

Lyve Client Software User Manual



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Getting Started with Lyve Client Software

Welcome

Industry-standard authentication key management lets you unlock your Lyve Mobile devices for use with a connected computer.

Users

Lyve Managed

Non-Lyve managed

Security options

Lyve managed

With Lyve managed devices, user credentials and permissions are managed by product administrators in your business. Lyve Client offers two ways forproduct admins to allow product end users to securely access Lyve Mobile storage devices:

Lyve Portal Identity — This security option allows an end user to enter a username and password to authorize host computers to access connected Lyve Mobile devices. End users must have a Lyve user account. Internet connectivity is required during sign-in and when periodically reauthorizing a host computer.

Lyve Token Security—This security option allows for use cases in which there is limited access to the internet when using Lyve Mobile Arrays. End users are not required to have a Lyve user account. Instead, the end user creates aregistration file for the computer in Lyve Client and then sends it to the product admin. The product admin uses that registration file to generate ayve Token file in Lyve Management Portal and then sends it to the end user. Internet connectivity is required to download the installer for Lyve Client, but is not required when accessing devices with Lyve Token files.

See the following chapters for more information:

- Accessing Devices with Lyve Portal Identity
- Accessing Devices with Lyve Token Security

Non-Lyve managed

All the features of Lyve Client, but responsible for their own password management.

Device management password

(Optional) Data password

Key Terms

Host computer

A computer installed with Lyve Client used to access assigned Lyve Mobile devices.

Lyve Client

An app used to unlock specific Lyve Mobile devices. Lyve Client can be used to access devices using Lyve Portal Identity and/or Lyve Token Security.

Lyve Portal Identity

Security option that allows an end user to enter a username and password to authorize host computers to access connected Lyve Mobile devices. End users must have a Lyve user account. Internet connectivity is required during sign-in and when periodically reauthorizing a host computer. SeeAccessing Devices with Lyve Portal Identity.

Lyve Token file

An encrypted security token file authorizing a host computer to access specific Lyve Mobile devices.

Lyve Token Security

Security option that allows for use cases in which there is limited access to the internet when using Lyve Mobile Arrays. End users are not required to have a Lyve user account. Instead, the end user creates a registration file for the computer in Lyve Client and then sends it to the project administrator. The project administrator uses that registration file to generate a Lyve Token file in Lyve Management Portal and then sends it to the end user. Internet connectivity is required to download the installer for Lyve Client, but is not required when accessing devices with Lyve Token files. SeeAccessing Devices with Lyve Token Security.

Product admin

Administrator in the account permitted to:

- Register nost computers.
- Assign Lyve Mobile devices to host computers.
- Issue Lyve Token files.

Product end user

End user accessing Lyve Mobile storage devices from a connected computer.

Registration file

A JSON file certifying Lyve Client on a specific host computer.

- A product end user downloads a registration file from Lyve Client running on the host computer.
- The registration file is sent to a product admin, who uses it to produce a Lyve Token file.
 - Registration files cannot be transferred between host computers or installations of Lyve Client. If an end user uninstalls/reinstalls Lyve Client, they'll need to download new registration files to send to their product admin.

Unlocker

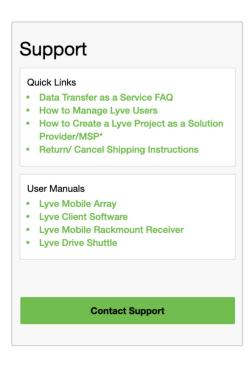
In Lyve Management Portal, an unlocker has the correct security permissions to unlock one or more Lyve Mobile Arrays. For example, an instance of Lyve Client installed on a host PC. Multiple Lyve Mobile Arrays can be assigned to a single unlocker, or to multiple unlockers.

Lyve Virtual Assistant

If you need to contact support, go tdyve.seagate.com and click on the Lyve Virtual Assistant icon to start a support session. Lyve Virtual Assistant is available throughout the Lyve Management Portal.

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You must upload a registration file and enter a name before you can click Seagate Virtual Assistant is only available during regional business hours of 8:00 AM-5:00 PM US Central Time and 8:00 AM-5:00 PM Central European Time.





Connection Types

Lyve Client can manage security for Lyve Mobile Arrays connected directly to the host PC or via the network using Lyve Mobile Rackmount Receiver.

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Make sure Lyve Mobile Array is powered on before connecting it to a computer.

Direct-Attached Storage (DAS) connections

USB and Thunderbolt

Lyve Mobile Array	Cable	Computer port
Host port (USB-C connector)	Thunderbolt™ 3	Thunderbolt 3 / Thunderbolt 4
Host port (USB-C connector)	USB-C to USB-C	USB 3.1 Gen 1 or higher
Host port (USB-C connector)	USB-C to USB-A	USB 3.0 or higher

For more connection details, see the following:

Lyve Mobile Array User Manual

Lyve Mobile PCIe Adapter

Lyve Mobile PCIe Adapter	Cable
Ethernet port (device configuration)	Ethernet
PCIe NVMe 12Gb x2 SFF-8644 (data)	SFF-8644

For more connection details, see the following:

- Lyve Mobile Mount and PCle Adapter User Manual
- Lyve Mobile Mount and PCle Adapter Front Loader User Manual

Rackmount Receiver connections

Lyve Mobile Rackmount Receiver	Cable
Ethernet port (device configuration)	Ethernet
FC 32Gb (data)	Fibre
FC 16Gb (data)	Fibre
iSCSI 25Gb (data)	Fibre (optical or copper)
iSCSI 10GbaseT (data)	Ethernet
SAS 12Gb (data)	SAS

For more connection details, see the following:

Lyve Mobile Rackmount Receiver User Manual
FC Network Setup for Windows
FC Network Setup for Linux (RHEL/CentOS 8)
FC Network Setup for Linux (Debian/Ubuntu)
iSCSI Network Setup for Windows
iSCSI Network Setup for Linux (RHEL/CentOS 8)
iSCSI Network Setup for Linux (Ubuntu/Debian)
SAS Network Setup for Windows
SAS Network Setup for Linux (RHEL/CentOS)
SAS Network Setup for Linux (Debian/Ubuntu)

IP addressing for networked and DAS connections

Make sure your anti-virus, firewall or VPN security settings allow port access to Lyve Client.

State	Access type	Port
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State	Access type	Port
Before device discovery	The application and device must be able to communicate via SLP.	UDP port 427
After device discovery	The application and device must be able to communicate via SSH.	TCP port 22

In both states, it is assumed that the device has been assigned an IP address by a local DHCP server or has been assigned a static IP address.

- All Lyve Mobile devices are in DHCP mode by default. If an IP is not assigned via DHCP, the device will generate its own IP address: 169.254.100.123.
- Any host on the same subnet can see the device and communicate with it using this address.
 - In DAS mode via a Thunderbolt/USB-C connection, this is the address that is used to communicate with the device.

Download and Install Lyve Client

Install Lyve Client on computers you intend to connect to your Lyve Mobile devices or manage on the network. Lyve Client is available for Windows and macOS.

Links to the installer can be found on Lyve Management Portal:

- 1. Go to lyve.seagate.com and sign in.
- 2. On the Home page, click **Download Lyve Client**.



- 3. At the prompt, click **Download** for either Windows[®] or macOS[®].
 - You can also download Lyve Client installers from the support page at www.seagate.com/support/lyve-client
- 4. Go the folder where you receive downloads and open the installer.
- 5. Follow the onscreen instructions to complete the setup and open Lyve Client.

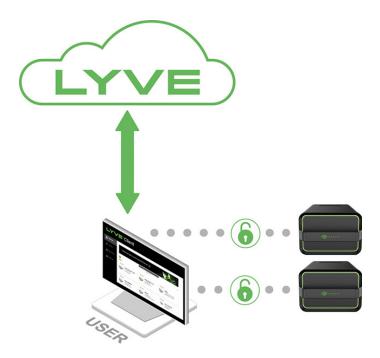
Accessing Devices with Lyve Portal Identity

The Lyve Portal Identity security option lets you unlock connected Lyve devices by entering a username and password in Lyve Client.

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An internet connection is required when signing in.

After you've signed in, Lyve Client is authorized to unlock and access assigned Lyve devices. Lyve Client remains authorized for up to 30 days of active use or 15 days of inactivity. Once the authorization period has elapsed, you must sign in again with your username and password to access connected devices.



Requirements

- Product admin has invited the product end user to be added to the accountin Lyve Management Portal
- Product admin set up projects, added devices to projects, and assigned the product end user to the same projects.
- Devices have been delivered to the product end user.
- End user has downloaded and installed Lyve Client on a computer they will use to unlock Lyve Mobile devices.

- **Important**—Lyve Portal Identity must be enabled in the Lyve Client settings. SeeSettings.
- **Important**—If Lyve Client is used behind a proxy or firewall, ensure that the following domains are allow.
 - https://lmp-prod.us.auth0.com/
 - https://rest.lyve.seagate.com/
 - https://lyve.seagate.com/

Sign in using Lyve Client

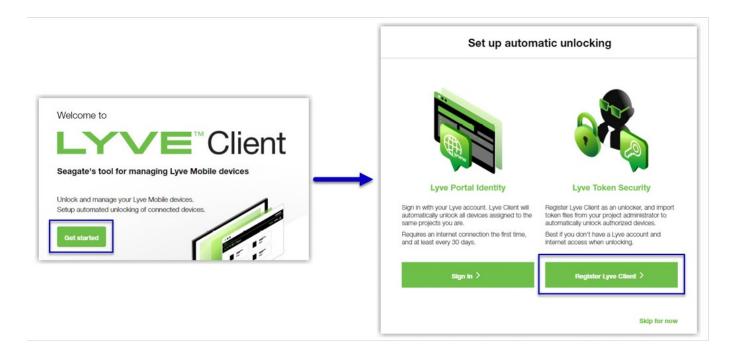
You created a username and password in Lyve Management Portal in one of two ways, depending on your role in the account:

Account creator—You set up an email address, username, and password when you initially created the account.

Other role—A user manager added your email address to an account, org, or project in Lyve Management Portal. An email was sent to you from Lyve Management Portal inviting you to set up your username and password.

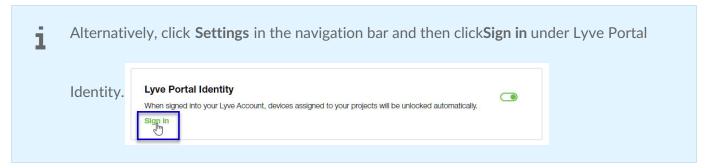
If you don't have a username and password, seeUsers with no username/password below

If you're opening Lyve Client for the first time, click**Get Started** on the Welcome screen, and then click **Sign in** under Lyve Portal Identity:



olf Lyve Client has been opened previously but no user is currently signed in, click on the user icon in the navigation bar:





If another user is currently signed in and you want to switch users, click on the user icon in the navigation bar and select **Switch user**:



Device locking

Lyve Client must be open and you must be signed in to access connected Lyve Mobile Arrays. A Lyve Mobile Array will lock when:

- The computer running Lyve Client goes to sleep.
- Lyve Mobile Array is ejected.
- Lyve Mobile Array is disconnected from the computer or network.
- Lyve Mobile Array is powered off.

Use Lyve Client to unlock Lyve Mobile Array again once the computer has been awakened or the device has been reconnected and powered on.

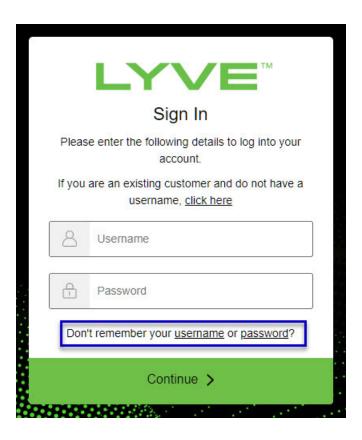
Forgotten username and/or password

If you can't remember your username or password:

- 1. Go to lyve.seagate.com.
- 2. Click **Sign In** in the navigation bar:



3. In the Sign In dialog, click on the link for a forgotten username or password:



4. Follow the onscreen instructions for recovering your username or changing your password.

Users with no username and password

You need a username and password to unlock connected Lyve Mobile devices. The setup process lets you:

- Create a username/password connected to your email address.
- Establish 2-step verification for strong security.

You might not have a username and password for one of the following reasons:

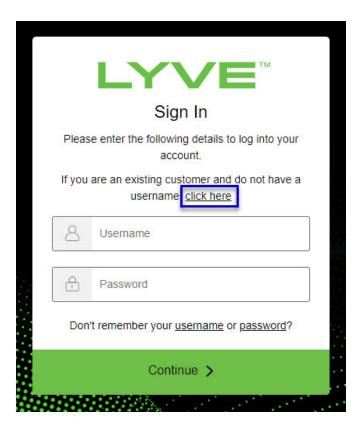
Issue	Resolution
A user manager in the account has not added you as a user.	Contact a user manager in the account and request to be added as a user.
Your email invitation is expired.	If the email invitation sent to you expired before you could register as a user, you can have Lyve Management Portal resend an invitation. See Resend an email invitation below.

Resend an email invitation

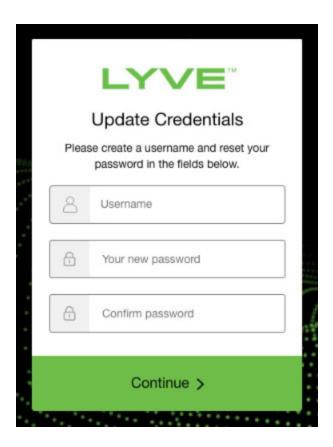
- 1. GO to tyve.seagate.com.
- 2. Click **Sign In** in the navigation bar:



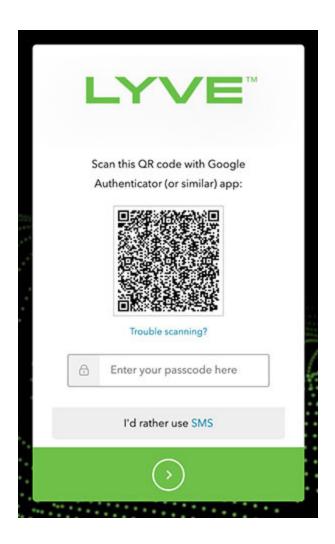
3. Click on the link for existing customers who do not have a username:



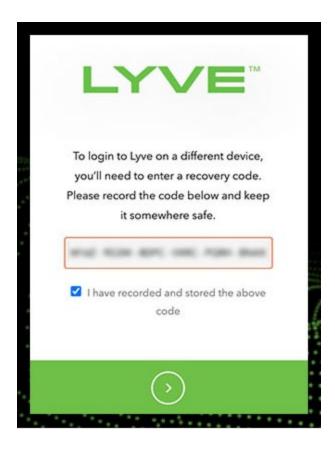
- 4. Enter your email address and click **Continue**. After a few minutes, Lyve Management Portal will send you a new email invitation. Check your inbox for the message.
 - If you didn't see the email in your inbox after a few minutes, check your spam folder. If you can't find it there, click**Resend Email** in Lyve Client. If you need to contact support, use the Lyve Virtual Assistant icon to start a support session.
- 5. Open the email and click on the Register Your Account button.
- 6. Enter a username and password. Confirm the password, and then click Continue.



7. Use an authenticator app such as Google Authenticator or Microsoft Authenticator to scan the QR code and receive a passcode. Enter your passcode and click the icon to continue.



- Alternatively, you can receive a passcode via SMS. Click the SMS option and enter your phone number to receive the 6-digit verification code. Note that carrier charges may apply. Enter the verification code sent to your phone and click the icon to continue.
- 8. You're asked to record a recovery code. A recovery code lets you log in to Lyve Management Portal from other devices. Copy the recovery code and keep it in a safe place. Once it's recorded, check the confirmation box and click the icon to continue.



Refreshing authorizations

If the product end user's project/device assignments have been changed by a product admin in Lyve Management Portal, they can refresh their authorizations in Lyve Client.

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- An internet connection is required when refreshing authorizations.
- 1. Open Lyve Client.
- 2. Click on the **Settings** tab.
- 3. Click Refresh authorizations.



Accessing Devices with Lyve Token Security

The Lyve Token Security option lets you configure a registered computer installed with Lyve Client to automatically unlock assigned Lyve Mobile devices. Once configured, Lyve Client will unlock devices, even when there's no access to Lyve Management Portal.

Requirements

- Product admin has set up projects and added devices to projects.
- Devices have been delivered to the product end user.
- End user has downloaded and installed Lyve Client on the computer they will use to unlock Lyve Mobile devices.
 - **Important**—Lyve Token Security must be enabled in the Lyve Client settings. See Settings.

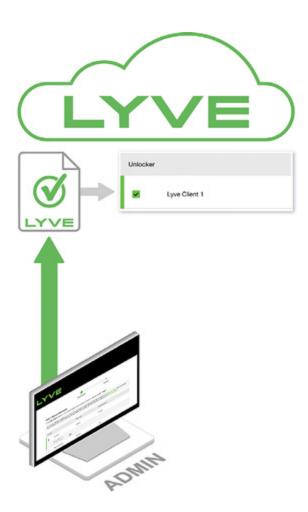
Process

1

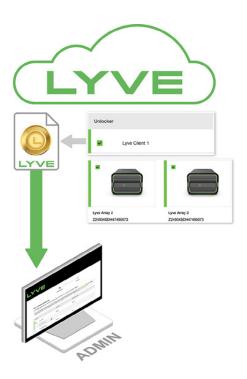
Product end user opens Lyve Client on ahost computer and creates aregistration file. End user sends the registration file to a product admin.



Admin uploads the registration file to the Lyve Management Portal and registers the Lyve Client installation as an unlocker.



Admin assigns devices to the unlocker and downloads an encrypted Lyve Token file authorizing the unlocker to access Lyve Mobile devices.



Admin sends the token file to the user.



User imports the token file into Lyve Client. Lyve Client is now authorized to unlock assigned Lyve Mobile devices with no connection to Lyve Management Portal.



End user initial tasks

Create a registration file

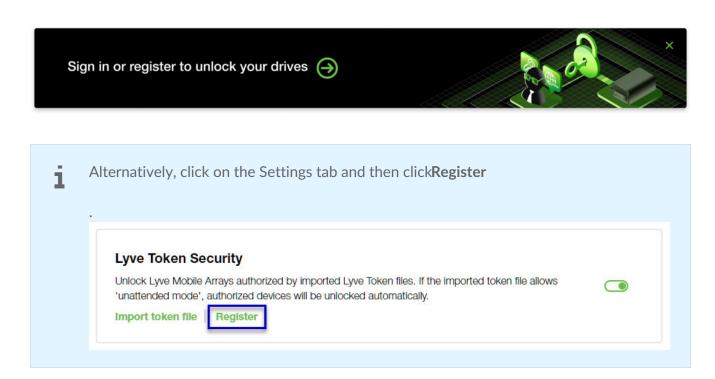
You will need aregistration file for each host computer/Lyve Client installation used to access Lyve Mobile devices.

1. Open Lyve Client.

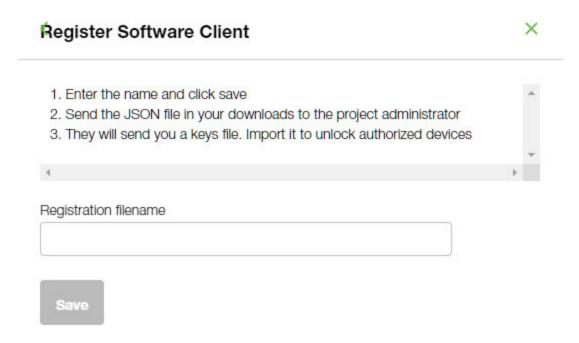
If you're opening Lyve Client for the first time, click**Get Started** on the Welcome screen, and then click **Register Lyve Client** under Lyve Token Security.



If Lyve Client was opened previously, click on the Devices tab, and then click the banner:



2. In the dialog, enter a filename and click **Save**.



3. Confirm the location for the download and click**Save**. A JSON (.json) file is downloaded to the location you specified.

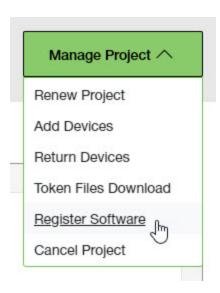
Send the registration file to your product admin

Using a file browser such as File Explorer or Finder, locate the downloaded registration file. Share it with your product admin using your preferred means of business communication (such as email, chat, or

Admin tasks

Register the Lyve Client installation as an unlocker

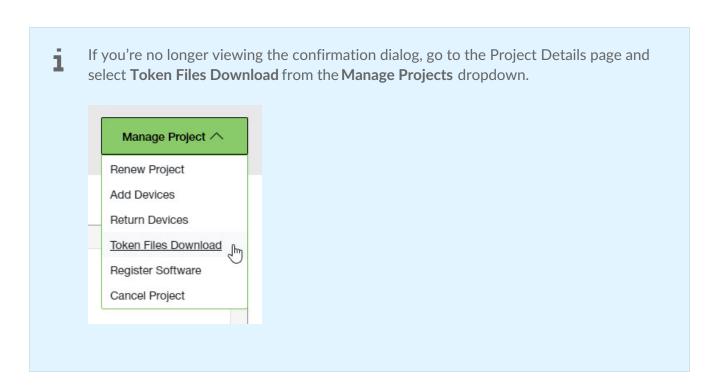
- 1. Go to lyve.seagate.com and sign in.
- 2. Click **Projects** in the navigation bar.
- 3. Click on a project.
- 4. On the Project Details page, click on the Manage Project dropdown and select Register Software.



- 5. In the Register Software Client dialog, click Attach File.
- 6. Navigate to the location where you are storing theregistration file you received from aproduct end user. Select the file and click Attach File.
- 7. Enter a name for the Lyve Client installation. Choose any friendly name that helps you differentiate one product end user/Lyve Client installation from another.
- 8. Click Register.
- 9. When the registration is completed, click **Close**.
 - You must upload a registration file and enter a name before you can click**Register**.

Choose unlockers and assign devices

1. In the confirmation dialog, click the **Token Files Download** link.



2. Click checkboxes to select one or more unlockers. Selected unlockers will be permitted to unlock the devices you specify.



- 3. For each unlocker, use the **Save File to Unlocker** toggle to specify whether or not the product end user can store the unlocker in the Lyve Client app.
 - Enabled—Lyve Token file can be imported and stored in Lyve Client, allowing the host computer to unlock assigned devices whenever they're connected.
 - **Disabled** Lyve Token file may only be used to unlock assigned drives for the current session. The file is not deleted from its location on the host computer, but it must be reselected each time the end user wants to use it.



4. Click checkboxes to select one or more devices. Selected devices can be unlocked by any of the unlockers selected in step 1.



Lyve Mobile Array (96TB HDD) NB26003C

If you don't know a device's serial number, you can find it by scanning the QR code on the left side of the Lyve Mobile Array handle.



Do not confuse the QR code on the handle with the QR code on the back of Lyve Mobile Array, which is clearly marked PSID. The PSID is not the same as the serial number.

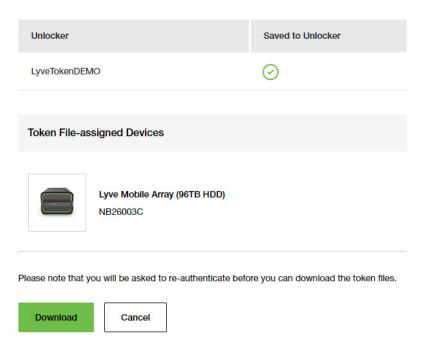
If the serial number on the handle is unreadable or doesn't work, use the Virtual Assistant icon to start a support session.

5. Click Continue.

Download Lyve Token files

- Note that in the following steps you'll need to provide your Lyve Management Portal password and multifactor authentication before your Lyve Token files will be downloaded.
- 1. Review the details of the Lyve Token file you created.
- 2. Click Download.

Review Token File Details



- 3. At the prompt, enter your Lyve Management Portal password and click on the icon to continue.
- 4. A dialog informs you that the Lyve Token file has been downloaded. Clic Close.
- 5. Using a file browser such as File Explorer or Finder, locate the file in the folder where you receive downloads.



The filename is a unique identifier followed by the date it was created. Once the file is downloaded, you can rename the file.

Send the Lyve Token file to the product end user

Share the Lyve Token file you downloaded with the appropriate product end user using your preferred means of business communication (such as email, chat, or sending on a USB drive).

End user final tasks

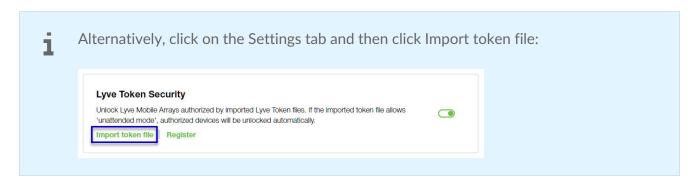
Download the Lyve Token file

Download the Lyve Token file you received from yourproduct admin to the appropriate host computer that will be accessing Lyve Mobile devices.

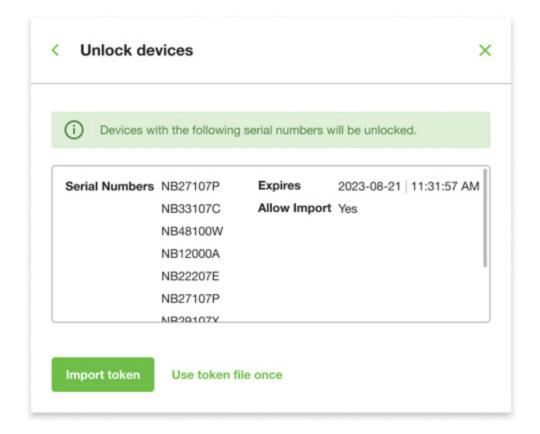
Import Lyve Token file and/or unlock devices

- 1. On the host computer, open the Lyve Client app.
- 2. Click on the **Devices** tab and then click the banner.





- 3. Use the folder tree to find the location of the downloaded Lyve Token file (.json). Select the appropriate file and click **Inspect File**.
- 4. Review the details of the file:



The following information is available:

Detail	Description
--------	-------------

Detail	Description
Serial Numbers	Specific devices the Lyve Token file is permitted to unlock.
Expires	Date/time when the Lyve Token file becomes invalid.
Allow Import	Yes—Lyve Token file can be stored in the Lyve Client app. No—Lyve Token file may only be used to temporarily unlock drives.

Check the serial numbers reported in Lyve Client correspond to the serial numbers of the Lyve Mobile Arrays you want to access. If you don't know a device's serial number, you can find it by scanning the QR code on the left side of the Lyve Mobile Array handle.



Do not confuse the QR code on the handle with the QR code on the back of Lyve Mobile Array, which is clearly marked PSID. The PSID is not the same as the serial number.

If the serial number on the handle is unreadable or doesn't work, use the yve Virtual Assistant icon to start a support session.

5. Click one of the following:

Import Lyve Token file	Imports the Lyve Token file to Lyve Client, allowing for automatic unlock of assigned devices. Once imported, the file is removed from its location and is no longer available for selection.
Use Lyve Token file once	Allows Lyve Client to unlock assigned devices for the current session. The file is not deleted from its location. You must reselect it each time you want to use it.

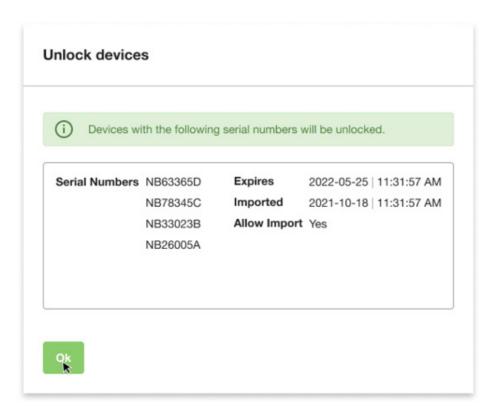
Viewing Lyve Token files

You can view an image of the most recent Lyve Token file imported into Lyve Client.

- 1. Open Lyve Client.
- 2. Click on the **Settings** tab.
- 3. Click View token file.



4. Review details of the recently imported file:



5. Click OK.

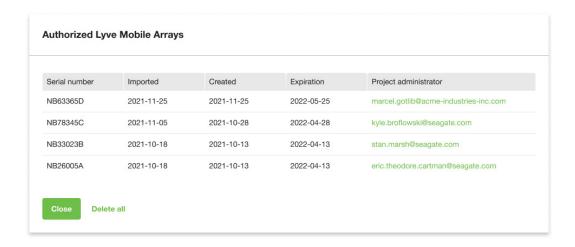
Viewing authorized devices

You can view an image of the most recent Lyve Token file imported into Lyve Client.

- 1. Open Lyve Client.
- 2. Click on the Settings tab.
- 3. Click Authorized Devices.



4. Review details of the devices Lyve Client is currently authorized to access:



5. Click Close.

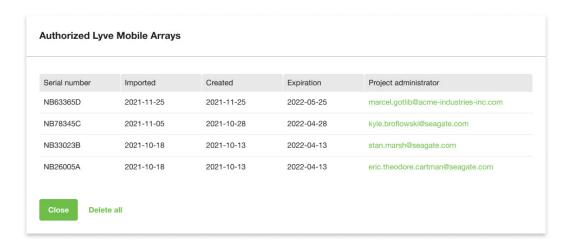
Deleting Lyve Token device authorizations

You can delete specific device authorizations from Lyve Client.

- 1. Open Lyve Client.
- 2. Click on the **Settings** tab.
- 3. Click Authorized Devices.



4. Review the list of devices Lyve Client is currently authorized to access:



5. Hover over the device and click the Delete icon.



- Alternatively, if you want to delete all device authorizations, click Delete all.
- 6. Confirm that you want to continue with the deletion.
- 7. Delete additional devices, or click Close

File issue notifications

Issues with a Lyve Token file may prompt the following messages:

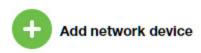
Message	Notes
Devices with the following serial numbers were found in the token file, but failed to unlock: [serial numbers]	A device or configuration issue is preventing the device from being accessed. Contact Lyve Mobile support using the Lyve Virtual Assistant
The file you've selected is corrupt or is not a token file at all. It cannot be imported or used to unlock devices.	Lyve Client does not recognize the file as a Lyve Token file. Select a different Lyve Token file or request a new Lyve Token file from your product admin.

Message	Notes
The selected Lyve Token file cannot be used with this installation of Lyve Client. Select a different token file or register Lyve Client and request a new token file from your project administrator.	This Lyve Client installation is not designated as the unlocker in this Lyve Token file. Select a different Lyve Token file or request a new Lyve Token file from your product admin.
The selected Lyve Token file does not authorize Lyve Client to unlock this device. Devices with the following serial numbers will be unlocked.	The Lyve Token file you attempted to import is not authorized to unlock the selected device. Select a different Lyve Token file or request a new Lyve Token file from your product admin that assigns the device to this installation of Lyve Client.
This token file has expired. Request a new token file from your project administrator.	The Lyve Token file you attempted to import is not authorized to unlock the selected device. Select a different Lyve Token file or request a new Lyve Token file from your product admin that assigns the device to this installation of Lyve Client.

Devices

Manually add a network device

- 1. Click on the **Devices** tab.
- 2. Click on the Add icon.



- 3. Enter the appropriate IP address or hostname.
- 4. Enter the device serial number.
 - If you don't know a device's serial number, you can find it by scanning the QR code on the left side of the Lyve Mobile Array handle.



Do not confuse the QR code on the handle with the QR code on the back of Lyve Mobile Array, which is clearly marked PSID. The PSID is not the same as the serial number.

If the serial number on the handle is unreadable or doesn't work, use the Click Connect. Lyve Virtual Assistant icon to start a support session.

- 5. Click Connect.
- 6. After the device is found, click **Confirm**.

View device details

To view device details:

1. Click on the **Devices** tab.

2. Hover your cursor over a device card and click on the Inspect icon.



3. View device details. See below.

Device



<u></u>	Click to download an activity log (used for troubleshooting issues).
0	Click to rename device.

Device details	Notes	
Device name		
Туре		
Serial #	0	Click to copy serial number to clipboard.
Model		
	6	Click to copy IP address to clipboard.

Bevice details	Notes		
	0	Click to edit IP address.	
Last activity	Date Time		

Data Connections



ß	Click to edit iSCSI setup.
---	----------------------------

Data connection details	Notes		
Port			
	•	Good connection	
Status	•	Degraded connection	
	•	No connection	
Actual Speed	С	Click to copy serial number to clipboard.	
Max Speed			
IPv4 Address	G	Click to copy IP address to clipboard.	

Cryptographic Erase



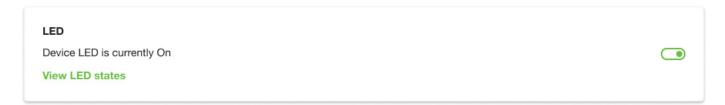
You can crypto-erase or disable password protection.





Click to begin a cryptographic erase of data in the device. SeeCryptographic Erase.

LED



	Turn LED on/off.	
View LED states	View information on LED states.	

Disks and Spares

Disks and Spares
6 disks | 6 healthy
0 available

# disks	Disks in device
# healthy	Connected and healthy
# offline	Disconnected
# degraded	Connected but read/write degraded (for example, RAID initialization in progress or drive errors)
# fault	Connected but read/write severely diminished (for example, drive errors)

available

Number of available disks for spares

Disk Group

If the device is currently configured with a disk group (RAID array):





Change the disk group (RAID) configuration. See Configure Disk Group (RAID).

If no disk group (RAID) has been configured:



(+) Create disk group | 6 drives unassigned

Firmware

Firmware

Bundle Version M100R007 Management Controller MXM100R003-01

MRA-1031.T3 Storage Controller

3.9 Complex Programmable Logic Device (CPLD) Storage Controller Loader 0.013

Management Controller OS MPM100R004-01 ASIC Controller Loader 1.64.35491h

Build Date 2022-09-28T04:10:58Z

Identify a device

Lyve Client can identify a connected Lyve Mobile device for you by having it temporarily flash its LED. This is useful if you have a large bank of connected Lyve Mobile devices and you need to identify a particular device. You can identify the device regardless of whether it is locked or unlocked.

- 1. Click on the **Devices** tab.
- 2. Hover your cursor over a connected device card and click the Identify icon.

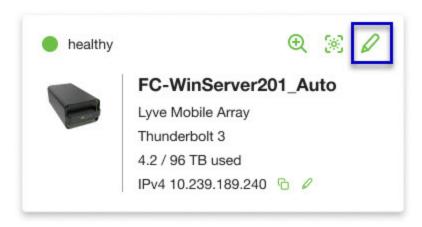


- 3. Observe the front faces of your devices to spot the one with the flashing purple LED.
- 4. Click the Identify LED icon a second time to turn off the identification.

Rename a device

You can change the name of connected unlocked device.

- 1. Click on the **Devices** tab.
- 2. Hover your cursor over a connected device card and click the Edit icon.

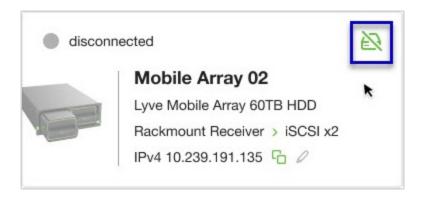


3. Enter a new device name and click Rename.

Forget a device

If you no longer want a disconnected device to appear in Lyve Client, you can make the app 'forget' the device.

- 1. Click on the **Devices** tab.
- 2. Hover your cursor on a disconnected device card and click the Forget Device icon.



3. Click **Forget Device** to confirm.

Configure Disk Group (RAID)

A disk group is a combination of two or more physical drives that are presented to the operating system as a single device. Drives are combined into different configurations known as 'RAID levels'. RAID stands for redundant array of independent disks. A RAID level categorizes how data is written to the drives in the array.

The RAID level you choose depends on which storage attributes are most important to you:

Capacity	The total amount of data you can store.	
Performance	The speed at which data is copied	
Protection	The number of disks that can fail before data is lost	

Lyve Mobile Array can be configured as RAID 0 or RAID 5. Both RAID levels offer advantages and disadvantages, described below.

RAID 0

In RAID 0, data is split into blocks that get written across all drives in the array.

Advantages

- Data is not duplicated across drives. This results in faster transfers and more storage, since the full
 capacity of all drives can be used to store unique data.
- Initialization takes only minutes.

Disadvantages

• RAID 0 lacks data protection. If a single drive fails, all data in the array is lost.

RAID 5

In RAID 5, data is also split into blocks that get written across all hard drives in the array. In addition, a redundant parity block is written for each data block.

Advantages

RAID 5's strong advantage over RAID 0 is data protection. If one physical drive fails, you still have access to all your data.

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In the event a drive fails, you should immediately copy all your data to another storage device and contact customer support.

Disadvantages

- RAID 5 offers read performance that can approach RAID 0. However, write performance is slower because the parity data must also be calculated.
- You still have much of the storage capacity of a RAID 0 array, based on the total available hard drives and storage capacities. However, overall storage capacity is reduced slightly. The equation for determining the storage is:

(The size of the drive with the smallest capacity in the array) * (Total hard drives minus 1)

Example: An array is assigned six 10TB hard drives for a total of 60TB. The equation is:

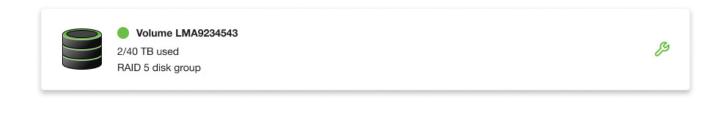
• Initialization may take up to 32 hours for an HDD device.

Change RAID configuration

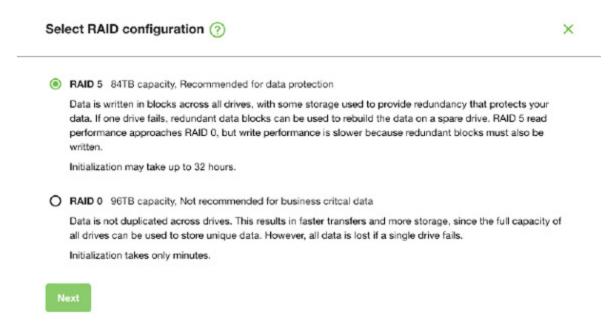
- 1. Click on the **Devices** tab.
- 2. Hover your cursor over a device card and click on the Inspect icon.



3. If the device is currently configured with a disk group (RAID array), click on the Wrench icon on the disk group volume card:



- If the device is not currently configured with a disk group, scroll down and click**Create** disk group.
 - + Create disk group | 6 drives unassigned
- 4. Select a RAID configuration: RAID 5 or RAID 0. Click Next.



5. Select a volume configuration.



Confirm

- A. Enter a volume label.
- B. Select a volume format:
 - Lyve Client for windows: NTFS or exFAT
 - Lyve Client for windows: HFS+ or exFAT
- C. Click Confirm.

The volume is displayed on the Device Details page with an amber status icon while the disks are being initialized.



Cryptographic Erase

A cryptographic erase securely deletes all data on the Lyve Mobile device while keeping your device settings intact.

Data deleted during a cryptographic erase cannot be recovered.

To securely erase your Lyve Mobile device, Lyve Client accesses all data on individual drives. The RAID must be recreated after the crypto-erase is complete.

Recreating the RAID requires an initialization that can take over 24 hours if the Lyve device is not in use.

Recreating the RAID requires an initialization that can take over 24 hours if the device is not in use. You can use your device during the initialization but performance will be degraded until it is complete.

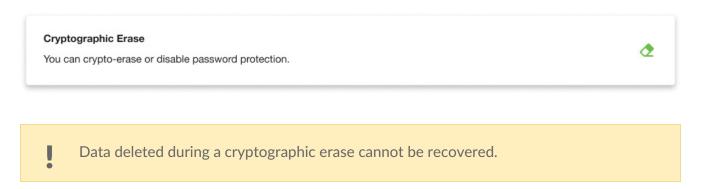
Using the device during an initialization will increase the time for it to complete. To avoid delays in completing the initialization, make certain that the host computer does not go to sleep until it is complete. If the computer goes to sleep, the initialization will be paused until it wakes up.

Initiating the erasure

- 1. Click on the **Devices** tab.
- 2. Hover your cursor over a device card and click on the Inspect icon.



3. On the Cryptographic Erase card, click on the Erase icon.



- 4. Click **Confirm** to confirm the cryptographic erase.
- 5. Click **Erase all data** to proceed with the operation.
- 6. When the process has completed, click **Certify** to view a certificate with the details of the erasure.

Settings

Application settings

Launch Lyve Client at startup—Enable if you want Lyve Client to automatically open whenever you start your computer.

Application logs

Click to download application logs.

Lyve Client updates



Enable if you want Lyve Client to automatically check for new updates when connected to
 the internet. You'll be notified with the option to skip or defer the installation of non-critical updates.

Critical updates are required for Lyve Client to function correctly. This setting is overridden when a critical update must be installed.

Lyve Portal Identity

Enable if you want some users to be able to access assigned connected devices using Lyve Portal Identity. See Security options.

Lyve Token Security



Enable if you want Lyve Client to use a Lyve Token file to access assigned connected devices. SeeSecurity options.

Import token	Import a Lyve Token file. SeeEnd user final tasks.	
Clear all imported tokens	Clear all imported Lyve Token files from Lyve Client.	
Register	Create a registration file for this installation on Lyve Client. SeeEnd user initial tasks.	

Imported token details	Notes	
Token File	Name of the imported token file.	
Token Location		
Expires	Date Month	
File	Θ	View file details.
File	Û	Delete file.

About

View the Lyve Client version and links to online legal notices.