



Google Apps for Education: Deployment Guide



The navigation bar consists of five circular icons connected by a horizontal line. The first three icons contain a checkmark, the fourth contains a refresh symbol, and the fifth contains a graduation cap. Below each icon is a text label.

Step	Label
1	WELCOME
2	DOMAIN BEST PRACTICES GUIDE
3	DEPLOYMENT GUIDE
4	CHANGE MANAGEMENT GUIDE
5	CLASSROOM APPLICATION



team.

This guide serves as a resource for domain administrators in charge of moving their student and/or faculty/staff populations to Google Apps 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 Apps 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 Apps 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



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Bookmarked task checklist	Relevant links	
1. Watch the deployment overview webinar	Deployment Webinar	<input type="checkbox"/>
2. Choose domain name(s) - select an option below		
A. Recommended: One Google Apps account for faculty, staff and students using one domain within one Google Apps account		<input type="checkbox"/>
B. Recommended: One Google Apps account for faculty, staff and students, but have a separate student domain within one Google Apps account	Multiple Domains & Limitations	<input type="checkbox"/>
C. Not Recommended: Two Google Apps accounts, one for faculty and staff and another for students (managing multiple Google Apps instances)		<input type="checkbox"/>
3. Sign up your domain(s) for Google Apps	Sign Up for Google Apps	<input type="checkbox"/>
4. Decide on your organizational structure	Domain Best Practices Create an Organizational Structure Turn Services On/Off for Orgs Set up a Walled Garden	<input type="checkbox"/>
5. Decide on mail flow - select an option below		
Configure dual delivery through legacy server	Dual Delivery through Legacy Server	<input type="checkbox"/>
Configure dual delivery through Google	Dual Delivery through Google	<input type="checkbox"/>
Configure split delivery through Google	Split Delivery through Google	<input type="checkbox"/>
6. Provision users in Google Apps		
Choose a method for creating users in Apps	Provisioning Options Overview	<input type="checkbox"/>
If performing a CSV upload:	CSV Upload Help Center Article	
Create CSV file of users (500 users per file)	CSV Upload How-To Video	<input type="checkbox"/>
Upload via the control panel & wait for email stating the upload is complete		<input type="checkbox"/>
If using Google Apps Directory Sync (GADS):		
Download GADS	GADS General Info/Download Page	<input type="checkbox"/>
Watch the GADS Technical Overview	GADS How-To Video	<input type="checkbox"/>
Read the GADS Admin Guide	GADS Admin Guide	<input type="checkbox"/>
Configure GADS		<input type="checkbox"/>
Run simulation sync, correct any issues, run actual sync		<input type="checkbox"/>
7. Implement authentication - select an option below		
Store passwords in Google Apps	Reset Google Apps passwords	<input type="checkbox"/>
Configure Single Sign-on	Learn more about SSO	<input type="checkbox"/>
8. Data migration - select an option below		
No data migration necessary		<input type="checkbox"/>
Migrate data for users (server side migration options)	Email Migration Options	<input type="checkbox"/>
Let users migrate their own data (client side migration options)	Email Migration Options	<input type="checkbox"/>
9. Additional Resources		
Domain Best Practices Guide	Domain Best Practices	<input type="checkbox"/>
Take a look at YouTube for Schools	YouTube for Schools	<input type="checkbox"/>
Google Apps Marketplace & Chrome Web Store	Marketplace & Chrome Web Store	<input type="checkbox"/>
Connect with other admins through our forums	EDU Forums	<input type="checkbox"/>
Professional Development & Training Resources	Guide to Going Google Resources	<input type="checkbox"/>

If you'd like additional assistance, you can find partners that are able to assist in the [Google Apps Marketplace](#).

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

- [Guide to Going Google](#)



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- [Google Apps Deployment site](#)
- [Google Apps Technical Transition Guide](#)

1. Watch the Deployment Webinar

This [video](#) is a great resource for learning more about deploying Google Apps and our recommended 3 Phase approach.

2. Domain Set-Up

There are many ways to setup your domains. Here are the more common setups we've seen.

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

A. Managing one domain/Google Apps instance

Recommended method: Register mydistrict.edu (example domain name) and provision both teacher, staff, and student accounts within this Google Apps 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 Apps instance

Recommended method: Register your production domain in Google Apps. 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 Apps 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 Apps instances

Not recommended (due to inability to collaborate seamlessly between separate Google Apps instances): Register mydistrict.edu for your teachers and staff and students.mydistrict.edu for your students as two separate Google Apps 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 Apps instance. If you'd like to add contact information of users outside of the Google Apps instance, you'll need to create contact objects using the [Shared Contacts API](#), [Google Apps Directory Sync](#) or a [marketplace tool](#).

3. Sign Up for Google Apps

Once you decide on the domain name(s) that'll be associated with your production Google Apps instance(s), you'll sign up [here](#). Please note that you must already own, or be able to purchase, these domain names. After signing up for Google Apps, you'll be required to [verify domain ownership](#).

4. 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 step-by-step instructions on how to do so, please see [this link](#).

5. 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 Apps? You'll want to consider your current mail architecture/flow and think about the best

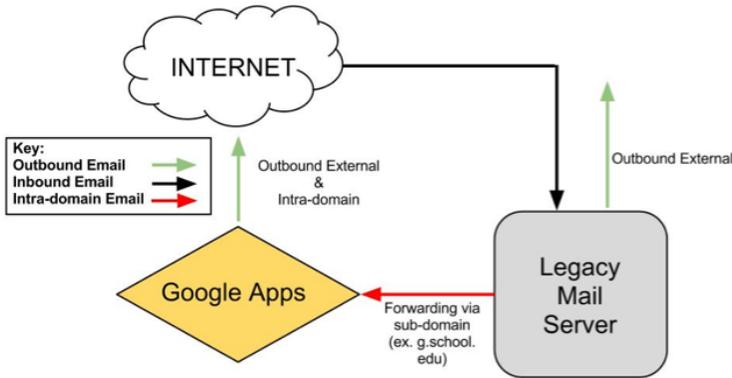


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way to adjust moving forward so that mail can be delivered to users within Google Apps. You'll also want to consider how your legacy server will handle emails sent from within the legacy server to user who may be on Google Apps.

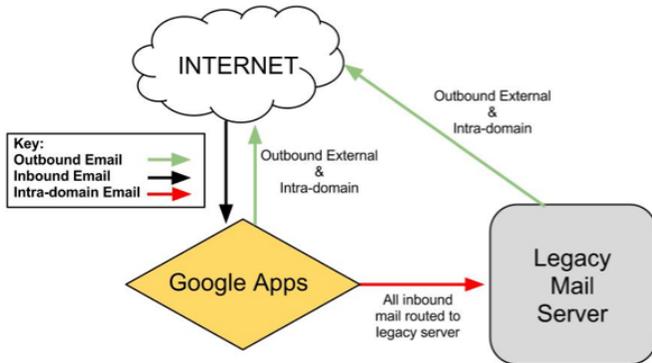
General information on mail delivery options can be found [here](#).

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 Apps domain you'll set up a domain alias (for example, g.school.edu) with MX records pointing to Google Apps. You'll then forward from your legacy server to the domain alias that you've set up.

Dual Delivery through Google

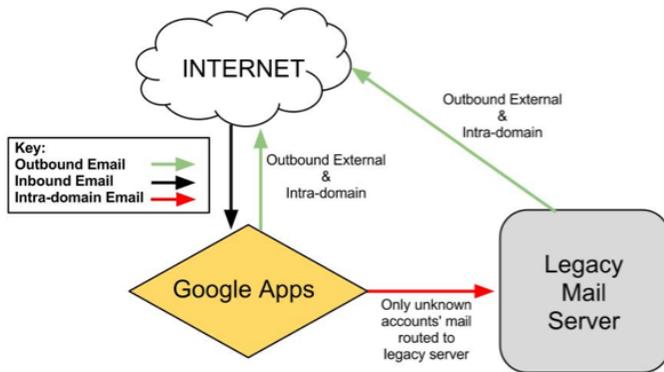


In this scenario, your MX records will point to Google. You'll then set up email routing in your Google Apps control panel to send mail back to your legacy server for all accounts. Instructions on configuring email routing can be found [here](#).

Split delivery through Google Apps



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In this scenario, your MX records will point to Google. You'll then set up email routing in your Google Apps 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](#).

6. 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](#).

CSV Upload

[CSV uploads](#) can be used to upload up to 500 users at a time. This is the simplest way to provision users, but you'll want to take into account the size of your school/district when deciding whether this is the correct route to go. 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

Google Apps Directory Sync

[Google Apps 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 Apps Directory Sync connects to your Google Apps directory and adds/deletes user accounts to match your existing organizational schema. The Google Apps Directory Sync configuration wizard guides you through customizing your synchronization and mapping of your LDAP user list to your Google Apps 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 Apps Directory Sync, you'll want to take a look at the following:

- [Watch the Google Apps Directory Sync Technical Overview](#)
- [Read the GADS Admin Guide](#)

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.

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,



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you'll want to take a look at the following:

- [Auth Magic](#)
- [SSO Easy](#)

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 Apps via mail clients or mobile devices, they will need a password stored in Google Apps.

- [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 Apps more positive.
- Cons: Can increase overall time/complexity of deployment as IT admins need to migrate data.

9. Additional Resources

YouTube for Schools

YouTube for Schools gives you a way to access educational videos from inside your school network. By enabling the feature, schools gain access to a broad set of educational videos on [YouTube EDU](#) and the ability to select the specific videos that are accessible from within the school network. Schools can sign up at [YouTube.com/schools](#) and learn more by visiting our YouTube for Schools [FAQs](#) or [Product Forum](#).

Google Apps Marketplace

If you're interested additional applications or are looking for someone to assist you with your Google Apps deployment, please take a look at the [Google Apps Marketplace](#).

Connect with other admins through our forums

You can use our [Google Apps for Education Community forums](#) to connect with other Google Apps domain administrators, ask for tips, and share best practices.



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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 Apps, 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 Apps in the classroom, and training resources.

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

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