

Flowscape Assistant

Overview

The Flowscape Assistant is a background tray application that runs on Windows and macOS. It detects desk dongles connected via USB, links them to user accounts via a Microsoft browser-based login, and reports desk occupancy data to the Flowscape server at a configurable interval.

The app starts automatically on system login, runs silently in the system tray, and does not show a main window. All interaction happens through the tray icon menu.

Device Identification

The app supports two methods for identifying a desk. It checks for both on startup and whenever a USB device is connected or removed.

1. USB desk dongle (primary)

The dedicated Flowscape desk dongle is identified by its USB vendor ID and product ID. When a recognised dongle is connected, its serial number is used as the desk identifier. This is the preferred method.

2. USB hub MAC address (fallback)

If no desk dongle is present, the app checks whether any connected USB hub has an onboard network device (e.g. a built-in Ethernet adapter). If one is found, the MAC address of that network device is used as the desk identifier instead.

Precedence

If both a desk dongle and a USB hub with a network device are detected at the same time, the desk dongle always takes precedence. The MAC address is only used when no dongle is found.

Caveat: MAC Address Pass-Through

The USB hub MAC address method relies on reading the hub's own MAC address from its onboard network device. Some laptops and managed PCs have a BIOS feature called **MAC Address Pass-Through** (also referred to as MAC Address Override) that replaces the MAC address of any connected USB-C dock or USB Ethernet adapter with the laptop's built-in hardware MAC address.

When this feature is enabled, every desk the laptop is docked to will report the same MAC address — the laptop's — instead of the desk's hub MAC. This means the app cannot

distinguish between desks, and desk identification will not work correctly with the MAC address method.

If the MAC address method is being used and desks are not being identified correctly, ask the IT admin to check whether MAC Address Pass-Through is enabled in the BIOS and disable it. The setting is typically found under a section such as *Network*, *LAN*, or *Advanced* in the BIOS/UEFI firmware settings, and its exact name varies by manufacturer.

Note: This limitation does not affect the desk dongle method. If reliable desk identification is required across a managed fleet with MAC Address Pass-Through enabled, use the USB desk dongle instead.

Installation

The installer for your platform is provided by Flowscape. Contact your Flowscape representative or use the download link provided to your organisation to obtain the correct version.

- **Windows:** run the `.msi` installer. It performs a machine-wide installation and is suitable for silent deployment via MDM. The app registers itself to start on login. The installed executable is named `flowscape-assistant.exe` and the app displays as **Flowscape Assistant** in the taskbar and system tray.
- **macOS:** open the `.dmg` and drag the app to Applications. On first launch, approve the app in System Settings → Privacy & Security if macOS blocks it.

Configuration

The app ships with default settings, but requires at minimum the `SERVER_CONNECTION_URL` to be set to point to your Flowscape server before it can report desk data. All configurable settings are listed in the table below.

Key	Type	Default	Description
<code>SERVER_CONNECTION_URL</code>	string	<code>https://yourserver.flowscape.se</code>	Base URL of the Flowscape server this installation reports to. Must be set before the app can function.
<code>SERVER_UPDATE_INTERVAL_SEC</code>	number	<code>30</code>	How often (in seconds) the app polls the server with desk

			state updates.
BASIC_AUTH_ENABLE D	boolean	false	Enable HTTP Basic Auth on server requests.
LINK_POPUP_ENABLE D	boolean	true	Show a dialog prompting the user to link their account when a dongle is detected and no account is linked.
LINK_POPUP_INTERV AL_MIN	number	120	Minutes between repeated link-account prompts if the user keeps dismissing them.

Configuration file

Settings are applied by placing a `program_config.json` file at the following system-wide path. The app reads it on every launch; if the file is absent, built-in defaults are used instead. Changes take effect on the next app restart and no reinstallation is required.

Platform	Path
Windows	%PROGRAMDATA%\Flowscape Assistant\program_config.json
macOS	/Library/Application Support/Flowscape Assistant/program_config.json

Copy the sample below, replace `SERVER_CONNECTION_URL` with the URL of your Flowscape server, and adjust any other values as needed:

```

1 {
2   "SERVER_CONNECTION_URL": "https://your-server.flowscape.se",
3   "SERVER_UPDATE_INTERVAL_SEC": 30,
4   "BASIC_AUTH_ENABLED": false,
5   "LINK_POPUP_ENABLED": true,
6   "LINK_POPUP_INTERVAL_MIN": 120
7 }
```

⚠ For MDM deployment, place the configuration file before installing the app. The app launches automatically as soon as installation completes. If the config file is not already in place at that point, the app starts with the built-in defaults — including the placeholder server URL — and will not report desk data correctly until it is restarted.

Recommended deployment order:

1. Create the directory and write `program_config.json` to the path above.
2. Install the `.msi` or `.dmg`.

 **macOS — do not modify the file inside the .app bundle.** The path `/Applications/Flowscape Assistant.app/Contents/Resources/program_config.json` is covered by macOS Gatekeeper's code-signature verification. Any modification inside the bundle causes macOS to treat the app as damaged and block it from launching. Always use the `/Library/Application Support/` path above instead.

CLI Parameters

Any configuration setting can be overridden at launch using command-line flags. CLI values take precedence over both the config file and the built-in defaults, and are useful for testing or per-machine customisation.

Pass `--help` (or `-h`) to print all available options with their current defaults and exit without starting the app.

Flag reference

Short	Long flag	Argument	Description
<code>-s</code>	<code>--server-url</code>	<code><url></code>	Override the server connection URL.
<code>-i</code>	<code>--update-interval</code>	<code><sec></code>	Override the server update interval in seconds.
<code>-b</code>	<code>--basic-auth</code> / <code>--no-basic-auth</code>	—	Enable or disable basic authentication.
<code>-l</code>	<code>--link-popup</code> / <code>--no-link-popup</code>	—	Enable or disable the link-account popup.
<code>-P</code>	<code>--popup-interval</code>	<code><min></code>	Override the link-account popup interval in minutes.
<code>-h</code>	<code>--help</code>	—	Print all options with defaults and exit.

Flag syntax

Both `--flag value` and `--flag=value` forms are accepted. Boolean flags use `--flag` to set `true` and `--no-flag` to set `false`.

Examples

Override the server URL:

```
1 # macOS
2 /Applications/Flowscape\ Assistant.app/Contents/MacOS/Flowscape\ Assistant --server-url
  https://yourserver.flowscape.se
3
4 # Windows
5 "C:\Program Files\flowscape-assistant\flowscape-assistant.exe" --server-url
  https://yourserver.flowscape.se
```

Combine multiple overrides:

```
1 flowscape-assistant.exe -s https://yourserver.flowscape.se -i 10 --no-link-popup
```

Show all options:

```
1 flowscape-assistant.exe --help
```

Account Linking

When a desk dongle is detected and no user account is linked, the app shows a dialog offering to link. Clicking **Link** opens the system browser to the Flowscape login page. After signing in with a Microsoft account, the browser returns the session to the app and the account is stored locally. The browser shows a confirmation page and can then be closed.

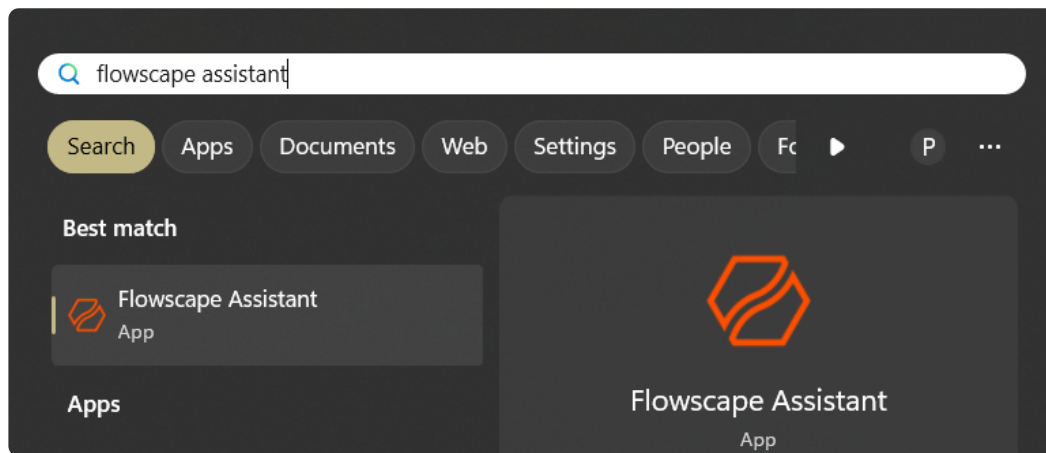
To unlink an account, open the tray menu → **User Account** → log out.

Troubleshooting MDM Deployment

When deploying Flowscape Assistant via an MDM solution (e.g. Intune, JAMF, or similar), some clients may experience startup issues after installation. There are two likely causes.

Cause 1: App not installed

First, verify that Flowscape Assistant has actually been installed on the affected machine. Ask the user to search for the app in the Start menu and attempt to launch it manually.



The default installation path is:

```
1 | C:\Program Files\flowscape-assistant
```

If the app launches successfully when started manually, the installation is intact and the issue is most likely **Cause 2** below. If the app cannot be found, review your MDM deployment configuration.

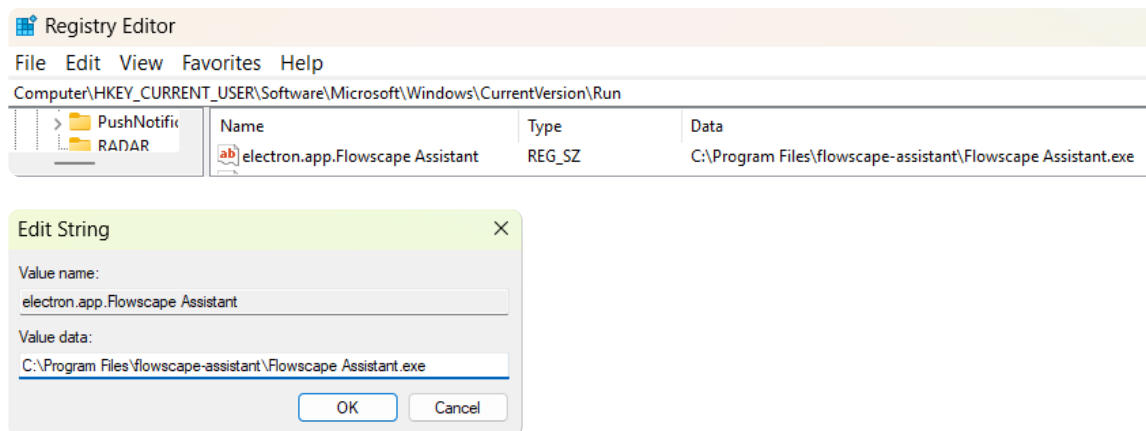
Cause 2: Missing autostart registry key

Flowscape Assistant registers an autostart entry in the Windows registry the *first time it launches*. When deployed via MDM, this initial post-install launch may not occur automatically — meaning the registry key is never created, and the app will not start on subsequent user logins.

This pattern is consistent: on all machines *without* the problem, the first post-install launch happened automatically. On all machines *with* the problem, it did not.

The missing registry entry is:

Field	Value
Path	Computer\HKEY_CURRENT_USER\Software\Microsoft\Windows\CurrentVersion\Run
Name	electron.app.Flowscape Assistant
Type	REG_SZ
Data	C:\Program Files\flowscape-assistant\flowscape-assistant.exe



Note: The key is created under `HKEY_CURRENT_USER` , not `HKEY_LOCAL_MACHINE` , even though the MSI installs machine-wide. This is expected behaviour: the app uses the standard Electron autostart API, which always registers under the current user's hive so that the app launches in the context of the logged-in user. It must therefore be deployed **per user**, not per machine.

Fix: single machine

Launch Flowscope Assistant manually once. The app will create the registry key on first run, and autostart will work correctly from that point on.

Fix: fleet-wide via MDM

Push the registry key out to affected machines using your MDM tooling. This can be targeted at all clients, or scoped only to those exhibiting the problem.