Surface Dock 1 Firmware Update

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This article explains how to use Microsoft Surface Dock 1 Firmware Update to install and manage firmware on the original Surface Dock 1. When installed on your Surface device, it will update Surface Dock 1 devices attached to your Surface device.

① Note

This article does not apply to **Surface Dock 2**, which receives updates automatically via Windows Update or by using Microsoft Endpoint Configuration Manager or other MSI deployment tools.

This tool supersedes the earlier Microsoft Surface Dock Updater tool, previously available for download as part of Surface Tools for IT. The earlier tool was named Surface_Dock_Updater_vx.xx.xxx.x.msi (where x indicates the version number) and is no longer available for download and should not be used.

(i) Important

This article contains technical instructions for IT administrators. If you are a home user, please see **How to update your Surface Dock Firmware** on the Microsoft Support site. The instructions at the support site are the same as the general installation steps below, but this article has additional information for monitoring, verifying, and deploying the update to multiple devices on a network.

Supported devices

Surface Dock 1 Firmware Update is supported on the following devices:

- Surface Pro 3 and later
- Surface Pro X (all generations)
- Surface 3
- Surface Book (all generations)
- Surface Laptop Studio
- Surface Studio (all generations)

- Surface Laptop (all generations)
- Surface Laptop Go (all generations)
- Surface Go (all generations)

Minimum OS requirement

Windows 10, version 1803 or later

Install Surface Dock 1 Firmware Update

This section describes how to manually install the firmware update on Surface Dock 1.

∏ Tip

Microsoft periodically releases new versions of Surface Dock 1 Firmware Update. The MSI file is not self-updating. If you have deployed the MSI to Surface devices and a new version of the firmware is released, you will need to deploy the new version.

- Go to Surface Tools for IT and download and install the .msi file named
 Surface_Dock_FwUpdate.., followed by the appropriate version. If you're running
 Surface Pro X, download the .arm64 build. For all other devices, use the .amd64 build.
 - The update requires a Surface device running Windows 10, version 1803 or later.
 - Installing the MSI file might prompt you to restart Surface. However, restarting is not required to perform the update.

① Note

All current software, firmware, and drivers for the Surface Dock 2 can be found here

2. Disconnect your Surface device from the Surface Dock, wait ~5 seconds, and then reconnect. The Surface Dock 1 Firmware Update will update the dock silently in background. The process can take a few minutes to complete and will continue even if interrupted.

Monitor the Surface Dock 1 Firmware Update

This section is optional and provides an overview of how to monitor installation of the firmware update.

To monitor the update:

- Open Event Viewer, browse to Windows Logs > Application, and then under Actions
 in the right-hand pane click Filter Current Log, enter SurfaceDockFwUpdate next to
 Event sources, and then click OK.
- 2. Type the following command at an elevated command prompt:

Console

Reg query "HKLM\SOFTWARE\Microsoft\Windows
NT\CurrentVersion\WUDF\Services\SurfaceDockFwUpdate\Parameters"

- 3. Install the update as described in the next section of this article.
- 4. Event 2007 with the following text indicates a successful update: Firmware update finished. hr=0 DriverTelementry EventCode = 2007.

If the update is not successful, then event ID 2007 will be displayed as an **Error** event rather than **Information**. Additionally, the version reported in the Windows Registry will not be current.

- 5. When the update is complete, updated DWORD values will be displayed in the Windows Registry, corresponding to the current version of the tool. See the Versions reference section in this article for details. For example:
 - Component10CurrentFwVersion 0x04ac3970 (78395760)
 - Component20CurrentFwVersion 0x04915a70 (76634736)

∏ Tip

If you see "The description for Event ID xxxx from source SurfaceDockFwUpdate cannot be found" in event text, this is expected and can be ignored.

Also see the following sections in this article:

- How to verify completion of firmware update
 - Event logging

- Troubleshooting tips
- Versions reference

Network deployment

You can use Windows Installer commands (Msiexec.exe) to deploy Surface Dock 1 Firmware Update to multiple devices across your network. When using Microsoft Endpoint Configuration Manager or other deployment tool, enter the following syntax to ensure the installation is silent:

• Msiexec.exe /i <path to msi file> /quiet /norestart

For example:

Console

msiexec /i
"\\share\folder\Surface_Dock_FwUpdate_1.42.139_Win10_17134_19.084.31680_0.msi"
/quiet /norestart

① Note

A log file is not created by default. In order to create a log file, you will need to append "/lv [path]". For example: Msiexec.exe /i <path to msi file> /lv %windir%\logs\ SurfaceDockFWI.log"

For more information, refer to Command line options documentation.

(i) Important

If you want to keep your Surface Dock updated using any other method, refer to **Update your Surface Dock** for details.

Intune deployment

You can use Intune to distribute Surface Dock 1 Firmware Update to your devices. First you will need to convert the MSI file to the .intunewin format, as described in the following documentation: Intune Standalone - Win32 app management.

Use the following command:

msiexec /i <path to msi file> /quiet /q

How to verify completion of the firmware update

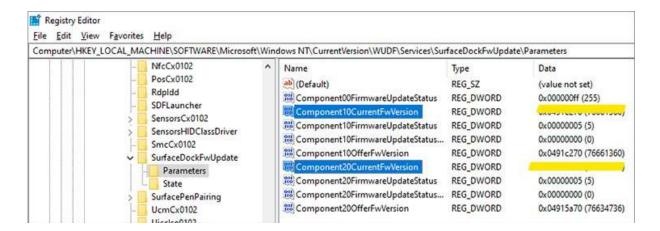
Surface dock firmware consists of two components:

- Component10: Micro controller unit (MCU) firmware
- Component20: Display port (DP) firmware.

Successful completion of Surface Dock 1 Firmware Update results in new registry key values for these firmware components.

To verify updates

- 1. Open Regedit and navigate to the following registry path:
 - HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows
 NT\CurrentVersion\WUDF\Services\SurfaceDockFwUpdate\Parameters
- 2. Look for the registry keys: **Component10CurrentFwVersion and Component20CurrentFwVersion**, which refer to the firmware that is currently on the device.



3. Verify the new registry key values match the updated registry key values listed in the Versions reference at the end of this document. If the values match, the firmware was updated successfully.

4. If unable to verify, review Event logging and Troubleshooting tips in the next section.

Event logging

Table 1. Log files for Surface Dock 1 Firmware Update

Log	Location	Notes
Surface Dock 1 Firmware Update log	Path needs to be specified (see note)	Earlier versions of this tool wrote events to Applications and Services Logs\Microsoft Surface Dock Updater.
Windows Device Install log	%windir%\inf\setupapi.dev.log	For more information about using Device Install Log, refer to SetupAPI Logging documentation.

Table 2. Event log IDs for Surface Dock 1 Firmware Update

Events are logged in the Application Event Log. Note: Earlier versions of this tool wrote events to Applications and Services Logs\Microsoft Surface Dock Updater.

Event ID	Event type
2001	Dock firmware update has started.
2002	Dock firmware update skipped because dock is known to be up to date.
2003	Dock firmware update failed to get firmware version.
2004	Querying the firmware version.
2005	Dock firmware failed to start update.
2006	Failed to send offer/payload pairs.
2007	Firmware update finished.
2008	BEGIN dock telemetry.
2011	END dock telemetry.

Troubleshooting tips

- Completely disconnect power for Surface dock from the AC power to reset the Surface Dock.
- Disconnect all peripherals except for the Surface Dock.
- Uninstall any current Surface Dock 1 Firmware Update and then install the latest version.
- Ensure that the Surface Dock is disconnected, and then allow enough time for the update to complete as monitored via an LED in the Ethernet port of the dock. Wait until the LED stops blinking before you unplug Surface Dock from power.
- Connect the Surface Dock to a different device to see if it is able to update the dock.

Versions reference

① Note

Version 1.53.139.0

Release Date: August 4, 2020

This version of Surface Dock 1 Firmware Update includes bug fixes and support for:

• Updating Surface Dock 1 using Surface Pro X.

Registry key values

The registry values that indicate the status of firmware updates are unchanged from the previous version of this tool:

- Component10CurrentFwVersion updated to 4ac3970.
- Component20CurrentFwVersion updated to 4a1d570.

Version 1.42.139

Release Date: September 18 2019

This version, contained in Surface_Dock_FwUpdate_1.42.139_Win10_17134_19.084.31680_0.MSI, updates firmware in the background.

Updated registry key values

- Component10CurrentFwVersion updated to 4ac3970.
- Component20CurrentFwVersion updated to **4a1d570**.

It adds support for Surface Pro 7 and Surface Laptop 3.

Legacy versions

Version 2.23.139.0

Release Date: 10 October 2018

This version of Surface Dock Updater adds support for the following:

- Add support for Surface Pro 6
- Add support for Surface Laptop 2

Version 2.22.139.0

Release Date: 26 July 2018

This version of Surface Dock Updater adds support for the following:

- Increase update reliability
- Add support for Surface Go

Version 2.12.136.0

Release Date: 29 January 2018

This version of Surface Dock Updater adds support for the following:

- Update for Surface Dock Main Chipset Firmware
- Update for Surface Dock DisplayPort Firmware
- Improved display stability for external displays when used with Surface Book or Surface Book 2

Additionally, installation of this version of Surface Dock Updater on Surface Book devices includes the following:

- Update for Surface Book Base Firmware
- Added support for Surface Dock firmware updates with improvements targeted to Surface Book devices

Version 2.9.136.0

Release date: November 3, 2017

This version of Surface Dock Updater adds support for the following:

- Update for Surface Dock DisplayPort Firmware
- Resolves an issue with audio over passive display port adapters

Version 2.1.15.0

Release date: June 19, 2017

This version of Surface Dock Updater adds support for the following:

- Surface Laptop
- Surface Pro

Version 2.1.6.0

Release date: April 7, 2017

This version of Surface Dock Updater adds support for the following:

- Update for Surface Dock DisplayPort firmware
- Requires Windows 10

Version 2.0.22.0

Release date: October 21, 2016

This version of Surface Dock Updater adds support for the following:

- Update for Surface Dock USB firmware
- Improved reliability of Ethernet, audio, and USB ports

Version 1.0.8.0

Release date: April 26, 2016

This version of Surface Dock Updater adds support for the following:

- Update for Surface Dock Main Chipset firmware
- Update for Surface Dock DisplayPort firmware