jamf

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→ Workbrew

Jamf Deployment Guide

Step-by-step instructions for a fast, error-free setup.

jamf

DEPLOYMENT GUIDE

Workbrew streamlines secure, automated Homebrew package deployment for macOS, integrating seamlessly with Jamf Pro to give IT teams centralized device management.

Homebrew is the de-factor package manager on macOS, installed on tens of millions of devices and offering more than 15,000 packages. With zero-touch deployment, policy enforcement, and real-time monitoring, Workbrew lets you leverage the power of Homebrew, whilst ensuring compliance and eliminating security risks.

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OUTCOMES

By the end of this deployment guide, you will:

Understand the available mechanisms to deploy Workbrew through Jamf Pro

Configure Jamf Pro to allow Workbrew to manage your fleet's Homebrew installations

Be ready to deploy Workbrew to your devices

PRE-REQUISITES

Before you begin following this guide, you should:

1. Have access to a Jamf Pro instance of version 10.49.0 or later

with user privileges to:

- Create an API role and client
- Create packages
- Create policies

2. Have a Workbrew workspace

New to Workbrew? Create a **free account** and follow the **Getting Started** guide.

3. Be aware of the system requirements for Workbrew (and Homebrew):

- Everything **Homebrew requires:**
  - An Apple Silicon CPU or 64-bit Intel CPU.
  - macOS Ventura (13) (or higher) installed on officially supported hardware.
  - The Bourne-again shell for installation (i.e. `bash`).
  - Don't worry about the Command Line Tools (CLT) for Xcode requirement, Xcode CLT will be installed as part of deployment.
- Device enrolled in Jamf
- User account in the `admin` group or in the `workbrew_users` group

QUICKSTART

Are you an experienced Jamf administrator? These steps will get you up and going quickly. Read on for more detailed explanations.

1. **In Jamf Pro**, create an API Role with “Read Computers”, Read Static Computer Groups", "Read Smart Computer Groups", and “Read Accounts”.
2. **In Jamf Pro**, create an API Client using the created role. Generate and save its Client ID and Secret.
3. **In the Workbrew console,** enter the workspace settings and select Jamf as the **MDM Type.** Enter your Jamf API Client ID and Secret, and then save the Workbrew
4. **In Jamf Pro,** add the Workbrew Workspace API key and installation script as a new Shell/bash script, with **Priority** set as “before”.
5. **In Jamf Pro**, add the Workbrew .pkg as a new package.
6. **In Jamf Pro, a**dd a Managed Login Item payload to prevent users disabling the Workbrew background process.
7. **In Jamf Pro,** create a new policy referencing the created script and package, and set the desired scopes to deploy it directly to devices or enable self-service.
8. **In the Workbrew console**, after deployment to a device, check Devices to ensure the expected device appears (please be aware that device inventory is updated periodically, not in real time).
9. If needed, check the Troubleshooting guide and FAQ or contact us for support.

DEPLOYMENT OVERVIEW

Workbrew is installed using a signed .pkg file, which installs several components:

- The Workbrew agent
- The Secure Workbrew CLI, a wrapper around the standard Homebrew CLI.

In addition to installing the Workbrew .pkg on each device, you must run a (bash) script which connects the Workbrew agent to your Workbrew Console. The script also installs Command Line Tools for Xcode if your devices do not already have it. The Workbrew Console connection wizard will guide you through customization to your install script. You can deploy the Workbrew .pkg through Package Deployment, using the Policy detailed in the following.

You can use this Policy to deploy Workbrew to your devices, or enable Self-Service to allow users to install at their leisure. In brief, you will perform these steps to ready Workbrew for deployment:

- Create a Jamf Pro API Role and Client
- Complete the Workbrew Console connection wizard, adding the API Client credentials in the process
- Add the Workbrew Package and setup script to Jamf Pro
- Create a Policy for Workbrew to run the setup script and install the Workbrew package
- Optionally, make the Policy available for self-service.

1. Creating an API Role and Client in Jamf Pro

To populate your Workbrew Console with information about your devices and users, Workbrew requires Read-Only API access to your Jamf Pro instance. In this section, you will create an **API Role and Client** with sufficient permissions and retain the credentials for input into Workbrew.

To complete this step, follow the instructions in the Jamf Pro documentation to creating an API Role, an API Client, and a Client Secret, until you reach the following numbered steps:

Creating an API Role

5. Enter “Workbrew Console API Role” as the role’s display name.

6. Add “Read Computers”, Read Static Computer Groups", "Read Smart Computer Groups" and “Read Accounts” Privileges to a new API role in Settings > API roles and clients.

If you don’t see this option in the Jamf Pro console, make sure you’re running version 10.49.0 or later.

Creating an API Client

5. Enter “Workbrew Console API Client” as the role’s display name.

6. In the **API Roles** field, assign “Workbrew Console API Role” to the client.

7. You can leave **Access token lifetime** at its default value.

Make sure you **Enable API client.**

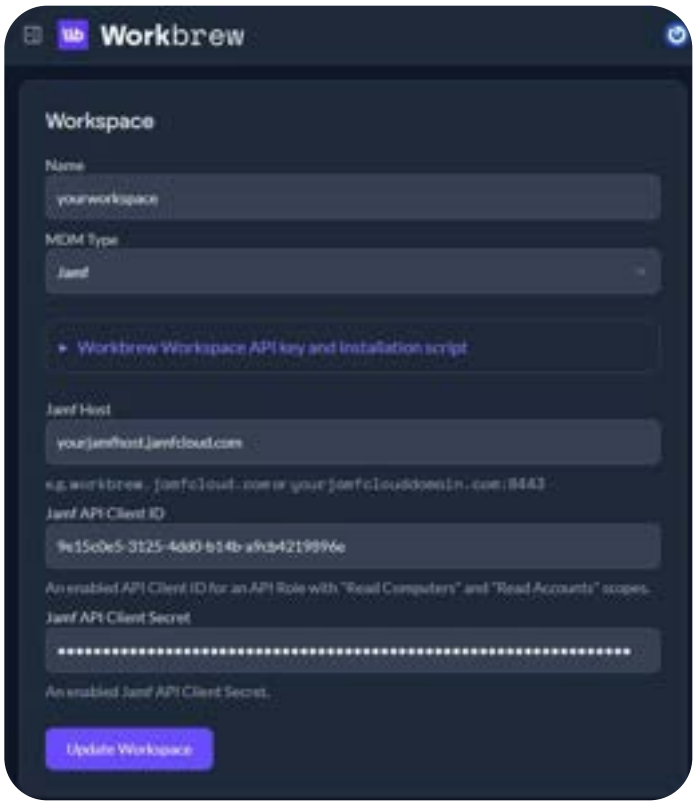
Generating a Client Secret

3. Save the Client ID and Secret securely (for example in a password manager). You will enter these into Workbrew to connect it to Jamf Pro.

You can stop following the Jamf Pro document after saving the secret.

2. Add Jamf Pro to your Workbrew Workspace

The Client ID and Secret created in the previous step will allow Workbrew to read from your Jamf Pro instance using the API. In this section, you will register Jamf as your MDM of choice within Workbrew.



From the Workbrew Console, select **Settings.** Ensure you are in the **Workspace** tab.

Under **MDM Type,** select "Jamf".

Under **Jamf Host,** enter the URL and port number (if applicable) for your Jamf Pro instance.

In the Jamf API Client ID and Jamf API Client Secret fields, enter the Client ID and Secret created in the previous section.

Click Update Workspace.

Open Workbrew Workspace API key and installation script, copy the script, and store it for later. This script will run as the first step in the installation policy.

1. Add the Installation Script

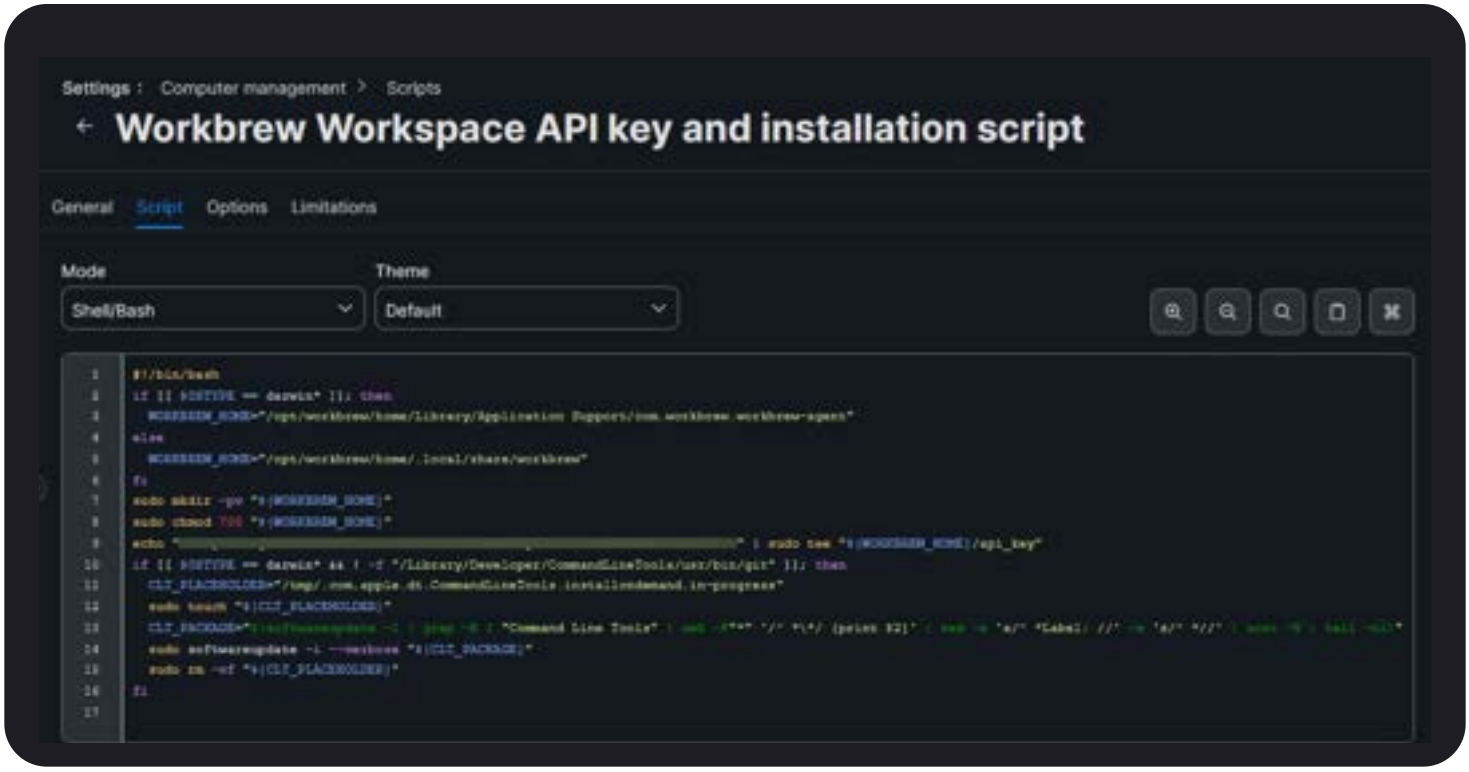
The Workbrew Workspace API key and installation script saved in the previous step prepares the device for a Workbrew installation, setting environment variables for workspace directories and the Workbrew Workspace API key. It also installs a Homebrew dependency, Command Line Tools for Xcode, using MacOS's `softwareupdate` utility. In this section, you will add the script to Jamf Pro so that it can be run as part of the Workbrew installation Policy.

Follow the steps under Adding a Script to Jamf Pro until you reach the following numbered steps:

4. In the **General** pane, enter "Workbrew Workspace API key and installation script" as the script's display name.

5. In the **Script** pane, set the **Mode** to "Shell/Bash". Paste the Workbrew Workspace API key and installation script into the code box.

6. In the **Options** pane, set the **Priority** to "before", to ensure the script runs before the package during Policy execution.



2. Add the package

The Workbrew .pkg installs Workbrew, including the agent, CLI, and Homebrew. In this section, you will add the package to Jamf Pro so that it can be distributed as part of the Workbrew installation policy. Download the package, and then follow the steps under Uploading a package to Jamf Pro until you reach the following numbered steps:

4. In the **General** pane, enter “Workbrew-{VERSION}.pkg” as the script’s display name, replacing {VERSION} with the version being used.

5. Select **Choose File** and choose the Workbrew .pkg.

Secure the login item

Workbrew's installation package adds a login item so that Workbrew runs in the background. By default, this background process (a `launchd` job) can be disabled by an admin user in System Settings. To prevent users from tampering with the login item, use a Managed Login Item in Jamf to keep it running.

Follow the instructions from Computer Configuration Profiles[5] until you reach the following numbered steps:

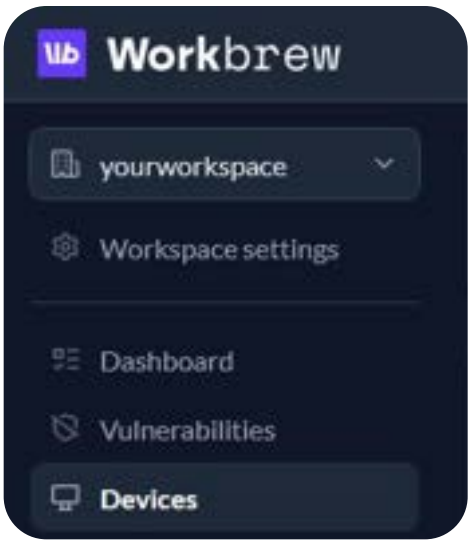
- 4. Use the General payload to configure basic settings. Ensure you create a computer-level configuration profile.
- 5. Add a Managed Login Item payload.
  - In the Managed Login Item payload configuration, set Rule Type to "Team Identifier".
  - In the Rule value field, enter 676JW3JDLF
  - In the Rule comment field, enter "Workbrew Developer Team Identifier"

DEPLOYMENT

The script and package will be deployed through a Jamf Policy. In this step, you will create a policy and choose to either deploy it immediately through the Policy scope, or enable self-service. Follow the instructions from Creating a Policy until you reach the following numbered steps:

4. In the **General** pane, enter “Deploy & Connect Workbrew Agent” as the policy’s display name. Select the desired triggers for deployment.

5. Add the script and package:
   - In the **Scripts** pane, click **Configure** and then **Add** the Workspace API key and installation script. Ensure that the **Priority** is set to “before”.
   - In the **Packages** pane, click **Configure** and then **Add** the Workbrew .pkg.



Once you have created the policy, you may want to deploy to one or more devices to test the deployment and ensure devices connect to Workbrew and are visible in the console. Workbrew devices check-in on a periodic basis, so it may take a little while for a new device to appear in your console.

SUPPORT

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workbrew.com