

CiraHub

Global Address List (GAL) Ebook

The CiraHub Global Address List (GAL) Ebook shows you how to set up the various Global Address List synchronization functionalities within CiraHub. This Ebook also explains why Global List (GAL) synchronization is becoming more popular with business users as well as how to utilize CiraHub to enable limitless Office 365 Global Address List syncs (GAL).



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What is a Global Address List (GAL)?

The address lookup tool in Office 365 is called the Global Address List (GAL). Individual and resource email addresses are included, with the exception of those which have been hidden. A GAL is a directory that holds entries for every group, user, and contact in a company's Microsoft Exchange deployment. When you're drafting a message or inviting people to a meeting, Office 365 uses the Global Address List to provide email addresses. The GAL can be accessed from the People App (under Directory) in Outlook on the Web or the Address Book in the Outlook Desktop App. Additional GALs can be created to separate users by organization or location, but each user can only see and use one GAL at a time. Every mail-enabled object in the organization is included in the built-in global address list (GAL) that Exchange Online creates automatically.

The Global Address List consists of the following:

- Mailboxes listed in HostPilot® Control Panel
- Company Contacts
- Distribution lists
- Mail-enabled public folders
- Resource mailboxes
- POP/IMAP mailboxes

How a GAL Used by Companies?

A Global Address List is a useful tool for any company, organization or club which is composed of individuals that need to email each other frequently. Regular operations in major corporations would be impossible without such Windows tools, as the benefits are evident. Creating a centralized address list improves the speed and efficiency of electronic communication, which is critical in business. With a GAL each employee has access to information on their coworkers and bosses. Without major Windows tools such as the global address list performing regular operations within large corporations would be nearly impossible. The need for GAL-to-GAL sync arises typically when a company undergoes a merger, acquisition, or migration. Companies that have undergone a merger for example will need to synchronize contacts of employees and vendors between both organizations during their transitional period.

How Can Organizations Benefit from CiraHub GAL-to-GAL Synchronization?

If your business utilizes Microsoft Exchange you can take advantage of the Global Address List, or GAL, which is a centrally-managed address book. The GAL generally contains the names, addresses, and email addresses of everyone with a company email address in your organization. A GAL-to-GAL Synchronization aims to synchronize users, groups, and contacts together from different locations online. It allows for automatic changes to global address lists, ensuring that they are constantly up to date.

CiraHub is the perfect solution for organizations looking to merge two or more Global Address Lists. Generally, managing data structures after merging is a time-consuming procedure, but CiraHub can be used to efficiently organize your company's internal information in a short amount of time. Companies involved in mergers and acquisitions will need to sync GALs, sometimes on short notice. Having the ability to communicate with other employees swiftly and efficiently is especially critical during times of transition. You can sync the GALs of two Office 365 tenants through CiraHub. CiraHub allows users to check and update user details, contact lists, and group information stored in your Global Address Lists on each remote system. It automatically sync contacts in all global address lists (GAL) so that all mail systems remain up to date without any manual intervention.

CiraHub is a SaaS platform that can manage one to multipoint synchronization of Shared Contacts and Calendars, along with multiple CRM solutions for organizations running Microsoft Office 365, Exchange Server and other Microsoft Enterprise applications. In other words, if you needed to add or edit a contact in the global address list, you can use your phone to manage these contacts with full confidence that CiraHub will sync these edits to the GAL. This functionality allows IT departments to focus on higher priority projects by shifting the responsibility of managing company contacts and calendars to employees with little to no IT experience.

Accounts Required for Gal Sync

To set up a GAL Connection in CiraHub a Microsoft 365 Admin account will be necessary, and a Microsoft Service Account is suggested.

What is an Admin Account?

A Microsoft admin is a user role which has administration capabilities across Microsoft online services. The account owner has additional privileges, such as having the ability to reset all users' passwords, add and edit domains, or even unblock other global administrators.

How Do I Become an Admin?

A Microsoft 365 subscription includes a set of admin responsibilities, which may be assigned using the Microsoft 365 admin center. Select the app launcher when logged in to Microsoft 365. If the Admin button is present, then this account already has global admin privileges. To assign admin roles, navigate to the Microsoft 365 admin center by selecting Admin. Select Users > Active users from the left navigation window and choose the person you wish to designate an administrator. After selecting Users > Active users and after searching for the person that should be given GA role, one needs to click on that user and open additional user settings. In there, Under "Roles" section, one needs to click on "Manage Roles" in order to assign this role to the user. An admin account is required for CiraHub to be able to connect to your Microsoft 365 Exchange Online accounts. Following this, enter the login (username and password) of an account with the "Global Admin" role inside your business. For example, to set up two-way Gal Sync, users will need to have an Office 365 account in each tenant with the Global Admin role assigned to it for setting up and providing Microsoft's access permission. Click [here](#) to learn more about how to set up a Global Admin Account.

What is a Service Account?

A Microsoft service account is used to operate one or more services or applications in a Windows system. It is recommend that users create a dedicated service account for CiraHub. A dedicated service account enables users to independently grant and limit access to certain Office 365 tenant accounts. When utilizing personal Office 365 credentials the password expires periodically, however with a dedicated service account password can be set to never expire. It's also important to note that a service account can be disabled without impacting other accounts or CiraHub services and access to it can be granted to other users without exposing the account's password.

How do you Assign Microsoft Exchange Roles?

A Microsoft 365 or Office 365 subscription includes a set of admin roles, which you may assign to users in your organization using the Microsoft 365 admin center. Admin roles give users permission to examine data and complete tasks in Microsoft admin centers. Admin roles are important because with CiraHub, each tenant's Office 365 service account must have the necessary Exchange Online roles: Address Lists, Mail Recipient Creation, and Mail Recipients permissions to conduct the GAL sync.

Alternative GAL Synchronization Platforms

GALsync

GALsync is a user-friendly solution for sharing Exchange mail-enabled objects. They offer GAL synchronization tools, which allow users to share e-mail-enabled objects with other Exchange organizations and even Exchange Online. This allows customers in the included mail organizations to access the user and group data of the other organization. GALsync simplifies the process of sharing all subsets of all user and group information in the Global Address List for Outlook/Exchange users. Only the email-enabled AD items in the source GAL are examined since GALsync is designed for Outlook users (Exchange GAL). CiraHub offers many more features than any other GAL synchronization solution. This two-way solution allows organizations to sync contacts between multiple Global Address lists, this in turn means that changes made to one GAL are reflected to any connected GAL – in essence you can merge two lists together in a few keystrokes. CiraHub is an efficient and cost-effective two-way GAL sync solution. CiraHub syncs contact data to users' smartphones as well as individual address books in Microsoft Outlook.

DiditBetter Software

With DiditBetter Software you can Automatically sync global address list (GAL) to Mobile devices. Users can enable Cross Tenant GAL Sync between two Tenants or Domains automatically with DiditBetter Software. Calendars and contacts from Microsoft Exchange and Office 365 public folders may be automatically synced with your team's personal folders. Users can sync all of their contacts or choose which GAL contacts to sync. Didit Better Software offers Public Folder, Calendar, and GAL sync. With CiraHub users can 2-Way Sync for: Mailboxes, Public Folders, Directories, CRM's Sharepoint, G-Suite, Microsoft Enterprise Applications and more. CiraHub is an omni-directional sync tool allowing organizations to sync, merge, and keep up-to-date contacts, calendars, and CRM data maintained. *That means when a change is made to a contact list, it's updated in the company address book, and to connected smartphones.*

One-Way GAL Sync vs Two-Way GAL Sync

A one-way GAL sync solution delivers GAL contacts omni-directionally to a recipient folder without changing the original GAL. On the other hand, a two-way solution allows organizations to sync contacts between multiple Global Address lists, this in turn means that changes made to one GAL are reflected to any connected GAL – in essence you can merge two lists together in a few keystrokes.

A two-way automatic GAL-to-GAL sync offers the following benefits:

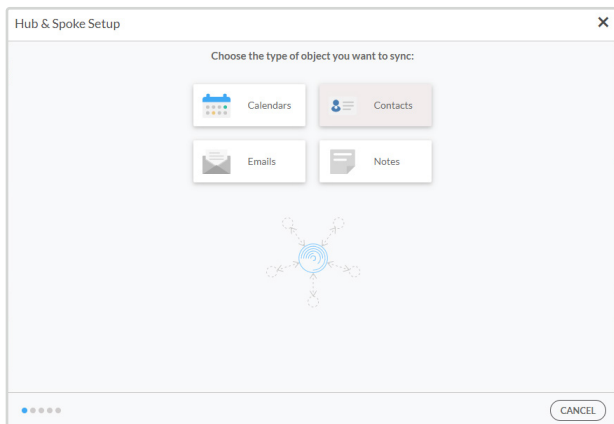
- Synchronization of contacts several times a day
- Avoids manual synchronization of contacts, email addresses, and caller ID photos
- Eliminates errors related to manual sync processes
- Allows organizations to merge two separate Global Address Lists faster and more efficiently

Enable CiraHub 2-Way GAL Sync

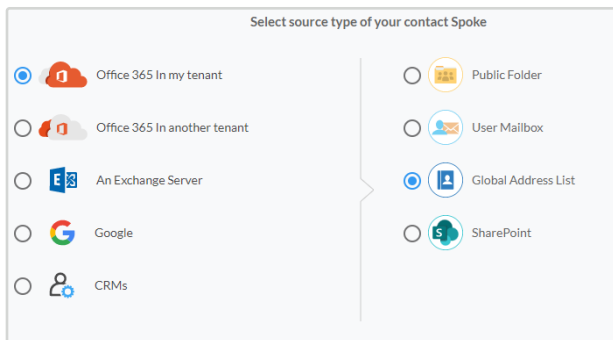
Instructions:

A one-way GAL sync solution delivers GAL contacts omni-directionally to a recipient folder without changing the original GAL. On the other hand, a two-way solution allows organizations to sync contacts between multiple Global Address lists, this in turn means that changes made to one GAL are reflected to any connected GAL – in essence you can merge two lists together in a few keystrokes.

1. First, Log in to CiraHub. You will be taken to the onboarding wizard. (See figure below.) Next, select the object you want to sync. In this example, contacts has been selected.



2. Next start the Hub and Spoke setup. Click on “**Office 365 in my tenant**”, then Select **Global Address List** as the source type for your contact spoke. You will need to have an Office 365 account in each tenant with the Global Admin role assigned to it.

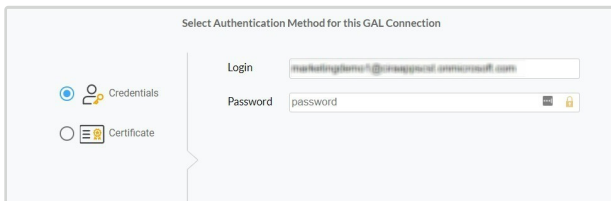


3. There are two authentication methods – **Credentials** and **Certificate** based:

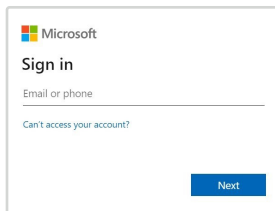
3.1 Credential Based Authentication

3.2 Certificate Based Authentication

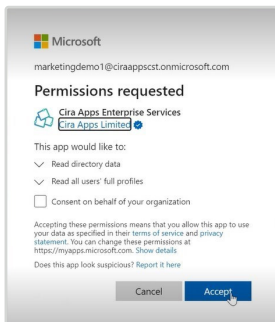
- 3.1.1 Select **Credentials** and Sign in with your Microsoft Admin Account's Login and Password Information for the GAL Connection.



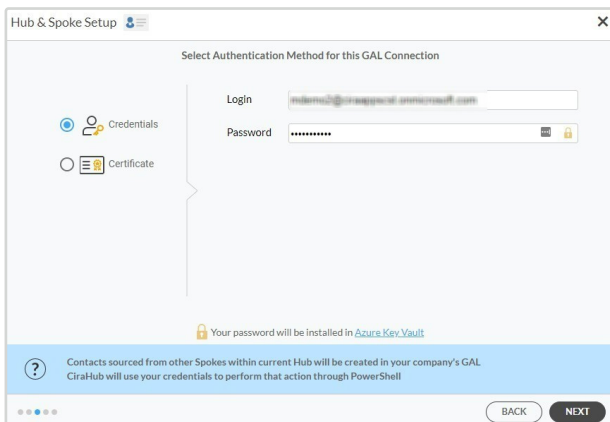
- 3.1.2 Next the Microsoft sign-in page will appear. Provide the Email and Password to your account.



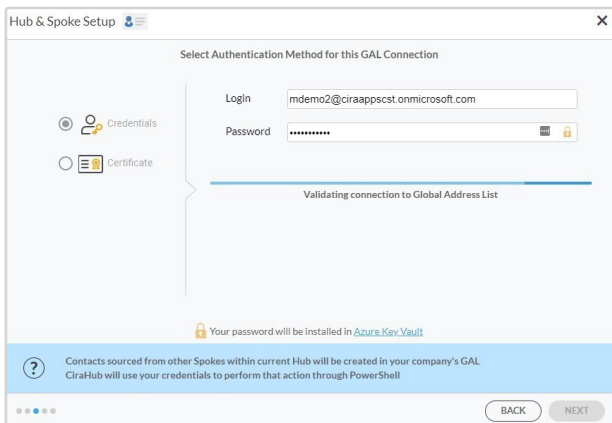
3.1.3 Click **Accept** to give CiraHub access to your Microsoft Account. You should always leave the “Consent on behalf of your organization” box unchecked when you sign in for the first time. This option lets other users under the same domain access this Hub if they login with their company email address. This user would not have access to this specific Hub, but the user would be able to login and create their own hub.



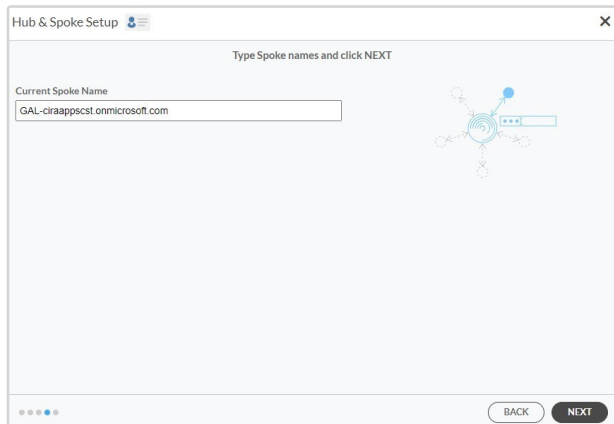
3.1.4 **Select Credentials** and Re-Enter your Microsoft Account Login and Password Information for the GAL Connection.



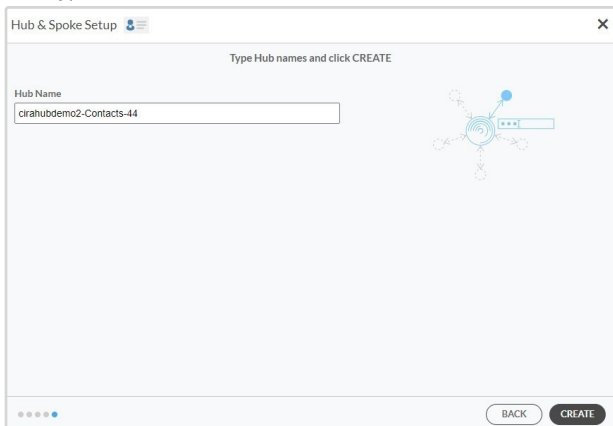
3.1.5 Wait for CiraHub to validate the connection to the Global Address List after entering the Microsoft Login and Password.



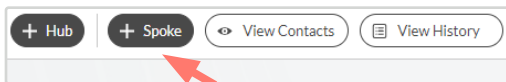
4. Type in a Spoke Name and click **Next**.



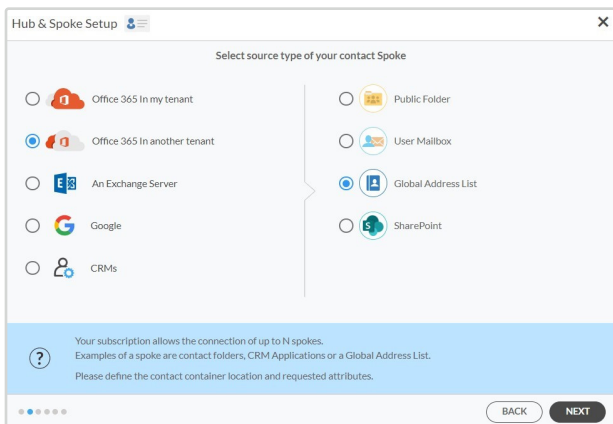
5. Next type in the **Hub Name** and click **Create**.



6. Click **+Add Spoke** at the top-right corner of the CiraHub dashboard.



7. Select **Office 365** In another tenant and Select **Global Address List** as the source type of your contact spoke. Each tenant will need a Dedicated Service Account with the following roles: access to Address Lists, Mail Recipient Creation, Mail Recipients permissions. You can learn more about the permissions and settings required for a CiraHub GAL Connection by clicking [here](#).



8. Click **"GRANT ACCESS"** or select any existing credentials that have already been saved. You can also choose to invite users from another tenant by entering their email address or Click **"CONFIGURE"** to grant CiraHub access through

Certificate Based Authorization.

The screenshot shows a window titled "Hub & Spoke Setup" with a close button (X) in the top right corner. The main heading is "Select how you want to access another tenant's data". There are three main sections:

- Invite user from another tenant:** Includes a text input field with "smtp@company.onmicrosoft.com" and an "INVITE" button.
- Use existing credentials:** Shows a list of saved credentials, including "m demo2" with email "mdemo2@ciraappsct.onmicrosoft.com".
- Supply another tenant's credentials:** Includes a "GRANT ACCESS" button and the text: "You can grant CiraHub access on behalf of user from another tenant."
- Use certificate based authorization:** Includes a "CONFIGURE" button and the text: "You can grant CiraHub access through certificate based authorization".

At the bottom, there is a blue informational banner with a question mark icon and the text: "Email with details on how to complete spoke setup will be sent to your colleague from another tenant. In case you have your colleague's credentials, you can use them to grant CiraHub access on behalf of that person and complete spoke setup yourself." A "BACK" button is located in the bottom right corner.

9. Next you can sync your Microsoft Service account to the GAL connect by choosing an Authentication Method. In this example we selected credentials and entered the login and password.

The screenshot shows a window titled "Hub & Spoke Setup" with a close button (X) in the top right corner. The main heading is "Select Authentication Method for this GAL Connection". On the left, there are two radio button options: "Credentials" (selected) and "Certificate".

On the right, there are two input fields: "Login" with the value "PennyW@cirahubdemo1.onmicrosoft.com" and "Password" with the value "password".

At the bottom, there is a blue informational banner with a question mark icon and the text: "Your password will be installed in [Azure Key Vault](#). Contacts sourced from other Spokes within current Hub will be created in your company's GAL. CiraHub will use your credentials to perform that action through PowerShell." "BACK" and "NEXT" buttons are located in the bottom right corner.

10. Wait for CiraHub to validate the connection to the Global Address List after entering the Microsoft Login and Password.

Hub & Spoke Setup

Select Authentication Method for this GAL Connection

Credentials

Certificate

Login

Password

Validating connection to Global Address List

Your password will be installed in [Azure Key Vault](#)

Contacts sourced from other Spokes within current Hub will be created in your company's GAL. CiraHub will use your credentials to perform that action through PowerShell

BACK NEXT

11. Type in a **Spoke Name** and click **Next**.

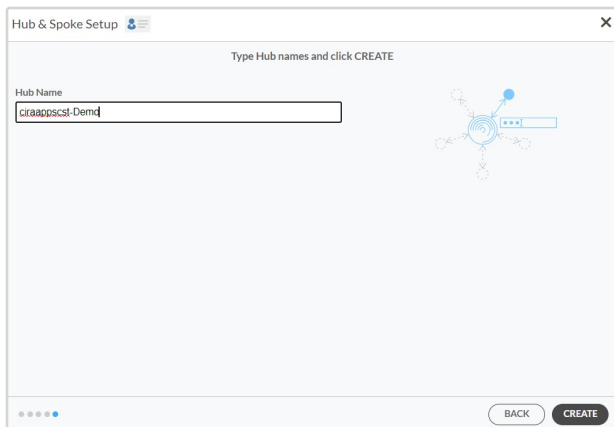
Hub & Spoke Setup

Type Spoke names and click NEXT

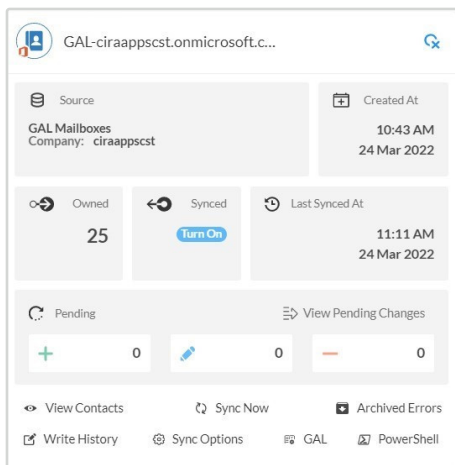
Current Spoke Name

BACK NEXT

12. Type in a **Hub Name** and click **Create**.



13. Click the Spoke that was just created. Click **Turn On** under the **Synced** tile.



14. The Spoke Sync Options will open. (See figure below.) Click the **Allow Hub to create and sync items in this spoke** checkbox to enable two-way sync.

The screenshot shows a dialog box titled "Allow Hub to create and sync items in this spoke". At the top right, there is a note: "Current spoke has two-way synchronization from the endpoint to the hub database and back". Below this, the source information is displayed: "Name: GAL-cirahubdemo2.onmicrosoft.com", "Source: GAL Mailboxes", and "Company: cirahubdemo2". To the right, it shows "Owned: 0" and "Synced At: Never". There is a checkbox for "Categorize Data in Spoke" which is currently unchecked. At the bottom, there is an "Advanced" tab that is currently collapsed.

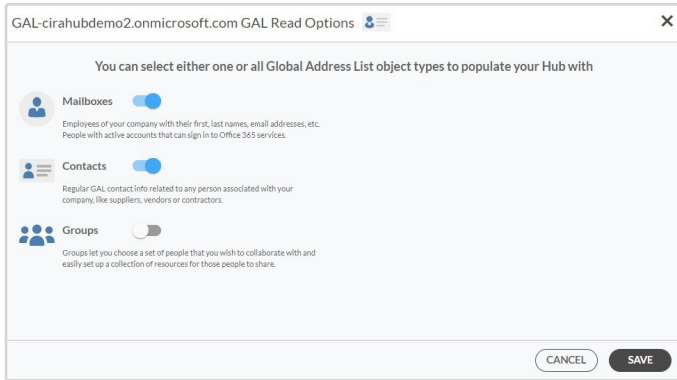
15. Users can customize sync settings by expanding the Advanced Tab and adding sync filters to the Spoke. This would enable a user to synchronize and create Hub items based on specific criteria. Find out more about Contact Filtering [here](#). Then Click **Save**.

The screenshot shows the "Advanced" tab expanded. At the top, there is a filter configuration bar with a dropdown menu set to "field", a dropdown menu set to "equals", and a text input field set to "value". To the right of the input field is a plus sign icon. Below this, there is a section titled "Create and sync Hub items matching following criteria" with a blue "AND" button and an "OR" button. The main area below is currently empty.

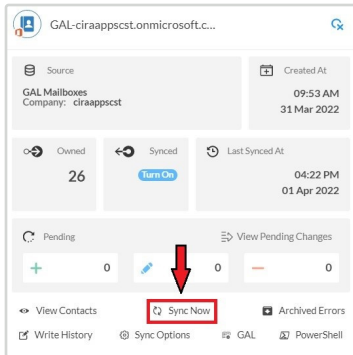
16. Click on the **GAL** button to set up GAL Read Option Settings.

The screenshot shows the GAL Read Option Settings interface. At the top, it displays the source name "GAL-cirahubdemo2.onmicroso...". Below this, there are sections for "Source" (GAL Mailboxes, Company: cirahubdemo2) and "Created At" (11:30 AM, 28 Mar 2022). There are also sections for "Owned" (0), "Synced" (Turn On), and "Last Synced At". Below these, there is a "Pending" section with a "View Pending Changes" link and three counters: "+ 0", "0", and "- 0". At the bottom, there are several buttons: "View Contacts", "Sync Now", "Archived Errors", "Write History", "Sync Options", "GAL", and "PowerShell". A red arrow points to the "GAL" button, which is highlighted with a red box.

17. Here you can choose which Global Address List Objects (Mailboxes, Contacts, and Groups) you would like to populate this Hub with.

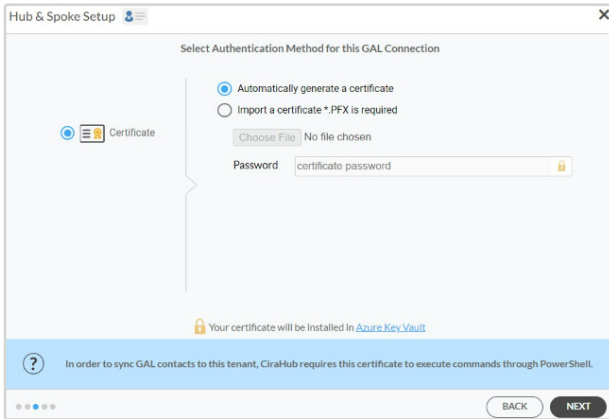


18. Click on the Hub and then click **Sync Now** to enable the two way GAL-to-GAL sync.

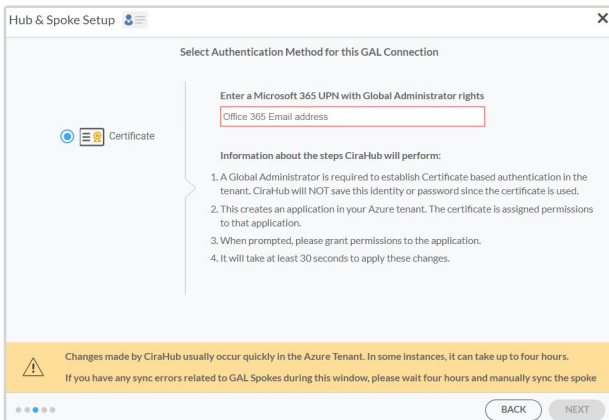


CiraHub GAL Certificate Authentication Method

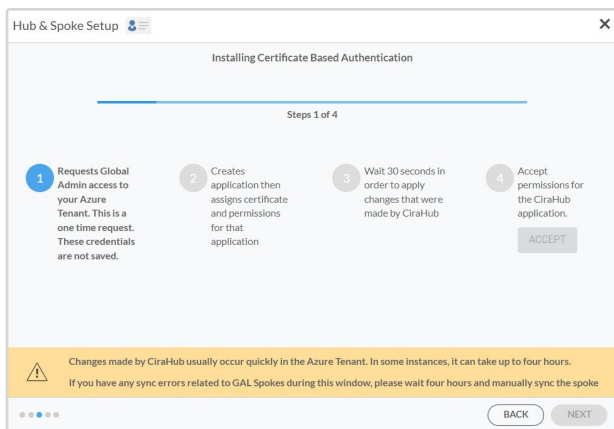
1. With the **Certificate Authentication method**, you will be prompted to either “Automatically Generate a Certificate” or you can choose to Import a PFX Certificate File and enter your password.



2. Next the user will need to enter in their Microsoft Global Admin email address. CiraHub will then store the users’ account information in the Microsoft Azure Vault when it is synced from Powershell.



3. Lastly the user will need to wait for CiraHub to Install Certificate Based Authentication for the GAL connection and then click **Next**.



CiraHub GAL Filter Settings

Contact Filtering settings in CiraHub allow you to create and sync items in your spoke based on specific criteria. Users can categorize data in the Hub and sync data from the endpoint to the hub database and back. For example customers may want to allow certain users to sync all contacts while allowing others to only sync contacts relevant to their team. With CiraHub you can use filter settings to set up Distribution Groups are collections or subgroups created with the contact data of individuals in the organization. Companies typically will have set up several of these subgroups or distribution set up, especially for a large organization. Distribution groups are great tools to sync GAL contacts and push contacts to certain groups or update only when a change is made.

GAL Field Mapping

With Field Mapping CiraHub allows customers to customize, map, and synchronize their desired data. When transferring data between different platforms, such as a CRM and a Public Folder Contact List, oftentimes there will be inconsistencies with how the data is labeled. For example, a CRM may utilize the field "Business Name" whereas the Public Folder may have it labeled as "Contact Name". If these two sources are merged without proper field mapping enabled, the data will not be merged.

Learn More About CiraHub!

CiraHub is a two-way sync platform for shared contacts and calendars for Microsoft Office 365, Exchange Server, and other Microsoft Enterprise Applications users. The software is designed to make it easy for people lacking IT expertise to set up shared contact and calendar sync for their company. For more information check out FAQ page and our **CiraHub Onboarding Guide**.

