

Dell Latitude 3300

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.

© 2020 Dell Inc. or its subsidiaries. All rights reserved. Dell, EMC, and other trademarks are trademarks of Dell Inc. or its subsidiaries. Other trademarks may be trademarks of their respective owners.

1 Set up your computer	5
2 Chassis Overview	7
Front view.....	7
Left view.....	8
Right view.....	8
Base view.....	9
3 Keyboard shortcuts	10
4 Technical Specifications	11
Processor.....	11
Memory.....	11
Storage.....	12
System board connectors.....	12
Media card-reader.....	12
Audio.....	12
Integrated graphics.....	13
Camera.....	13
Communication.....	13
Wireless.....	13
Ports and connectors.....	14
Display.....	14
Keyboard.....	15
Touchpad.....	15
Battery.....	15
Power adapter.....	16
Dimensions and weight.....	17
Computer environment.....	17
Security.....	17
Security Software.....	18
5 System setup	19
Boot menu.....	19
Navigation keys.....	19
System setup options.....	20
General options.....	20
System configuration.....	21
Video screen options.....	23
Security.....	23
Secure Boot.....	24
Intel Software Guard Extensions options.....	25
Performance.....	25
Power management.....	26

Post behavior.....	27
Virtualization support.....	28
Wireless options.....	28
Maintenance.....	29
System logs.....	29
SupportAssist System Resolution.....	29
Boot Sequence.....	30
Updating the BIOS in Windows	30
Updating your system BIOS using a USB flash drive.....	31
Updating the Dell BIOS in Linux and Ubuntu environments.....	31
System and setup password.....	31
Assigning a system setup password.....	32
Deleting or changing an existing system setup password.....	32
6 Software and Troubleshooting.....	33
Operating system.....	33
Create a USB recovery drive for Windows.....	33
Downloading Windows drivers.....	33
7 Getting help.....	35
Contacting Dell.....	35
Contacting Dell.....	35

Set up your computer

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



2. Finish the Windows system setup.
3. 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.**
 - Sign in or create an account if the internet is connected, or create an offline account if it's not.
 - On the **Support and Protection** screen, enter your contact details.
4. Locate and use Dell apps from the Windows Start menu—Recommended

Table 1. Locate Dell apps

Dell apps	Details
	<p>Dell Product Registration</p> <p>Register your computer with Dell.</p>
	<p>Dell Help & Support</p> <p>Access help and support for your computer.</p>
	<p>SupportAssist</p> <p>Proactively checks the health of your computer's hardware and software.</p> <p>NOTE: Renew or upgrade your warranty by clicking the warranty expiry date in SupportAssist.</p>

Dell apps



Details

Dell Update

Updates your computer with critical fixes and important device drivers as they become available.

Dell Digital Delivery

Download software applications including software that is purchased but not pre-installed on your computer.

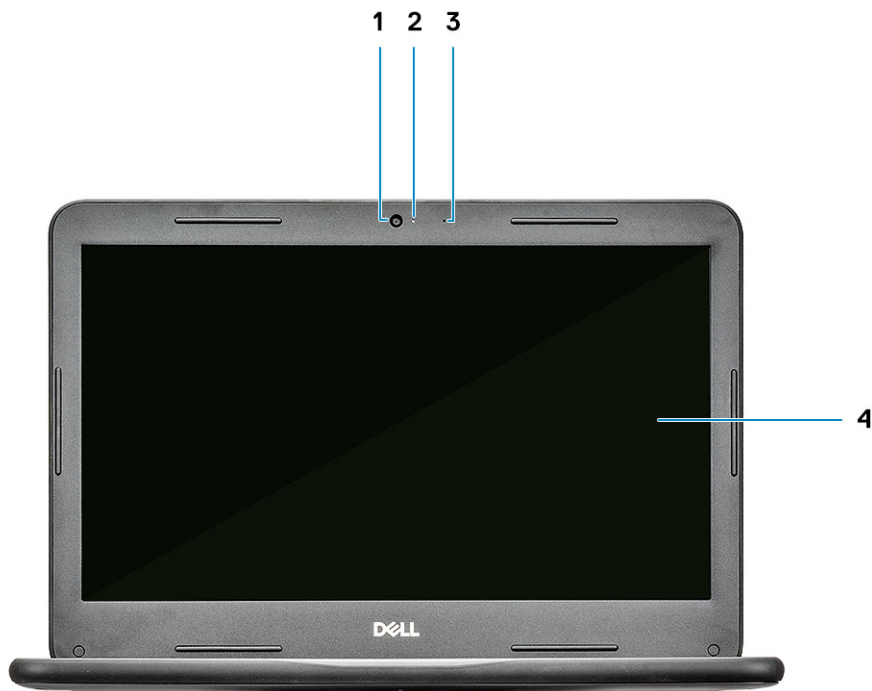
5. Create recovery drive for Windows.

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

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

Chassis Overview

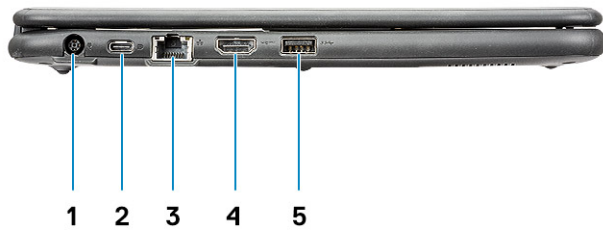
Front view



1. Camera
3. Microphone

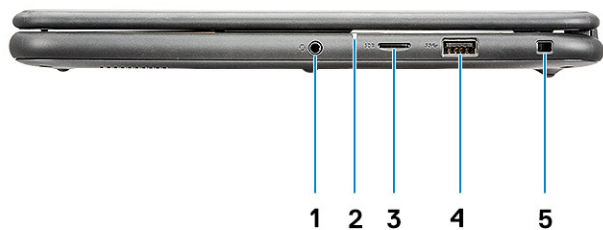
2. Camera status light
4. LCD Panel

Left view



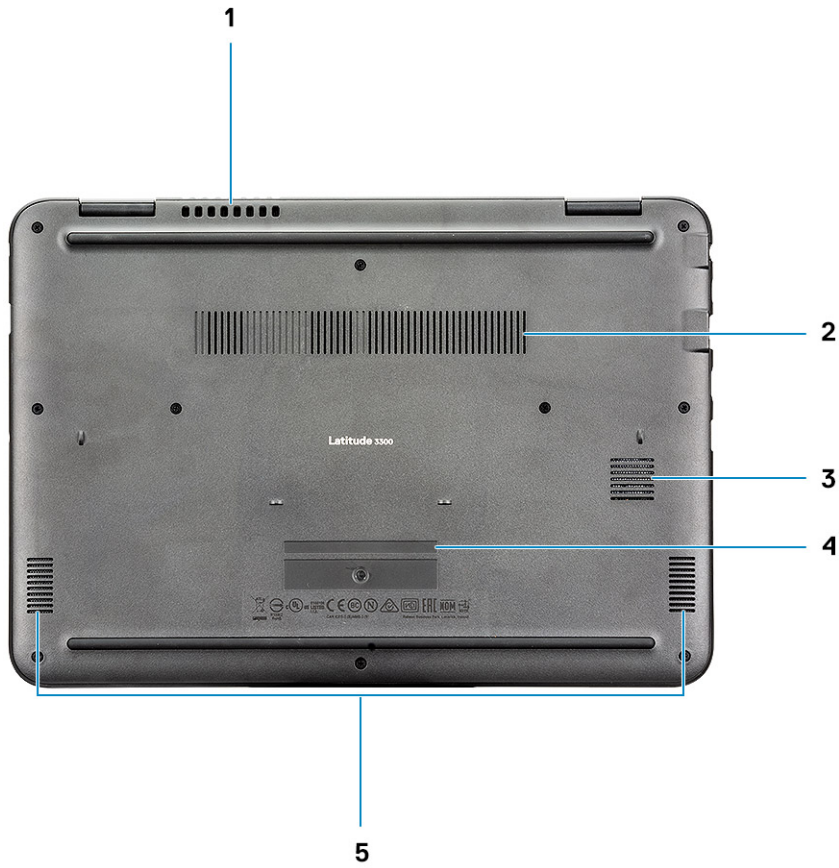
- 1. Power connector
- 2. USB Type-C port
- 3. Network port
- 4. HDMI port
- 5. USB 3.0 port

Right view



- 1. Audio port
- 2. Battery status light
- 3. microSD port
- 4. USB 3.0 port
- 5. Wedge-shaped lock slot

Base view



- 1. System fan vent
- 3. SSD vent
- 5. Speakers

- 2. Heatsink vent
- 4. Service tag

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	Description
Fn + F1	Mute audio
Fn + F2	Decrease volume
Fn + F3	Increase volume
Fn + F4	Mic Mute
Fn + F5	Num Lock
Fn + F6	Scroll Lock
Fn + F8	Display Toggle (Win + P)
Fn + F9	Search
Fn + F11	Print Screen
Fn + F12	Insert
Fn + Home	Toggle Wireless On/Off
Fn + End	Sleep
Fn + Ctrl	open application
Fn + Esc	Toggle Fn-key lock
Fn + Up arrow	Increase brightness
Fn + Down arrow	Decrease brightness

Technical Specifications

Processor

NOTE: Processor numbers are not a measure of performance. Processor availability is subject to change and may vary by region/country.

Table 3. Processor specifications

Type	Type	UMA Graphics
Intel Core i3 - 7020U (Dual Core, # of Threads: 4, TDP:15 W, 3 M cache, 2.3 GHz)	Kaby Lake U	Intel HD Graphic 620
Intel Celeron Processor 3865U (Dual Core, # of Threads: 2, TDP:15 W, 2 M cache, 1.80 GHz)	Kaby Lake U	Intel HD Graphic 610
Intel Pentium Processor 4415U (Dual Core, # of Threads: 4, TDP:15 W, 2 M cache, 2.3 GHz)	Kaby Lake U	Intel HD Graphic 610
Intel Core i5-8250U (Quad Core, # of Threads : 8, TDP:15 W, 6 M cache, 1.6 GHz)	Kaby Lake R	Intel UHD Graphic 620

Memory

Table 4. Memory specifications

Memory specification	
Minimum memory configuration	4 GB
Maximum memory configuration	16 GB
Number of slots	1 SODIMM
Maximum memory supported per slot	16 GB
Memory options	<ul style="list-style-type: none"> • 4 GB - 1 x 4 GB • 8 GB- 1 x 8 GB • 16 GB - 1 x 16 GB
Type	DDR4
Speed	<ul style="list-style-type: none"> • KBL-U: 2133 MHz • KBL-R: 2400 MHz

Storage

Table 5. Storage specifications

Type	Form factor	Interface	Capacity
M.2 SSD	2230	PCIe	128 GB/256 GB
M.2 eMMC	2242	SATA	64 GB

System board connectors

Table 6. System board connectors

System board connectors	
M.2 Connectors	Two <ul style="list-style-type: none">Slot 1: 2230/2242 Key-M for StorageSlot 2: 2230 Key-A for WLAN card

Media card-reader

Table 7. Media-card reader specifications

Media card-reader	
Type	microSD card slot
Supported cards	<ul style="list-style-type: none">SDSDHCSDXC

Audio

Table 8. Following are the audio specifications

Audio specifications	
Controller	Realtek ALC3246
Type	Four-channel high-definition audio
Speakers	Two (Directional speakers)
Interface	<ul style="list-style-type: none">Universal audio jackHigh quality speakersSingle microphoneStereo headset/mic combo
Internal speaker amplifier	2 W (RMS) per channel

Integrated graphics

Table 9. Integrated graphics specifications

Controller	Type	CPU Dependency	Graphics memory type	Capacity	External display support	Maximum resolution
Intel HD Graphics 620	UMA	Intel Core i3 - 7020 U	Integrated	Shared system memory	<ul style="list-style-type: none"> HDMI 1.4 a DisplayPort via Type-C 	4096 × 2304
Intel UHD Graphics 620	UMA	Intel Core i5 - 8250 U	Integrated	Shared system memory	<ul style="list-style-type: none"> HDMI 1.4 a DisplayPort via Type-C 	4096 × 2304
Intel HD Graphics 610	UMA	Intel Celeron 3865 U/ Pentium 4415 U	Integrated	Shared system memory	HDMI 1.4 a NOTE: Celeron CPU sku does not have the USB Type-C port	4096 × 2304

Camera

Table 10. Camera specifications

Specifications

Resolution	Camera: <ul style="list-style-type: none"> Still image: 0.92 megapixels Video: 1280 x 720 at 30 fps
Diagonal viewing angle	<ul style="list-style-type: none"> Camera - 78.6 degree (optical FOV) / 83.5 degree (ME FOV)

Communication

Table 11. Communication specifications

Communications specifications

Network adapter	Integrated Realtek RTL8111HSD 10/100/1000 Mb/s Ethernet (RJ-45)
-----------------	--

Wireless

Table 12. Wireless specifications

Wireless specifications

Intel Dual Band Wireless-AC 8265 802.11AC 2 x 2 Wi-Fi + BT 4.2 LE M.2 Wireless Card
Qualcomm® QCA61x4A 802.11ac MU-MIMO Dual Band (2 x 2) Wi-Fi + Bluetooth 4.2 LE M.2 Wireless Card

Ports and connectors

Table 13. Following are ports and connectors specifications

Ports and connectors specifications

Memory card reader	microSD 3.0 memory card reader
USB	<ul style="list-style-type: none">• Two USB 3.1 Gen 1 Type-A ports• One USB 3.1 Gen 1 Type-C port (except Celeron sku)
Security	Noble Wedge shaped lock slot
Audio	<ul style="list-style-type: none">• Universal audio jack• Single microphone
Video	<ul style="list-style-type: none">• HDMI 1.4 a• DisplayPort through Type-C port
Network adapter	One RJ-45 connector

Display

Table 14. Following are the display specifications

Display specifications

Type	<ul style="list-style-type: none">• 13.3-inch FHD WVA (1920 x 1080) True-life (16:9) WLED touch screen• 13.3 inch-HD (1366 x 768) Anti-glare (16:9) WLED non-touch screen
Height (Active area)	FHD: 165.24 mm HD: 164.97 mm
Width (Active area)	FHD: 293.76 mm HD: 293.42 mm
Diagonal	FHD: 337.044 mm (13.3 inch) HD: 336.616 mm (13.3 inch)
Luminance/Brightness (typical)	220 nits
Refresh rate	60 Hz
Horizontal viewing angle (min)	FHD: +/- 80 HD: +/- 40
Vertical viewing angle (min)	FHD: +/- 80 HD: +10/- 40

Keyboard

Table 15. Keyboard specifications

Keyboard specifications

Number of keys	<ul style="list-style-type: none">• 82 Keys (U.S.A.)• 83 Keys (U.K.)• 86 Keys (Japan)• 84 Keys (Brazil)
Size	Compressed <ul style="list-style-type: none">• X= 19.05 mm key pitch• Y= 18.05 mm key pitch
Backlit keyboard	None
Layout	U.S.A./U.K./Japan/Brazil

Touchpad

Table 16. Touchpad specifications

Specifications

Resolution	<ul style="list-style-type: none">• Horizontal: 3220• Vertical: 1952
Dimensions	<ul style="list-style-type: none">• Width: 4.13 inch (105 mm)• Height: 2.56 inch (65 mm)
Multi-touch	Supports up to 5 fingers i NOTE: Gesture support is dependent on operating system

Battery

Table 17. Battery specifications

Battery specifications

Type	<ul style="list-style-type: none">• 42 WHr "smart" Lithium-ion 3 cell battery• 56 WHr "smart" Lithium-ion 4 cell battery• 42 WHr "smart" Lithium-polymer 3 cell battery
Dimension	<ol style="list-style-type: none">1. 42 WHr "smart" Lithium-ion<ul style="list-style-type: none">• Height: 5.9 mm (0.23 inch)• Width: 97.15 mm (3.82 inch)• Depth: 184.15 mm (7.25 inch)• Weight: 0.2 Kg (0.44 lb)2. 56 WHr "smart" Lithium-ion<ul style="list-style-type: none">• Height: 5.9 mm (0.23 inch)• Width: 98.20 mm (3.87 inch)• Depth: 233.37 mm (9.19 inch)• Weight: 0.25 Kg (0.55 lb)3. 42 WHr "smart" Lithium-polymer

Battery specifications

	<ul style="list-style-type: none">Height: 5.9 mm (0.23 inch)Width: 97.15 mm (3.82 inch)Depth: 184.15 mm (7.25 inch)Weight: 0.195 Kg (0.43 lb)
Voltage	<ul style="list-style-type: none">42 WHr - 11.40 V DC56 WHr - 15.20 V DC
Life span	42 WHr-One year warranty for 300 cycles discharge/charge cycles 56 WHr- Optional three year warranty for 1000 cycles discharge/charge cycles
Charging time when the computer is off (approximate)	Express Charge Mode 0~15 °C : 4 hours 16~45 °C : 2 hours 46~60 °C : 2 hours Standard Mode 0~15 °C : 4 hours 16~60 °C : 3 hours 46~60 °C : 3 hours
Operating time	Varies depending on operating conditions and can significantly reduce under certain power-intensive conditions
Temperature range: Operating	0 °C to 35 °C (32 °F to 95 °F) Charge: 0 °C to 50 °C (32 °F to 122 °F) Discharge: 0 °C to 70 °C (32 °F to 158 °F)
Temperature range: Storage	- 20 °C to 65 °C (- 4 °F to 149 °F)
Coin-cell battery	CR2032

Power adapter

Table 18. Power adapter specifications

The following table lists power adapter specifications

Type	<ul style="list-style-type: none">65 W Barrel TypeUpsell Type-C Adapter
Input Voltage	100 VAC to 240 VAC
Input current (maximum)	2.5 A
Input frequency	50 Hz to 60 Hz
Output current	3.34 A
Rated output voltage	19.5 VDC
Temperature range (Operating)	0 °C to 40 °C (32 °F to 104 °F)
Temperature range (Non-Operating)	40 °C to 70 °C (-40 °F to 158 °F)

Dimensions and weight

Table 19. Dimensions and weight

Dimensions and weight	
Height	Front height - 0.88 inch (22.3 mm) Back height - 0.88 inch (22.3 mm)
Width	12.98 inch (329.6 mm)
Depth	9.07 inch (230.45 mm)
Weight	Starting 3.52 lb (1.59 kg)

Computer environment

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

For information on Dell Product Safety, EMC and Environmental Data Sheets, see <https://www.dell.com/learn/us/en/uscorp1/product-info-datasheets-safety-emc-environmental>.

Table 20. Computer environment

Physical conditions	Operating	Storage
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) NOTE: Maximum dew point temperature = 26 °C	0% to 95% (non-condensing) NOTE: Maximum dew point temperature = 33 °C
Vibration (maximum)	2 Hz to 600 Hz at 0.66 Grms	2 Hz to 600 Hz at 1.33 Grms
Shock (maximum)	160 G†	160 G‡
Altitude (maximum)	3048 m (10,000 ft)	10,668 m (35,000 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.

‡ Measured using a 2 ms half-sine pulse when the hard-drive head is in parked position.

Security

Table 21. Security

Security	
Firmware TPM	Yes
Windows Hello Support	Optional
Cable cover	No
Chassis lock slot and loop support	Yes

Security Software

Table 22. Security Software

Security Software

Dell Endpoint Security Suite Enterprise	Optional
Dell Data Guardian	Optional
Dell Encryption (Enterprise or Personal)	Optional
Dell Threat Defense	Optional
RSA SecurID Access	Optional
RSA NetWitness Endpoint	Optional
MozyPro or MozyEnterprise	Optional
Absolute Data & Device Security	Optional

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](#)
- [System setup options](#)
- [Boot Sequence](#)
- [Updating the BIOS in Windows](#)
- [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:
 - Windows Boot Manager
- Other Options:
 - BIOS Setup
 - BIOS Flash Update
 - Diagnostics
 - Change Boot Mode Settings

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	Navigation
Up arrow	Moves to the previous field.
Down arrow	Moves to the next field.
Enter	Selects a value in the selected field (if applicable) or follow the link in the field.
Spacebar	Expands or collapses a drop-down list, if applicable.
Tab	Moves to the next focus area.

Keys

Navigation


Esc 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.

System setup options

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

General options

Table 23. General



Option	Description
System Information	<p>This section lists the primary hardware features of your computer.</p> <p>The options are:</p> <ul style="list-style-type: none">• System Information<ul style="list-style-type: none">• BIOS version• Service Tag• Asset Tag• Ownership Tag• Manufacture Date• Express Service Code• Memory Configuration<ul style="list-style-type: none">• Memory Installed• Memory Available• Memory Speed• Memory Channel Mode• Memory Technology• DIMM A Size <p> NOTE: Due to an amount of memory being assigned for system use, "Memory Available" is less than "Memory Installed". Note that certain operating systems may not be able to use all the available memory.</p> <ul style="list-style-type: none">• Processor Information<ul style="list-style-type: none">• Processor Type• Core Count• Processor ID• Current Clock Speed• Maximum Clock Speed• Processor L2 Cache• Processor L3 Cache• HT Capable• 64-Bit Technology• Device Information<ul style="list-style-type: none">• SATA-0• M.2 PCIe SSD-0• LOM MAC Address• Passthrough MAC Address• Video Controller

Option	Description
	<ul style="list-style-type: none"> • Video BIOS Version • Video Memory • Panel Type • Native Resolution • Audio Controller • WiFi Device • Bluetooth Device
Battery Information	Displays the battery status, health, and the type of AC adapter connected to the computer.
Boot Sequence	<p>Allows you to change the order in which the computer attempts to find an operating system.</p> <p>The options are:</p> <ul style="list-style-type: none"> • Windows Boot Manager • Onboard NIC (IPV4) • Onboard NIC (IPV6) <p>Allows you to change the boot list options.</p> <p>Click one of the following options:</p> <ul style="list-style-type: none"> • Legacy External Devices • UEFI—Default
Advanced Boot Options	<p>Allows you to Enable Legacy Option ROMs.</p> <p>The options are:</p> <ul style="list-style-type: none"> • Enable Legacy Option ROMs • Enable Attempt Legacy Boot
UEFI Boot Path Security	<p>Allows you to control whether the system prompts the user to enter the Admin password when booting to a UEFI boot path.</p> <p>Click one of the following options:</p> <ul style="list-style-type: none"> • Always, Except Internal HDD—Default • Always • Never
Date/Time	Allows you to set the date and time. The change to the system date and time takes effect immediately.

System configuration

Table 24. System Configuration

Option	Description
Integrated NIC	<p>Allows you to configure the integrated network controller.</p> <p>Enable UEFI Network Stack : Enabled by Default.</p> <p>Click one of the following options:</p> <ul style="list-style-type: none"> • Disabled: The internal LAN is off and not visible to the operating system. • Enabled : The internal LAN is enabled. • Enabled w/PXE: The internal LAN is enabled (with PXE boot) —Default

Option	Description
SATA Operation	<p>Allows you to configure the operating mode of the integrated SATA hard-drive controller.</p> <p>Click one of the following options:</p> <ul style="list-style-type: none"> • Disabled • AHCI • RAID On—Default <p> NOTE: SATA is configured to support RAID mode.</p>
Drives	<p>These fields let you enable or disable various drives on board.</p> <p>The options are:</p> <ul style="list-style-type: none"> • SATA-0 • M.2 PCIe SSD-0
SMART Reporting	<p>This field controls whether hard drive errors for integrated drives are reported during startup.</p> <p>The option is disabled by default.</p>
USB Configuration	<p>Allows you to enable or disable the internal/integrated USB configuration.</p> <p>The options are:</p> <ul style="list-style-type: none"> • Enable USB Boot Support • Enable External USB Ports <p>All the options are set by default.</p> <p> NOTE: USB keyboard and mouse always work in the BIOS setup irrespective of these settings.</p>
Dell Type-C Dock Configuration	<p>Allows you to connect to Dell WD and TB family of docks (Type-C Docks) independent of USB and Thunderbolt adapter configuration.</p> <p>This option is enabled by default.</p>
Audio	<p>Allows you to enable or disable the integrated audio controller. By default, the Enable Audio option is selected.</p> <p>The options are:</p> <ul style="list-style-type: none"> • Enable Microphone • Enable Internal Speaker <p>This option is set by default.</p>
Touchscreen	<p>This option controls whether the touchscreen is enabled or disabled</p> <p>This option is enabled by default.</p>
Miscellaneous devices	<p>Allows you to enable or disable various on board devices.</p> <ul style="list-style-type: none"> • Enable Camera—Default • Enable Secure Digital (SD) Card — Enabled Default • Secure Digital (SD) Card Boot - Disabled • Secure Digital Card (SD) Read-Only Mode - Disabled

Video screen options


Table 25. Video

Option	Description
LCD Brightness	Allows you to set the display brightness depending upon the power source. On Battery (50% is default) and On AC (100% default).
Switchable Graphics	<p>This option enables or disables switchable graphics technologies such as NVIDIA Optimus and SMD PowerExpress.</p> <p>It should only be enabled for Windows 7 and later versions of Windows or the Ubuntu OS. This feature is not applicable to other operating systems.</p>

Security

Table 26. Security

Option	Description
Admin Password	<p>Allows you to set, change, or delete the administrator (admin) password.</p> <p>The entries to set the password are:</p> <ul style="list-style-type: none">• Enter the old password• Enter the new password• Confirm new password <p>Click OK once you set the password.</p> <p>NOTE: For the first time login, "Enter the old password:" field is marked to "Not set". Set the password for the first time and later you can change or delete the password</p>
System Password	<p>Allows you to set, change, or delete the System password.</p> <p>The entries to set the password are:</p> <ul style="list-style-type: none">• Enter the old password• Enter the new password• Confirm new password <p>Click OK once you set the password.</p> <p>NOTE: For the first time login, "Enter the old password:" field is marked to "Not set". Set the password for the first time and later you can change or delete the password</p>
Strong Password	<p>Allows you to enforce the option to always set the strong password.</p> <ul style="list-style-type: none">• Enable Strong Password <p>This option is not set by default.</p>
Password Configuration	<p>You can define the length of your password. Min = 4, Max = 32</p>
Password Bypass	<p>Allows you to bypass the System password and the Internal HDD password, when it is set, during a system restart.</p> <p>Click one of the options:</p> <ul style="list-style-type: none">• Disabled—Default• Reboot bypass
Password Change	<p>Allows you to change the System password when the administrator password is set.</p> <ul style="list-style-type: none">• Allow Non-Admin Password Changes <p>This option is set by default.</p>

Option	Description
Non-Admin Setup Changes	<p>Allows you to determine whether changes to the setup options are allowed when an Administrator Password is set. If disabled, the setup options are locked by the admin password.</p> <ul style="list-style-type: none"> • Allow Wireless Switch Changes <p>This option is not set by default.</p>
UEFI Capsule Firmware Updates	<p>Allows you to update the system BIOS via UEFI capsule update packages.</p> <ul style="list-style-type: none"> • Enable UEFI Capsule Firmware Updates <p>This option is set by default.</p>
PTT Security	<p>This option lets you control whether the Platform Trust Technology feature (PTT) is visible to the operating system.</p> <p>The options are :</p> <ul style="list-style-type: none"> • PTT On — Enabled by Default • Clear • PPI ByPass for Clear Command
Computrace (R)	<p>Allows you to activate or disable the optional Computrace software.</p> <p>The options are:</p> <ul style="list-style-type: none"> • Deactivate • Disable • Activate—Default
CPU XD Support	<p>Allows you to enable or disable the Execute Disable mode of the Processor, operating system uses this feature to hinder malicious programs that exploits buffer overflow.</p> <ul style="list-style-type: none"> • Enable CPU XD Support—Default
Admin Setup Lockout	<p>Allows you to prevent users from entering Setup when an administrator password is set.</p> <ul style="list-style-type: none"> • Enable Admin Setup Lockout <p>This option is not set by default.</p>
Master Password Lockout	<p>Allows you to disable master password support.</p> <ul style="list-style-type: none"> • Enable Master Password Lockout <p>This option is not set by default.</p> <p> NOTE: Hard disk password should be cleared before the settings can be changed.</p>
SMM Security Mitigation	<p>Allows you to enable or disable additional UEFI SMM Security Mitigation protection.</p> <ul style="list-style-type: none"> • SMM Security Mitigation <p>This option is not set by default.</p>

Secure Boot

Table 27. Secure Boot

Option	Description
Secure Boot Enable	<p>Allows you to enable or disable the Secure Boot Feature.</p> <ul style="list-style-type: none"> • Secure Boot Enable Not enabled by default
Secure Boot Mode	<p>Changes to the Secure Boot operation mode modifies the behavior to allow evaluation of UEFI driver signatures.</p> <p>Choose one of the these options:</p>

Option	Description
Expert Key Management	<ul style="list-style-type: none"> • Deployed Mode—Default • Audit Mode <p>Allows you to enable or disable Expert Key Management.</p> <ul style="list-style-type: none"> • Enable Custom Mode <p>This option is not set by default.</p> <p>The Custom Mode Key Management options are:</p> <ul style="list-style-type: none"> • PK—Default • KEK • db • dbx

Intel Software Guard Extensions options

Table 28. Intel Software Guard Extensions

Option	Description
Intel SGX Enable	<p>This field allows you to provide a secured environment for running code/storing sensitive information in the context of the main operating systems.</p> <p>Click one of the following options:</p> <ul style="list-style-type: none"> • Disabled • Enabled • Software controlled—Default
Enclave Memory Size	<p>This option sets SGX Enclave Reserve Memory Size</p> <p>Click one of the following options:</p> <ul style="list-style-type: none"> • 32 MB • 64 MB • 128 MB—Default

Performance

Table 29. Performance


Option	Description
Multi Core Support	<p>This field specifies whether the process has one or all cores enabled. The performance of some applications improves with the additional cores.</p> <ul style="list-style-type: none"> • All—Default • 1 • 2 • 3
Intel SpeedStep	<p>Allows you to enable or disable the Intel SpeedStep mode of processor.</p> <ul style="list-style-type: none"> • Enable Intel SpeedStep <p>This option is set by default.</p>
C-States Control	<p>Allows you to enable or disable the additional processor sleep states.</p>

Option	Description
	<ul style="list-style-type: none"> • C states <p>This option is set by default.</p>
Hyper-Thread Control	<p>Allows you to enable or disable the HyperThreading in the processor.</p> <ul style="list-style-type: none"> • Disabled • Enabled—Default

Power management

Table 30. Power Management

Option	Description
AC Behavior	<p>Allows you to enable or disable the computer from turning on automatically when an AC adapter is connected.</p> <ul style="list-style-type: none"> • Wake on AC <p>This option is not set by default.</p>
Enable Intel Speed Shift technology	<p>This option is used to enable/disable Intel Speed Shift Technology.</p> <p>This option is not enabled by default.</p>
Auto On Time	<p>Allows you to set the time at which the computer must turn on automatically.</p> <p>The options are:</p> <ul style="list-style-type: none"> • Disabled—Default • Every Day • Weekdays • Select Days <p>This option is not set by default.</p>
USB Wake Support	<p>Allows you to enable USB devices to wake the system from standby.</p> <ul style="list-style-type: none"> • Enable USB Wake Support • Wake on Dell USB-C Dock—Default
Wireless Radio Control	<p>This option if enabled, will sense the connection of the system to a wired network and subsequently disable the selected wireless radios (WLAN and WWAN). Upon disconnection from the wired network the selected wireless radio will be enabled.</p> <ul style="list-style-type: none"> • Control WLAN radio <p>This option is not set by default.</p>
Wake on LAN /WLAN	<p>This option allows the computer to power up from the off state when triggered by a special LAN signal. Wake-up from the Standby state is unaffected by this setting and must be enabled in the operating system. This feature only works when the computer is connected to AC power supply.</p> <ul style="list-style-type: none"> • Disabled—Default - Does not allow the system to power on by special LAN signals when it receives a wake-up signal from the LAN or wireless LAN. • LAN or WLAN - Allows the system to be powered on by special LAN or WLAN signals. • LAN Only - Allows the system to be powered on by special LAN signals. • WLAN Only - Allows the system to be powered on by special WLAN signals. • LAN with PXE Boot A wake up packet is sent to the system in either the S4 or S5
Block Sleep	<p>This option lets you to block entering to sleep in operating system environment.</p> <p>This option is not set by default.</p>

Option	Description
Peak Shift	<p>Allows you enable or disable the Peak shift feature. This feature, when enabled, minimizes the AC power usage at times of peak demand. Battery does not charge between the Peak Shift start and end time.</p> <p>Peak Shift Start and End Time can be configured for all weekdays.</p> <p>This option sets the battery threshold value (15% to 100%)</p>
Advanced Battery Charge Configuration	<p>This option enables you to maximize the battery health. By enabling this option, your system uses the standard charging algorithm and other techniques, during the non-work hours, to improve the battery health.</p> <p>Advanced Battery Charge Mode can be configured for all weekdays.</p>
Primary Battery Charge Configuration	<p>Allows you to select the charging mode for the battery.</p> <p>The options are:</p> <ul style="list-style-type: none"> • Adaptive—Default • Standard - Fully charges your battery at a standard rate. • ExpressCharge- The battery charges over a shorter period of time using Dell's fast charging technology. • Primarily AC use • Custom <p>If Custom Charge is selected, you can also configure Custom Charge Start and Custom Charge Stop.</p> <p> NOTE: All charging modes may not be available for all the batteries.</p>

Post behavior

Table 31. POST Behavior

Option	Description
Adapter Warnings	<p>Allows you to enable or disable the system setup (BIOS) warning messages when you use certain power adapters.</p> <ul style="list-style-type: none"> • Enable Adapter Warnings—Default
Numlock Enable	<p>Allows you to enable or disable the Numlock function when the system boots.</p> <ul style="list-style-type: none"> • Enable Numlock—Default
Fn Lock Options	<p>Allows you to let hot key combinations Fn + Esc toggle the primary behavior of F1–F12, between their standard and secondary functions. If you disable this option, you cannot dynamically toggle the primary behavior of these keys.</p> <ul style="list-style-type: none"> • Fn Lock—Default <p>Click one of the following options:</p> <ul style="list-style-type: none"> • Lock Mode Disable/Standard—Default • Lock Mode Enable/Secondary
Fastboot	<p>Allows you to speed up the boot process by bypassing some of the compatibility steps.</p> <p>Click one of the following options:</p> <ul style="list-style-type: none"> • Minimal—Default • Thorough • Auto
Extended BIOS POST Time	<p>Allows you to create an additional preboot delay.</p> <p>Click one of the following options:</p>

Option	Description
	<ul style="list-style-type: none"> • 0 seconds—Default • 5 seconds • 10 seconds
Full Screen Logo	<p>Allows you to display full screen logo, if your image matches screen resolution.</p> <ul style="list-style-type: none"> • Enable Full Screen Logo <p>This option is not set by default.</p>
Warnings and Errors	<p>Allows you to select different options to either stop, prompt and wait for user input, continue when warnings are detected but pause on errors, or continue when either warnings or errors are detected during the POST process.</p> <p>Click one of the following options:</p> <ul style="list-style-type: none"> • Prompt on Warnings and Errors—Default • Continue on Warnings • Continue on Warnings and Errors
MAC Address Pass-Through	<p>This feature replaces the external NIC MAC address (in a supported dock or dongle) with selected MAC address from the system.</p> <p>Click one of the following options:</p> <ul style="list-style-type: none"> • Passthrough MAC Address—Default • Integrated NIC 1 MAC Address • Disabled

Virtualization support

Table 32. Virtualization Support

Option	Description
Virtualization	<p>This option specifies whether a Virtual Machine Monitor (VMM) can utilize the additional hardware capabilities provided by the Intel Virtualization technology.</p> <ul style="list-style-type: none"> • Enable Intel Virtualization Technology <p>This option is set by default.</p>
VT for Direct I/O	<p>Enables or disables the Virtual Machine Monitor (VMM) from utilizing the additional hardware capabilities provided by the Intel Virtualization technology for direct I/O.</p> <ul style="list-style-type: none"> • Enable VT for Direct I/O <p>This option is set by default.</p>

Wireless options


Table 33. Wireless

Option	Description
Wireless Switch	<p>Allows to set the wireless devices that can be controlled by the wireless switch.</p> <p>The options are:</p> <ul style="list-style-type: none"> • WLAN • Bluetooth <p>All the options are enabled by default.</p>

Option	Description
Wireless Device Enable	<p>Allows you to enable or disable the internal wireless devices.</p> <p>The options are:</p> <ul style="list-style-type: none"> • WLAN • Bluetooth <p>All the options are enabled by default.</p>

Maintenance

Table 34. Maintenance

Option	Description
Service Tag	Displays the service tag of your computer.
Asset Tag	<p>Allows you to create a system asset tag if an asset tag is not already set.</p> <p>This option is not set by default.</p>
BIOS Downgrade	<p>Allows you to flash previous revisions of the system firmware.</p> <ul style="list-style-type: none"> • Allow BIOS Downgrade <p>This option is set by default.</p>
Data Wipe	<p>Allows you to securely erase data from all internal storage devices.</p> <ul style="list-style-type: none"> • Wipe on Next Boot <p>This option is not set by default.</p>
Bios Recovery	<p>BIOS Recovery from Hard Drive—This option is set by default. Allows you to recover the corrupted BIOS from a recovery file on the HDD or an external USB drive.</p> <p>BIOS Auto-Recovery— Allows you to recover the BIOS automatically.</p> <p> NOTE: BIOS Recovery from Hard Drive field should be enabled.</p> <p>Always Perform Integrity Check—Performs integrity check on every boot.</p>

System logs

Table 35. System Logs

Option	Description
BIOS events	Allows you to view and clear the System Setup (BIOS) POST events.
Thermal Events	Allows you to view and clear the System Setup (Thermal) events.
Power Events	Allows you to view and clear the System Setup (Power) events.

SupportAssist System Resolution

Table 36. SupportAssist System Resolution

Option	Description
Auto OS Recovery Threshold	<p>The Auto OS Recovery threshold setup options controls the automatic flow for SupportAssist System Resolution Console and for Dell OS Recovery Tool.</p> <p>The options are:</p>

Option	Description
	<ul style="list-style-type: none"> • 0 • 1 • 2—Default • 3
SupportAssist OS Recovery	<p>The SupportAssist OS Recovery option will enable or disable the boot flow for SupportAssist OS Recovery tool in the event of certain system errors.</p> <p>This option is not set by default.</p>

Boot Sequence

Boot sequence enables 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

NOTE: XXXX denotes the SATA drive number.

- Optical Drive (if available)
- SATA Hard Drive (if available)
- Diagnostics

NOTE: Choosing Diagnostics, displays the ePSA diagnostics screen.

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

Updating the BIOS in Windows

It is recommended to update your BIOS (System Setup) when you replace the system board or if an update is available. For laptops, ensure that your computer battery is fully charged and connected to a power before initiating a BIOS update.

NOTE: If BitLocker is enabled, it must be suspended prior to updating the system BIOS, and then re enabled after the BIOS update is completed.

1. Restart the computer.
2. Go to **Dell.com/support**.
 - Enter the **Service Tag** or **Express Service Code** and click **Submit**.
 - Click **Detect Product** and follow the instructions on screen.
3. If you are unable to detect or find the Service Tag, click **Choose from all products**.
4. Choose the **Products** category from the list.

NOTE: Choose the appropriate category to reach the product page.
5. Select your computer model and the **Product Support** page of your computer appears.
6. Click **Get drivers** and click **Drivers and Downloads**.
The Drivers and Downloads section opens.
7. Click **Find it myself**.
8. Click **BIOS** to view the BIOS versions.
9. Identify the latest BIOS file and click **Download**.
10. Select your preferred download method in the **Please select your download method below** window, click **Download File**.
The **File Download** window appears.
11. Click **Save** to save the file on your computer.
12. Click **Run** to install the updated BIOS settings on your computer.
Follow the instructions on the screen.

Updating your system BIOS using a USB flash drive

If the system cannot load into Windows, but there is still a need to update the BIOS, download the BIOS file using another system and save it to a bootable USB Flash Drive.

NOTE: You will need to use a bootable USB flash drive. Please refer to the following article for further details [How to Create a Bootable USB Flash Drive using Dell Diagnostic Deployment Package \(DDDP\)](#)

1. Download the BIOS update .EXE file to another system.
2. Copy the file e.g. O9010A12.EXE onto the bootable USB flash drive.
3. Insert the USB flash drive into the system that requires the BIOS update.
4. Restart the system and press F12 when the Dell splash logo appears to display the One Time Boot Menu.
5. Using arrow keys, select **USB Storage Device** and click **Enter**.
6. The system will boot to a Diag C:\> prompt.
7. Run the file by typing the full filename, for example, O9010A12.exe and press **Enter**.
8. The BIOS Update Utility will load. Follow the instructions on screen.

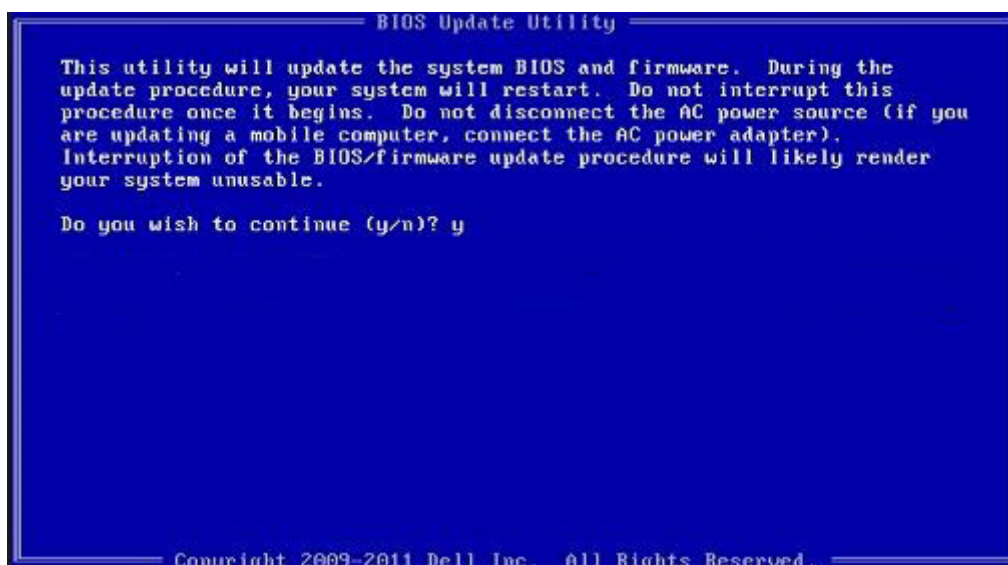


Figure 1. DOS BIOS Update Screen

Updating the Dell BIOS in Linux and Ubuntu environments

If you want to update the system BIOS in a Linux environment, such as Ubuntu, see <https://www.dell.com/support/article/sln171755/>.

System and setup password

Table 37. 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

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


To enter the system setup, press F2 immediately after a power-on or reboot.

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 allowed.
 - Only the following special characters are allowed: space, ("), (+), (,), (-), (.), (/), (:), ([), (\), (]), (').
3. Type the system password that you entered earlier in the **Confirm new password** field and click **OK**.
4. Press **Esc** and a message prompts you to save the changes.
5. Press **Y** to save the changes.
The computer reboots.

Deleting or changing an existing system setup password

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

To enter the System Setup, press **F2** immediately after a power-on or reboot.

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**, alter or delete the existing system password and press **Enter** or **Tab**.
4. Select **Setup Password**, alter or delete the existing setup password and press **Enter** or **Tab**.
 **NOTE: If you change the System and/or Setup password, re enter the new password when prompted. If you delete the System and Setup password, confirm the deletion when prompted.**
5. Press **Esc** and a message prompts you to save the changes.
6. Press **Y** to save the changes and exit from System Setup.
The computer restarts.

Software and Troubleshooting

Operating system

Table 38. Operating system

Operating system

Operating systems supported	<ul style="list-style-type: none"> • Windows 10 Home (64 bit) • Windows 10 Professional (64 bit) • Windows 10 Professional S mode • Windows 10 Professional Embedded (OEM customers only) • Ubuntu 16.04 LTS (64 bit)
-----------------------------	--

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.

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.

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.

Downloading Windows drivers

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.

Getting help

Topics:

- [Contacting Dell](#)
- [Contacting Dell](#)

Contacting Dell

i **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.**

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:

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.

Contacting Dell

i **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.**

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:

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.