

# Vostro 3405

## Setup and specifications 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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# Set up your computer

## Steps

1. Connect the power adapter and press the power button.

 **NOTE:** To conserve battery power, the battery might enter power saving mode.



2. Finish Windows system setup.

Follow the on-screen instructions to complete the setup. When setting up, Dell recommends that you:

- Connect to a network for Windows updates.
  -  **NOTE:** If connecting to a secured wireless network, enter the password for the wireless network access when prompted.
- If connected to the internet, sign-in with or create a Microsoft account. If not connected to the internet, create an offline account.
- On the **Support and Protection** screen, enter your contact details.

3. Locate and use Dell apps from the Windows Start menu—Recommended

**Table 1. Locate Dell apps**

Dell apps	Details
	<p><b>Dell Product Registration</b> Register your computer with Dell.</p>
	<p><b>Dell Help &amp; Support</b> Access help and support for your computer.</p>

**Table 1. Locate Dell apps (continued)**

Dell apps	Details
	<p><b>SupportAssist</b></p> <p>Proactively checks the health of your computer’s hardware and software.</p> <p><b>i</b> <b>NOTE:</b> Renew or upgrade your warranty by clicking the warranty expiry date in SupportAssist.</p>
	<p><b>Dell Update</b></p> <p>Updates your computer with critical fixes and important device drivers as they become available.</p>
	<p><b>Dell Digital Delivery</b></p> <p>Download software applications including software that is purchased but not preinstalled on your computer.</p>

4. Create recovery drive for Windows.

**i** **NOTE:** It is recommended to create a recovery drive to troubleshoot and fix problems that may occur with Windows.

For more information, see [Create a USB recovery drive for Windows](#).

# Create a USB recovery drive for Windows

Create a recovery drive to troubleshoot and fix problems that may occur with Windows. An empty USB flash drive with a minimum capacity of 16 GB is required to create the recovery drive.

## Prerequisites

 **NOTE:** This process may take up to an hour to complete.

 **NOTE:** The following steps may vary depending on the version of Windows installed. Refer to the [Microsoft support site](#) for latest instructions.

## Steps

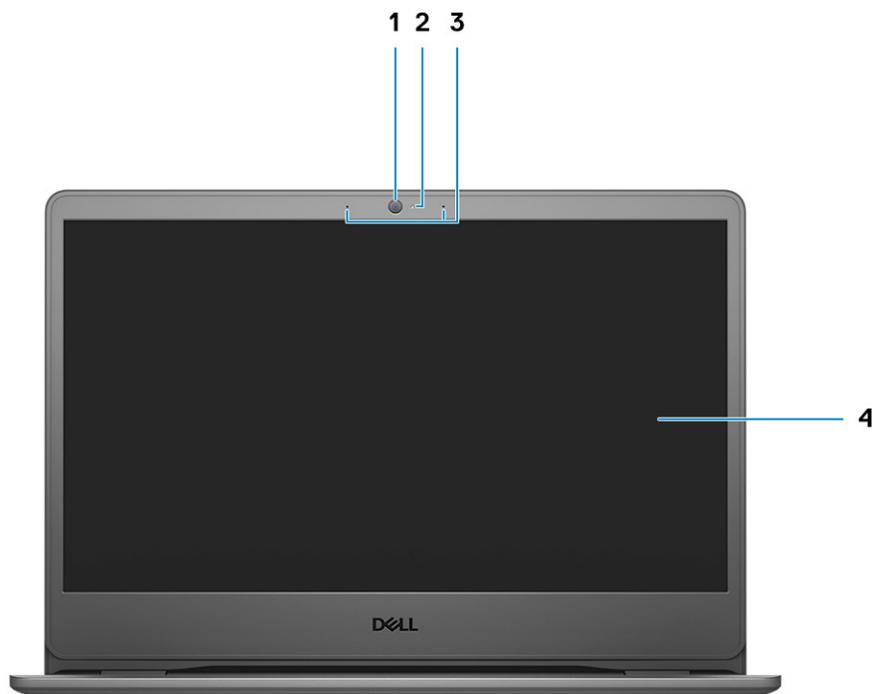
1. Connect the USB flash drive to your computer.
2. In Windows search, type **Recovery**.
3. In the search results, click **Create a recovery drive**.  
The **User Account Control** window is displayed.
4. Click **Yes** to continue.  
The **Recovery Drive** window is displayed.
5. Select **Back up system files to the recovery drive** and click **Next**.
6. Select the **USB flash drive** and click **Next**.  
A message appears, indicating that all data in the USB flash drive will be deleted.
7. Click **Create**.
8. Click **Finish**.  
For more information about reinstalling Windows using the USB recovery drive, see the *Troubleshooting* section of your product's *Service Manual* at [www.dell.com/support/manuals](http://www.dell.com/support/manuals).

## Chassis overview

### Topics:

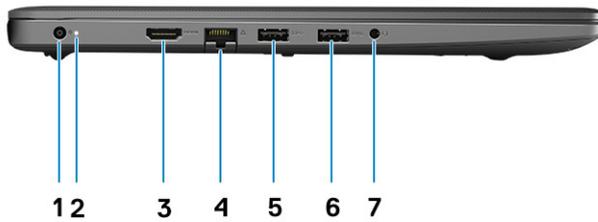
- Display view
- Left view
- Right view
- Palmrest view
- Bottom view
- Keyboard shortcuts

### Display view



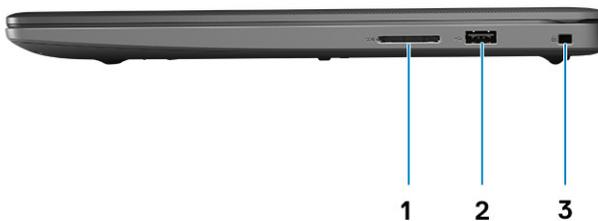
1. RGB camera
2. Camera Status Light
3. Microphones
4. LCD panel

## Left view



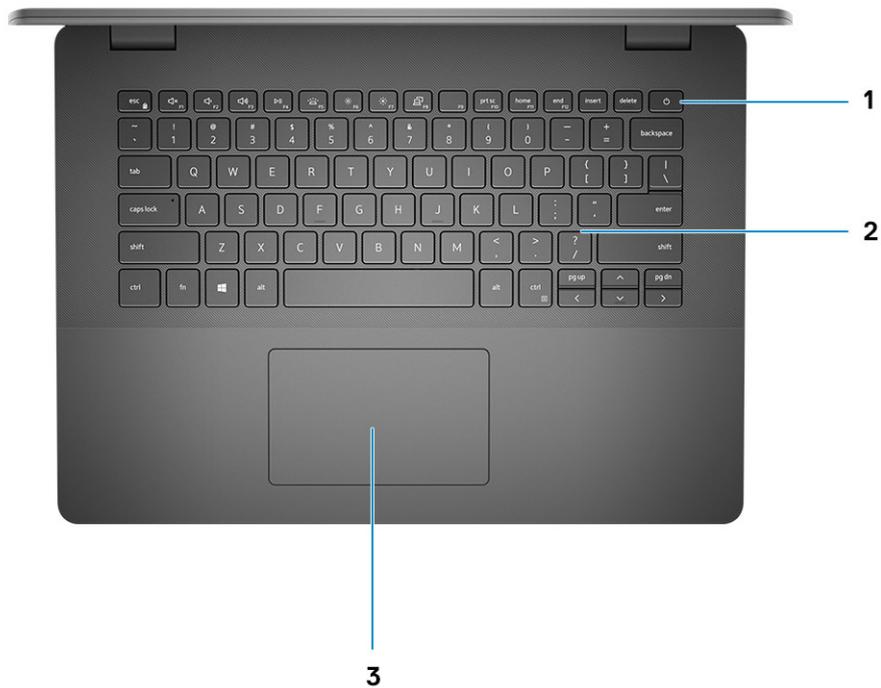
1. Power connector port
2. Diagnostics LED Light
3. HDMI port
4. Network port
5. USB Type-A 3.2 Gen 1 port
6. USB Type-A 3.2 Gen 1 port
7. Universal Audio Jack

## Right view



1. SD-card reader
2. USB Type-A 2.0 Gen 1 Charging port
3. Wedge-shaped lock slot

## Palmrest view



1. Power button with optional fingerprint reader
2. Keyboard
3. Touchpad

## Bottom view



1. Speakers
2. Service Tag label
3. Fan vents

## Keyboard shortcuts

**NOTE:** Keyboard characters may differ depending on the keyboard language configuration. Keys that are used for shortcuts remain the same across all language configurations.

**Table 2. List of keyboard shortcuts**

Keys	Primary behavior
Fn + Esc	Toggle Fn-key lock
Fn + F1	Mute audio
Fn + F2	Decrease volume
Fn + F3	Increase volume
Fn + F4	Play/Pause
Fn + F5	Turn on/off keyboard backlight

**Table 2. List of keyboard shortcuts (continued)**

<b>Keys</b>	<b>Primary behavior</b>
Fn + F6	Decrease brightness
Fn + F7	Increase brightness
Fn + F8	Switch to external display
Fn + F10	Print screen
Fn + F11	Home
Fn + 12	End
Fn + Ctrl	Open application menu

# Technical specifications

**NOTE:** Offerings may vary by region. The following specifications are only those required by law to ship with your computer. For more information about the configuration of your computer, go to Help and Support in your Windows operating system and select the option to view information about your computer.

## Topics:

- Processors
- Chipset
- Operating system
- Operating system
- Memory
- Ports and connectors
- System board connectors
- Storage
- Media-card reader
- Audio
- Video
- Camera
- Communications
- Battery
- Power adapter
- Dimensions and weight
- Touchpad
- Display
- Keyboard
- Fingerprint reader in Power Button
- Sensor and control specifications
- Computer environment

## Processors

**Table 3. Processors**

Description	Values					
Processors	AMD Athlon Silver 3050U	AMD Athlon Gold 3150U	AMD Ryzen 3 3250U	AMD Ryzen 5 3450U	AMD Ryzen 5 3500U	AMD Ryzen 7 3700U
Wattage	15 W	15 W	15 W	15 W	15 W	15 W
Core count	2	2	2	4	4	4
Thread count	2	4	4	8	8	8
Speed	Up to 3.2 GHz	Up to 3.3 GHz	Up to 3.5 GHz	Up to 3.5 GHz	Up to 3.7 GHz	Up to 4.0 GHz
Cache	4 MB	4 MB	4 MB	4 MB	4 MB	4 MB

**Table 3. Processors (continued)**

Description	Values					
Integrated graphics	AMD Radeon Graphics	AMD Radeon Graphics	AMD Radeon Graphics	AMD Radeon Vega 8 Graphics	AMD Radeon Vega 8 Graphics	AMD Radeon Vega 10 Graphics

## Chipset

**Table 4. Chipset**

Description	Values	
Chipset	Integrated	Integrated
Processor	AMD Athlon series	AMD Ryzen series
Flash EPROM	16 MB	16 MB
PCIe bus	Up to Gen 3	Up to Gen 3

## Operating system

- Windows 10 Home (64-bit)
- Windows 10 Professional (64-bit)

## Operating system

Your Vostro 3405 supports the following operating systems:

- Windows 11 Home, 64-bit
- Windows 11 Pro, 64-bit
- Windows 11 Pro National Academic, 64-bit
- Windows 11 Home National Academic, 64-bit
- Windows 10 Home, 64-bit
- Windows 10 Pro, 64-bit

## Memory

**Table 5. Memory specifications**

Description	Values
Slots	Two SODIMM
Type	DDR4
Speed	<ul style="list-style-type: none"> <li>• 2400 MHz</li> </ul>
Maximum memory	16 GB
Minimum memory	4 GB
Configurations supported	<ul style="list-style-type: none"> <li>• 4 GB, 1 x 4 GB, DDR4, 2400MHz, SO-DIMM</li> </ul>

**Table 5. Memory specifications (continued)**

Description	Values
	<ul style="list-style-type: none"> <li>• 8 GB, 2 x 4 GB, DDR4, 2400MHz, SO-DIMM</li> <li>• 8 GB, 1 x 8 GB, DDR4, 2400MHz, SO-DIMM</li> <li>• 12 GB, 1x8 GB + 1x4 GB, DDR4, 2400MHz, SO-DIMM</li> <li>• 16 GB, 2 x 8 GB, DDR4, 2400MHz, SO-DIMM</li> <li>• 16 GB, 1 x 16 GB, DDR4, 2400MHz, SO-DIMM</li> </ul>

## Ports and connectors

**Table 6. External ports and connectors**

Description	Values
<b>External:</b>	
Network	One RJ 45 10/100 Mbps
USB	<ul style="list-style-type: none"> <li>• Two USB 3.2 Gen1 Type-A ports</li> <li>• One USB 2.0 Type-A port</li> </ul>
Audio	<ul style="list-style-type: none"> <li>• One Universal audio port (Computers with Realtek audio configuration) Two USB 3.2 Gen1 Type-A ports</li> <li>• One Audio jack (Computers with Cirrus logic audio configuration)</li> </ul>
Video	One HDMI 1.4 port  <b>NOTE:</b> The maximum resolution supported by HDMI port is 1920x1080 @60 Hz (24 bit)
Power adapter port	4.5 mm barrel-type
Security	One Wedge shaped lock slot
Card slot	One SD card slot

**Table 7. Internal ports and connectors**

Description	Values
<b>Internal:</b>	
One M.2 Key-M (2280 or 2230) for solid-state drive One M.2 2230 Key-E for WLAN	<ul style="list-style-type: none"> <li>• One M.2 2230 slot for Wi-Fi</li> <li>• One M.2 slot for 2230/2280 solid-state drive</li> </ul>  <b>NOTE:</b> To learn more about the features of different types of M.2 cards, see the knowledge base article <a href="#">SLN301626</a> .
SIM card	Not Supported

## System board connectors

**Table 8. System board connectors**

Feature	Specifications
M.2 Connectors	<ul style="list-style-type: none"> <li>• Two M.2 2280 Key-M connector</li> </ul>

# Storage

Your computer supports one of the following configurations:

- 2.5-in. 5400 RPM, SATA hard drive
- M.2 2230/2280 for solid-state drive

The primary drive of your computer varies with the storage configuration. For computers:

- 2.5-in. 5400 RPM, SATA hard drive
- M.2 2230/2280 for solid-state drive

**Table 9. Storage specifications**

Form factor	Interface type	Capacity
2.5-in. 5400 rpm, hard drive	SATA	2 TB
M.2 2230 solid-state drive	PCIe NVMe 3x4	Upto 512 GB
M.2 2280 solid-state drive	PCIe NVMe 3x4	Upto 1 TB

# Media-card reader

**Table 10. Media-card reader specifications**

Description	Values
Type	One SD card
Cards supported	<ul style="list-style-type: none"> <li>• Secure Digital (SD)</li> <li>• Secure Digital High Capacity(SDHC)</li> <li>• Secure Digital Extended Capacity(SDXC)</li> </ul>

# Audio

**Table 11. Audio specifications**

Description	Values
Controller	Realtek ALC3204 <ul style="list-style-type: none"> <li>• Cirrus CS8409</li> <li>• Cirrus CS42L42</li> <li>• Cirrus TI SN005825</li> </ul>
Stereo conversion	Supported
Internal interface	HDA (High definition audio)
External interface	Audio jack <p><b>NOTE:</b> 3.5mm Audio jack functionality varies by model configuration. For best results, use Dell recommended audio accessories</p>
Speakers	2
Internal-speaker amplifier	Supported

**Table 11. Audio specifications (continued)**

Description	Values	
External volume controls	Keyboard shortcut controls	Keyboard shortcut controls
Speaker Output Average	2 W	2 W
Speaker Output Peak	2.5 W	2.5 W
Subwoofer output	Not supported	Not supported
Microphone	Single digital microphone	Single digital microphone

## Video

**Table 12. Integrated graphics specifications**

Integrated graphics			
Controller	External display support	Memory size	Processor
AMD Radeon Graphics	<ul style="list-style-type: none"> <li>One HDMI port</li> </ul>	Shared system memory	<ul style="list-style-type: none"> <li>AMD Athlon Gold/Silver</li> <li>AMD Ryzen 3</li> </ul>
AMD Radeon Vega 8 Graphics	<ul style="list-style-type: none"> <li>One HDMI port</li> </ul>	Shared system memory	<ul style="list-style-type: none"> <li>AMD Ryzen 5</li> </ul>
AMD Radeon Vega 10 Graphics	<ul style="list-style-type: none"> <li>One HDMI port</li> </ul>	Shared system memory	<ul style="list-style-type: none"> <li>AMD Ryzen 7</li> </ul>

## Camera

**Table 13. Camera specifications**

Description	Values
Number of cameras	One
Type	HD RGB camera
Location	Front Camera
Sensor type	CMOS sensor technology
Resolution:	
Still image	0.92 megapixel
Video	1280 x 720 (HD) at 30 fps
Diagonal viewing angle	87 degrees

# Communications

## Wireless module

**Table 14. Wireless module specifications**

Description	Values
Model number	Qualcomm QCA61x4A
Transfer rate	Up to 867 Mbps
Frequency bands supported	2.4 GHz/5 GHz
Wireless standards	<ul style="list-style-type: none"> <li>• WiFi 802.11a/b/g</li> <li>• Wi-Fi 4 (Wi-Fi 802.11n)</li> <li>• Wi-Fi 5 (Wi-Fi 802.11ac Wave 2)</li> </ul>
Encryption	<ul style="list-style-type: none"> <li>• 64-bit/128-bit WEP</li> <li>• AES-CCMP</li> <li>• TKIP</li> </ul>
Bluetooth	Bluetooth 5.0

# Battery

**Table 15. Battery specifications**

Description	Values
Type	42 Whr 3 cell Polymer battery
Voltage	11.40 VDC
Weight (maximum)	0.18 kg (0.40 lb)
Dimensions:	
Height	184.10 mm (7.25 in.)
Width	90.73 mm (3.57 in.)
Depth	5.75 mm (0.23 in.)
Temperature range:	
Operating	0°C to 35°C (32°F to 95°F)
Storage	-40°C to 65°C (-40°F to 149°F)
Operating time	Varies depending on operating conditions and can significantly reduce under certain power-intensive conditions.
Charging time (approximate)	4 hours (when the computer is off) <i>i</i> <b>NOTE:</b> Control the charging time, duration, start and end time, and so on using the Dell Power Manager application. For more information on the Dell Power Manager, see <i>Me and My Dell</i> on <a href="http://www.dell.com/">www.dell.com/</a>

**Table 15. Battery specifications (continued)**

Description	Values
Life span (approximate)	300 discharge/charge cycles
Coin-cell battery	CR2032
Operating time	Varies depending on operating conditions and can significantly reduce under certain power-intensive conditions.

## Power adapter

**Table 16. Power adapter specifications**

Description	Values
Diameter (connector)	2.9 mm x 5.4 mm
Weight	0.23 kg (0.51 lb)
Input voltage	100 VAC x 240 VAC
Input frequency	50 Hz x 60 Hz
Input current (maximum)	1.30 A
Output current (continuous)	2.31 A
Rated output voltage	19.50 VDC
Operating	0°C to 40°C (32°F to 104°F)
Storage	-40°C to 70°C (-40°F to 158°F)

## Dimensions and weight

**Table 17. Dimensions and weight**

Description	Values
Height:	
Front	18.10 mm (0.71 in.)
Rear	19.90 mm (0.78 in.)
Width	328.70 mm (12.94 in.)
Depth	239.50 mm (9.42 in.)
Weight	1.70 kg (3.61 lb)
	 <b>NOTE:</b> The weight of your system depends on the configuration ordered and the manufacturing variability.

# Touchpad

The following table lists the touchpad specifications of your Vostro 3405.

**Table 18. Touchpad specifications**

Description		Values
Touchpad resolution:		
	Horizontal	305
	Vertical	305
Touchpad dimensions:		
	Horizontal	105 mm (4.13 in.)
	Vertical	80 mm (3.15 in.)
Touchpad gestures		For more information about touchpad gestures available on Windows, see the Microsoft knowledge base article <a href="https://support.microsoft.com/4027871">4027871</a> at <a href="https://support.microsoft.com">support.microsoft.com</a> .

# Display

**Table 19. Display specifications**

Description	Values	
Type	High Definition (HD)	Full High Definition (FHD)
Panel technology	TN	WVA
Luminance (typical)	220 nits	220 nits
Dimensions (Active Area):		
	Height	173.99 mm ( 6.85 in.)
	Width	309.35 mm ( 12.17 in.)
	Diagonal	354.92 mm ( 13.97 in.)
Native Resolution	1366 x 768	1920 x 1080
Megapixels	1.05 M	2.07 M
Pixels per Inch (PPI)	112	157
Color Gamut (CG)	NTSC 45% Typ.	NTSC 45% Typ.
Contrast Ratio (min)	400:1	500:1
Response Time (max)	16 ms	35 ms
Refresh Rate	60 Hz	60 Hz
Horizontal View Angle	40 degrees (Left/Right)	80 degrees (Left/Right)
Vertical View Angle	10 degrees (Up) / 30 degrees (Down)	80 degrees (Up/Down)

**Table 19. Display specifications (continued)**

Description	Values	
Pixel Pitch	0.2265 x 0.2265 mm	0.161 x 0.161 mm
Power Consumption (maximum)	3.2 W	3.5 W
Anti-glare vs glossy finish	Anti-glare	Anti-glare
Touch options	No	No

## Keyboard

**Table 20. Keyboard specifications**

Feature	Specifications
Number of keys	<ul style="list-style-type: none"> <li>● 102 (U.S. and Canada)</li> <li>● 103 (UK)</li> <li>● 106 (Japan)</li> </ul>
Size	Full sized <ul style="list-style-type: none"> <li>● X= 18.6 mm (0.73 in.) key pitch</li> <li>● Y= 19.05 mm (0.75 in.) key pitch</li> </ul>
Backlit keyboard	Optional (backlit and Non-backlit)
Layout	QWERTY

## Fingerprint reader in Power Button

**Table 21. Fingerprint reader specifications**

Description	Values	
Sensor technology	Capacitive	Capacitive
Sensor resolution	363 dpi	500 dpi
Sensor pixel size	76 x 100	108 x 88

## Sensor and control specifications

**Table 22. Sensor and control specifications**

Specifications
1. Hall Effect Sensor (Detects when the lid is closed)

## Computer environment

**Airborne contaminant level:** G1 as defined by ISA-S71.04-1985

**Table 23. Computer environment**

<b>Description</b>	<b>Operating</b>	<b>Storage</b>
Temperature range	0°C to 35°C (32°F to 95°F)	-40°C to 65°C (-40°F to 149°F)
Relative humidity (maximum)	10% to 90% (non-condensing)	0% to 95% (non-condensing)
Vibration (maximum)*	0.66 GRMS	1.30 GRMS
Shock (maximum)	110 G†	160 G†
Altitude (maximum)	-15.2 m to 3048 m (4.64 ft to 5518.4 ft)	-15.2 m to 10668 m (4.64 ft to 19234.4 ft)

\* Measured using a random vibration spectrum that simulates user environment.

† Measured using a 2 ms half-sine pulse when the hard drive is in use.

# Software

This chapter details the supported operating systems along with instructions on how to install the drivers.

## Topics:

- [Downloading Windows drivers](#)

## Downloading Windows drivers

### Steps

1. Turn on the notebook.
2. Go to **Dell.com/support**.
3. Click **Product Support**, enter the Service Tag of your notebook, and then click **Submit**.

 **NOTE:** If you do not have the Service Tag, use the auto detect feature or manually browse for your notebook model.

4. Click **Drivers and Downloads**.
5. Select the operating system installed on your notebook.
6. Scroll down the page and select the driver to install.
7. Click **Download File** to download the driver for your notebook.
8. After the download is complete, navigate to the folder where you saved the driver file.
9. Double-click the driver file icon and follow the instructions on the screen.

# System setup

**CAUTION:** Unless you are an expert computer user, do not change the settings in the BIOS Setup program. Certain changes can make your computer work incorrectly.

**NOTE:** Before you change BIOS Setup program, it is recommended that you write down the BIOS Setup program screen information for future reference.

Use the BIOS Setup program for the following purposes:

- Get information about the hardware installed in your computer, such as the amount of RAM and the size of the hard drive.
- Change the system configuration information.
- Set or change a user-selectable option, such as the user password, type of hard drive installed, and enabling or disabling base devices.

## Topics:

- [Boot menu](#)
- [Navigation keys](#)
- [Boot Sequence](#)
- [System setup options](#)
- [Updating the BIOS](#)
- [System and setup password](#)

## Boot menu

Press <F12> when the Dell logo appears to initiate a one-time boot menu with a list of the valid boot devices for the system. Diagnostics and BIOS Setup options are also included in this menu. The devices listed on the boot menu depend on the bootable devices in the system. This menu is useful when you are attempting to boot to a particular device or to bring up the diagnostics for the system. Using the boot menu does not make any changes to the boot order stored in the BIOS.

The options are:

- **UEFI Boot Devices:**
  - Windows Boot Manager
  - UEFI Hard Drive
  - Onboard NIC (IPV4)
  - Onboard NIC (IPV6)
- **Pre-Boot Tasks:**
  - BIOS Setup
  - Diagnostics
  - BIOS Update
  - SupportAssist OS Recovery
  - BIOS Flash Update - Remote
  - Device Configuration

## Navigation keys

**NOTE:** For most of the System Setup options, changes that you make are recorded but do not take effect until you restart the system.

### Keys

**Up arrow**

### Navigation

Moves to the previous field.

Keys	Navigation
<b>Down arrow</b>	Moves to the next field.
<b>Enter</b>	Selects a value in the selected field (if applicable) or follow the link in the field.
<b>Spacebar</b>	Expands or collapses a drop-down list, if applicable.
<b>Tab</b>	Moves to the next focus area.
<b>Esc</b>	Moves to the previous page until you view the main screen. Pressing Esc in the main screen displays a message that prompts you to save any unsaved changes and restarts the system.

## Boot Sequence

Boot Sequence allows you to bypass the System Setup–defined boot device order and boot directly to a specific device (for example: optical drive or hard drive). During the Power-on Self Test (POST), when the Dell logo appears, you can:

- Access System Setup by pressing F2 key
- Bring up the one-time boot menu by pressing F12 key

The one-time boot menu displays the devices that you can boot from including the diagnostic option. The boot menu options are:

- Removable Drive (if available)
- STXXXX Drive (if available)
  - **NOTE:** XXX denotes the SATA drive number.
- Optical Drive (if available)
- SATA Hard Drive (if available)
- Diagnostics

The boot sequence screen also displays the option to access the System Setup screen.

## System setup options

**NOTE:** Depending on your computer and its installed devices, the items listed in this section may or may not appear.

**Table 24. System setup options—Main menu**

Main	
System Time	Displays the current time in hh:mm:ss format.
System Date	Displays the current date in mm/dd/yyyy format.
BIOS Version	Displays the BIOS version.
Product Name	Displays the model number of your computer.
Service Tag	Displays the service tag of your computer.
Asset Tag	Displays the asset tag of your computer.
CPU Type	Displays the processor type.
CPU Speed	Displays the processor speed.
CPU ID	Displays the processor identification code.
<b>CPU Cache</b>	
L1 Cache	Displays the processor L1 cache size.
L2 Cache	Displays the processor L2 cache size.
L3 Cache	Displays the processor L3 cache size.
First HDD	Displays the type of hard drive installed.

**Table 24. System setup options—Main menu (continued)**

**Main**

M.2 PCIe SSD	Display the M.2 PCIe SSD device information of the computer.
AC Adapter Type	Displays the type of AC adapter.
System Memory	Displays the size of memory installed.
Memory Speed	Displays the speed of memory.
Keyboard Type	Displays the type of keyboard installed on the computer.

**Table 25. System setup options—Advanced menu**

**Advanced**

PowerNow! Enable	<p>Enables or disables the dynamic frequency scaling and power-saving technology for the AMD processor.</p> <p>Default: Enabled</p>
Virtualization	<p>Enables or disables the Virtualization technology.</p> <p>Default: Enabled</p>
Integrated NIC	<p>Enables or disables the on-board LAN controller.</p> <p>Default: Enabled</p>
USB Emulation	<p>Enables or disables the USB emulation feature. This feature defines how the BIOS, in the absence of a USB-aware operating system, handles USB devices. USB emulation is always enabled during POST.</p> <p><b>i</b> <b>NOTE:</b> You cannot boot any type of USB device (floppy, hard drive, or memory key) when this option is off.</p> <p>Default: Enabled</p>
USB Wake Support	<p>Allows you to enable USB devices to wake the computer from standby or to disable the USB wake support feature.</p> <p><b>i</b> <b>NOTE:</b> If USB PowerShare is enabled, a device connected to the USB PowerShare connector may not wake the computer.</p> <p><b>i</b> <b>NOTE:</b> To enable wake support for the fingerprint reader the USB Wake Support needs to be enabled in the BIOS. To enable USB wake support, complete the steps in the knowledge base article <a href="#">SLN321473</a>.</p> <p>Default: Disabled</p>
SATA Operation	<p>Allows you to configure the operating mode of the integrated SATA hard drive controller.</p> <p>Default: AHCI</p>
Adapter Warnings	<p>Allows you to choose if the computer should display warning messages when you use AC adapters that are not supported by your computer.</p> <p>Default: Enabled</p>
Function Key Behavior	<p>Allows you to set function key or multimedia key as the default function key behavior.</p> <p>Default: Multimedia key</p>
Keyboard Illumination	<p>Selects the operating mode of the keyboard illumination feature.</p>

**Table 25. System setup options—Advanced menu (continued)**

<b>Advanced</b>	
Keyboard Backlight with AC	<p>Default: Bright</p> <p>Selects the timeout value for the keyboard backlight when an AC adapter is plugged into the computer.</p> <p>Default: 1 minute</p>
Keyboard Backlight with Battery	<p>Selects the timeout value for the keyboard backlight when the computer is running on battery power.</p> <p>Default: 1 minute</p>
Battery Health	Displays the battery health.
External USB Ports	<p>Enables or disables the USB Ports.</p> <p>Default: Enabled</p>
Microphone	<p>Enables or disables the microphone.</p> <p>Default: Enabled</p>
Camera	<p>Enables or disables the camera.</p> <p>Default: Disabled</p>
Battery Charge Configuration	<p>Set the battery charge settings with a preselected custom charge start and stop.</p> <p>Default: Adaptive</p>
Advanced Battery Charge Configuration	<p>Enable Advanced Battery Charge Configuration from the beginning of the day to a specified work period.</p> <p>Default: Disabled</p>
<b>Maintenance</b>	
Data Wipe on next boot	<p>Enables or disables data wipe on the next boot.</p> <p>Default: Disabled</p>
BIOS Recovery from Hard Drive	Enables the user to recover from certain corrupted BIOS conditions from a recovery file on the user primary hard drive or an external USB key.
BIOS Auto-Recovery	<p>Enables BIOS to automatically recover BIOS without user actions.</p> <p>Default: Disabled</p>
<b>SupportAssist System Resolution</b>	
Auto OS Recovery Threshold	<p>Controls the automatic boot flow for SupportAssist System Resolution Console and for the Dell OS Recovery tool.</p> <p>Default: 2</p>
SupportAssist OS Recovery	<p>Enables or disables the boot flow for the SupportAssist OS Recovery tool in the even of certain system errors.</p> <p>Default: Disabled</p>

**Table 26. System setup options—Security menu**

<b>Security</b>	
Admin Password Status	Displays if the administrator password is clear or set.
System Password Status	Displays if the system password is clear or set.

**Table 26. System setup options—Security menu (continued)**

<b>Security</b>	
	Default: Not Set
Service Tag	Set your system's Service Tag.
Asset Tag	Set your system's Asset Tag.
Admin Password	Allows you to set the administrator password. The administrator password controls access to the system setup utility.
System Password	Allows you to set the system password. The system password controls access to the computer at boot.
HDD Password	Allows you to set the HDD password. The HDD password controls access to the computers HDD.
Password Change	Allows you to permit or deny system password or HDD password changes.
	Default: Permitted
Absolute®	Allows you to track your computer
	Default: enabled
Absolute® Status	Allows you to activate or deactivate the Absolute® feature
Firmware TPM	Enable or disable the firmware TPM.
	Default: Enabled
PPI Bypass for Clear Command	Allows you to control the TPM Physical Presence Interface (PPI). When enabled, this setting will allow the OS to skip BIOS PPI user prompts when issuing the Clear command. Changes to this setting take effect immediately.
	Default: Disabled
UEFI Firmware Capsule Updates	Enables or disables BIOS updates through UEFI capsule update packages.
	Default: Enabled
WINDOWS SMM SECURITY MITIGATIONS TABLE (WSMT)	Enables or disables configuration of platform features on Dell Client Systems with WSMT-enabled BIOS.
	Default: Enabled
Secure Boot	Enables or disables Secure Boot.
	Default: Enabled

**Table 27. System setup options—Boot menu**

<b>Boot</b>	
File Browser Add Boot Option	Allows you to add boot options.

**Table 28. System setup options—Exit menu**

<b>Exit</b>	
Exit Saving Changes	Allows you to exit system setup and save your changes.
Save Change Without Exit	Allows you to save your changes without exiting the BIOS setup.
Exit Discarding Changes	Allows you to exit the BIOS setup without saving the changes.

**Table 28. System setup options—Exit menu (continued)**

Exit	
Load Optimal Defaults	Allows you to restore default values for all system setup options.
Discard Changes	Allows you to load previous values for all system setup options.

## Updating the BIOS

### Updating the BIOS in Windows

#### About this task

 **CAUTION:** If BitLocker is not suspended before updating the BIOS, the next time you reboot the system it will not recognize the BitLocker key. You will then be prompted to enter the recovery key to progress and the system will ask for this on each reboot. If the recovery key is not known this can result in data loss or an unnecessary operating system re-install. For more information on this subject, see Knowledge Article: <https://www.dell.com/support/article/sln153694>

#### Steps

1. Go to [www.dell.com/support](http://www.dell.com/support).
2. Click **Product support**. In the **Search support** box, enter the Service Tag of your computer, and then click **Search**.  
 **NOTE:** If you do not have the Service Tag, use the SupportAssist feature to automatically identify your computer. You can also use the product ID or manually browse for your computer model.
3. Click **Drivers & Downloads**. Expand **Find drivers**.
4. Select the operating system installed on your computer.
5. In the **Category** drop-down list, select **BIOS**.
6. Select the latest version of BIOS, and click **Download** to download the BIOS file for your computer.
7. After the download is complete, browse the folder where you saved the BIOS update file.
8. Double-click the BIOS update file icon and follow the on-screen instructions.  
For more information, see knowledge base article [000124211](https://www.dell.com/support/article/000124211) at [www.dell.com/support](http://www.dell.com/support).

### Updating the BIOS in Linux and Ubuntu

To update the system BIOS on a computer that is installed with Linux or Ubuntu, see the knowledge base article [000131486](https://www.dell.com/support/article/000131486) at [www.dell.com/support](http://www.dell.com/support).

### Updating the BIOS using the USB drive in Windows

#### About this task

 **CAUTION:** If BitLocker is not suspended before updating the BIOS, the next time you reboot the system it will not recognize the BitLocker key. You will then be prompted to enter the recovery key to progress and the system will ask for this on each reboot. If the recovery key is not known this can result in data loss or an unnecessary operating system re-install. For more information on this subject, see Knowledge Article: <https://www.dell.com/support/article/sln153694>

#### Steps

1. Follow the procedure from step 1 to step 6 in [Updating the BIOS in Windows](#) to download the latest BIOS setup program file.

2. Create a bootable USB drive. For more information, see the knowledge base article [000145519](https://www.dell.com/support/article/000145519) at [www.dell.com/support](http://www.dell.com/support).
3. Copy the BIOS setup program file to the bootable USB drive.
4. Connect the bootable USB drive to the computer that needs the BIOS update.
5. Restart the computer and press **F12**.
6. Select the USB drive from the **One Time Boot Menu**.
7. Type the BIOS setup program filename and press **Enter**.  
The **BIOS Update Utility** appears.
8. Follow the on-screen instructions to complete the BIOS update.

## Updating the BIOS from the F12 One-Time boot menu

Update your computer BIOS using the BIOS update.exe file that is copied to a FAT32 USB drive and booting from the F12 One-Time boot menu.

### About this task

 **CAUTION:** If BitLocker is not suspended before updating the BIOS, the next time you reboot the system it will not recognize the BitLocker key. You will then be prompted to enter the recovery key to progress and the system will ask for this on each reboot. If the recovery key is not known this can result in data loss or an unnecessary operating system re-install. For more information on this subject, see Knowledge Article: <https://www.dell.com/support/article/sln153694>

### BIOS Update

You can run the BIOS update file from Windows using a bootable USB drive or you can also update the BIOS from the F12 One-Time boot menu on the computer.

Most of the Dell computers built after 2012 have this capability, and you can confirm by booting your computer to the F12 One-Time Boot Menu to see if BIOS FLASH UPDATE is listed as a boot option for your computer. If the option is listed, then the BIOS supports this BIOS update option.

 **NOTE:** Only computers with BIOS Flash Update option in the F12 One-Time boot menu can use this function.

### Updating from the One-Time boot menu

To update your BIOS from the F12 One-Time boot menu, you need the following:

- USB drive formatted to the FAT32 file system (key does not have to be bootable)
- BIOS executable file that you downloaded from the Dell Support website and copied to the root of the USB drive
- AC power adapter that is connected to the computer
- Functional computer battery to flash the BIOS

Perform the following steps to perform the BIOS update flash process from the F12 menu:

 **CAUTION:** Do not turn off the computer during the BIOS update process. The computer may not boot if you turn off your computer.

### Steps

1. From a turn off state, insert the USB drive where you copied the flash into a USB port of the computer.
2. Turn on the computer and press F12 to access the One-Time Boot Menu, select BIOS Update using the mouse or arrow keys then press Enter.  
The flash BIOS menu is displayed.
3. Click **Flash from file**.
4. Select external USB device.
5. Select the file and double-click the flash target file, and then click **Submit**.
6. Click **Update BIOS**. The computer restarts to flash the BIOS.
7. The computer will restart after the BIOS update is completed.

# System and setup password

Table 29. System and setup password

Password type	Description
System password	Password that you must enter to log on to your system.
Setup password	Password that you must enter to access and make changes to the BIOS settings of your computer.

You can create a system password and a setup password to secure your computer.

 **CAUTION:** The password features provide a basic level of security for the data on your computer.

 **CAUTION:** Anyone can access the data stored on your computer if it is not locked and left unattended.

 **NOTE:** System and setup password feature is disabled.

## Assigning a system setup password

### Prerequisites

You can assign a new **System or Admin Password** only when the status is in **Not Set**.

### About this task

To enter the system setup, press F12 immediately after a power-on or reboot.

### Steps

1. In the **System BIOS** or **System Setup** screen, select **Security** and press Enter.  
The **Security** screen is displayed.
2. Select **System/Admin Password** and create a password in the **Enter the new password** field.  
Use the following guidelines to assign the system password:
  - A password can have up to 32 characters.
  - The password can contain the numbers 0 through 9.
  - Only lower case letters are valid, upper case letters are not valid.
  - Only the following special characters are valid: Space, ("), (+), (.), (-), (.), (/), (:), ([], (\), (]), (`).
3. Type the system password that you entered earlier in the **Confirm new password** field and click **OK**.
4. Press F10 to save the changes.  
The computer restarts.

## Deleting or changing an existing system setup password

### Prerequisites

Ensure that the **Password Status** is Unlocked (in the System Setup) before attempting to delete or change the existing System password. You cannot delete or change an existing System password, if the **Password Status** is Locked.

### About this task

To enter the System Setup, press F12 immediately after a power-on or reboot.

### Steps

1. In the **System BIOS** or **System Setup** screen, select **System Security** and press Enter.  
The **System Security** screen is displayed.
2. In the **System Security** screen, verify that **Password Status** is **Unlocked**.

3. Select **System Password**, update, or delete the existing system password, and press Enter or Tab.

 **NOTE:** If you change the System password, reenter the new password when prompted. To delete the System and/or Setup password, key in a blank entry into the password window and hit enter.

4. Press F10 to save the changes.  
The computer restarts.

## Clearing BIOS (System Setup) and System passwords

### About this task

To clear the system or BIOS passwords, contact Dell technical support as described at [www.dell.com/contactdell](http://www.dell.com/contactdell).

 **NOTE:** For information on how to reset Windows or application passwords, refer to the documentation accompanying Windows or your application.

# Getting help and contacting Dell

## Self-help resources

You can get information and help on Dell products and services using these self-help resources:

**Table 30. Self-help resources**

Self-help resources	Resource location
Information about Dell products and services	<a href="http://www.dell.com">www.dell.com</a>
My Dell	
Tips	
Contact Support	In Windows search, type <b>Contact Support</b> , and press Enter.
Online help for operating system	<a href="http://www.dell.com/support/windows">www.dell.com/support/windows</a> <a href="http://www.dell.com/support/linux">www.dell.com/support/linux</a>
Troubleshooting information, user manuals, setup instructions, product specifications, technical help blogs, drivers, software updates, and so on.	<a href="http://www.dell.com/support">www.dell.com/support</a>
Dell knowledge base articles for a variety of computer concerns.	<ol style="list-style-type: none"> <li>1. Go to <a href="https://www.dell.com/support/home/?app=knowledgebase">https://www.dell.com/support/home/?app=knowledgebase</a>.</li> <li>2. Type the subject or keyword in the <b>Search</b> box.</li> <li>3. Click <b>Search</b> to retrieve the related articles.</li> </ol>
Learn and know the following information about your product: <ul style="list-style-type: none"> <li>• Product specifications</li> <li>• Operating system</li> <li>• Setting up and using your product</li> <li>• Data backup</li> <li>• Troubleshooting and diagnostics</li> <li>• Factory and system restore</li> <li>• BIOS information</li> </ul>	See <i>Me and My Dell</i> at <a href="http://www.dell.com/support/manuals">www.dell.com/support/manuals</a> . To locate the <i>Me and My Dell</i> relevant to your product, identify your product through one of the following: <ul style="list-style-type: none"> <li>• Select <b>Detect Product</b>.</li> <li>• Locate your product through the drop-down menu under <b>View Products</b>.</li> <li>• Enter the <b>Service Tag number</b> or <b>Product ID</b> in the search bar.</li> </ul>

## Contacting Dell

To contact Dell for sales, technical support, or customer service issues, see [www.dell.com/contactdell](http://www.dell.com/contactdell).

 **NOTE:** Availability varies by country and product, and some services may not be available in your country.

 **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.