

# Dell Docking Station WD19

## User Guide



## Notes, cautions, and warnings

 **NOTE:** A NOTE indicates important information that helps you make better use of your product.

 **CAUTION:** A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

 **WARNING:** A WARNING indicates a potential for property damage, personal injury, or death.

|                                                                       |           |
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# Introduction

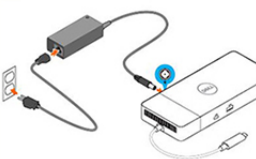
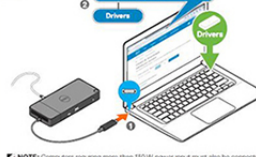
The Dell Docking Station WD19 is a device that links all your electronic devices to your computer using a USB Type-C cable interface. Connecting the computer to the docking station allows you to access all peripherals (mouse, keyboard, stereo speakers, external hard drive, and large-screen displays) without having to plug each one into the computer.

 **CAUTION:** Update your computer's BIOS, graphic drivers and the Dell Docking Station WD19 drivers to the latest versions available at [www.dell.com/support](http://www.dell.com/support) BEFORE using the docking station. Older BIOS versions and drivers could result your computer not recognizing the docking station or not functioning optimally. Always check if any recommended firmware is available for your docking station at [www.dell.com/support](http://www.dell.com/support).

## Package contents

Your docking station ships with the components shown below. Ensure that you have received all the components and contact Dell (see your invoice for contact information) if something is missing.

**Table 1. Package contents**

| Contents                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Specifications                                                                                                                              |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
|  <p>1</p> <p>2</p> <p>3</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <ol style="list-style-type: none"> <li>1. Docking station with USB Type-C cable</li> <li>2. Power adapter</li> <li>3. Power cord</li> </ol> |
| <div data-bbox="132 1095 245 1126">Dell Dock</div> <div data-bbox="132 1133 169 1149">WD19</div> <div data-bbox="132 1191 303 1218">Quick Start Guide</div> <div data-bbox="132 1276 205 1296">Important</div> <div data-bbox="132 1301 360 1397"> <p>You must update your computer's BIOS and the Dell Dock WD19 drivers to the latest versions available at <a href="http://www.dell.com/support">www.dell.com/support</a> before using the Dock. Older BIOS versions and drivers could result in the Dell Dock WD19 not being recognized by your computer or not functioning optimally. For more information, please refer to the User's Guide.</p> </div> <div data-bbox="391 1464 434 1505">  </div> <div data-bbox="494 1066 782 1267"> <p>1</p> <p><a href="http://www.dell.com/drivers">http://www.dell.com/drivers</a></p> <p>BIOS</p>  </div> <div data-bbox="494 1294 782 1496"> <p>2</p> <p><a href="http://www.dell.com/drivers">http://www.dell.com/drivers</a></p> <p>Drivers</p>  </div> <div data-bbox="845 1066 1133 1267"> <p>3</p>  </div> <div data-bbox="845 1294 1133 1496"> <p>4</p> <p><a href="http://www.dell.com/drivers">http://www.dell.com/drivers</a></p> <p>Drivers</p>  <p><b>NOTE:</b> Computers requiring more than 150 W power input must also be connected to their own power adapter for charging and operating at full performance.</p> </div> | <p>Quick Setup Guide (QSG)</p>                                                                                                              |

### Table 1. Package contents (continued)

[illegible]

## Hardware requirements

Before using the docking station, ensure that your system has a DisplayPort over USB Type-C designed to support the docking station.

 **NOTE:** Dell Docking stations are supported with select Dell systems. See the [Dell Commercial Docking Compatibility Guide](#) for the list of supported systems and recommended docking.

## Identifying Parts and Features



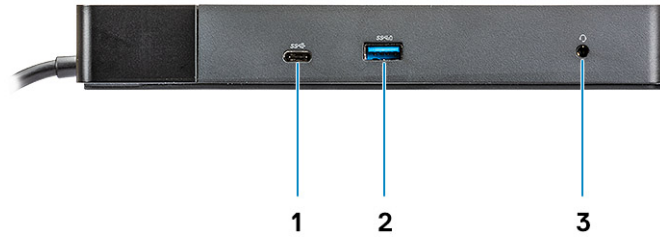
Figure 1. Top view



1. Sleep/Wake up/Power button

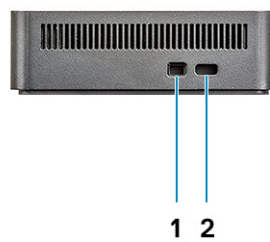
**NOTE:** The dock button is designed to replicate your system's power button. If you connect the Dell Docking Station WD19 to supported Dell computers, the dock button works like your computer's power button and you can use it to power on/sleep/force shutdown the computer.

**NOTE:** The dock button is not functional when connected to unsupported Dell computers or non-Dell computers.



**Figure 2. Front view**

1.  USB 3.1 Gen1/Gen2 Type-C port
2.  USB 3.1 Gen1 port with PowerShare
3.  Audio headset port



**Figure 3. Left view**

1.  Wedge-shaped lock slot



2. Kensington lock slot

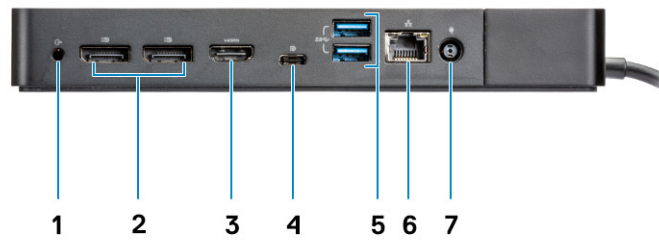


Figure 4. Back view



1. Line-out port



2. DisplayPort 1.4 (2)



3. HDMI2.0 port



4. USB 3.1 Gen1/Gen2 Type-C port with DisplayPort 1.4



5. USB 3.1 Gen1 port (2)



6. Network connector (RJ-45)



7. Power connector



**Figure 5. Bottom view**

1. Service tag label

## Important Information

Dell Docking Station drivers (Realtek USB GBE Ethernet Controller Driver and Realtek USB Audio Driver) are required to be installed before using the docking station for full functionality. Dell recommends updating the computer BIOS and graphics driver, computer BIOS, graphics driver, Thunderbolt driver, and Thunderbolt firmware to the latest version before using the docking station. Older BIOS versions and drivers could result in the docking station not being recognized by your computer or not functioning optimally.

Dell highly recommends the following applications to automate the installation of BIOS, firmware, driver, and critical updates specific to your system and docking station:

- Dell | Update - for Dell XPS, Inspiron or Vostro systems only.
- Dell Command | Update - for Dell Latitude, Dell Precision, or XPS systems.

These applications are available for download on the Drivers & Downloads page for your product at [www.dell.com/support](http://www.dell.com/support)

## Updating the Dell Docking Station WD19 driver set

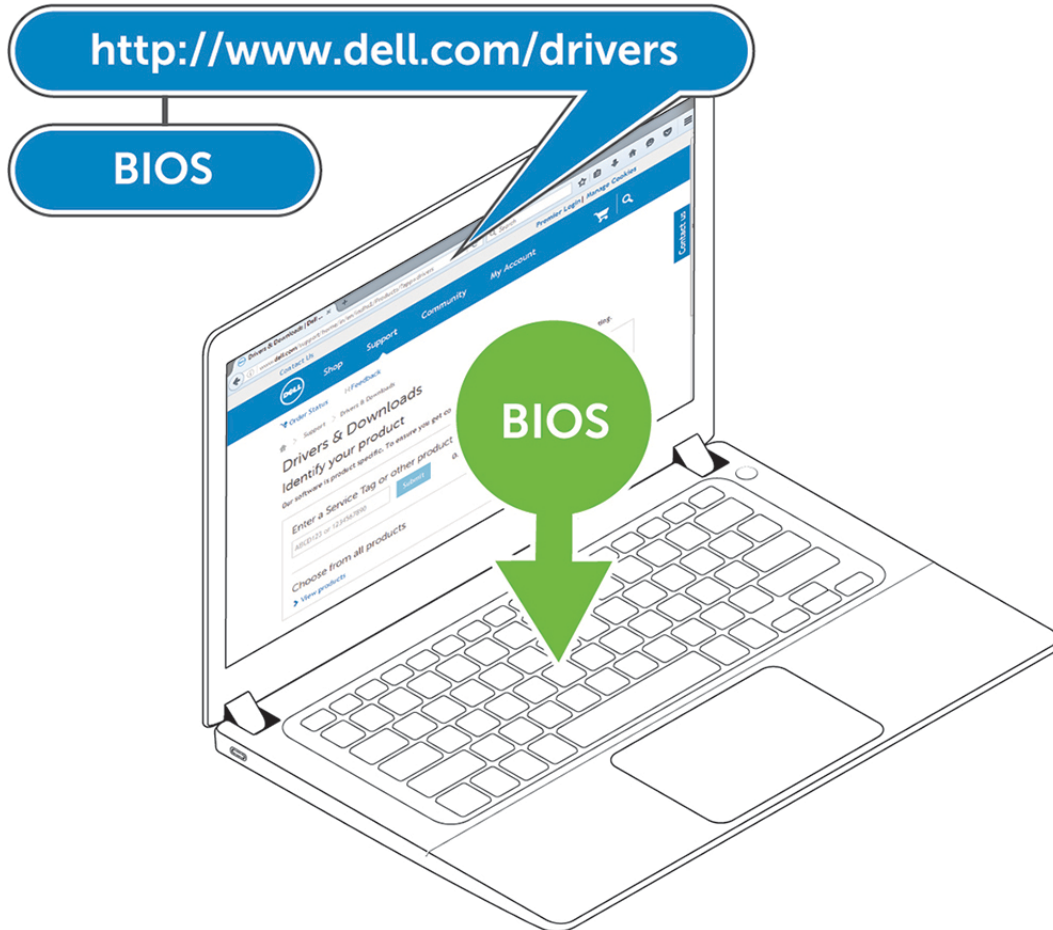
To fully support the new generation Dell Docking Station WD19, it is highly recommended to install the following BIOS/Drivers on a 64-bit Windows operating system:

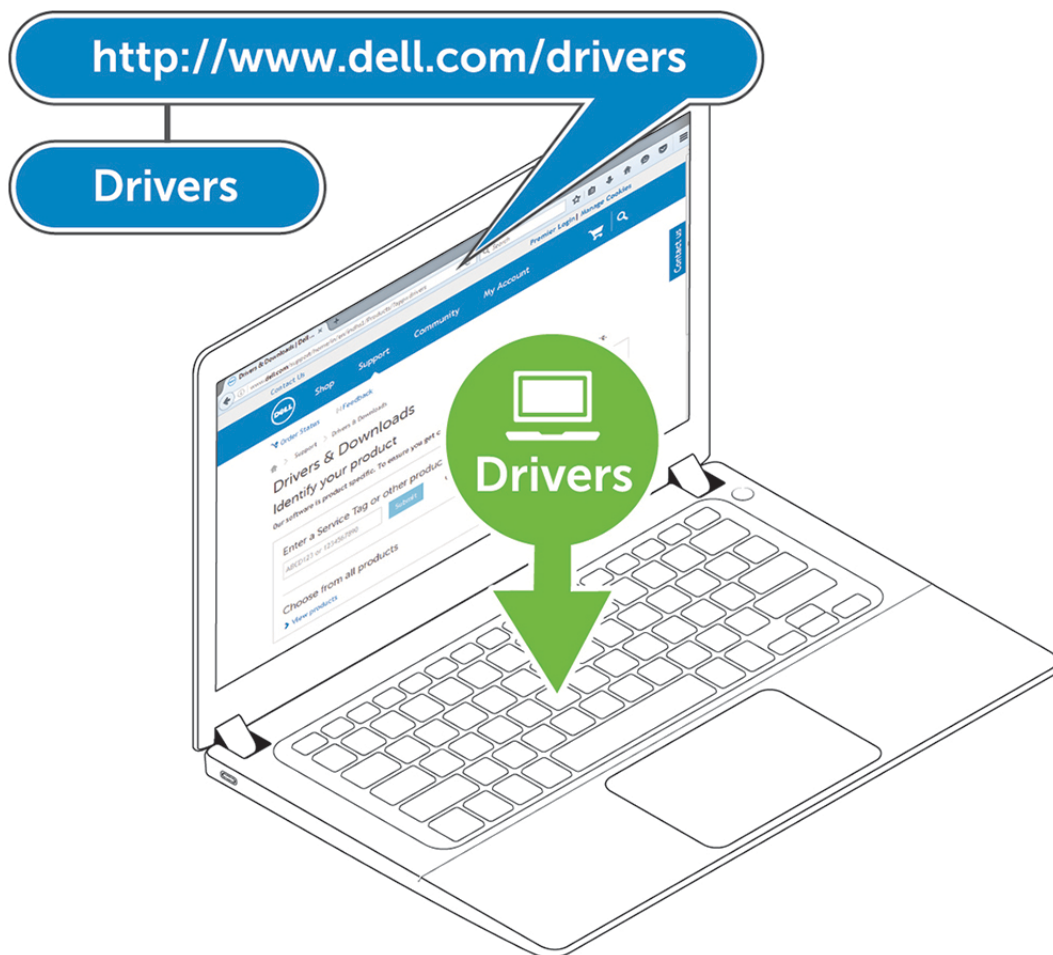
1. Go to [www.dell.com/support](http://www.dell.com/support) and click **Detect Product** to Autodefect your product, or enter your computer's Service Tag in the **Enter a Service Tag or Express Service Code** field, or click **View Products** to browse to your computer model.
2. Flash the latest BIOS available for the system. This is available for download at [dell.com/support](http://dell.com/support) under the "**BIOS**" section. Restart the computer before the next step.
3. Install the latest Intel HD/nVIDIA/AMD Graphics drivers available for the system. This is available for download at [www.dell.com/support/drivers](http://www.dell.com/support/drivers). Restart the computer before the next step.
4. Install the **Realtek USB GBE Ethernet Controller Driver for Dell Dock WD19** available for your system. This is available for download at [dell.com/support](http://dell.com/support) under the "**Docks/Stand**" section.
5. Install the **Realtek USB Audio Driver for Dell Dock WD19** available for your computer. This is available for download at [dell.com/support](http://dell.com/support) under the "**Docks/Stand**s" section.

## Quick Setup of Hardware

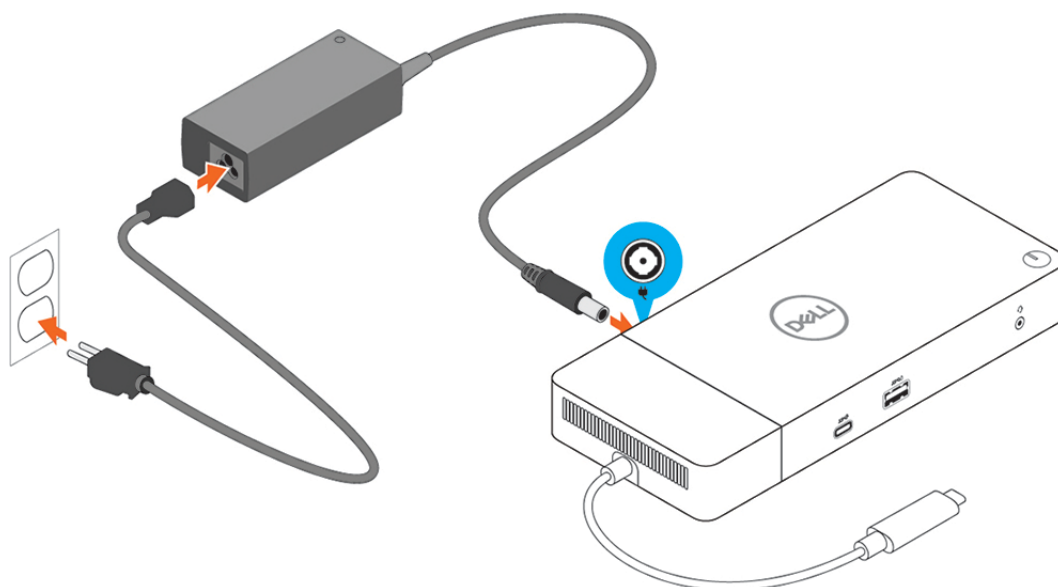
### Steps

1. Update your system's BIOS, graphics and drivers from [www.dell.com/support/drivers](http://www.dell.com/support/drivers).



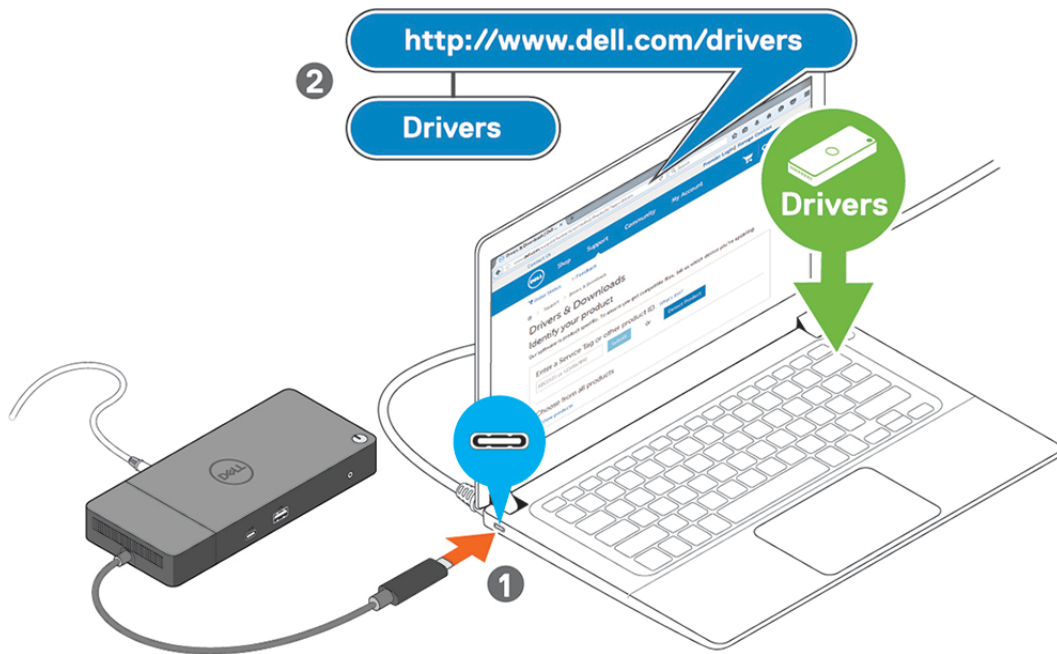


2. Connect the AC adapter to a power outlet. Then, connect the AC adapter to the 7.4 mm DC-in power input on the Dell Docking Station WD19.



**Figure 6. Connecting the AC Adapter**

3. Connect the USB Type-C connector to the computer.  
Update the Dell Docking Station WD19 firmware from [www.dell.com/support/drivers](http://www.dell.com/support/drivers).



**Figure 7. Connecting the USB Type-C connector**

4. Connect multiple displays to the docking station, as needed.



**Figure 8. Connecting the multiple displays**

# Setup of External Monitors

## Topics:

- [Updating the graphics drivers for your computer](#)
- [Configuring your Monitors](#)
- [Display bandwidth](#)
- [Display Resolution Table](#)

## Updating the graphics drivers for your computer

The Microsoft Windows operating systems include the VGA graphics drivers only. Therefore, for optimum graphics performance, it is recommended that Dell graphics drivers applicable for your computer be installed from [dell.com/support](http://dell.com/support) under the “**Video**” section

### NOTE:

1. **For nVidia Discrete Graphics solutions on the supported Dell systems:**
  - a. **First, install the Intel Media Adapter Graphics Driver applicable to your computer.**
  - b. **Second, install the nVidia Discrete Graphics Driver applicable to your computer.**
2. **For AMD Discrete Graphics solutions on the supported Dell systems:**
  - a. **First, install the Intel Media Adapter Graphics driver applicable to your computer.**
  - b. **Second, install the AMD Discrete Graphics driver applicable to your computer.**

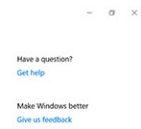
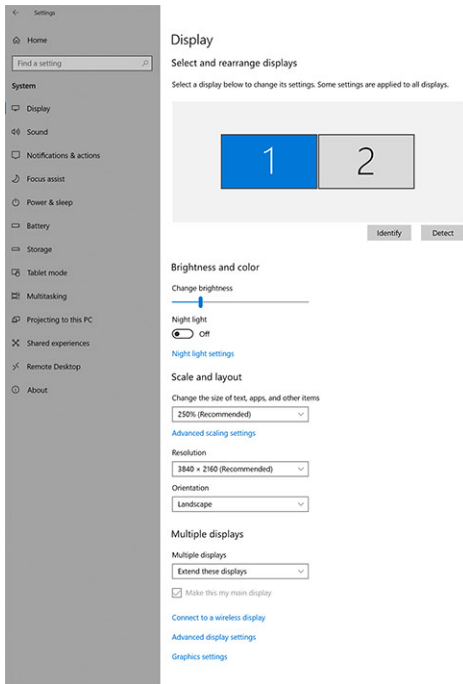
## Configuring your Monitors

If connecting two displays, follow these steps:

### Steps

1. Click the **Start** button, and then select **Settings**.
2. Click **System** and select **Display**.

3. Under the **Multiplying displays** section, select **Extend these displays**.



## Display bandwidth

External monitors require a certain amount of bandwidth to work properly. Monitors with higher resolution require more bandwidth.

- DisplayPort High Bit Rate 2 (HBR2) is DP 1.2 (5.4 Gbps maximum link rate per lane). With DP overhead, the effective data rate is 4.3 Gbps per lane.
- DisplayPort High Bit Rate 3 (HBR3) is DP 1.4 (8.1 Gbps maximum link rate per lane). With DP overhead, the effective data rate is 6.5 Gbps per lane.

**Table 2. Display bandwidth**

| Resolution                           | Minimum bandwidth required |
|--------------------------------------|----------------------------|
| 1 x FHD (1920 x 1080) display @60 Hz | 3.2 Gbps                   |
| 1 x QHD (2560 x 1440) display @60 Hz | 5.6 Gbps                   |
| 1 x 4K (3840 x 2160) display @30 Hz  | 6.2 Gbps                   |
| 1 x 4K (3840 x 2160) display @60 Hz  | 12.5 Gbps                  |

## Display Resolution Table

**Table 3. WD19**

| Display Port Available Bandwidth | Single Display (maximum resolution)                | Dual Display (maximum resolution)                                                                                                                | Triple Display (maximum resolution)                                                                                                                                                                  |
|----------------------------------|----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| HBR2 (HBR2 x2 lanes - 8.6 Gbps)  | DP1.4/HDMI2.0/MFDP Type-C: 4K (3840 x 2160) @30 Hz | <ul style="list-style-type: none"> <li>• DP1.4 + DP1.4: FHD (1920 x 1080) @60 Hz</li> <li>• DP1.4 + HDMI2.0: FHD (1920 x 1080) @60 Hz</li> </ul> | <ul style="list-style-type: none"> <li>• DP1.4 + DP1.4 + HDMI2.0: <ul style="list-style-type: none"> <li>○ 1 x FHD (1920 x 1080) @60 Hz</li> <li>○ 2 x HD (1280 x 720) @60 Hz</li> </ul> </li> </ul> |

**Table 3. WD19 (continued)**

| Display Port Available Bandwidth | Single Display (maximum resolution)                | Dual Display (maximum resolution)                                                                                                                                                                   | Triple Display (maximum resolution)                                                                                                                                                                |
|----------------------------------|----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                  |                                                    | <ul style="list-style-type: none"> <li>DP1.4 + MFDP Type-C: FHD (1920 x 1080) @60 Hz</li> </ul>                                                                                                     | <ul style="list-style-type: none"> <li>DP1.4 + DP1.4 + MFDP Type-C: <ul style="list-style-type: none"> <li>1 x FHD (1920 x 1080) @60 Hz</li> <li>2 x HD (1280 x 720) @60 Hz</li> </ul> </li> </ul> |
| HBR3 (HBR3 x2 lanes - 12.9 Gbps) | DP1.4/HDMI2.0/MFDP Type-C: 4K (3840 x 2160) @60 Hz | <ul style="list-style-type: none"> <li>DP1.4 + DP1.4: QHD (2560 x 1440) @60 Hz</li> <li>DP1.4 + HDMI2.0: QHD (2560 x 1440) @60 Hz</li> <li>DP1.4 + MFDP Type-C: QHD (2560 x 1440) @60 Hz</li> </ul> | <ul style="list-style-type: none"> <li>DP1.4 + DP1.4 + HDMI2.0: FHD (1920 x 1080) @60 Hz</li> <li>DP1.4 + DP1.4 + MFDP Type-C: FHD (1920 x 1080) @60 Hz</li> </ul>                                 |

**NOTE:** HDMI2.0 and MFDP (Multi-Function DisplayPort) Type-C ports on the back of all docks in the WD19 family are toggled. HDMI2.0 and MFDP Type-C cannot support dual monitors simultaneously. Only one of these ports can be used as a display device at a time.

**NOTE:** If higher resolution monitors are used, the Graphics driver makes a judgment based on monitor specifications and display configurations. Some resolutions may not be supported and so will be removed from the Windows Display Control Panel.

**NOTE:** Linux operating system is unable to physically turn-off built-in display, the external display numbers will be one less than the display numbers listed in above tables.

If the Display Port Data Rate is HBR2, then, the maximum resolution that Linux supports is 8192 x 8192 (counted with built-in display plus external display).

**NOTE:** Resolution support is also dependent on the monitor's Extended Display Identification Data (EDID) resolution.

## Removing the USB Type-C cable module

### Prerequisites

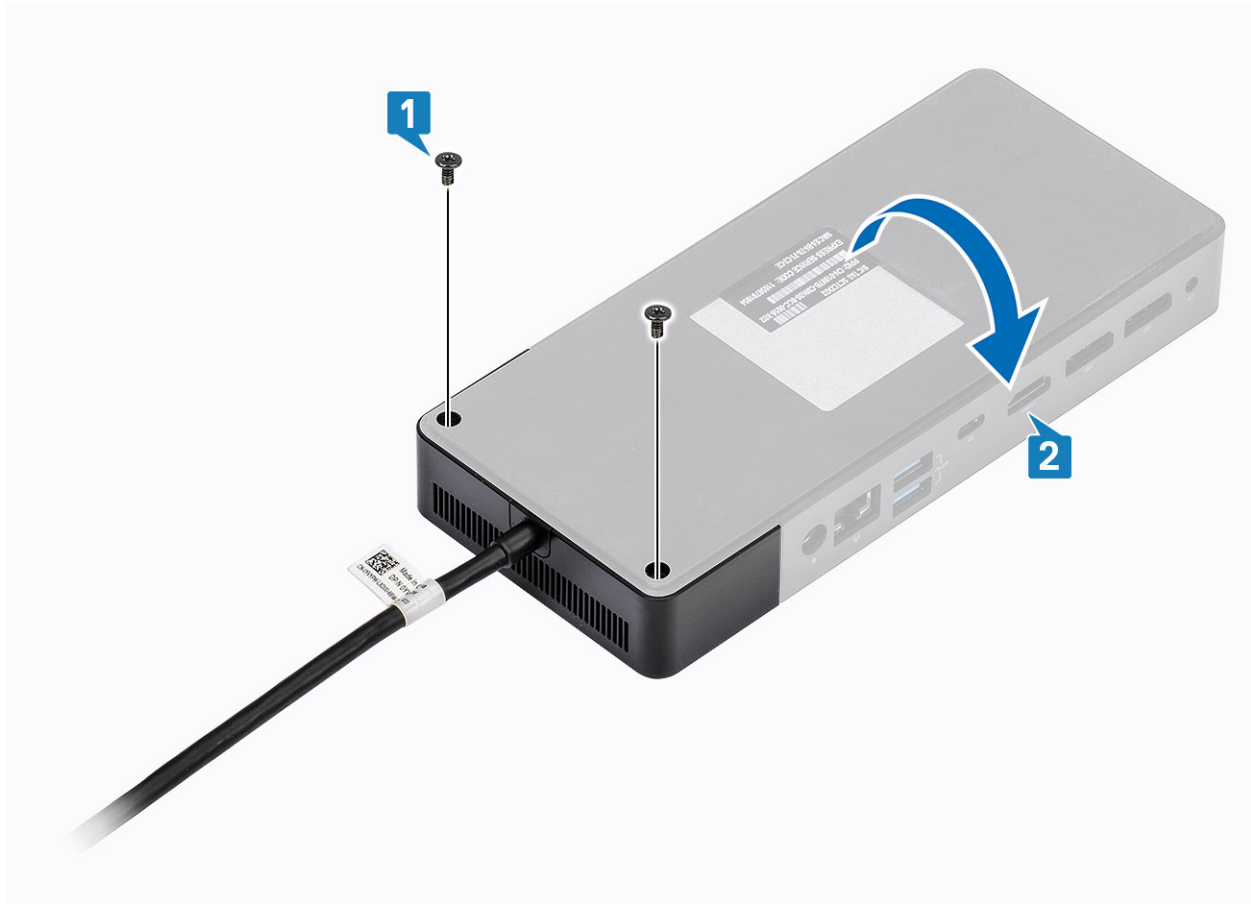
The Dell Docking Station WD19 is shipped with the USB Type-C cable attached. To remove/change the cable module, follow these steps:

### Steps

1. Turn over the docking station.



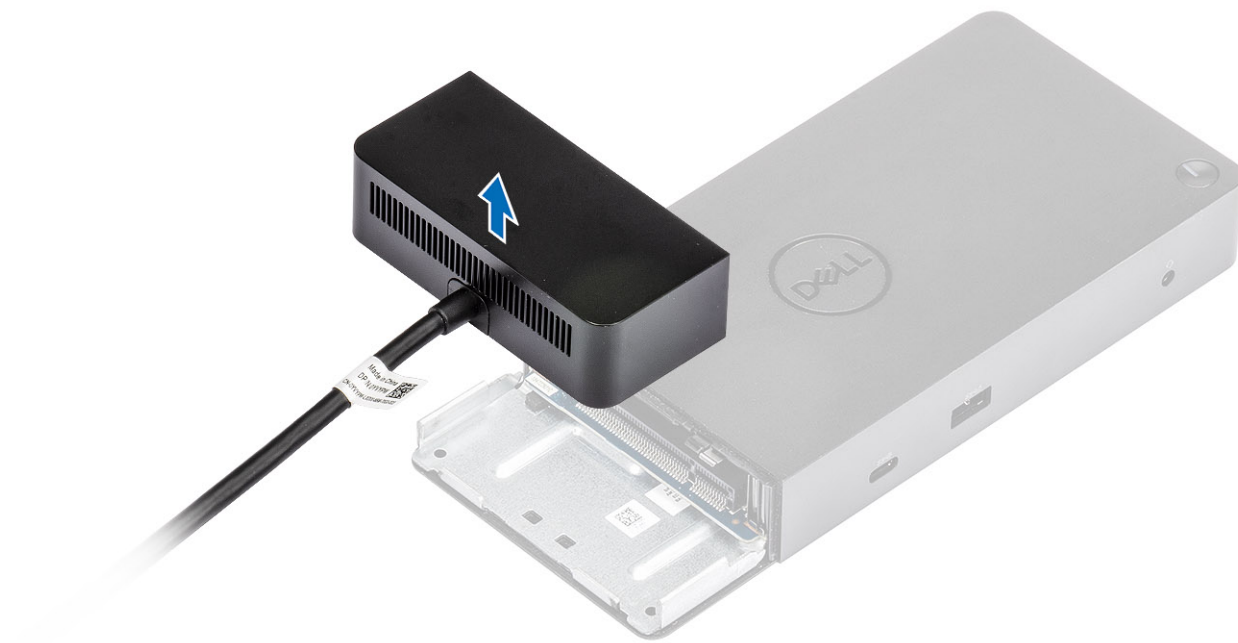
2. Remove the two M2.5 x 5 screws [1], and turn over the docking station [2].



3. Gently pull the cable module away from the docking station.



4. Lift and remove the USB Type-C cable module from its connector inside the docking station.



# Technical specifications

## Topics:

- LED Status Indicators
- Docking specifications
- Input/Output (I/O) Connectors
- Dell ExpressCharge and ExpressCharge boost overview

## LED Status Indicators

### Power Adapter LED

**Table 4. Power Adapter LED indicator**

| State                                     | LED Behavior |
|-------------------------------------------|--------------|
| Power Adapter is plugged into wall socket | Solid White  |

### Docking Status Indicator

**Table 5. Docking Station LED Indicators**

| State                                                 | LED Behavior      |
|-------------------------------------------------------|-------------------|
| Docking station is receiving power from power adapter | Flash three times |

**Table 6. Cable LED Indicators**

| State                                                 | LED Behavior              |
|-------------------------------------------------------|---------------------------|
| USB Type-C host supports video + data + power         | On                        |
| USB Type-C host does not support video + data + power | Off (will not illuminate) |

**Table 7. RJ-45 LED Indicators**

| Link Speed Indicators | Ethernet Activity Indicator |
|-----------------------|-----------------------------|
| 10 Mb = Green         | Amber Flashing              |
| 100 Mb = Amber        |                             |
| 1 Gb = Green + Orange |                             |

## Docking specifications

**Table 8. Docking Specifications**

| Features    | Specifications                                                                                                  |
|-------------|-----------------------------------------------------------------------------------------------------------------|
| Standard    | USB 3.1 Gen1/Gen2 Type-C                                                                                        |
| Video Ports | <ul style="list-style-type: none"> <li>• USB 3.1 Gen1/Gen2 Type-C with DisplayPort 1.4 or HDMI2.0 x1</li> </ul> |

**Table 8. Docking Specifications (continued)**

| Features                       | Specifications                                                                                                                                                                                                                                                                                                                    |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                | <ul style="list-style-type: none"> <li>DisplayPort++ 1.4 x2</li> </ul>                                                                                                                                                                                                                                                            |
| <b>Audio Ports</b>             | <ul style="list-style-type: none"> <li>Front Headset connector x1</li> <li>Rear Line out x1</li> </ul>                                                                                                                                                                                                                            |
| <b>Network Port</b>            | <ul style="list-style-type: none"> <li>Gigabit Ethernet (RJ-45) x1</li> <li>Support Wake On LAN from S3, S4, or S5 sleep state with select Dell systems. See platform setup guide for more details.</li> <li>Support MAC Address Pass-Through with select Dell systems. See platform setup guide for more details.</li> </ul>     |
| <b>USB Ports</b>               | <ul style="list-style-type: none"> <li>Front USB 3.1 Gen1 x1: Dell PowerShare BC1.2; 2 A @ 5 V (max 10 W)</li> <li>Front USB 3.1 Gen1/Gen2 Type-C: 1.5 A @ 5 V (max 7.5 W)</li> <li>Rear USB 3.1 Gen1 x2: 0.9 A @ 5 V (max 4.5 W)</li> <li>Rear USB 3.1 Gen1/Gen2 Type-C with DisplayPort 1.4 x1: 3 A @ 5 V (max 15 W)</li> </ul> |
| <b>DC-in Port</b>              | 7.4 mm DC-in port x1                                                                                                                                                                                                                                                                                                              |
| <b>USB Type-C cable length</b> | 1 m                                                                                                                                                                                                                                                                                                                               |
| <b>Power delivery</b>          | <p>Dell systems</p> <ul style="list-style-type: none"> <li>90 W power capability to Dell systems with 130 W AC-adaptor</li> <li>130 W power capability to Dell systems with 180 W AC-adaptor</li> </ul> <p>Non-Dell systems</p> <ul style="list-style-type: none"> <li>90 W support for USB Power Delivery 3.0.</li> </ul>        |
| <b>Button</b>                  | <ul style="list-style-type: none"> <li>Sleep/Wakeup/Power button</li> </ul>                                                                                                                                                                                                                                                       |

**Table 9. Environment specifications**

| Feature                      | Specifications                                                                                                                                                                                          |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Temperature range</b>     | <p>Operating: 0°C–35°C (32°F–95°F)</p> <p>Non-operating:</p> <ul style="list-style-type: none"> <li>Storage: -20°C to 60°C (-4°F to 140°F)</li> <li>Shipping: -20°C to 60°C (-4°F to 140°F)</li> </ul>  |
| <b>Relative humidity</b>     | <p>Operating: 10% to 80% (non-condensing)</p> <p>Non-operating:</p> <ul style="list-style-type: none"> <li>Storage: 5% to 90% (non-condensing)</li> <li>Shipping: 5% to 90% (non-condensing)</li> </ul> |
| <b>Dimension</b>             | 205 mm x 90 mm x 29 mm                                                                                                                                                                                  |
| <b>Weight</b>                | 450 g (0.99 lb)                                                                                                                                                                                         |
| <b>VESA Mounting options</b> | Yes—using Dell Docking station mounting kit                                                                                                                                                             |

## Input/Output (I/O) Connectors

The Dell Docking Station WD19 has the following I/O connectors:

**Table 10. I/O connectors**

| Ports                     | Connectors                                                                                                                                                                                                                                                                                  |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Video Ports</b>        | <ul style="list-style-type: none"> <li>• DisplayPort++ 1.4 x2</li> <li>• USB 3.1 Gen1/Gen2 with DisplayPort 1.4 or HDMI2.0 x1</li> </ul>                                                                                                                                                    |
| <b>Input/Output Ports</b> | <ul style="list-style-type: none"> <li>• USB 3.1 Gen1 x 2</li> <li>• USB 3.1 Gen1 with PowerShare x 1</li> <li>• USB 3.1 Gen1/Gen2 Type-C</li> <li>• 7.4 mm DC-in x 1</li> <li>• Gigabit Ethernet (RJ-45) x 1</li> <li>• Headset connector x 1</li> <li>• Line-out connector x 1</li> </ul> |

## Dell ExpressCharge and ExpressCharge boost overview

- Dell ExpressCharge enables an empty battery to charge to 80% in about one hour when the system is turned off and to 100% in approximately two hours.
- Dell ExpressCharge Boost enables an empty battery to charge to 35% in 15 minutes.
- Metrics are created for **system off** given charge time with the system on has varied results.
- Customers must enable ExpressCharge mode in the BIOS or through Dell Power Manager to take advantage of these features.
- Check your Dell Latitude or Dell Precision system for the battery size using the table to determine compatibility.

**Table 11. Dell ExpressCharge compatibility**

| Power Delivery to System | Max Battery Size for ExpressCharge | Max Battery Size for ExpressCharge Boost |
|--------------------------|------------------------------------|------------------------------------------|
| 90 W with 130 W adapter  | 92 Whr                             | 53 Whr                                   |
| 130 W with 180 W adapter | 100 Whr                            | 76 Whr                                   |

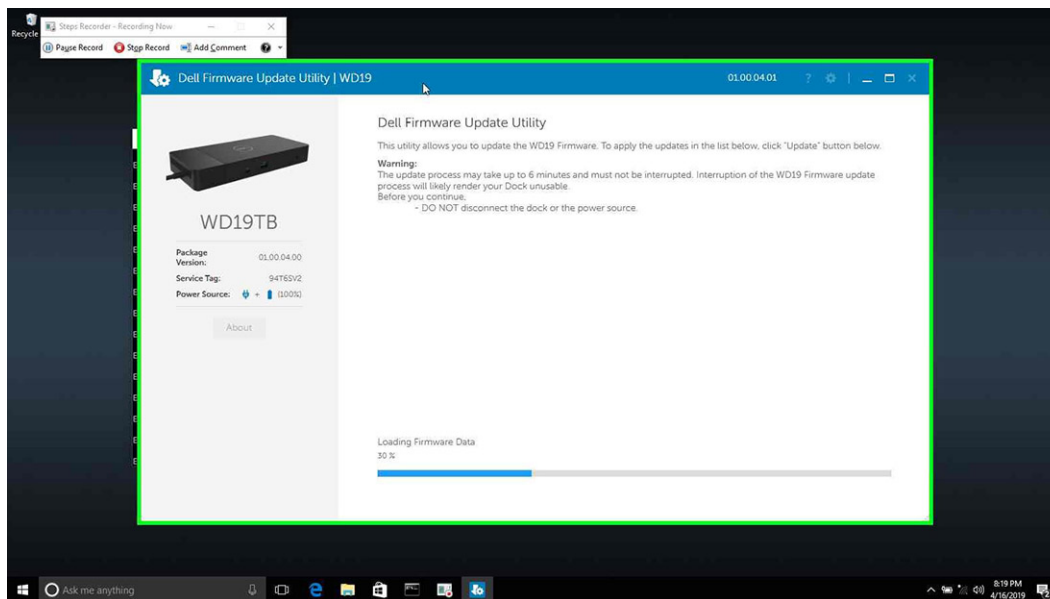
# Dell docking station firmware update

## Standalone Dock Firmware Update utility

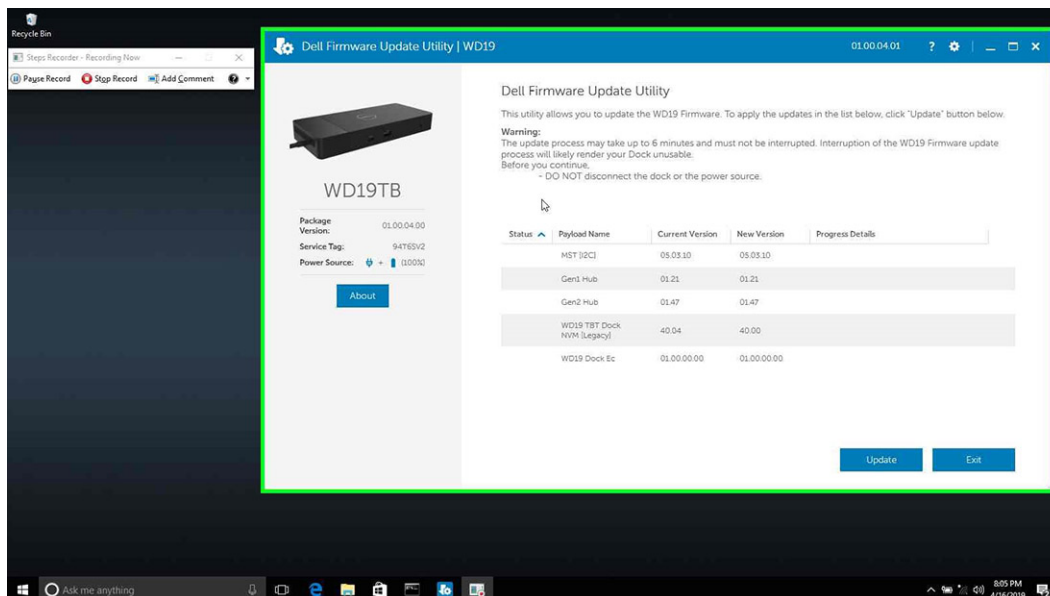
**NOTE:** Information that is provided is for Windows users running the executable tool. For other operating systems or further detailed instructions see the WD19 admin guide available on [www.dell.com/support](http://www.dell.com/support).

Download the WD19 driver and firmware update from [www.dell.com/support](http://www.dell.com/support). Connect the dock to the system and start the tool in administrative mode.

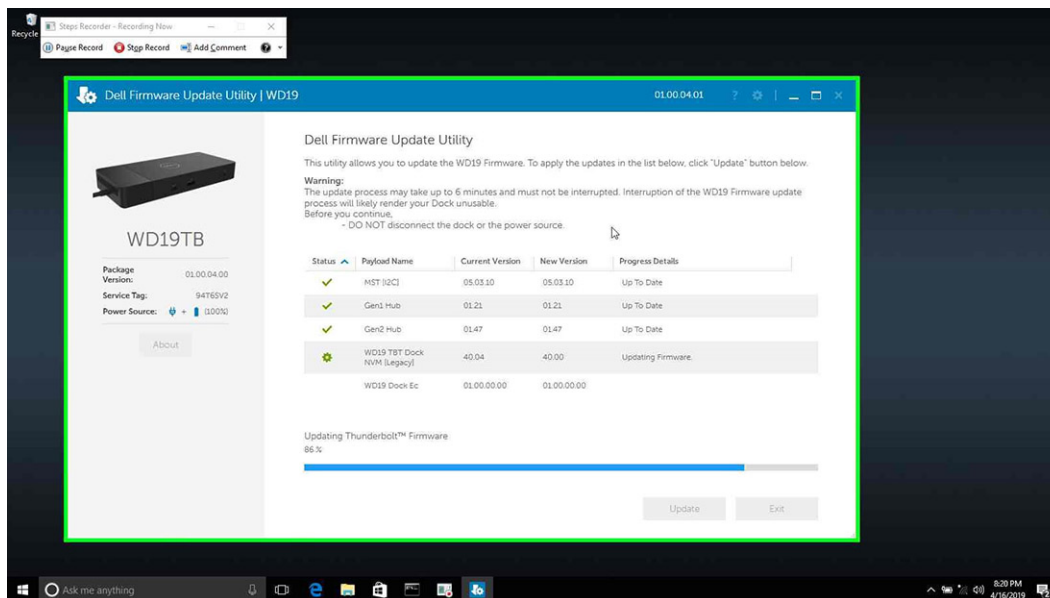
1. Wait for all the information to be entered in the various Graphical User Interface (GUI) panes.



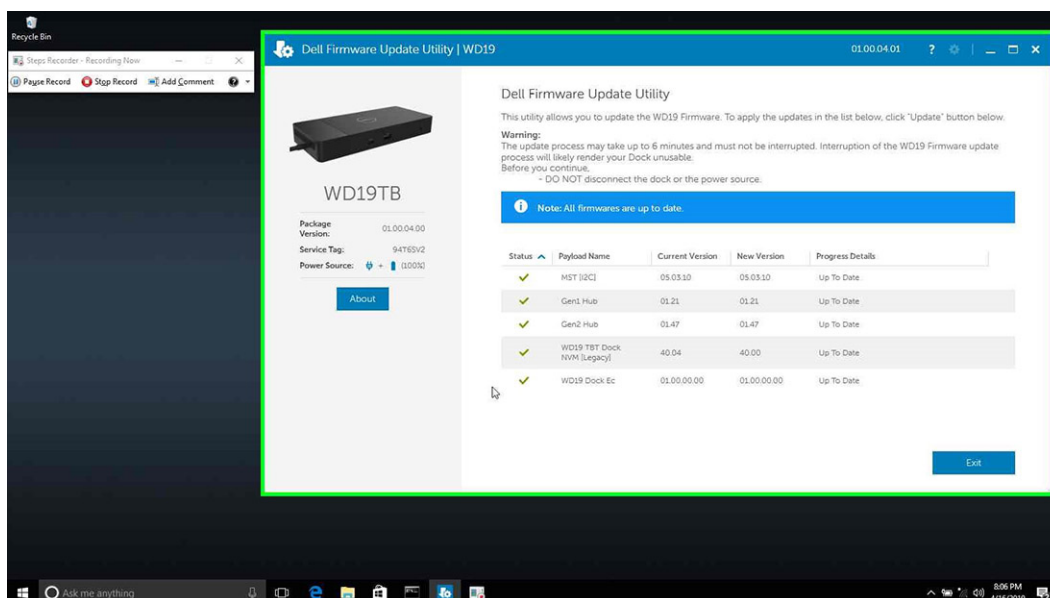
2. **Update** and **Exit** buttons are displayed in the bottom-right corner. Click the **Update** button.



3. Wait for all the component firmware update to complete. A progress bar is displayed in the bottom.



4. The update status is displayed above the payload information.



**Table 12. Command-Line Options**

| Command lines   | Function                                                 |
|-----------------|----------------------------------------------------------|
| /? or /h        | Usage.                                                   |
| /s              | Silent.                                                  |
| /f              | Force update.                                            |
| /forceit        | Skip power check.                                        |
| /l=<filename>   | Log file.                                                |
| /verflashexe    | Display utility version.                                 |
| /componentsvers | Display current version of all dock firmware components. |

For IT professionals and engineers, to get more information about the following technical topics, see the Dell Docking Station WD19 Administrator's Guide:

- Step-by-step stand-alone DFU (Dock Firmware Update) and driver update utilities.
- Using DCU (Dell Command | Update) for driver download.

- Dock asset management locally and remotely through DCM (Dell Command | Monitor) and SCCM (System Center Configuration Manager).

## Frequently asked questions

### 1. The fan is not working after connecting with the system.

- The fan is triggered by temperature. The dock fan will not rotate until the dock is hot enough to trigger a thermal threshold.
- Vice versa, if your dock is not cool enough, the fan will not stop even when you disconnect the dock from the system.

### 2. The dock does not work after high-speed fan noise.

- When you hear a loud fan noise, it is warning you that the dock is in some kind of a hot condition. For example, the vent in the dock may be blocked or the dock is working in a high working-temperature environment (> 35C), etc.. Please eliminate these abnormal conditions from the dock. If you do not eliminate the abnormal condition, in a worst-case situation, the dock will shut down through the over-temperature protection mechanism. Once this happens, please un-plug the Type-C cable from the system and remove the dock's power. Then wait 15 seconds and plug in the dock power to recover the dock back online.

### 3. I hear a fan noise when I plug in the dock's AC adapter.

- This is a normal condition. First time plugging in of the dock's AC adapter will trigger the fan to rotate, but it will subsequently turn off very soon.

### 4. I hear a loud fan noise. What's wrong?

- The dock fan is designed with five different rotate speeds. Normally, the dock will work on low fan speed. If you put the dock in a heavy loading, or in a high working-temperature environment, the dock fan may have a chance to work at a high speed. But, this is normal and the fan will work at a low/high speed depending on the work loading.

**Table 13. Fan states**

| State | State name      | Fan speed (rpm) |
|-------|-----------------|-----------------|
| 0     | Fan off         | Off             |
| 1     | Fan minimum     | 1900            |
| 2     | Fan low         | 2200            |
| 3     | Fan medium      | 2900            |
| 4     | Fan medium-high | 3200            |
| 5     | Fan high        | 3600            |

### 5. What is the charging station feature?

- The Dell Docking Station WD19 can charge your mobile or power bank even without being connected to the system. Just make sure your dock is connected to external power. The dock fan will rotate automatically if the dock gets too warm. This is normal working condition.

### 6. Why does the hardware installation window show up when I plug in a USB device to the docking stations ports?

- When a new device is plugged in, the USB hub driver notifies the Plug and Play (PnP) manager that a new device was detected. The PnP manager queries the hub driver for all of the device's hardware IDs and then notifies the Windows OS that a new device needs to be installed. In this scenario, the user will see a hardware installation window.

<https://msdn.microsoft.com/en-us/windows/hardware/drivers/install/step-1--the-new-device-is-identified>

<https://msdn.microsoft.com/en-us/windows/hardware/drivers/install/identifiers-for-usb-devices>

### 7. Why do the peripheral devices, which are connected to the dock station, become unresponsive after recovering from a power loss?

- Our Dell dock is designed to operate on AC power only and it does not support system power source back (powered by system Type-C port). A power loss event will make all devices on the dock fail to work. Even when you restore the AC power, the dock may still not function properly because the dock still needs to negotiate proper power contract with the system's Type-C port and establish a system EC-to-dock-EC connection.

# Troubleshooting the Dell Docking Station

## WD19

### Topics:

- [Symptoms and solutions](#)

## Symptoms and solutions

**Table 14. Symptoms and solutions**

| Symptoms                                                                                                                                           | Suggested solutions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. No video on the monitors that are attached to the High Definition Multimedia Interface (HDMI), or DisplayPort (DP) port on the docking station. | <ul style="list-style-type: none"> <li>• Ensure that the latest BIOS and drivers for your system and the docking station are installed on your system.</li> <li>• Ensure that your system is connected to the docking station securely. Try to disconnect and reconnect the docking station to the notebook system.</li> <li>• Disconnect both ends of the video cable and check for damaged/bent pins. Securely re-connect the cable to the monitor and docking station.</li> <li>• Ensure the video cable (HDMI, or DisplayPort) is connected properly to the monitor and the docking station. Ensure to select the correct video source on your monitor (see your monitor's documentation for more information about changing the video source).</li> <li>• Check the resolution settings on your system. Your monitor may support higher resolutions than what the docking station can support. See the <a href="#">Display Resolution Table</a> for more information about maximum resolution capacity.</li> <li>• If your monitor is connected to the docking station, the video output on your system may be disabled. You can enable the video output using the Windows Control Panel or see the User Guide of your system.</li> <li>• If only one monitor is shown, while the other is not, go to Windows Display Properties, and under <b>Multiple Displays</b>, select the output for the second monitor.</li> <li>• Using Intel graphics and using the system LCD, only two additional displays can be supported.</li> <li>• For NVIDIA or AMD discrete graphics, the dock supports three external displays plus the system LCD.</li> <li>• Try with a different monitor and cable that is known to be good, if possible.</li> </ul> |
| 2. The video on the attached monitor is distorted or flickering.                                                                                   | <ul style="list-style-type: none"> <li>• Reset the monitor to Factory Defaults. See the User Guide of your monitor for more information about how to reset the monitor to factory defaults.</li> <li>• Ensure that the video cable (HDMI, or DisplayPort) is connected securely to the monitor and the docking station.</li> <li>• Disconnect and reconnect the monitor/s from the docking station.</li> <li>• First power off the docking station by disconnecting the Type-C cable and then removing the power adapter from the dock.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

**Table 14. Symptoms and solutions (continued)**

| Symptoms                                                                                                  | Suggested solutions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-----------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                           | <p>Then, power on the docking station by connecting power adapter to the dock before connecting the Type-C cable to your system.</p> <ul style="list-style-type: none"> <li>• Undock and reboot the system if, the above steps do not work.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 3. The video on the attached monitor is not displaying as an Extended Monitor.                            | <ul style="list-style-type: none"> <li>• Ensure that the Intel HD Graphics driver is installed in the Windows Device Manager.</li> <li>• Ensure that the nVidia or AMD Graphics driver is installed in the Windows Device Manager.</li> <li>• Open the Windows Display Properties and go to <b>Multiple Displays</b> control to set the display to the extended mode.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 4. The audio connector is not functioning or there is a lag in the audio.                                 | <ul style="list-style-type: none"> <li>• Ensure that the latest BIOS and drivers for your system and the docking station are installed on your system.</li> <li>• If your BIOS Setup has an Audio Enabled/Disabled option, ensure it is set to <b>Enabled</b>.</li> <li>• Ensure that the correct playback device is selected on the notebook system.</li> <li>• Try to re-plug the audio cable to the external speaker output on the docking station.</li> <li>• First power off the docking station by disconnecting the Type-C cable and then removing the power adapter from the dock. Then, power on the docking station by connecting the power adapter to the dock before connecting the Type-C cable to your system.</li> </ul>                                                                                                                                                                          |
| 5. The USB ports are not functioning on the docking station.                                              | <ul style="list-style-type: none"> <li>• Ensure that the latest BIOS and drivers for your system and the docking station are installed on your system.</li> <li>• If your BIOS Setup has a USB Enabled/Disabled option, ensure it is set to <b>Enabled</b>.</li> <li>• Verify if the device is detected in Windows Device Manager and that the correct device drivers are installed.</li> <li>• Ensure that the docking station is connected securely to the notebook system. Try to disconnect and reconnect the docking station to the system.</li> <li>• Check the USB ports. Try plugging the USB device into another port.</li> <li>• First power off the docking station by disconnecting the Type-C cable and then removing the power adapter from the dock. Then, power on the docking station by connecting the power adapter to the dock before connecting the Type-C cable to your system.</li> </ul> |
| 6. The High-Bandwidth Digital Content Protection (HDCP) content is not displayed on the attached monitor. | <ul style="list-style-type: none"> <li>• Dell Dock supports HDCP up to HDCP 2.2.</li> </ul> <p> <b>NOTE: User's monitor/display must support HDCP 2.2</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 7. The LAN port is not functioning.                                                                       | <ul style="list-style-type: none"> <li>• Ensure that the latest BIOS and drivers for your system and the docking station are installed on your system.</li> <li>• Ensure that the RealTek Gigabit Ethernet Controller is installed in the Windows Device Manager.</li> <li>• If your BIOS Setup has a LAN/GBE Enabled/Disabled option, ensure it is set to <b>Enabled</b>.</li> <li>• Ensure that the Ethernet cable is connected securely on the docking station and the hub/router/firewall.</li> <li>• Check the status LED of the Ethernet cable to confirm connectivity. Re-connect both ends of the Ethernet cable if the LED is not lit.</li> </ul>                                                                                                                                                                                                                                                       |

**Table 14. Symptoms and solutions (continued)**

| Symptoms                                                                                                                                            | Suggested solutions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                     | <ul style="list-style-type: none"> <li>First power off the docking station by disconnecting the Type-C cable and then removing the power adapter from the dock. Then, power on the docking station by connecting the power adapter to the dock before connecting the Type-C cable to your system.</li> </ul>                                                                                                                                                                                                                                       |
| 8. Cable LED is not ON after it is connected to your host.                                                                                          | <ul style="list-style-type: none"> <li>Ensure the WD19 is connected to AC power.</li> <li>Ensure that the system is connected with the docking station. Try to disconnect and re-connect again with the docking station.</li> </ul>                                                                                                                                                                                                                                                                                                                |
| 9. USB port has no function in a pre-OS environment.                                                                                                | <ul style="list-style-type: none"> <li>If your BIOS has an USB Configuration page, ensure that the following options are checked: <ul style="list-style-type: none"> <li>1. Enable USB Boot Support</li> <li>2. Enable External USB Port</li> </ul> </li> </ul>                                                                                                                                                                                                                                                                                    |
| 10. PXE boot on dock does not function.                                                                                                             | <ul style="list-style-type: none"> <li>If your BIOS has an integrated NIC page, select <b>Enabled w/ PXE</b>.</li> <li>If your BIOS Setup on your system has an USB Configuration page, ensure that the following options are checked: <ul style="list-style-type: none"> <li>1. Enable USB Boot Support</li> </ul> </li> </ul>                                                                                                                                                                                                                    |
| 11. USB Boot does not function.                                                                                                                     | <ul style="list-style-type: none"> <li>If your BIOS has an USB Configuration page, ensure that the following options are checked: <ul style="list-style-type: none"> <li>1. Enable USB Boot Support</li> <li>2. Enable External USB Port</li> </ul> </li> </ul>                                                                                                                                                                                                                                                                                    |
| 12. AC Adapter is displayed as "Not Installed" in the Battery Information page of the Dell BIOS Setup when the Type-C cable is connected.           | <ul style="list-style-type: none"> <li>1. Ensure the Dell Docking Station WD19 is connected properly to its own adapter (130 W or 180 W).</li> <li>2. Ensure the cable LED of your docking station is ON.</li> <li>3. Disconnect and re-connect the (Type-C) cable to your system.</li> </ul>                                                                                                                                                                                                                                                      |
| 13. Peripherals connected to the docking station do not work in a pre-OS environment.                                                               | <ul style="list-style-type: none"> <li>If the BIOS Setup on your system has an USB Configuration page, check the following option to enable docking station function in a pre-OS environment: <ul style="list-style-type: none"> <li>Enable External USB Port</li> </ul> </li> </ul>                                                                                                                                                                                                                                                               |
| 14. Alert message "You have attached an undersized power adapter to your system" is displayed when the docking station is connected to your system. | <ul style="list-style-type: none"> <li>Ensure that the docking station is connected properly to its own power adapter. Computer requiring more than 130 W power input must also be connected to their own power adapter for charging and operating at full performance.</li> <li>First power off the docking station by disconnecting the Type-C cable and then removing power adapter from the dock. Then, power on the docking station by connecting the power adapter to the dock before connecting the Type-C cable to your system.</li> </ul> |
| 15. Undersized power adapter warning message that is displayed and cable LED are off.                                                               | <ul style="list-style-type: none"> <li>The docking connector has disconnected from the system's USB ports. Reconnect the docking cable from the system, wait for 15 seconds or more, and then dock again.</li> </ul>                                                                                                                                                                                                                                                                                                                               |
| 16. No external display. USB or data and cable LED is off.                                                                                          | <ul style="list-style-type: none"> <li>The docking connector has disconnected from the system's USB ports. Reconnect the docking connector.</li> <li>Undock and reboot the system if the above steps do not work.</li> </ul>                                                                                                                                                                                                                                                                                                                       |
| 17. When system or dock is moved the cable LED turns off.                                                                                           | <ul style="list-style-type: none"> <li>Avoid moving the system/dock when the docking cable is connected to the system.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                  |

**Table 14. Symptoms and solutions (continued)**

| Symptoms                                                                                                                                                   | Suggested solutions                                                                                                                                                                                             |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 18. With Ubuntu 18.04, WIFI will be turned off when the docking station is connected to the system and the WIFI turns On again after rebooting the system. | <ul style="list-style-type: none"><li>• Please uncheck the option <b>Control WLAN radio</b> in BIOS.</li><li>• Option is available in - Settings -&gt; Power Management -&gt; Wireless Radio Control.</li></ul> |

## Getting help

### Topics:

- [Contacting Dell](#)

## Contacting Dell

### Prerequisites

 **NOTE:** If you do not have an active Internet connection, you can find contact information on your purchase invoice, packing slip, bill, or Dell product catalog.

### About this task

Dell provides several online and telephone-based support and service options. Availability varies by country and product, and some services may not be available in your area. To contact Dell for sales, technical support, or customer service issues:

### Steps

1. Go to **Dell.com/support**.
2. Select your support category.
3. Verify your country or region in the **Choose a Country/Region** drop-down list at the bottom of the page.
4. Select the appropriate service or support link based on your need.