriate document access to the Group's email address. When a new person onboards or offboard, you can just add or remove their email from the Google Group rather than adding or removing them to each individual file.

Google Groups can also be used to manage shared email accounts. Everyone who needs access to the email address can be added to a Google Group. Using the "send as" feature, individuals can use their own emails to reply as the shared account. This is detailed below.

12. Convert shared emails to Google Groups/Collaborative Inbox, or use Inbox Delegation to allow shared access

Shared emails - i.e., when multiple people log in and check the same email - present a security threat from an account hygiene standpoint as well as a data management standpoint. Shared inboxes mean shared passwords, which end up being communicated via text, email, or other insecure means when users need to log in. Two-factor authentication is challenging, if not impossible, to enforce. It's also challenging to onboard and offboard users from shared inboxes; offboarding requires changing the password for all users, exacerbating the password sharing issues above. If a shared inbox is compromised, it's harder to trace the source of the attack and to cut off access for the attacker, especially if this is the organization's only or most important inbox.

Luckily, Google offers solutions that you can use as an alternative to sharing emails: Google Groups, Collaborative Inbox, and Delegation.

Delegation is one of the easiest solutions to implement. You can learn more about email delegation in Google here. As Google explains, "Mail delegation lets delegated users read, send, and delete messages on the account owner's behalf." Users can use their own secure login to access an inbox that they have been made a delegate of. If you have Google Workspace, all delegates must have email accounts within your workspace (i.e., emails @yourdomain.org).

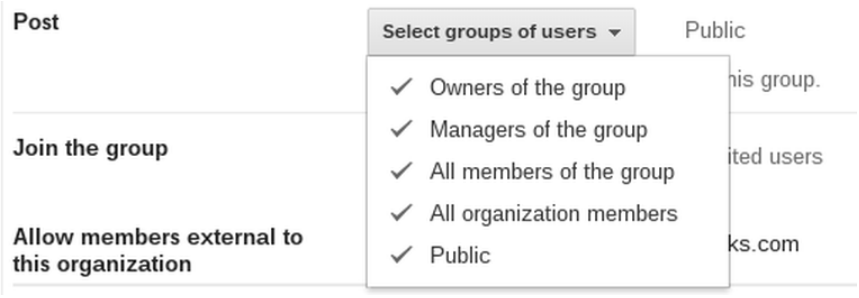
This great video explains Google Groups and Collaborative Inbox. The video highlights some of the neat features of collaborative inbox, like tagging emails as assigned, taken, or completed.

If you have an email **at your domain** that you currently share - say, team@mydomain.org - that you want to convert, you'll have to free up that alias for your Google Group. First, rename the email account that you want to convert into a group. In our example, we'd rename team@mydomain to old-team@mydomain.com. Google will automatically make team@mydomain an alias for the account; delete this alias. Go to groups.google.com and create a Google Group with the old shared email account - team@mydomain.com. Add members to the Google Group who you would like to see all emails to team@mydomain, and be sure to check the permissions settings to allow people outside your domain to email the group.

If you have a **regular gmail** or other email address that you currently share, you can skip straight to going to groups.google.com and creating a Group with whatever you want your new group email address to be!

You can set up Google Groups from the Admin Panel or the Groups Panel, and the steps will be slightly different based on where you are setting it up. Instructions on Google Group set-up from each possible avenue are available here.

One setting to keep in mind as you set up the group: make sure that you allow the public to post to the group. Otherwise, only people in your domain will be able to! That's illustrated in this image:



In order for people in the Google Group to respond from the group email, you can either set up the "send as" function in each person's inbox, or people could send emails as the group directly from the Google Groups portal. This is explained in the same video that we linked to above.

We find that when setting up something like this, it's important to test out first. We'd suggest running through the following steps to test this out:

- make yourself a group member
- from a separate email account email the group email —> confirm that you receive the email as a group member
- from that separate email account, attempt to access the google group's page (the URL when you're looking at the group's inbox) —> confirm that you do not have access
- reply to your separate email from the Google Group's email, either by setting up the "send as" function or by logging into the group portal

If you are moving away from an old shared email, consider whether you want to save those messages in the old email (with a new, unique password stored in your organization's password manager), delete them, or transfer them to a new inbox. You can use POP settings to import old and new messages into a different inbox. Instructions are available here.

13. Audit users regularly.

Once a quarter, audit your list of users. Open your complete list of Google Workspace users, and check last activity date. Are there any accounts that haven't been used in over a month? Anyone who has left the organization but whose account wasn't deleted?

For any shared accounts, check with the primary supervisor of the account if it has become inactive. Before deleting, check with the team to make sure it's not still public or active.

14. Monitor for suspicious behavior

You want to check login activity, file storage amount, and sharing for any odd behavior or spikes. Check weekly or monthly and get a feel for what is normal for your organization so you can notice any changes in patterns. Set a calendar reminder to check your account activity report and your audit log from the Google Workspace Admin portal.

15. Isolate your superadmin accounts

Your superadmin accounts (those that can create new users and reset passwords) should not be email accounts you use everyday. Create a separate account for your regular email and a separate account for administration - for example, admin-jane@example.com and jane@example.com. Log in to the superadmin account only to complete admin functions, and log out as soon as you are done. Be sure to save the superadmin password where at least one other person has access to it, or create at least two superadmin accounts, so that if your account is lost or compromised, the organization can continue operating their Google Workspace. For admin tasks you find yourself repeating often - like creating a new account or resetting a password - consider making an admin account with the necessary privileges to complete those tasks, while keeping a superadmin account for permanent admin tasks like deleting a user.

Manage Documents

16. Turn on Shared Drive (formerly Team Drive) **(Priority)**

Using Shared Drives to store your organizations' files ensures that no matter who comes and goes, the organization will always retain file ownership of all documents. For some reason, the default on Google Workspace is to prevent users from making team drives. You have to un-prevent them in order to start using shared drives. Instructions from Google are here.

- From your Admin Console, head to Apps > Google Workspace > Drive and Docs.
- Make sure that Drive is turned on (click More and then ON for Everyone).
- Select Sharing Settings.
- Under Shared drive creation, uncheck "Prevent users in your organization from creating new shared drives."
- After you click save, these changes will take 24 hours to go into effect.

17. Limit sharing settings

The safest way to share documents from your team's Shared Drive is by sending invitations to trusted individuals only.

You want to make sure that Link Sharing is off so that team members don't inadvertently make documents public. As iEcology explains, "Unless you change the default behavior of your G Suite, whenever anyone clicks "Get shareable link" on a folder or file, they will create a link that is open to anyone, without needing to sign into a Google account. You can and should change this default behavior so that "Get shareable link" can be used to copy-paste a document link without changing the existing permissions on the item." Instructions for finding these settings are here; at; under Link Sharing, choose "OFF."

Team members will still be able to share documents, but they will have to intentionally change the file's permissions using the "Share" button in order to do so.

In the same part of your admin portal for setting Drive users' sharing permissions, you can enable a warning before users share files with external people.

You'll also want to scroll down to the settings for Access Checker - this is the feature that makes sure all recipients of an email have access to a Google file being shared or linked to in that email. Ensure that Access Checker is configured "for Recipients only" so that files linked to in emails aren't made public.

18. Turn on alerts for Drive document sharing

As a Google Workspace Admin, you can get alerts for different Google Drive activity in the Drive Audit Log. Google offers a great step-by-step guide to using the Drive Audit Log here.

To see the audit log, go to the Admin console Home page, and then go to **Reports**. On the left, under **Audit**, click **Drive**. You might have to scroll to see Audit.

When a user in your domain shares a file, a "User Sharing Permissions Change" event is added to the audit log. You can create an email alert so that you get a notification whenever a user in your domain does this.

Manage Devices

19. Use Mobile Device Management to enforce your data & device use policy.

Google Workspace plans include basic Mobile Device Management (MDM) features. With MDM, you can:

1. Customize password requirements for managed mobile devices.
    a. Require that users have a password for their device.
    b. Set a minimum password length or complexity rule.
2. Adjust the Set time until screen locks to lock the device screen after it's inactive.
3. Wipe a user's account from a mobile device if the device is lost or stolen.
4. Set up mobile device activity alerts.
5. Periodically review the mobile devices that access your organization's data.

Make sure you have a device and data use policy in place before implementing MDM, and ensure all users understand what access you have to their devices and provide their consent.