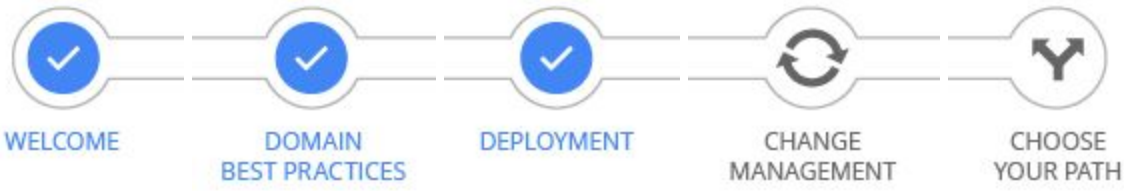
Google Workspace for Education: Deployment Guide



This guide serves as a resource for domain administrators in charge of moving their student and/or faculty/staff populations to Google Workspace for Education. Inside you'll find a step-by-step outline for completing the technical aspects of your deployment, including relevant help center articles and videos. Google Workspace deployments typically take between 1 day and 6 weeks. This material is targeted towards IT administrators (or others) looking to learn more about the technical aspects of a Google Workspace deployment. If you wish to connect with other schools as you deploy, or if you have additional technical questions, please visit our community support forum. This forum is directly managed by our EDU team.

Google Workspace for Education: Deployment Guide

Bookmarked task checklist	Relevant links	
Google Workspace for Education Privacy Notice	Privacy Notice	▢
1. Choose domain name(s) - select an option below	Best Practices: Domain Setup Options Multiple Domains & Limitations	▢
2. Sign up your domain(s) for Google Workspace	Sign Up for Google Workspace	▢
3. Decide on your organizational structure	Create an Organizational Structure Turn Services On/Off for Orgs Set up a Walled Garden	▢
4. Decide on mail flow - select an option below		
Configure dual delivery through legacy server	Dual Delivery through Legacy Server	▢
Configure dual delivery through Google	Dual Delivery through Google	▢
Configure split delivery through Google	Split Delivery through Google	▢
5. Provision users in Google Workspace		
Choose a method for creating users in Apps	Provisioning Options Overview	▢
If performing a CSV upload:	CSV Upload Help Center Article	
Create CSV file of users (500 users per file)	CSV Upload How-To Video	▢
Upload via the control panel & wait for email stating the upload is complete		▢
If using Google Workspace Directory Sync (GADS):		
Download GADS	GADS General Info/Download Page	▢
Watch the GADS Technical Overview	GADS How-To Video	▢
Read the GADS Admin Guide	GADS Admin Guide	▢
Configure GADS		▢
Run simulation sync, correct any issues, run actual sync		▢
6. Google Classroom setup		
Manual creation of classes	Creating a Class	▢
Classroom API	Classroom API	▢
3rd Party Options		▢
7. Implement authentication - select an option below		
Store passwords in Google Workspace	Reset Google Workspace passwords	▢
Enter Admin contact information for users		
Configure Single Sign-on	Learn more about SSO	▢
8. Data migration - select an option below		
No data migration necessary		▢
Migrate data for users (server side migration options)	Email Migration Options	▢
Let users migrate their own data (client side migration options)	Email Migration Options	▢
9. Additional Resources		
Domain Best Practices Guide	Domain Best Practices	▢
Take a look at YouTube settings for Google Workspace	YouTube settings for Google Workspace	▢
Google Workspace Marketplace & Chrome Web Store	Marketplace & Chrome Web Store	▢
Connect with other admins through our forums	EDU Forums	▢
Professional Development & Training Resources	Guide to Going Google Resources	▢

If you'd like additional assistance, you can find partners that are able to assist in the Google Workspace Marketplace.

If you are also interested in how you can pilot devices, specific information can be found in Google Devices for Education Pilot Guide.

If you're interested in more detailed information about switching to Google Workspace, please take a look at:

Google Workspace for Education: Deployment Guide

- Guide to Going Google
- Google Workspace Deployment site
- Google Workspace Technical Transition Guide

Google Workspace for Education Privacy Notice

Please review the Google Workspace for Education Privacy Notice for information on how Google collects and uses information from Google Workspace for Education accounts specifically. You can also visit the Google for Education Trust site for answers to FAQ.

1. Domain Set-Up

There are many ways to setup your domains. Here are the more common setups we've seen. Please before making a decision, check Best Practices Guide (Domain Setup Options)

(NOTE: Signing your production domain up for Google Workspace will NOT affect your current mail flow).

A. Managing one domain/Google Workspace instance (**Best option)**

Register mydistrict.edu (example domain name) and provision both teacher, staff, and student accounts within this Google Workspace account. If contact sharing is turned on, all users will have access to contact information of users provisioned in the domain.

B. Managing multiple domains in one Google Workspace instance **(Recommended)**

Register your production domain in Google Workspace. For example, if you currently use mydistrict.edu for your teacher email accounts, register that as your primary domain. Then, add an additional domain for your students, like students.mydistrict.org, in the same Google Workspace instance. If contact sharing is turned on, all users will have access to contact information of users provisioned in the domain.

C. Managing multiple Google Workspace instances (**Not recommended,** due to inability to collaborate seamlessly between separate Google Workspace instances)

Register mydistrict.edu for your teachers and staff and students.mydistrict.edu for your students as two separate Google Workspace instances. You'll manage these using two separate control panels. If contact sharing is turned on, by default users will only have access to contact information of users provisioned in their individual Google Workspace instance. If you'd like to add contact information of users outside of the Google Workspace instance, you'll need to create contact objects using the Shared Contacts API, Google Workspace Directory Sync or a marketplace tool.

2. Sign Up for Google Workspace

Once you decide on the domain name(s) that'll be associated with your production Google Workspace instance(s), you'll sign up here. Please note that you must already own, or be able to purchase, these domain names. To take full advantage of Google Workspace for Education, domain verification is a required step. If verification sounds a little too technical for you, don't worry, you now have access to 1:1, step-by-step domain verification support with the help of a Google Support specialist completely free of charge.

To get in touch, follow these instructions. Please note that you'll need to have already signed up for GAFE before calling Support.

3. Decide on your organizational structure

Organizational units allow you to segment your user population (i.e. you can create an organization for students and another for faculty - you could further break down the student organization by grade). Administrators can turn services on or off for different organizational units. Organizational units also allow for email delivery to be restricted for certain populations. You configure email delivery settings so that some users can only email users within the domain (and receive emails from users within the domain).

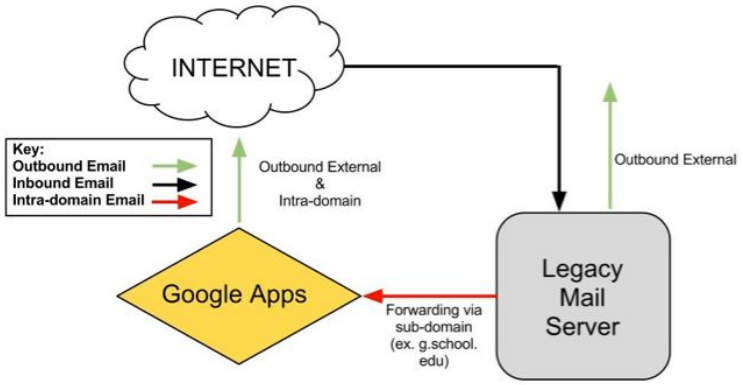
For best practices, review best practices document.
For step-by-step instructions on how to do so, please see this link.

4. Mail Architecture

Will you be changing your MX records to point to Google? Will some users remain on your legacy server, while other users will start using Google Workspace? You'll want to consider your current mail architecture/flow and think about the best way to adjust moving forward so that mail can be delivered to users within Google Workspace. You'll also want to consider how your legacy server will handle emails sent from within the legacy server to user who may be on Google Workspace.

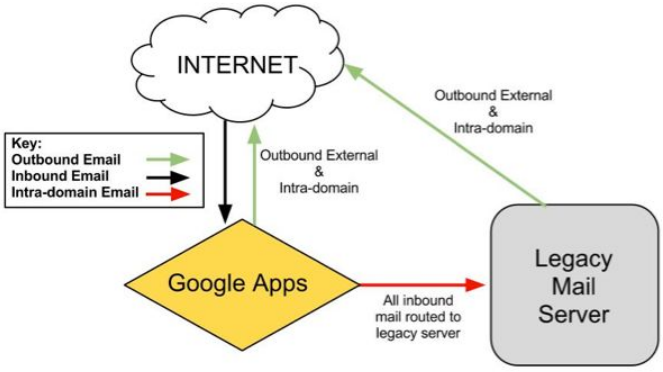
General information on mail delivery options can be found here.

Dual Delivery through Legacy Server



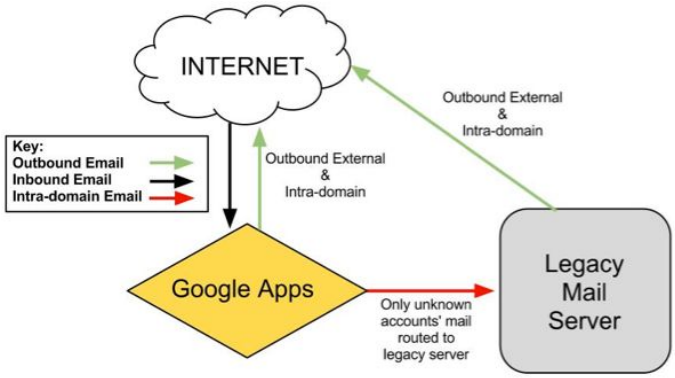
In this scenario, your MX records will not change - they'll continue to point to your legacy server. On your Google Workspace domain you'll set up a domain alias (for example, g.school.edu) with MX records pointing to Google Workspace. You'll then forward from your legacy server to the domain alias that you've set up.

Dual Delivery through Google



In this scenario, your MX records will point to Google. You'll then set up email routing in your Google Workspace control panel to send mail back to your legacy server for all accounts. Instructions on configuring email routing can be found here.

Split delivery through Google Workspace



In this scenario, your MX records will point to Google. You'll then set up email routing in your Google Workspace control panel to send mail back to your legacy server for accounts that are not found in Google. Instructions on configuring email routing can be found here.

5. Provisioning

There are a few different options when it comes to creating users and you'll want to choose the one that works best for your institution. General information on provisioning options can be found here. Please review best practices document to see what is the best option for you.

1. Manual provisioning
2. CSV Upload

   CSV uploads can be used to upload up to 500 users at a time. If you choose a CSV upload, you'll format your file as a table and include headers to define each field, like this:

   Cell A1: Email Address | Cell B1: First Name | Cell C1: Last Name | Cell D1: Password

3. Google Workspace Directory Sync

   Google Workspace Directory Sync allows you to automatically provision users, groups, and contacts based on the user data in your LDAP server, such as Microsoft Active Directory. Google Workspace Directory Sync connects to your Google Workspace directory and adds/deletes user accounts to match your existing organizational schema. The Google Workspace Directory Sync configuration wizard guides you through customizing your synchronization and mapping of your LDAP user list to your Google Workspace users,

nicknames, shared contacts, and groups. To manage your synchronization, you can perform test synchronizations, and configure change limits, notifications, and scheduled synchronizations.

If you're interested in using Google Workspace Directory Sync, you'll want to take a look at the following:

- Watch the Google Workspace Directory Sync Technical Overview
- Read the GADS Admin Guide

4. Provisioning API

The Provisioning API allows for users to be created programmatically. If you're interested in learning more, take a look at the Provisioning API documentation.

5. Provisioning partner: please ask Google representatives to find the best partner for you needs.

6. Google Classroom Setup

Will you be prepopulating Google Classroom classes automatically or will you have teachers create their own classes?

Teachers creating their own classes

To manually create a class, a teacher can follow the instructions as noted here.

Classroom API

We've recently launched the Classroom API which allows developers to automatically create and populate classes. This can all be completed by the Google Administrator with no interaction from students or teachers. Developers will want to review the following:

- Classroom API Home
- Classroom API Guides

3rd Party Options

With the new Classroom API, 3rd party developers, can easily integrate with Google Classroom to create and populate classes. Some great examples of this are:

- Google Workspace Manager (GAM)
- New Visions - rosterSync

The rosterSync tool is really easy to use as it's a Google Sheet Add-on and allows you to create and update Google Classroom rosters using Student Information System (SIS) CSV exports and data stored in Google Sheets. If you want a quick and easy way to create and populate Google Classroom, you can use this tool.

7. Authentication

Will your users be authenticating straight to Google (using the default Google login page)? Or are you looking to

integrate login with other services that you have at your school?

If your users will have passwords stored in Google, then you will need to either sync passwords from an existing campus system or create new passwords for users in Apps. If you're looking to sync passwords from Active Directory, you'll want to take a look at the following:

- Auth Magic
- SSO Easy

We recommend that you enter the Admin or Help desk contact information for end user password recovery, so users can contact the right team in case of any login issues, it only takes 1minute! See this article for the specific steps.

If you're interested in integrating logins with other services at your institution, you should take a look at our Single Sign-On articles/resources. NOTE: Single Sign-On works for browser based interactions. If your users will be interacting with Google Workspace via mail clients or mobile devices, they will need a password stored in Google Workspace.

- Learn more about SSO
- SAML SSO with Apps
- Shibboleth SSO and Apps
- SSO in Apps Marketplace

8. Data Migration

Data migrations can be performed server side (run by IT) or client side (run by the end user). The data that can be migrated from your legacy server will depend on the legacy server you're looking to migrate from. More information on migration options can be found here.

No migration

Pros: Reduces overall time/complexity of deployment as there is no need for IT admins to migrate data.
Cons: Users may want some of their legacy account data and may not know how to keep it.

Client side

Pros: Reduces overall time/complexity of deployment as there is no need for IT admins to migrate data.
Cons: Help Desk/IT admins may be contacted by users for help, since users run these migrations on their own.

Server Side

Pros: Since user data is transferred without user intervention, it can make the transition to Google Workspace more positive.
Cons: Can increase overall time/complexity of deployment as IT admins need to migrate data.

9. Additional Resources

YouTube settings for Google Workspace

This feature is integrated directly into the Google Workspace Admin console under YouTube settings [Apps > Additional Google services > YouTube]. In addition to restricting video content, admins will be able to delegate "approvers" to whitelist additional content for signed-in users on the domain. More information here.

Google Workspace Marketplace

If you're interested additional applications or are looking for someone to assist you with your Google Workspace deployment, please take a look at the Google Workspace Marketplace.

Connect with other admins through our forums

You can use our Google Workspace for Education Community forums to connect with other Google Workspace domain administrators, ask for tips, and share best practices.

Chrome Web Store

Take a look at additional web applications that you can install on your Chrome browser.

Professional Development & Training Resources

If you're looking for professional development and training resources to assist your user population in your move to Google Workspace, please take a look at the resources in the Guide to Going Google. You'll find professional development plans, ideas for starting to use Google Workspace in the classroom, and training resources.

Extra Credit: Here are some recommended resources to stay up to date after you've deployed Google Workspace

- Recommended bandwidth limits
- Track product updates and releases
- Look at the Apps Status Dashboard and the Google Workspace Known Issues page before contacting support
- Check out the Google Enterprise Blog
- Learn more about Google in Education and follow our Google+ page