

Troubleshooting dead MDM Client on macOS using launchctl kickstart Command

As a warning the workaround listed in this article has been identified as not being recommended by Apple. There are multiple Internet discussions on various MDM forums saying this worked for them so we wanted to publish this to offer an option, but please do contact Apple to become aware of an official solution.

What

MDM (Mobile Device Management) is an essential tool for managing devices in an organization, and sometimes MDM client on macOS systems can stop processing commands. If you're experiencing this issue, let us know through support, but as a workaround, you can use the following to get things flowing again. Because FileWave uses a hybrid approach, we can do this workaround even when the OS built-in MDM client has become stuck.

```
sudo /bin/launchctl kickstart -k system/com.apple.softwareupdated
```

In this article, we'll walk you through what this command does, when and why you should use it, how to use it, and provide related links. We've also included a Fileset that uses this command in a Verification Script so that it will run once per day. You should only use this workaround until a future OS update addresses this issue. At that time, you can remove the Association to the Fileset since the workaround won't be needed anymore.

The launchctl kickstart command is used to start system services on macOS. The kickstart subcommand is used to start a system service, and the -k option tells kickstart to send a stop signal to the specified service before starting it.

When/Why

If the MDM client on your macOS system is not processing commands, you can use the described command to restart the softwareupdated system service. This service is responsible for checking for and downloading updates for macOS and other Apple software. This command can be used as a workaround until the issue is addressed in a future OS update. In looking at this issue it is possible that an OS update is contributing to the issue so you may want to clear out OS updates from FileWave and have the most recent ones enabled. Smaller updates like Safari may be more problematic. We're working on what we can do to make this not an issue.

How

To use the `launchctl kickstart` command, open the Terminal application and type the following command:

```
sudo /bin/launchctl kickstart -k system/com.apple.softwareupdated
```

This will restart the softwareupdated system service, which is responsible for checking for and downloading updates for macOS and other Apple software. You will need to enter your admin password to run this command as sudo.

Using Fileset for launchctl kickstart command:



We have created a Fileset that includes a Verification Script which uses the launchctl kickstart command to restart the softwareupdated system service once per day. This Fileset can be used as a workaround until Apple addresses the MDM client issue. You can download the Fileset from our website and then associate it with the macOS devices that are experiencing the MDM client issue.

Digging Deeper

If you want to learn more about how the `launchctl kickstart` command works, you can refer to the `launchctl` manual page by typing the following command in Terminal:

```
man launchctl
```

This will provide you with detailed technical information on `launchctl` and its subcommands, including `kickstart`. You can also refer to the Apple Developer website for more information on the macOS system services and how they work.