

# **Dropbox Deployment**

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In this eBook we will outline the three phases of a Dropbox deployment and share best practices around key activities that take place in each phase.

### **Dropbox** Business

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Dropbox follows the standard methodology of "Plan, Test, Execute," adapted into the following phases:

- 1. "Discovery and Plan"
- 2. "Build and Pilot"
- 3. "Enable and Roll Out"

The three phases are organized into three main work streams. You may find that these work streams correlate to various project roles at your organization:

- 1. "Project Management"
- 2. "Technical"
- 3. "Change Management"

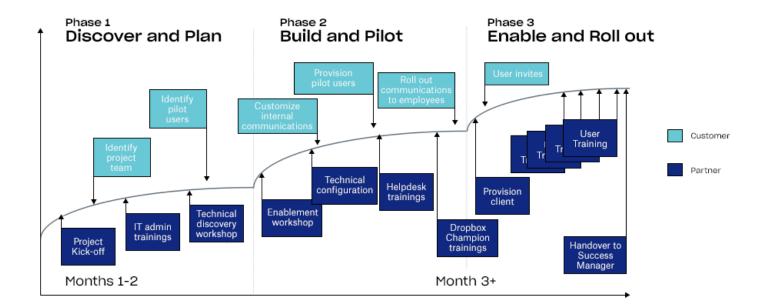
The image below contains example tasks in each phase and work stream.

	Discover & Plan	Build & Pilot	Enable & Roll Out
Project Management	<ul><li>Analyze customer needs</li><li>Define scope of the project</li><li>Define Project Plan</li><li>Allocate team project</li></ul>	Control planned tasks	<ul><li>Control planned tasks</li><li>Close project</li></ul>
Technical	List technical and integration requirements	<ul> <li>Configure Admin Console</li> <li>Integrate systems</li> <li>Custom developments</li> <li>Deploy subset of business users</li> </ul>	<ul><li>Provision all users</li><li>Deploy Dropbox client and apps</li></ul>
Change Management	<ul><li> Understand Requirements</li><li> Define success metrics</li><li> Admin training</li></ul>	<ul><li>Draft End User Communications</li><li>Helpdesk training</li><li>Raise awareness</li></ul>	<ul><li>Communicate deployment steps</li><li>End-user training</li></ul>



## **Example Project Timeline**

Below is an example of a deployment timeline with key deliverables segmented into customer versus partner responsibility. Please note, the timeline below depicts a three month project, but we all know that projects can vary greatly based on complexity and other factors. For example, we have seen simple roll outs that have taken 2 weeks, and we have seen projects that have lasted over a year. Roles and responsibilities will also depend on the statement of work in place for any given customer.



We provide Services Partners with several additional resources in the Services Partner Library including a sample project plan. However, we understand that you may have your own project management frameworks (such as PMI or PRINCE) that you like to use on your projects. You do not have to use our methodology to work with us or deploy Dropbox.



Proper end user communication is an important component to successful deployment. Once you pass your certification exam, Dropbox will provide sample email templates. One example is a template for an executive sponsor to send out organization-wide. We recommend beginning the communication process as early in the deployment cycle as possible for end users to anticipate the change, and be ready to make a smooth transition over to Dropbox.

# The following are ways you may consider communicating with users:

- Initial announcement email from Executive Sponsor
- Intranet notifications
- Poster campaigns or other internal communication tools
- Standard or custom invite message
- Training communications



# Change Management

While Dropbox is a simple product, incorporating change management practices are crucial to the success of a Dropbox deployment.

In this section we'll discuss the change management workstream throughout a Dropbox deployment. Ultimately, we want to drive adoption. When we think of long-term success, higher adoption yields a higher likelihood of renewal and upsell. As resellers, increasing adoption should be top of mind to ensure your customers continue buying Dropbox.

When implementing a new technology or service, you will inevitably have resistance somewhere. Turn these conversations into opportunities to understand the customer's concerns and leverage those to build communications and education to support the change. Make sure to ask and understand what a customer's success criteria is, and how you can enable and train their team to ensure a smooth transition during deployment.



By introducing the change over time and providing users with thorough communication and education, you can make the process of change less painful. Change management lasts the entire duration of the deployment but at different phases you are trying to drive different outcomes.

- 1. In the initial stages, you want to make people aware that a change is coming and give them sufficient warning, so they can start processing and provide feedback if there are major concerns you should be thinking through.
- Next you want to build anticipation and get people excited about the changes coming. This is also an important opportunity to help them build understanding of what the tool will do for them so they again can identify if there are transitions they may need help with.
- 3. With Dropbox, users have to accept the invitation to join the team, this is something an admin cannot force or accept on behalf of their users. So, it's important to ensure that users physically select accept to gain access to the team.
- 4. The ultimate goal is for the company to see a return on investment which comes from employee adoption. By using Dropbox regularly, the users become more efficient, and you will have a happy customer.



You can look at this process as the four 'A' Stages:

- Aware communicate to ensure the users know the change is coming
- 2. Anticipate give the users time to think about how Dropbox will fit and where they may need help
- 3. Accept drive high acceptance rates at go-live
- 4. Adopt help users leverage Dropbox to improve their everyday workflows

Understanding a customer's requirements is key for effective change management. You can gather this information through a variety of ways. Some suggested methods are via meetings, surveys, and knowledge from key stakeholders.

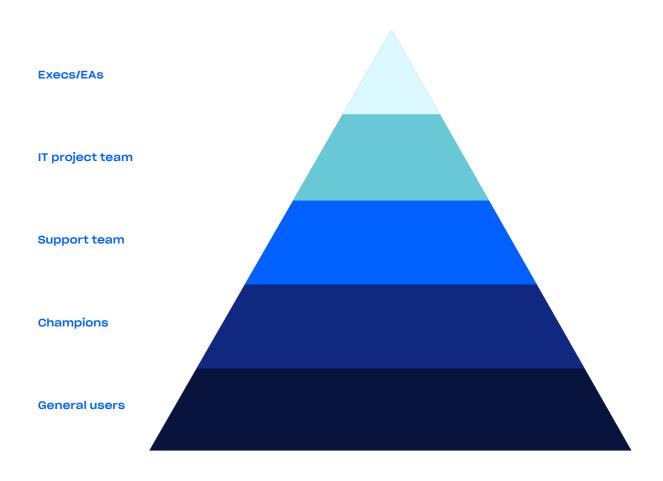
Key stakeholders will be crucial in making any deployment successful. It is important to identify these individuals and develop them into Dropbox champions to help influence engagement, promote internal change and awareness, and drive the project for the organization.

#### **Identify Team and Stakeholders**

Product Sponsors	<ul><li>Find executive support</li><li>Agree on role in communications plan</li></ul>
Key Stakeholders	<ul><li>Identify advocates (and detractors)</li><li>Leverage existing support and awareness</li></ul>
User Groups	<ul><li>Define Champions, IT team, early adopters</li><li>Plan training/communications for each group</li></ul>



You may experience customers or users who claim they already know how to use Dropbox because they have a Basic account, and therefore don't need to attend a training. Dropbox is user friendly, but we find that these training sessions help unlock the more advanced collaboration features for users who perhaps thought they were experts but were only using a small portion of the functionality. Any Dropbox training can be done remotely, but for relationship development purposes, in-person admin and executive training is beneficial if the customer budget fits.





# Discovery

In this section you will learn what discovery questions should be asked before your project kicks off to shape your project plan. These questions are grouped into three different categories:

- 1. General deployment
- 2. Change management
- Provisioning 3.



# General deployment discovery questions

Scoping Question	Project Plan Impact
What is the customer's preferred deployment approach, if any (pilot, waved roll out, 'big bang'?	Impacts overall deployment timeline and user groups
How much technical aptitude exists within the target workforce for the change (on a spectrum from understand "what is the cloud" to understanding "how the workflow actually works")?	Determines how much emphasis we need to put on change management
Is there any kind of internal milestone or outcome we could anchor to around sunsetting the legacy content repository?  If not, what is a 'soft' target re-deployment date/window?	Shape overall deployment timeline and key milestones
Are there any considerations for peak activity for the legacy solution that should be considered in the timeline / timeframe?  • Are there change/freeze windows?	Shape deployment timeline to account for any windows of minimal activity
Do you have any existing Dropbox Business teams?	If so, we want to find out if they are interested in a team merge, or if they want to keep each team separate
Do you have any data to migrate?	If yes, reference the data migration certification
What is your standard desktop browser version, and what does your upgrade plan look like?	Dropbox works across all modern browsers, but is unsupported and/or less functional for older versions.  Dropbox is not supported on Internet Explorer.
What integrations with Dropbox are you considering? (example: O365, G Suite, Salesforce)	Will determine testing and integration needed to complete before rolling out
What identity and access management systems do you use (if any)?	See provisioning scoping section for more info
What does your existing security architecture look like? (Do you use any SIEM, CASB, DRM providers?)	We want to know if they have any security solutions that integrate with Dropbox. If not, we may want to explore a custom solution or opportunity to sell a different security solution.
Do you use Microsoft Office 365? Does everyone have a license? What type of license?	Dropbox has an out-of-the-box integration with O365 for office online. To configure "Dropbox as a Place" on Office 365, see instructions here



# Change management discovery questions

Scoping Question	Project Plan Impact
Do you have regular IT trainings?	We want to incorporate our trainings into their regular practices
Do you have a standard communication process to your end users?	We want to incorporate our comms into their standard process
What are your most effective forms of communication to end users?	We want to think of other ways to communicate to users about Dropbox outside of email
Are there teams responsible for end-user communication internally?	Point of Contact to send end-user comms
How are your users distributed geographically?	May determine rollout groups in a larger deployment



# **Provisioning Scoping Questions**

Scoping Question	Project Plan Impact
Is the customer using SSO today? What provider? Do they want to integrate SSO with Dropbox?	If your customer has an existing SSO solution, they can use that to authorize and manage access to Dropbox.  If not, you should discuss how they plan to manage Dropbox access. You can read more about integrating Dropbox with SSO here. You will also find instructions for the following:  InCommon and eduGAIN  ADFS 2.0  ADFS 3.0
Will the customer be integrating 2FA with Dropbox?	If they are using SSO, 2FA will need to be configured with their SSO provider
Does the customer use proxies or firewalls which Dropbox traffic will need to be configured to route through?	Ensure firewalls are configured correctly as it may block Dropbox traffic; if your customer is on the Enterprise Plan, you can explore and address Network control.
On which domains does the customer want to manage Dropbox use? If on the Enterprise plan, are you interested in using account capture?	Dropbox Advanced and Enterprise provide multiple tools to manage Dropbox usage on your domains and sub domains. If your customer wants to use account capture, you will want to discuss the best time in the deployment to activate the feature. The customer may want to turn it on near the end of the deployment.
What directory service do you use? Do you have an IDM provider?	If your customer uses Active Directory, they will likely want to use our AD Connector to provision users. If your customer uses an IDM provider like Okta or Centrify, we recommend provisioning users with this method (to keep a single source of truth).
What does your AD environment look like?	This can decide if we want to encourage them to consider the AD Connector or a 3rd-party IDM to centralize their provisioning to Dropbox.
Do you manage two or more domain controllers?	The AD Connector must be installed on a single domain controller or on a member server with Powershell Active Directory module installed and at least read-only access to AD.
Do you have two or more domains?	The AD Connector can run multiple domains as long as there is a trust established between the them.



# Provisioning Scoping Questions (cont'd)

Scoping Question	Project Plan Impact
Do you wish to do Group management or just use the connector as a provisioning/deprovisioning tool?	We don't support group management with Azure AD, so we need to know ahead of time for customers who use Azure AD and want to manage groups.  The AD Connector and most IDM providers support group provisioning.
Do you use Azure Active Directory?	You can provision users through Azure AD, however, you can't use it to provision groups to Dropbox. You can find the most up to date info on our integration with Azure AD here.
What is the primary OS on computers (Windows, Mac)? If you have Mac users, do they have admin rights on their machines?	Dropbox works across all standard operating systems, however, it may not work on older versions. You can find the most up to date requirements here. Deploying software to a Mac requires users to have admin rights on their machines (or take them to their help desk).
How does the customer currently deploy and manage software? (Example: SCCM, Group Policy)	We want to incorporate their standard software deployment with Dropbox. The next section addresses how to deploy the Dropbox desktop application using our enterprise installer.



# Provisioning

In this section you will learn:

How to provision the Dropbox desktop application on: 1.

Windows operating systems Mac operating systems

2. How to provision/de-provision users' Dropbox accounts with:

Manual provisioning The Dropbox AD Connector The Dropbox API 3rd Party IDM Provider



## **Dropbox Desktop Application Provisioning: Windows**

Dropbox has an enterprise installer for Windows that can be run silently from another, elevated process. Dropbox Business admins can run the installer remotely-using an existing managed-software solution

or deployment mechanism-and install the Dropbox desktop application on the computers of multiple team members at once. (Provisioning on Macs is covered in the next section.)

How to download and run the enterprise installer:

If you are a Dropbox Business team admin and would 1. like to use the enterprise installer, first download the offline installer.

The installer file should be named "Dropbox [x.y.z] Offline Installer.exe" (where "[x.y.z]" represents the three-digit designation of the latest installer version)

To run the installer silently for the current computer, 2. execute the installer file you just downloaded with the /s or Inolaunch option appended:

Dropbox x.y.z Offline Installer.exe /s

3. To deploy the installer to more devices, invoke the installer with the silent option from your preferred managed software solution.

This will install Dropbox on the Program Files (x86) directory and will require new users to sign in to their Dropbox accounts and manually set up preferences Existing users will not be required to sign in or configure preferences again



There are two command line parameters you can set for the enterprise installer, /s and /nolaunch. The functionality and differences between the two are outlined below:

/s	/nolaunch
Silent installation and no prompts for install location	Silent installation and no prompts for install location
Dropbox login prompt will launch when installation is complete	Dropbox desktop application will not automatically launch after install, and the icon Dropbox icon is added to target user start menu
	Note: The /nolaunch parameter includes /s [If you try to use both you will get an error]

#### Choosing a managed-software solution:

While there are many managed-software solutions that can allow you to manage deployments for your entire team-such as SCCM or Group Policy-Dropbox does not recommend one over another.

#### Deciding when to use the enterprise installer:

The enterprise installer allows users who don't have admin rights on their Microsoft Windows machines to easily install the Dropbox desktop application.



# **Dropbox Desktop Application Provisioning: Mac**

Dropbox does not maintain an enterprise installer for Macs. The table below summarizes how to push the Dropbox desktop application to any Mac laptops and desktops:

Step	Instructions
1	Download latest desktop client '.dmg' to an Admin
2	Add the '.dmg' to your Managed Software solution
3	Push application to client machine(s) or allow users to "pull" from their managed software solution
4	<ul> <li>If users are admins on their machines: User enters admin credentials to complete install.</li> <li>If users are not admins on their machines: Users brings machines to local IT to enter admin credentials.</li> </ul>

#### "Pushing" vs "Pulling" the desktop application for end users:

"Pushing" the desktop application to end users can act as a change management tool, since the desktop application will appear on users' desktops. This can increase adoption and awareness for your customers.



# **User Provisioning and** Deprovisioning

Before we begin, it is important to understand a few terms and definitions around members' status regarding their Dropbox license. Please review the following and ensure you understand the difference between these four terms:

#### Invited member

An invited member has been sent an invitation to join the team, but they have not accepted the invitation. An invited member consumes a license.

#### **Active Member**

An active member has been provisioned a license and accepted their invitation to join the team.

#### Suspended member

A suspended team member will instantly lose access to their Dropbox Business team account, along with all of its files, folders, and Paper docs. However, a suspended account continues to use one of the allotted team member licenses. This gives admins the option to remove the suspension later.

#### **Deleted** member

A deleted team member immediately loses access to the account. Additionally, Dropbox will stop syncing files to the team member's computers and mobile devices, and any shared links created on that account are disabled. A deleted member no longer consumes a license.

There are four different ways you can provision a user in Dropbox:

- 1. Manual
- Bulk upload through the API 2.
- 3. **AD Connector**
- 3rd Party IDM Provider 4.



# **Manual User Provisioning**

Manual provisioning can be easily done through the Dropbox admin console.

### To invite someone to Dropbox Business:

- Sign in to dropbox.com using your 1. admin credentials.
- Click Admin Console. 2.
- On the Members page, click Invite members. 3.
- Enter the email addresses of people you 4. want to invite, and click Send invites.

This type of provisioning works great on very small teams or teams that don't have a central way to manage users' identities.

### Bulk upload through the API

You can also provision users via a .csv file using the API. You can use these scripts on GitHub as an example of how to provision users via the API, or you can write your own.



## The Dropbox Active **Directory Connector** (On-Prem AD)

#### The Dropbox Active Directory Connector

(AD Connector) allows one-way syncing between an on-premise Active Directory (AD) and a Dropbox Business team. The AD Connector simplifies the process of provisioning and deprovisioning users in Dropbox Business by syncing changes made in Active Directory when the connector runs. The AD Connector can also (optionally) sync Active Directory groups and group members to your Dropbox Business team. The AD Connector syncs one-way (AD → Dropbox). No changes made in Dropbox are synched back to AD.

The Dropbox AD Connector is built using Microsoft PowerShell and is packaged in an MSI installer. This gives admins an easy user interface to install the connector with.

The AD connector supports the following functions:

- Syncing of Active Directory users.
- Pushing Active Directory groups to Dropbox. (Please note that this function is optional.)

The AD Connector can be set to run via a scheduled task at an indicated time. By default, the task is set to run daily at 2:00 am (server's local time). Frequency can be increased to have it run more often, but should not be more frequent than every 3 hours for best performance.



#### **Under provisioning:**

 During setup, the AD Connector setup wizard asks the administrator to indicate a specific AD group for the connector to check for users. This group can be applied to multiple users. It is recommended that the AD administrator create a single group called "Dropbox Users" that contains all the members they would like to provision. They can place both users and groups within the Dropbox group.

#### **AD Sync Users**



· When the AD connector runs, it checks all the users in that AD group and compares it to Dropbox, then executes one of the following actions:

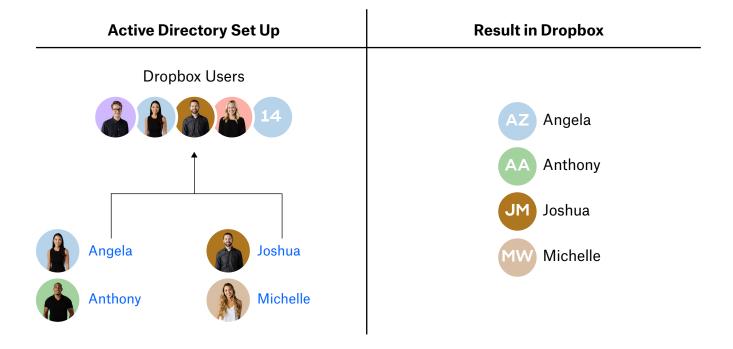
AD User State	Dropbox User State
User exists in AD group but not Dropbox	Provisions license to user
User is disabled in AD and is assigned to Dropbox group	Suspends user in Dropbox*
User has been removed from "Dropbox" AD group	Suspends user in Dropbox*
User is deleted in AD	Suspends user in Dropbox*

\*A user will only be suspended if either 1) the user was originally provisioned by the AD Connector or 2) the "manage existing users" box is checked in the AD Connector configuration

Note: the AD Connector never deletes a user from Dropbox. An admin will need to navigate to the Members tab and delete suspended users to free up licenses.



The below diagram represents what happens in Dropbox (on the right) after the connector runs with the given configuration in AD (on the left).





#### **Group provisioning:**

During the setup process, administrators can choose if they would also like to
perform a one-way sync of AD "security groups" as "groups" in Dropbox. To sync
groups, an admin can select whether they'd like to use the same AD group chosen to
sync users or an alternate security group. We recommend using "Dropbox Users" and
"Dropbox Groups" as your naming convention to avoid confusion.

#### **AD Sync Groups**



 When the AD connector runs, it checks the configured AD sync group and compares it to Dropbox, then does one of the following group actions:

Creates Dropbox group(s) if the group doesn't exist in Dropbox already Adds members to groups, if users are also in their respective group of users that will sync

- · Changes from Dropbox will not sync back to Active Directory.
- Once created, deleting a group from Active Directory will not delete the corresponding group from Dropbox. Instead, all users will be removed from the Dropbox group if either:

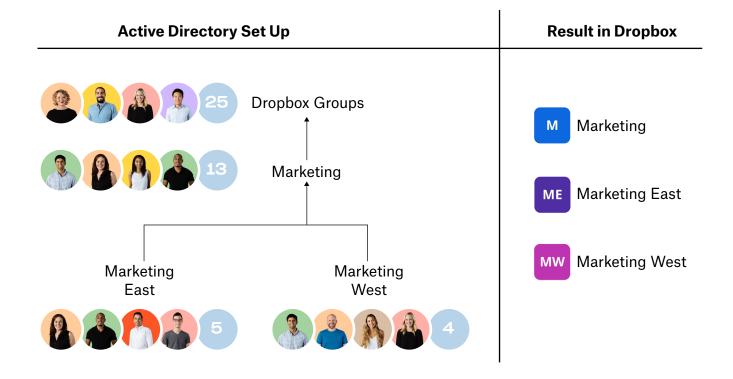
All members are removed from the sync group in Active Directory
The sync group (e.g. "Dropbox Groups") is removed from the Configuration step

The below table summarizes these actions:

AD Group State	Dropbox Group State
Group exists in AD but not in Dropbox	Creates the group in Dropbox. It adds the users of that group, only if the user is a member of the Dropbox Business Account.
Group is removed from "Dropbox" AD sync group	Deletes group in Dropbox, but does not delete the users (if you are managing users and groups separately in the AD Connector configuration).
Changes to group membership in AD	Changes in membership are reflected in Dropbox group.
Group is deleted in AD	Deletes group in Dropbox.



The below diagram represents what happens in Dropbox (on the right) after the connector runs with the given configuration in AD (on the left).



Please note that the AD Connector is only available in English. You can read more about the AD Connector in the following help center articles:

The Dropbox AD Connector How can I use AD to manage my Dropbox Business members?

## 3rd Party IDM provider

Dropbox integrates with several 3rd party identity management providers. IDM providers can often manage provisioning as well as authentication (SSO). You can find a list of these integrations here. You may already sell or have customers with these solutions. This makes deploying Dropbox even easier.



# Domain verification, invite enforcement, account capture, and domain insights

#### **Domain verification**

Dropbox Business offers domain verification and invite enforcement to make the process of onboarding faster and easier for companies, organizations, and businesses. These features are available on our Advanced and Enterprise Plans. Domain verification allows a team admin to verify ownership of an email domain with Dropbox, and is required to use invite enforcement or account capture. You can find instructions here to verify your domain.

#### What if I have more than one domain to verify, or I want to verify a subdomain?

Team admins can choose to verify a primary domain, which is the top-level domain of their website (for example, "dropbox.com"). Team admins can also verify subdomains, which are secondary domains of their website (for example, "sales.dropbox.com" and "dropbox.com/sales"). When a team admin verifies a primary domain, they will see a checkbox next to Include all subdomains. Leave this checked to verify all the subdomains of the primary domain. Teams can verify any domains they own, but please note that a domain cannot be verified by more than one existing Dropbox Advanced or Enterprise team.

#### Invite enforcement

Once you have established domain ownership, you can enable invite enforcement for email addresses on each domain. Enabling invite enforcement will cause all existing and future invites on this domain to be enforcedthat is, users will be forced to either join your team, or to change the email on their existing Dropbox or Paper account to an address that does not use your verified domain. In this article you will find instructions to configure invite enforcement (you'll need to scroll down in the article).

#### Domain insights and account capture

For Dropbox Business teams on the Enterprise plan, domain verification is complemented by two exclusive features: domain insights and account capture. Together, they can help admins:

- Gain greater insights into organic Dropbox usage on a company domain
- Prevent unauthorized Dropbox usage from taking place on a company domain
- Easily migrate an entire company onto a single Enterprise team
- Get greater security with company data, and better ownership of company files and assets

Once an Enterprise team admin has verified domain ownership, they can use domain insights to see an aggregated view of how many individual users have created personal Dropbox accounts using a work email address on those domains. Admins can then use account capture to force these users to either migrate their personal account into the Dropbox Enterprise team, or to change the email address associated with the personal account to a personal email account. Finally, admins can use domain insights to track this unauthorized usage of the company domain over time. You can find instructions here on using account capture.

Dropbox cannot provide a full list of personal users on the company domain. The advantage of account capture over invite enforcement is that account capture does not require an admin to know who is using Dropbox. Invite enforcement, on the other hand, requires the admin to send an invitation to a user before they are required to join the team. If you would like to enforce a specific group of users to join your team rather than everyone on your domain, you should use invite enforcement.



### The table below summarizes the key differences between account capture and invite enforcement:

Account Capture	Invite Enforcement
Enterprise Only	Advanced and Enterprise
User's decision impacts license use	Always uses a license
Impacts users across entire domain	Only impacts provisioned users

Account capture and invite enforcement also have a couple key similarities:

Both features pause syncing on personal accounts Both features force users off of personal accounts ("locked out")



## Deprovisioning

Many of the above methods are used for both provisioning and deprovisioning users. You will want to be aware of three additional things when deprovisioning users:

- Transferring users' files
- Converting a team member to a Basic account
- Recovering deleted members

#### Transfer files to another team member

Dropbox Business team and user management admins can easily transfer a deleted member's Dropbox files to another team member.

All of the folders and files in the former member's work Dropbox will go to the recipient you've chosen. Dropbox will also look to preserve sharing relationships. For example, if the member owned a shared folder, Dropbox will transfer ownership of the folder to the recipient.

- You can only transfer a user's files once.
- If it doesn't make sense to transfer all of a former team member's files to a single person, you (the team admin) can transfer the content to your own account and then share the files with various users who may need access.
- Remember, you have 120 days to transfer a users files after the user has been deleted.

You can read more about account transfer and find stepby-step instructions here.

#### Converting a team member to a Basic account

When you delete a user, you now have the option to convert a team member to a personal account through the admin console. Using this option, their work account becomes a Dropbox Basic account that isn't connected to your Dropbox Business team. They will keep all shared files and folders they had access to before joining the team, and any private files in their account. Admins can reuse the license they occupied and invite another person to the team. You can read more about this feature here.

#### Recover a deleted user

If you accidentally delete a team member, you have seven days to restore the user. Restoring a user will reactivate the account with the same files and permissions the account will be exactly as it was before deletion. You can read instructions on how to recover a deleted user here.



## **Provisioning FAQs**

#### How do I decide which provisioning method my customer should use?

There are a number of factors that could determine which method you choose. A few key considerations are listed below:

- Company size
- License count
- Future scale
- Existing integrations and current IDM provider
- AD environment (size, complexity, configuration)

#### What is "silent" provisioning and how can I use it?

When a user is provisioned, an email is generated from Dropbox to that user. Some companies want to standardize their communication to end users, and prefer to send messaging to users that is IT branded. To use "silent" provisioning with Dropbox, you need to suppress the email invite from Dropbox. To support silent provisioning, you must meet the following criteria:

- Customer must be using SSO and have this integrated with Dropbox
- Customer must instruct users to navigate to dropbox.com/sso to log in

There are 4 provisioning methods that support silent provisioning:

- **AD Connector**
- Custom provisioning with the API
- Cloud IDM providers like Okta or Centrify
- Provisioning through the API

#### At what point in the deployment process should I turn on invite enforcement and account capture?

You should always turn on invite enforcement prior to provisioning any users, this ensures that they need to make the decision to change their email address or join the team.

Typically, account capture should be turned on later in a deployment (especially with larger, more complex deployments). Using invite enforcement first allows a team to be tactical about who they invite to the team. Once intentional users have been invited, you should turn on account capture to scoop up the outliers and prevent people from using their personal Dropbox account on a managed domain. If you turn on account capture before testing with a pilot group, there is a risk of capturing hundreds of users before your customer is truly ready for go-live.

#### What if I provision a user who has a free account on their work email?

If a user has a Basic, Plus, or Professional account associated with a work email, they will go through a different join flow than a non-existing user. They will have the option to move their files to their work account, or keep them personal. This help center article provides written steps and a video to demonstrate the process of a personal user joining a Dropbox Business account.



# **Technical Watchpoints**

The below table summarizes technical watchpoints that may come up during a Dropbox deployment. Additional documentation is provided in the far right column when needed.

Watchpoint	Summary	Additional Documentation
Device, OS, and browser compatibility	Dropbox is compatible with most operating systems and all modern browsers, however outdated versions such as XP are no longer supported. Check the system requirements to ensure your customer is using supported systems.	https://www. dropbox.com/help/ desktop-web/system- requirements
Open Ports	Ensure these ports are open for all Dropbox functionality to work:	
	<ul><li>17600</li><li>17603</li><li>17500</li></ul>	Open button - ports 17600 and 17603 LAN Sync - open port 17500
Domains used by Dropbox	Confirm that Dropbox emails are not blocked:  All email from employees, support staff, and some service-related email (such as email verification, password reset confirmations, and Dropbox research study invitations) are sent from dropbox.com, dropboxmail.com, or dropbox.zendesk.com  All Dropbox Business related email originates from dropbox.com or dropboxpartners.com  All promotional and tip emails originate from dropboxmail.com  *Note: The domains shown above are the main ones, but check the help center article for a more exhaustive list	https://www. dropbox.com/help/ security/official- domains
Configuring a firewall to work with Dropbox	Usually no firewall configuration is needed to run the Dropbox desktop app. If your web browser has an internet connection, the desktop app should be able to use the same connection.  However, if sync isn't working, adjust your firewall settings to permit the desktop app internet access. Usually, adding Dropbox to a list of applications with internet access resolves the issue.	Firewalls



Watchpoint	Summary	Additional Documentation
Dropbox through Proxies	Be aware that restrictive Proxies can block Dropbox traffic.	Proxies
Customer concerns over bandwidth impact	Delta Sync, LAN sync, and smart sync are all technologies that will reduce bandwidth impact and ease your customers' concerns. You can read more about each.	<ul><li>LAN Sync</li><li>Delta Sync</li><li>Smart Sync</li><li>(also covered in</li></ul>
	Still, the initial sync of Dropbox for users could be bandwidth intensive depending on the amount of data that needs to sync.  Consider basing deployment timelines around potential bandwidth constraints. For example, if bandwidth is a concern, you could consider provisioning to users by department rather than location.  Note: users can set their own bandwidth preferences on their desktop applications, but this can't be controlled centrally by admins.	the security chapter)
Syncing 300k+ files	There is a soft limit of 300,000 files in a Dropbox account, at that point, you may begin to see performance on the desktop client degrade. The best way to correct this issue is to use selective sync to remove local copies of files over 300,000. Keep in mind that using Smart Sync will not resolve this issue if it comes up—Smart Sync still indexes files.	HTTPS://WWW. DROPBOX.COM/ HELP/SPACE/FILE- STORAGE-LIMIT
AD Forests	The Dropbox AD connector will not work for provisioning across multiple forests unless their is a trust established between the two. Ensure you ask your customer about their AD setup to find out if they are a fit for the AD connector.	
Dropbox in China	Dropbox is currently one of the services blocked in China.	
Smart Sync Configuration	As an admin, you can choose whether or not Smart Sync is enabled by default (meaning that new content will automatically be synced locally or available online only). Because this setting is not retroactive, ensure you've configured this to your customers' preferred setting prior to provisioning users. If your customer is concerned about consuming bandwidth while large team folders are syncing, you will want to configure this prior to deploying the desktop application.	