VAULT Dock

Application Documentation

V 1.3

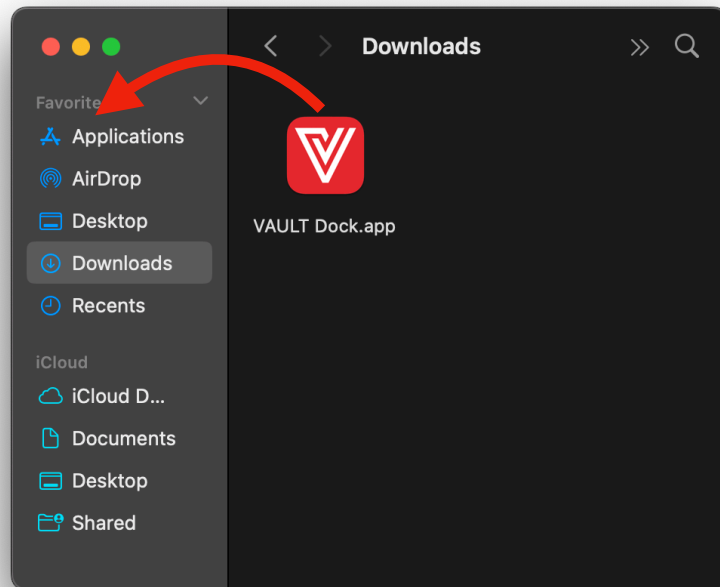# Contents

Application Download and macOS Settings

The latest release of VAULT Dock application is available here:

https://github.com/Engineering-PSB/VaultDock-App/releases/latest/download/VAULT.Dock.zip

Download the app and move it from the Downloads folder to the Application folder.


Please ensure the low power mode is disabled in macOS settings **Energy → Low Power Mode**, and **Prevent automatic sleeping when the display is off**, **Wake for network access**, and **Start up automatically after a power failure** are enabled.
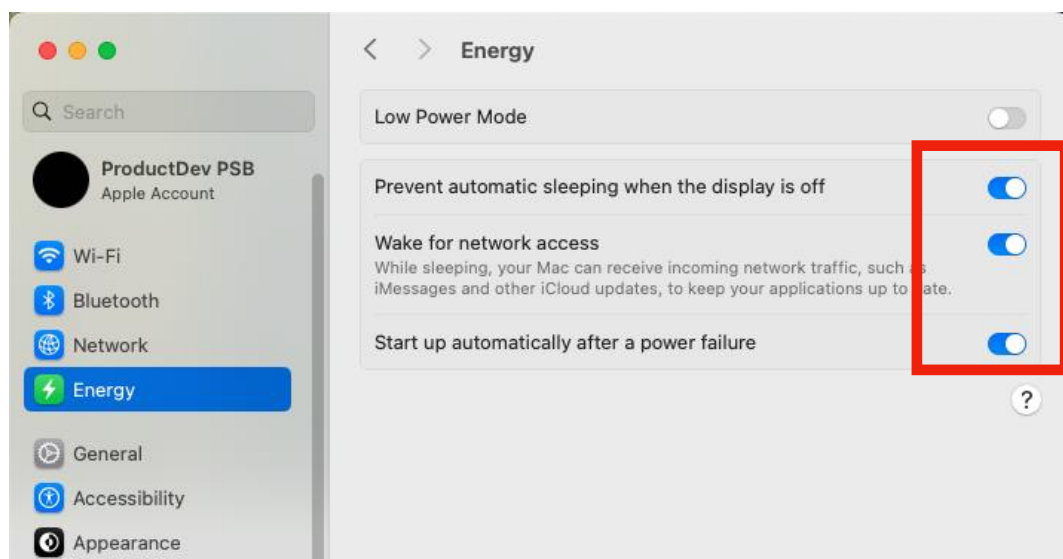
To start the app, open the Applications folder and double click the app icon:
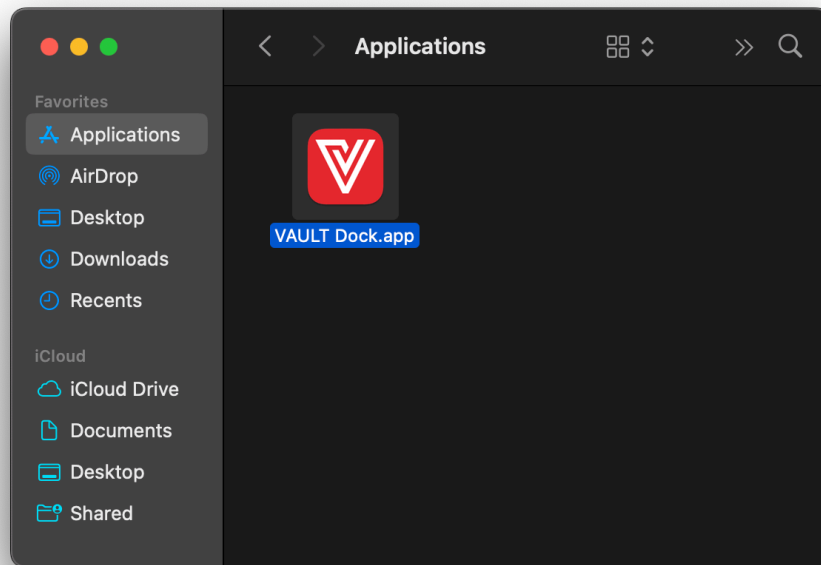
You will see the app running in the top menu bar. Click the icon to see the app menu.
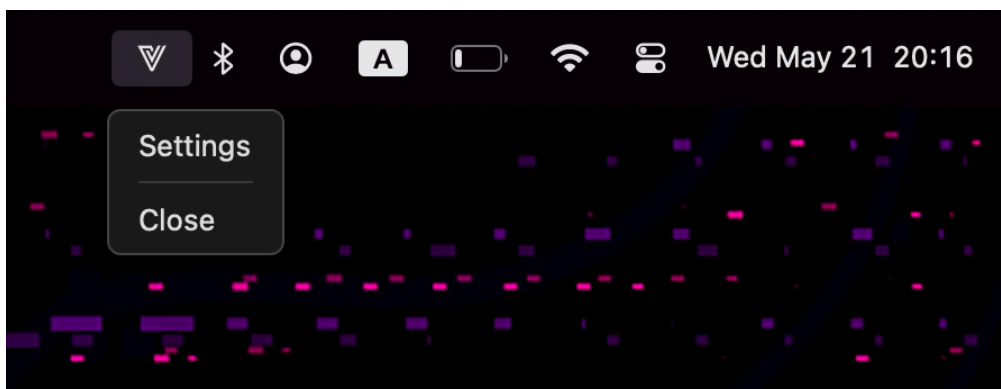
The click on the application icon opens a menu with two options: "Settings" and "Close".

The **Settings** item opens the Settings screen of the app, and the **Close** item closes the application.

To start using the application, you need to fill in connection parameters on the "Connection" tab of the settings screen. You may need to change application configuration parameters (like whether the app should launch at login, or the use of LDAP server) on the "Config" tab.

Let's complete the initial setup of the application.

Connection Parameters

Connection parameters allow you to set up MDM provider connection.
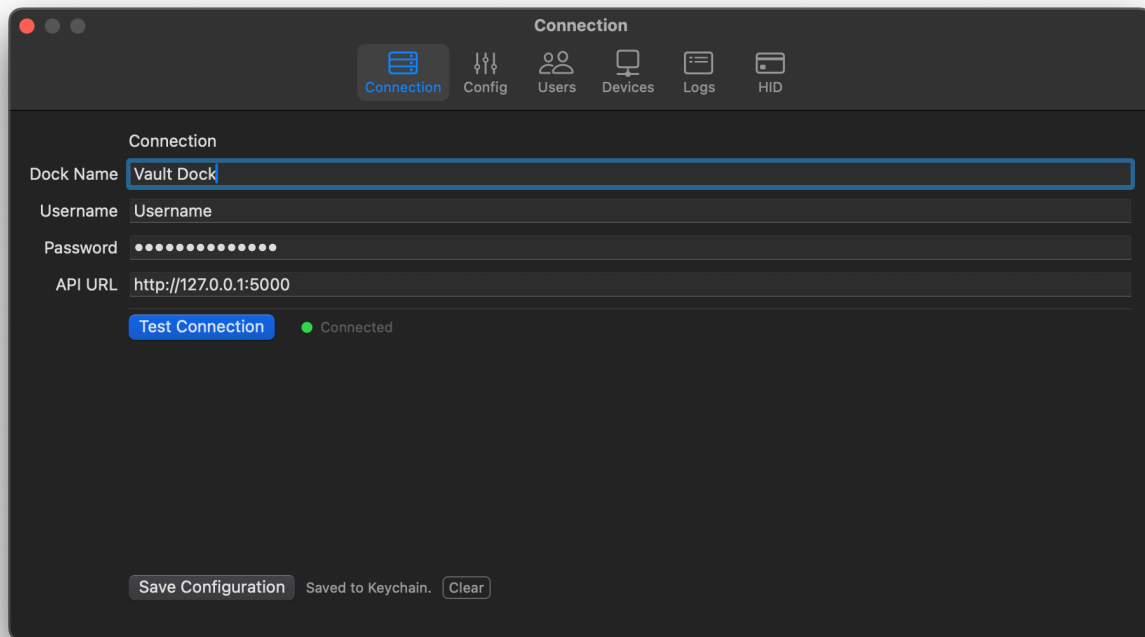
Dock Name: VAULT Dock device name, this is the name the app sets to MDM location parameter for docked iPads. This will default to macOS device name.

Username: User name for the MDM service provider.

Password: Password for the MDM service provider.

API URL: API address of an MDM service provider.

The **[Test Connection]** button and the connection status icon show if the provided parameters are correct and the connection between the app and MDM server can be established.

The **[Save Configuration]** button saves the current configuration.

The **[Clear]** button removes user name, password and API URL from Keychain.

Minimum User Account Privileges: Minimum privileges for Jamf Pro API communication.
- **Jamf Pro Server Objects**
  - Device extension attributes: CREATE, READ, UPDATE
    - You do not need the CREATE privilege if your Jamf Pro Admin creates an Extension Attribute "HubLocation" in the Device Management Extension Attributes.
  - LDAP servers: READ
    - Only needed if linking users through Jamf Pro.
  - Mobile Devices: READ, UPDATE
 - Users: READ, UPDATE
    - Needed to assign users.
- **Jamf Pro Server Actions**
  - Assign Users to Mobile Devices: Allow
    - Needed to assign users.

Configuration

Configuration tab is designed for fine-tuning application's behavior and contains time intervals for various events managed by the application.

The view of the configuration page depends on the type of your app distribution: the App Store version of the application doesn't allow you to set up Paths parameters for user file and log file on the Config screen.
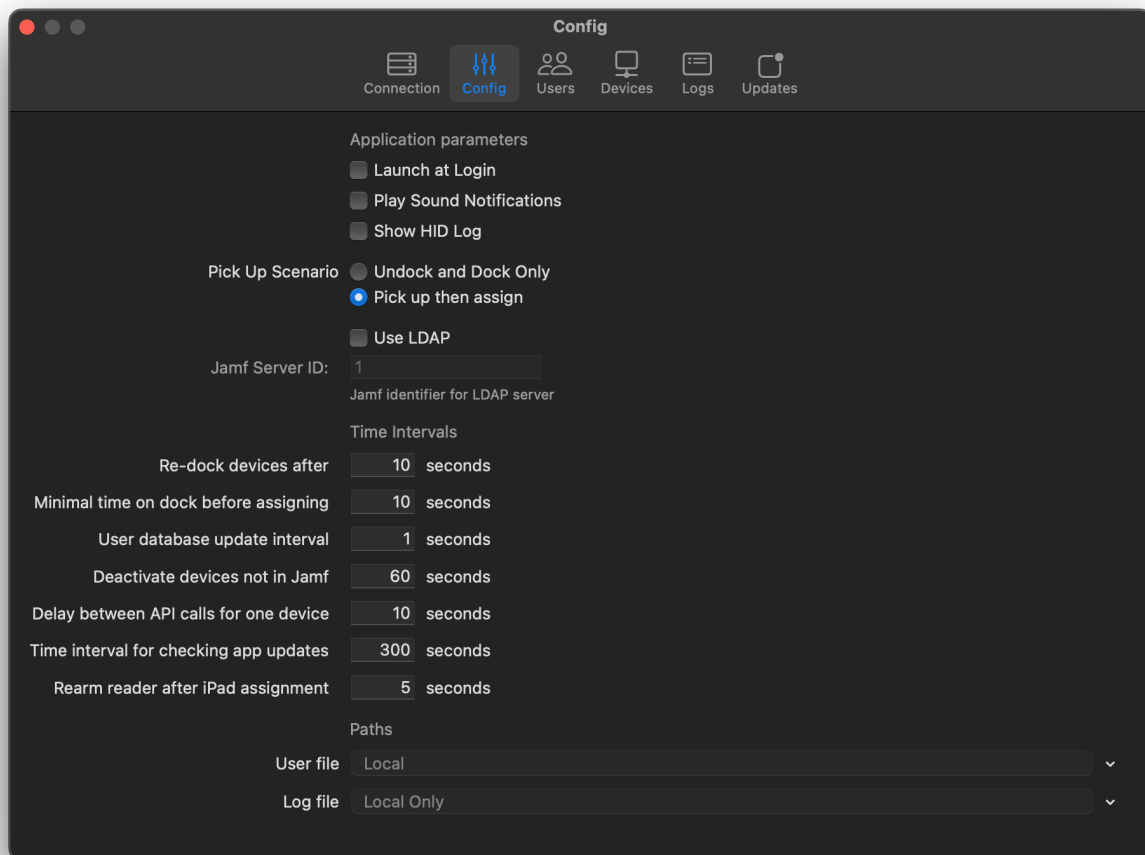
Application Parameters

Launch at Login: whether the app starts automatically at login.

Play Sound Notifications: toggles voice announcements for errors and connection status.

Show HID Log: toggles HID device communication log tab.

Pick Up Scenario: switches between device assignment scenarios:
- **Undock and Dock only**: performs device docking and undocking procedures without assigning a user.
- **Pick up then assign**: after the user scans their card, lets the user pick up one of available devices, and then assigns the device to the user.

Use LDAP: fetch user information from LDAP server (via Jamf Pro connection)

Jamf Server ID: The Jamf-defined identifier for the LDAP server used when **Use LDAP** is enabled. It is the **id** parameter in the address line on the LDAP server page.

Time Intervals

The value shown are the defaults and it is recommended not to adjust them.

Re-dock devices after: a time interval (in seconds) to pick up an assigned iPad from the dock; if the iPad remains docked after that time interval, the app resets the iPad in MDM and marks it as "docked".

Minimal time on dock before assigning: a time interval (in seconds) after iPad is placed on the dock and before it can be assigned.

User database update interval: a time interval (in seconds) between user database updates from a CSV file.

Deactivate devices not in Jamf: a time interval (in seconds) to ignore devices not registered in MDM; the app will not attempt to assign them for that time interval, providing time to remove the device or register in an MDM provider software.

Delay between API calls for one device: a time interval (in seconds) that allows docked devices to process MDM update notifications.

Time interval for checking app updates: a time interval (in seconds) between software updates.
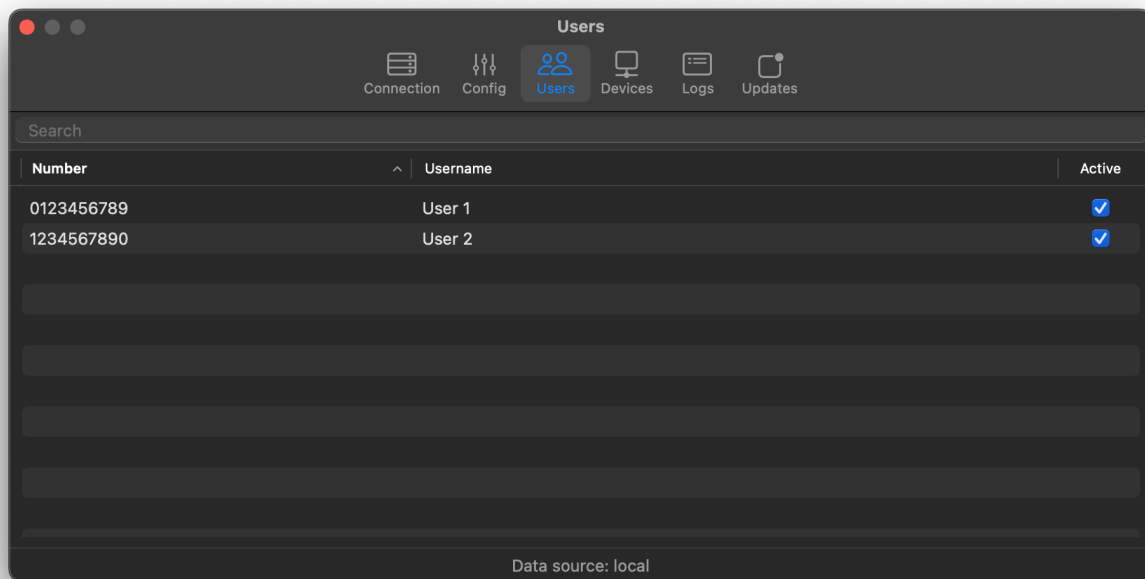
Paths

Only available in the direct app.

User file: when set, provides a remote source of users registered with the app; otherwise, the app uses internal database.

Log file: when set, the app logs internal events and errors to the file.

Users

Users tab displays a list of users the app can assign to iPads.

Cards not on this list won't be assigned to iPads.

When **User File** parameter is set, this table is disabled for editing and managed by the user file. When **Use LDAP** parameter is set, this table is disabled for editing and managed by the LDAP server.

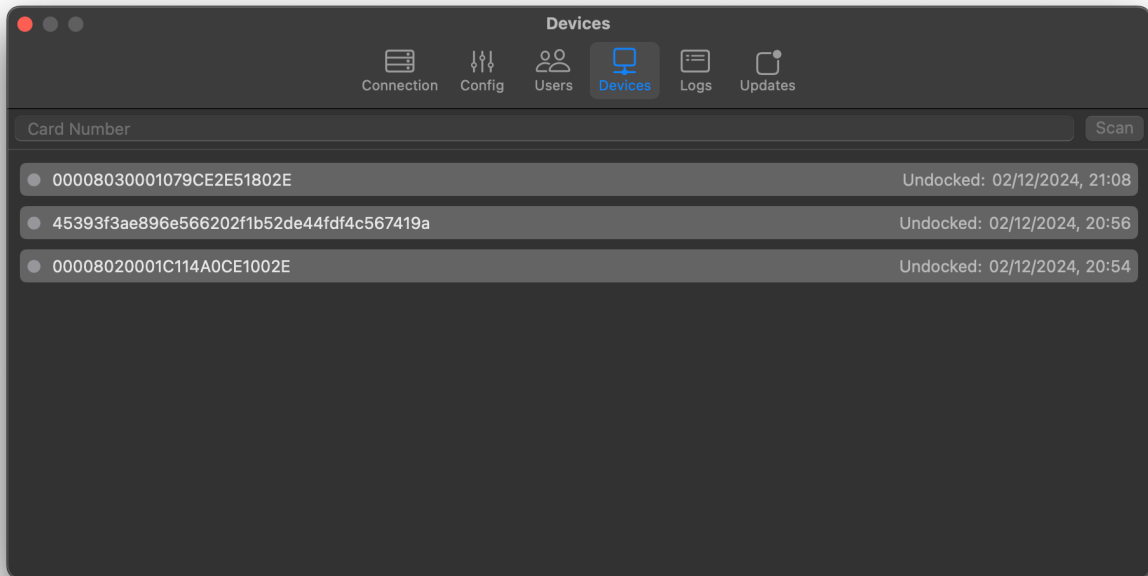User file format (CSV):

Columns:
• **card**: card number
• **username**: user name in MDM

Example:

```
card,username
0123456789,User 1
1234567890,User 2
```

Devices

Devices tab shows a list of devices docked, undocked, assigned and unassigned.

- Gray dot next to the device ID means the device is not docked at the moment.
- Orange dot next to the device ID means the device is awaiting synchronization with MDM.
- Green dot next to the device ID means the device is docked and ready to be assigned.
- White dot next to the device ID means the device is assigned and can be taken from the dock.

HID
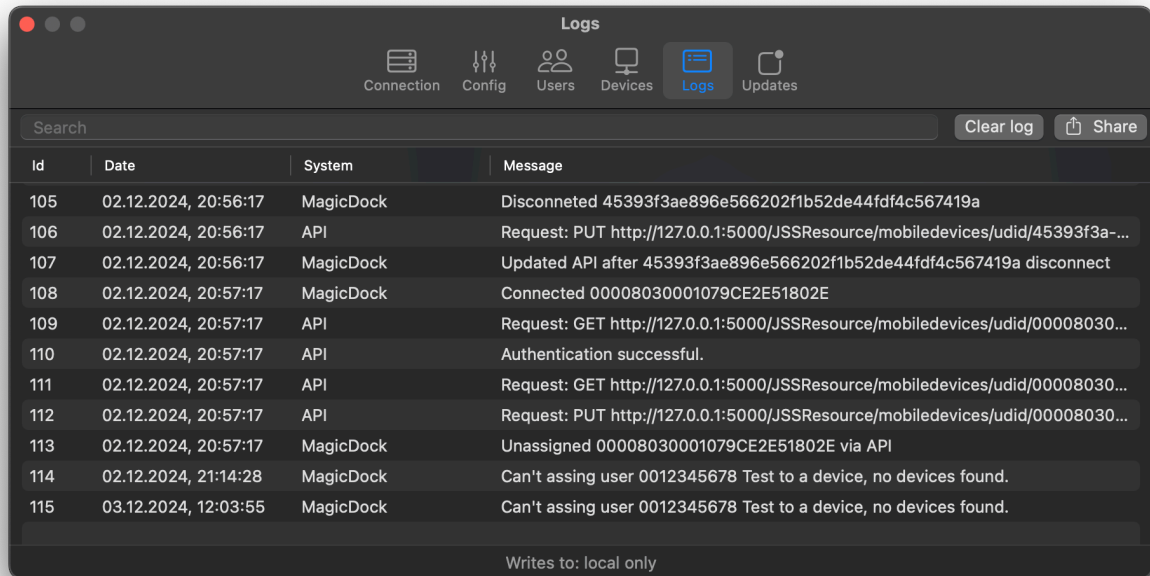
Show communication log for HID card readers
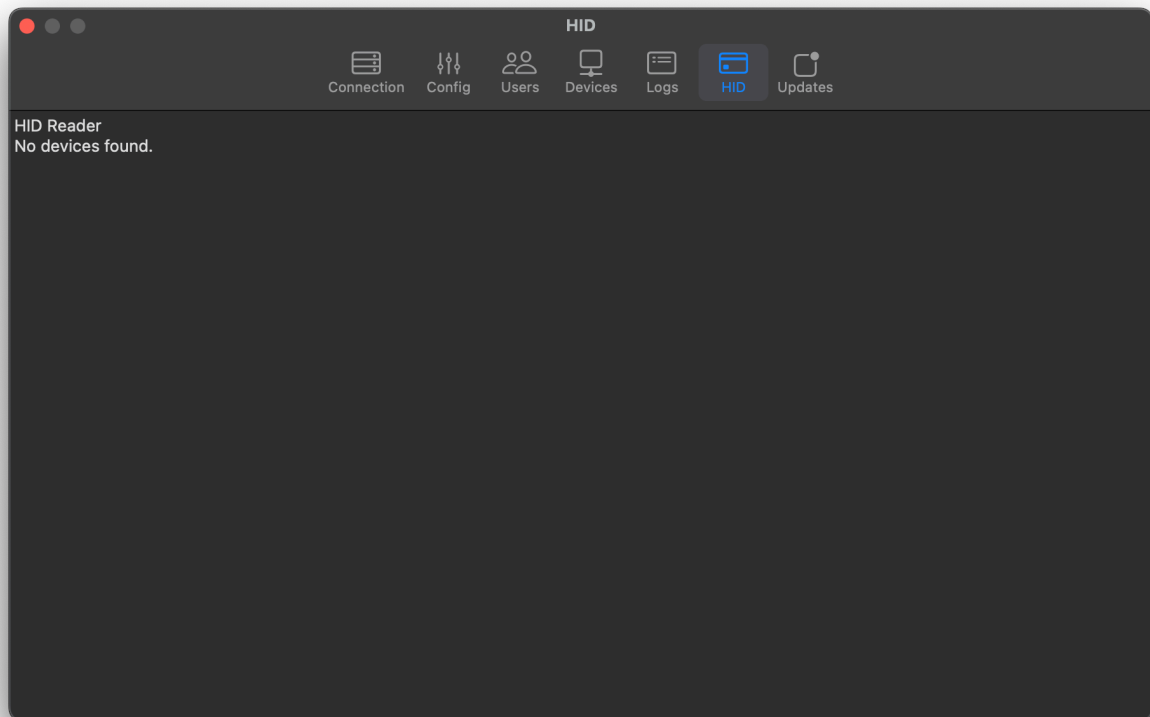
The HID tab is not visible by default, but can be enabled for troubleshooting on the Config tab.

HID log is limited to 1000 lines and is cleared every time the app is closed.

Logs

Logs tab shows recent application logs.
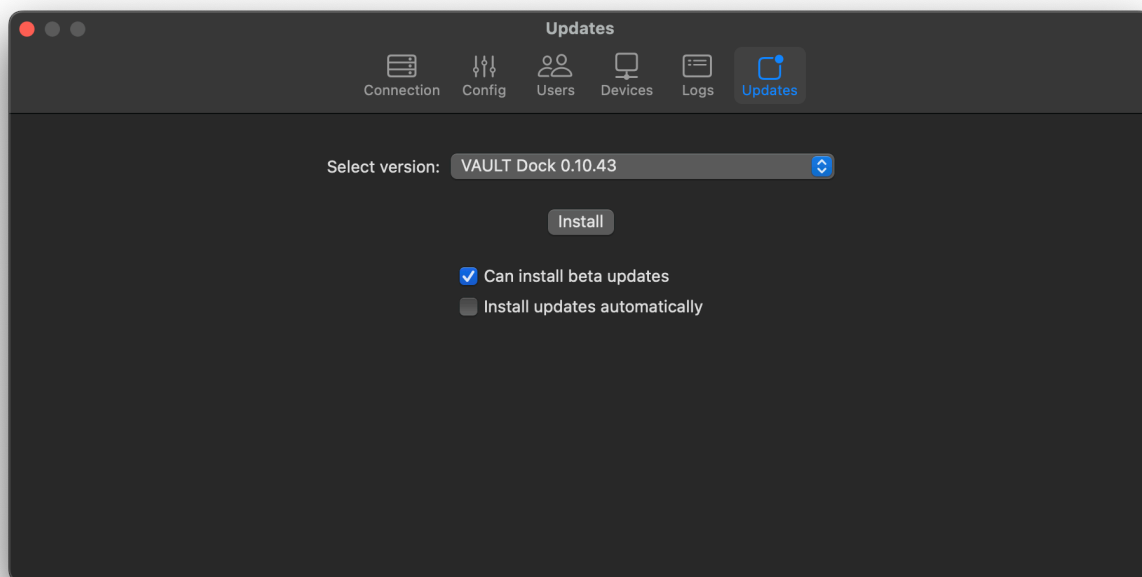

Logs are limited to 1000 lines.

Updates

Updates tab provides a way to switch between application releases. The tab is visible in direct app only.

Can install beta updates: Allows to install beta releases of the app.

Install updates automatically: checks for newer versions of the app periodically and updates the app automatically if a newer version is published.

Configuration Parameters

VAULT Dock's configuration is securely stored in macOS Keychain and can't be accessed via default values. However, to help with the initial application configuration, it is possible to pre-set these values; they will be read on the app start, and their values will be transferred to Keychain.

Below is a list of recognized parameters and their intended use. Unless stated otherwise, string parameters should be set via defaults write ... -string "Value", booleans via -bool, and numeric values (time intervals, integers) via -int or -float.

- **hasPerformedInitialConfiguration** - (Boolean) controls the initial Settings screen appearance.
- **dockName** - (String) VAULT Dock device name.
- **clientAPIURL** - (String) MDM URL.
- **username** - (String) API username.
- **password** - (String) API password.
- **minimalDockTime** - (Integer) Minimal time (in seconds) on dock before assigning the device.
- **timeIntervalToUndock** - (Integer) A time interval (in seconds) to take an assigned iPad from the dock; it becomes unassigned after that interval again.
- **cardReaderTimeIntervalBetweenKeyboardEvents** - (Integer) The maximum time interval between keystrokes for keyboard-emulating card readers. Any interval larger than that will be considered a different card reading.
- **userDatabaseUpdateTimeInterval** - (Integer) Time interval for internal database updates from a CSV file.
- **deviceDeactivationTimeInterval** - (Integer) Time-out interval for devices not in MDM
- **deviceAPICallsDelayTimeInterval** - (Integer) Delay between two consecutive API calls for one device.
- **updatesFetchingTimeInterval** - (Integer) Time interval for fetching application updates.
- **timeIntervalToRearmAfterSoundNotification** - (Integer) After a sound notification (success/ failure tone), how long to wait before re-enabling card reading.
- **pickUpScenario** - (Integer) Determines how devices are assigned vs. physically picked up.
  - 1 = "Pick up then assign"
  - 2 = "Undock and Dock Only" (default)
- **canPlaySoundNotifications** - (Boolean) Allows the application to play sound notifications for various events.
- **canFetchLDAPUsers** - (Boolean) Enables fetching user information from an LDAP server via Jamf.
- **LDAPServerIdentifier** - (String) The Jamf-defined identifier for the LDAP server used when canFetchLDAPUsers is enabled.
- **canInstallBetaUpdates** - (Boolean) Enables checking for and installing beta versions of updates.
- **isAutomaticUpdatesEnabled** - (Boolean) Allows the application to automatically install new updates.
- **enableKeybordEmulatingCardReaders** - (Boolean) Allows the app to accept input from keyboard-emulating card readers.
- **showHIDTab** - (Boolean) Enables or hides an internal diagnostics tab for HID devices.

You can set the values with **defaults write com.psbhq.Dock parameterName "Parameter Value"** command, for example:

```
defaults write com.psbhq.Dock dockName "VAULT Dock"
```

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