

Vostro 3020 Tower Desktop

Setup and Specifications

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.

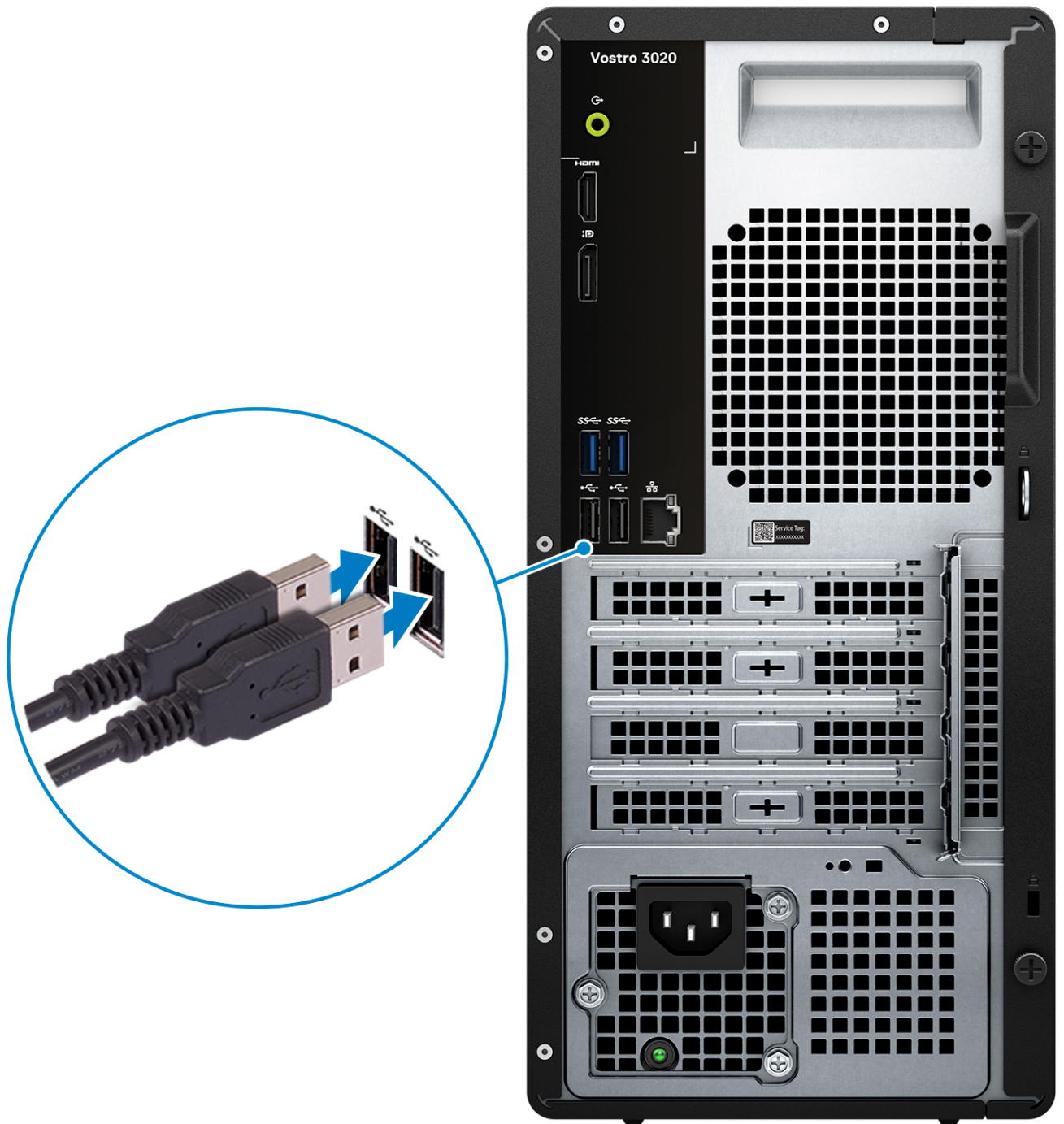
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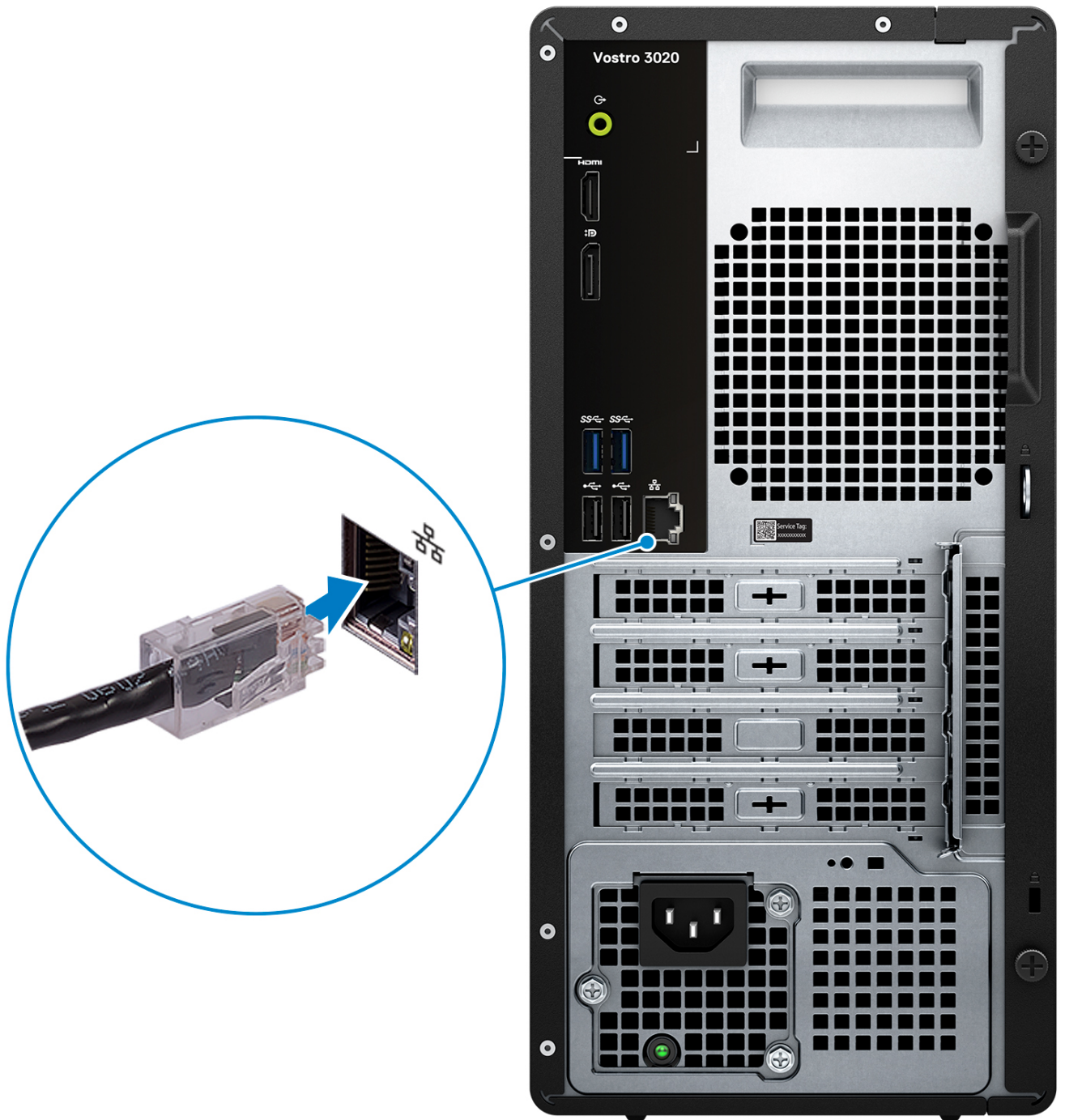
Set up your computer

 **NOTE:** The images in this document may differ from your computer depending on the configuration you ordered.

1. Connect the keyboard and mouse to the USB ports on the computer. If you have a wireless keyboard and mouse, see the documentation that shipped with the wireless keyboard and mouse for instructions.



2. Connect to your network using an Ethernet cable. Alternatively, connect to an available wireless network when setting up the operating system.

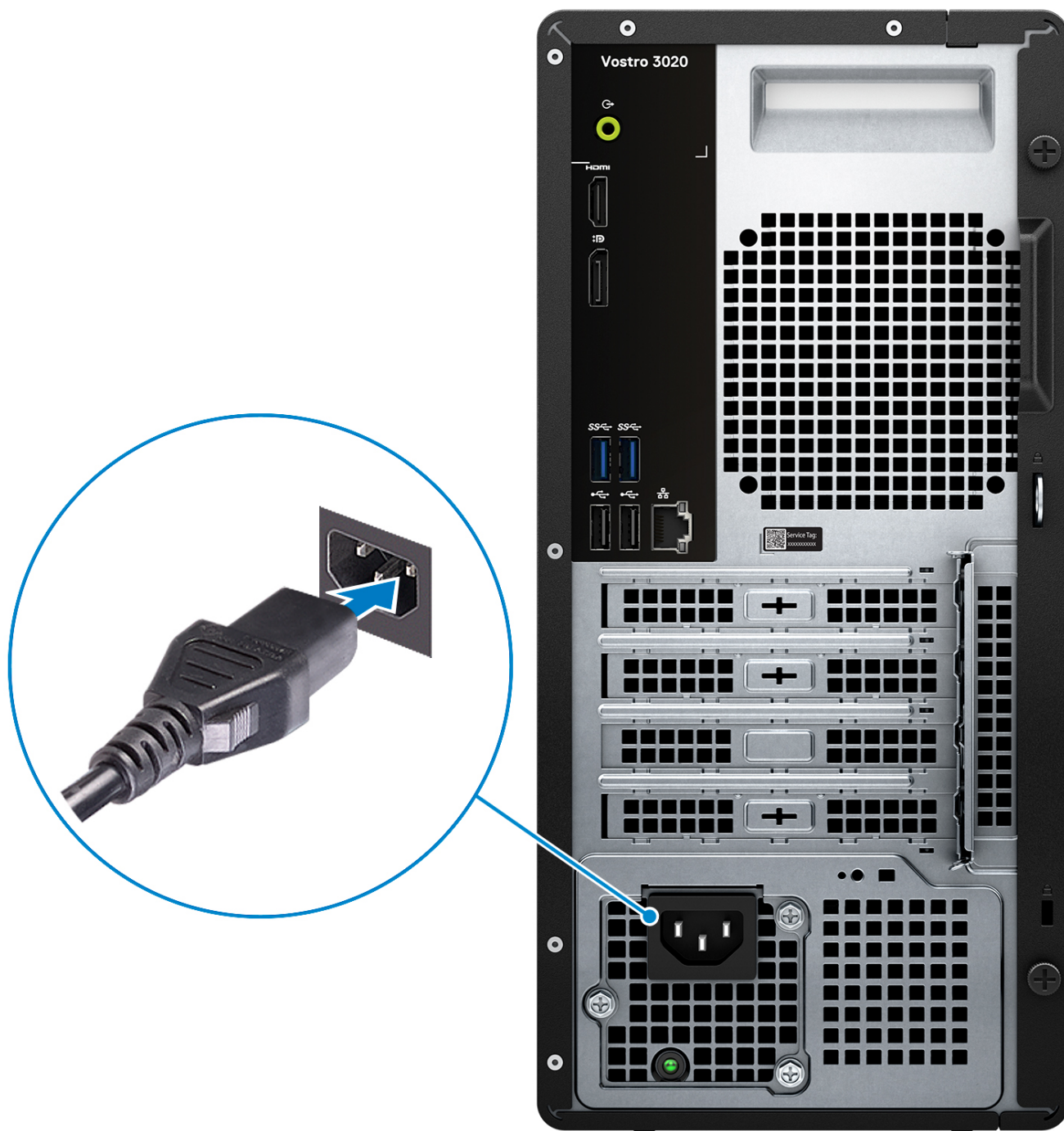


3. Connect the display. For more information about setting up the display, see the documentation that is shipped with your display.



NOTE: The location to connect the display cable can vary if your computer has a discrete graphics card installed. For optimal graphics performance, ensure to connect the display cable to the graphics card if there is one installed.

4. Connect the power cable to the computer and then connect it to the wall outlet.



5. Press the power button at the front of the computer to turn it on. If required, press the power button on the display to turn it on.



NOTE: For instructions on how to connect speakers, a printer and other accessories, see *Me and My Dell* at [Dell Support Site](#).

6. Finish Windows 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.

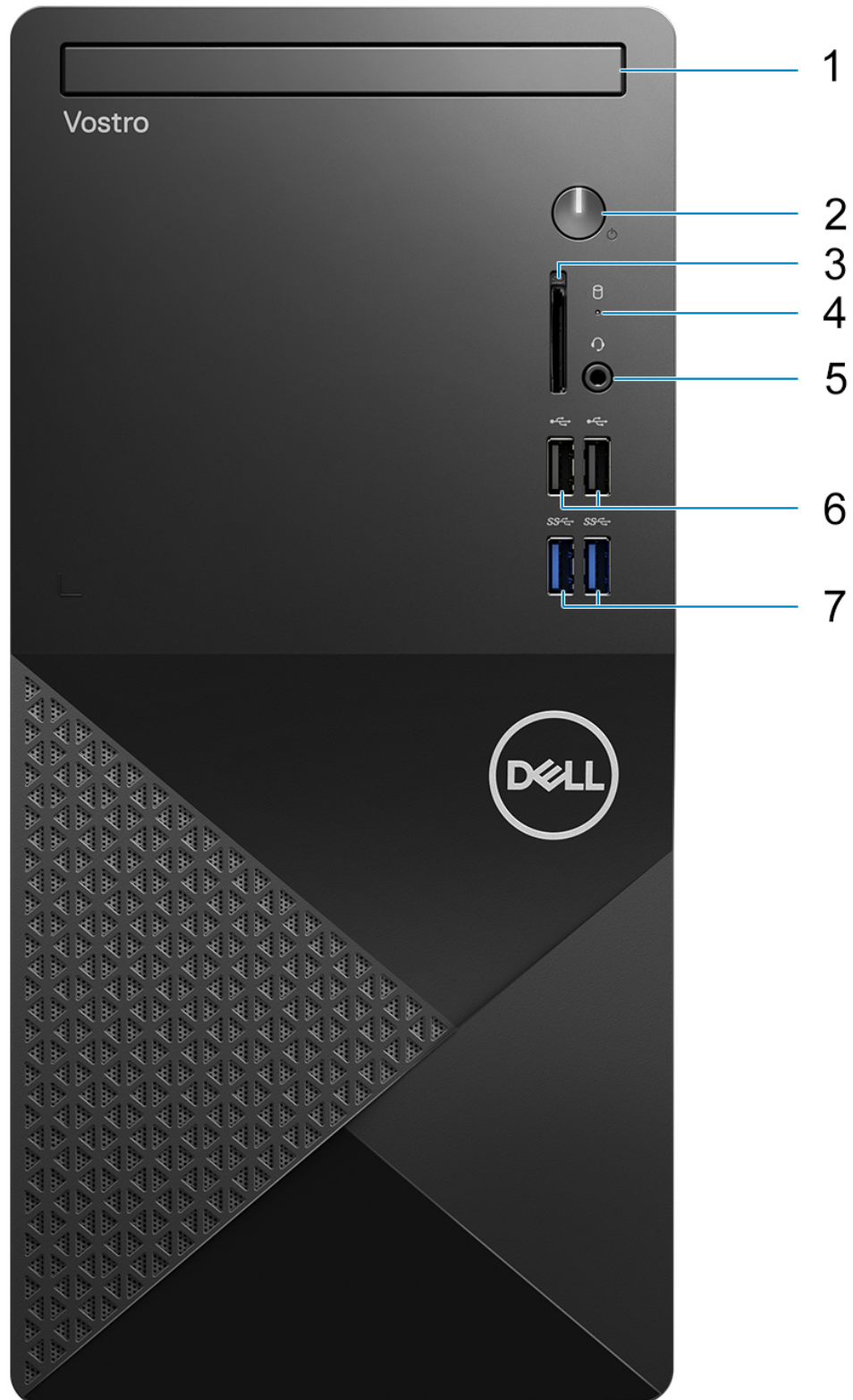
7. Locate and use Dell apps from the Windows Start menu—Recommended.

Table 1. Locate Dell apps

| Resources | Description |
|---|---|
|  | <p>My Dell</p> <p>Centralized location for key Dell applications, help articles, and other important information about your computer. It also notifies you about the warranty status, recommended accessories, and software updates if available.</p> |
|  | <p>SupportAssist</p> <p>SupportAssist proactively and predictively identifies hardware and software issues on your computer and automates the engagement process with Dell Technical support. It addresses performance and stabilization issues, prevents security threats, monitors, and detects hardware failures. For more information, see <i>SupportAssist for Home PCs User's Guide</i> at Dell SupportAssist. Click SupportAssist and then, click SupportAssist for Home PCs.</p> <p> NOTE: In SupportAssist, click the warranty expiry date to renew or upgrade your warranty.</p> |
|  | <p>Dell Update</p> <p>Updates your computer with critical fixes and latest device drivers as they become available. For more information on using Dell Update, search in the Knowledge Base Resource at Dell Support Site.</p> |
|  | <p>Dell Digital Delivery</p> <p>Download software applications, which are purchased but not preinstalled on your computer. For more information on using Dell Digital Delivery, search in the Knowledge Base Resource at Dell Support Site.</p> |

Views of Vostro 3020 Tower Desktop

Front



1. Slim optical drive (optional)

The optical drive reads from and writes to CDs and DVDs.

2. Power button

Press to turn on the computer if it is turned off, in sleep state, or in hibernate state.

Press to put the computer in sleep state if it is turned on.

Press and hold to force shut-down the computer.

3. SD-card slot (optional)

Reads from and writes to the SD card. The computer supports the following card types:

- Secure Digital (SD)
- Secure Digital High Capacity (SDHC)
- Secure Digital Extended Capacity (SDXC)

4. Hard-drive activity light

The activity light turns on when the computer reads from or writes to the hard drive.

5. Headset (headphone and microphone combo) port

Connect headphones or a headset (headphone and microphone combo).

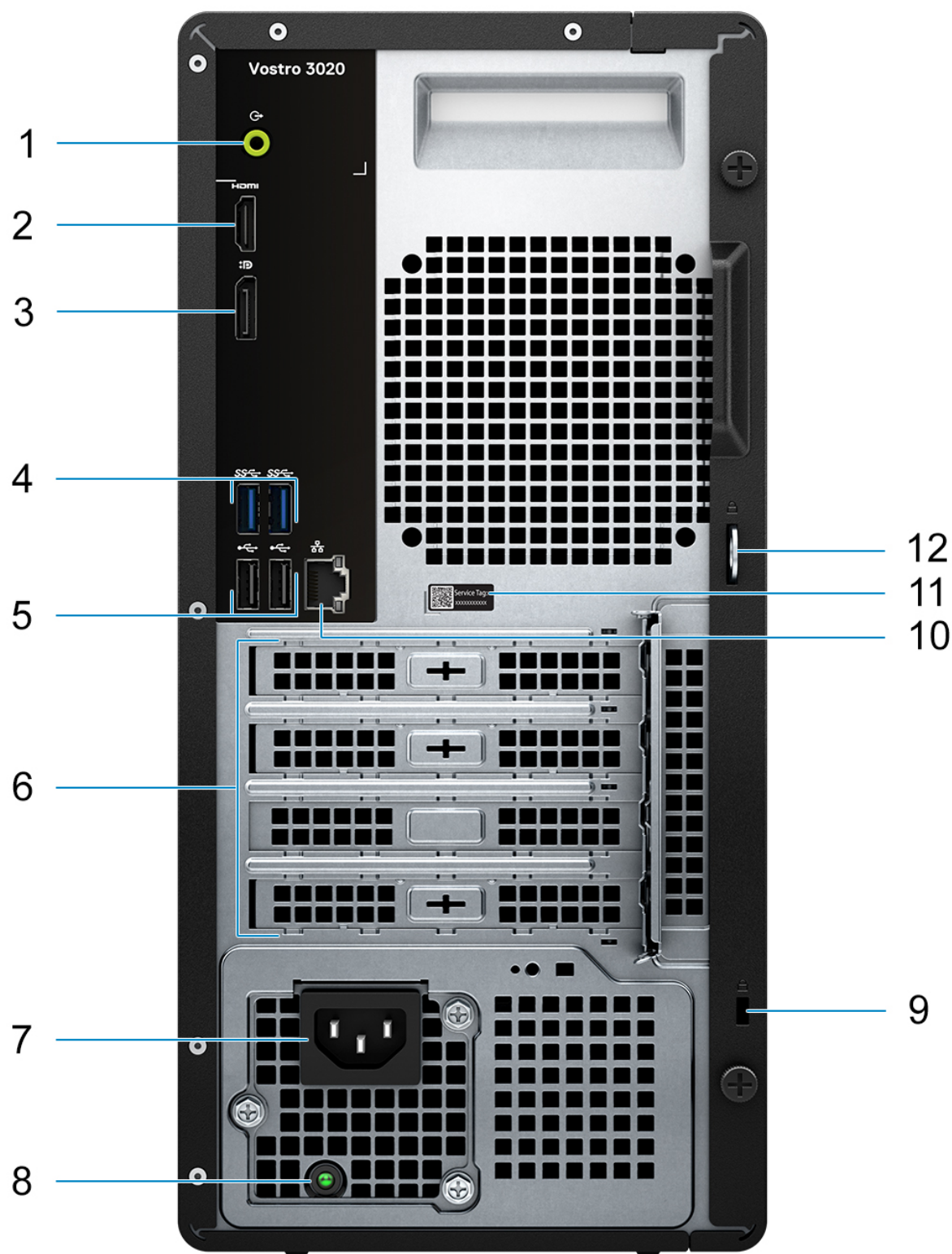
6. USB 2.0 ports (2)

Connect devices such as external storage devices and printers. Provides data transfer speeds up to 480 Mbps.

7. USB 3.2 Gen 1 ports (2)

Connect devices such as external storage devices and printers. Provides data transfer speeds up to 5 Gbps.

Back





1. Line-out port

Connect speakers.

2. HDMI 1.4b port


Connect to a TV, external display or another HDMI-in enabled device. Provides video and audio output.


 **NOTE:** HDMI port resolution is up to 1920 x 1200.

 **NOTE:** This port is only available on computers shipped with Intel UHD Graphics integrated processor.

3. Dual-Mode DisplayPort 1.4

Connect an external display or a projector.

 **NOTE:** Besides a DisplayPort connector, this port can also provide display output to a DVI or HDMI connector with a DisplayPort 1.4 adapter (sold separately).

 **NOTE:** This port is only available on computers shipped with Intel UHD Graphics integrated processor.

4. USB 3.2 Gen 1 ports (2)

Connect devices such as external storage devices and printers. Provides data transfer speeds up to 5 Gbps.

5. USB 2.0 ports (2)

Connect devices such as external storage devices and printers. Provides data transfer speeds up to 480 Mbps.

6. Expansion card slots

Connect a PCI-express or PCI-32 card to enhance the capabilities of your computer.

7. Power port

Connect a power cable to provide power to your computer.

8. Power-supply diagnostics light

Indicates the power-supply state.

9. Security-cable slot

Connect a security cable to prevent unauthorized movement of your computer.

10. Network port (with lights)

Connect an Ethernet (RJ45) cable from a router or a broadband modem for network or Internet access.

The two lights next to the connector indicate the connectivity status and network activity.

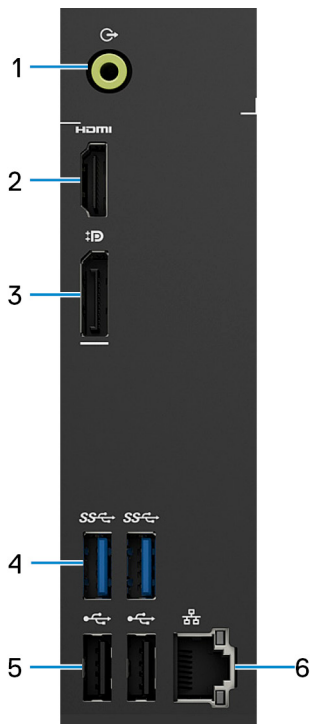
11. Service Tag label

The Service Tag is a unique alphanumeric identifier that enables Dell service technicians to identify the hardware components in your computer and access warranty information.

12. Padlock rings

Attach a standard padlock to prevent unauthorized access to the interior of your computer.

Back panel



1. Line-out port

Connect speakers.

2. HDMI 1.4b port

Connect to a TV, external display or another HDMI-in enabled device. Provides video and audio output.

3. Dual-Mode DisplayPort 1.4

Connect an external display or a projector.

NOTE: Besides a DisplayPort connector, this port can also provide display output to a DVI or HDMI connector with a DisplayPort 1.4 adapter (sold separately).

NOTE: This port is only available on computers shipped with a Intel UHD Graphics integrated graphics processor.

4. USB 3.2 Gen 1 ports (2)

Connect devices such as external storage devices and printers. Provides data transfer speeds up to 5 Gbps.

5. USB 2.0 ports (2)

Connect devices such as external storage devices and printers. Provides data transfer speeds up to 480 Mbps.

6. Network port (with lights)

Connect an Ethernet (RJ45) cable from a router or a broadband modem for network or Internet access.


The two lights next to the connector indicate the connectivity status and network activity.

Specifications of Vostro 3020 Tower Desktop

Dimensions and weight

The following table lists the height, width, depth, and weight of your Vostro 3020 Tower Desktop.

Table 2. Dimensions and weight

| Description | Values |
|--|-----------------------|
| Height | 324.30 mm (12.77 in.) |
| Width | 154 mm (6.06 in.) |
| Depth | 292 mm (11.50 in.) |
| Weight  NOTE: The weight of your computer depends on the configuration ordered and manufacturing variability. | 7.46 kg (16.46 lb) |

Processor

The following table lists the details of the processors that are supported for your Vostro 3020 Tower Desktop.

Table 3. Processor

| Description | Option one | Option two | Option three | Option four | Option five | Option six | Option seven | Option eight |
|------------------------|---|---|--|---|---|--|--------------------------|---------------------|
| Processor type | 13 th Generation Intel Core i3-13100 | 13 th Generation Intel Core i5-13400 | 13 th Generation Intel Core i5-13400F | 13 th Generation Intel Core i5-13500 | 13 th Generation Intel Core i7-13700 | 13 th Generation Intel Core i7-13700F | Intel Pentium Gold G7400 | Intel Celeron G6900 |
| Processor wattage | 65 W | 65 W | 65 W | 65 W | 65 W | 65 W | 46 W | 46 W |
| Processor core count | 4 | 10 | 10 | 14 | 12 | 12 | 2 | 2 |
| Processor thread count | 8 | 16 | 16 | 20 | 20 | 20 | 4 | 2 |
| Processor speed | Up to 3.40 GHz | Up to 4.60 GHz | Up to 4.60 GHz | Up to 4.80 GHz | Up to 2.10 GHz | Up to 2.10 GHz | Up to 3.70 GHz | Up to 3.40 GHz |
| Processor cache | 12 MB | 20 MB | 20 MB | 24 MB | 30 MB | 30 MB | 6 MB | 2 MB |
| Integrated graphics | Intel UHD Graphics | Intel UHD Graphics | None | Intel UHD Graphics | Intel UHD Graphics | None | Intel UHD Graphics | Intel UHD Graphics |

Chipset

The following table lists the details of the chipset that is supported for your Vostro 3020 Tower Desktop.

Table 4. Chipset

| Description | Values |
|----------------|---|
| Chipset | B660 |
| Processor | <ul style="list-style-type: none">13th Generation Intel Core i3/i5/i5F/i7/i7FIntel Pentium GoldIntel Celeron |
| DRAM bus width | 64-bit |
| Flash EPROM | 32 MB |
| PCIe bus | Up to Gen3.0 |

Operating system

Your Vostro 3020 Tower Desktop supports the following operating systems:

- Windows 11 Home
- Windows 11 Pro
- Windows 11 National Academic
- Ubuntu 22.04 LTS

Memory

The following table lists the memory specifications of your Vostro 3020 Tower Desktop.


Table 5. Memory specifications

| Description | Values |
|---------------------------------|--|
| Memory slots | Two U-DIMM slots |
| Memory type | Dual-channel DDR4 |
| Memory speed | 3200 MT/s |
| Maximum memory configuration | 64 GB |
| Minimum memory configuration | 4 GB |
| Memory size per slot | 4 GB, 8 GB, 16 GB and 32 GB |
| Memory configurations supported | <ul style="list-style-type: none">4 GB: 1 x 4 GB, DDR4, 3200 MT/s8 GB: 1 x 8 GB, DDR4, 3200 MT/s8 GB: 2 x 4 GB, DDR4, 3200 MT/s, dual-channel16 GB: 1 x 16 GB, DDR4, 3200 MT/s16 GB: 2 x 8 GB, DDR4, 3200 MT/s, dual-channel32 GB: 1 x 32 GB, DDR4, 3200 MT/s32 GB: 2 x 16 GB, DDR4, 3200 MT/s, dual-channel64 GB: 2 x 32 GB, DDR4, 3200 MT/s, dual-channel |

Ports and connectors

The following table lists the external and internal ports available on your Vostro 3020 Tower Desktop.

Table 6. Ports and connectors

| Description | Values |
|---------------------------|--|
| External: | |
| Network | One RJ-45 Ethernet port |
| USB | <ul style="list-style-type: none">Two USB 3.2 Gen 1 ports (Front)Two USB 2.0 ports (Front)Two USB 3.2 Gen 1 ports (Rear)Two USB 2.0 ports with Smart Power On (Rear) |
| Audio | <ul style="list-style-type: none">One global headset jackOne audio line-out port |
| Video | <ul style="list-style-type: none">One DisplayPort 1.4a port (HBR2)One HDMI 1.4b port (1920 x 1200 @60Hz max resolution) |
| Media-card reader | One SD-card slot (optional) |
| Power port | One AC power-supply port |
| Security | <ul style="list-style-type: none">One padlock ring slotOne security-cable slot (wedge-shaped) |
| Internal: | |
| PCIe expansion card slots | Worldwide Shipping <ul style="list-style-type: none">One PCIe x16 full-height expansion card slot, Gen3Two PCIe x1 full-height slot, Gen3One PCI-32 slot China Only <ul style="list-style-type: none">One PCIe x16 full-height expansion card slot, Gen3One PCIe x1 full-height slot, Gen3 |
| mSATA | None |
| SATA | Three SATA 3.0 slots |
| M.2 | <ul style="list-style-type: none">One M.2 2230 slot for WiFi and Bluetooth combo cardOne M.2 2230/2280 slot for solid-state drive <p> NOTE: To learn more about the features of different types of M.2 cards, search in the Knowledge Base Resource at Dell Support Site.</p> |

Ethernet

The following table lists the wired Ethernet Local Area Network (LAN) specifications of your Vostro 3020 Tower Desktop.

Table 7. Ethernet specifications

| Description | Values |
|--------------|-------------------|
| Model number | Realtek RTL8111HD |


Table 7. Ethernet specifications (continued)

| Description | Values |
|---------------|------------------|
| Transfer rate | 10/100/1000 Mbps |

Wireless module

The following table lists the Wireless Local Area Network (WLAN) module specifications of your Vostro 3020 Tower Desktop.

Table 8. Wireless module specifications

| Description | Option one | Option two | Option three |
|---------------------------|--|--|--|
| Model number | Realtek RTL8821CE | Intel AX201 | Realtek RTL8852BE |
| Transfer rate | Up to 433 Mbps | Up to 2400 Mbps | Up to 433 Mbps |
| Frequency bands supported | 2.4 GHz/5 GHz | 2.4 GHz/5 GHz | 2.4 GHz/5 GHz |
| Wireless standards | <ul style="list-style-type: none"> • WiFi 802.11a/b/g • Wi-Fi 4 (WiFi 802.11n) • Wi-Fi 5 (WiFi 802.11ac) | <ul style="list-style-type: none"> • WiFi 802.11a/b/g • Wi-Fi 4 (WiFi 802.11n) • Wi-Fi 5 (WiFi 802.11ac) • Wi-Fi 6 (WiFi 802.11ax) | <ul style="list-style-type: none"> • WiFi 802.11a/b/g • Wi-Fi 4 (WiFi 802.11n) • Wi-Fi 5 (WiFi 802.11ac) • Wi-Fi 6 (WiFi 802.11ax) |
| Encryption | <ul style="list-style-type: none"> • 64-bit/128-bit WEP • AES-CCMP • TKIP | <ul style="list-style-type: none"> • 64-bit/128-bit WEP • AES-CCMP • TKIP | <ul style="list-style-type: none"> • 64-bit/128-bit WEP • AES-CCMP • TKIP |
| Bluetooth wireless card | Bluetooth 5.0 | Bluetooth 5.2 | Bluetooth 5.3 |
| |  NOTE: The version of the Bluetooth wireless card may vary depending on the operating system that is installed on your computer. | | |

Storage

This section lists the storage options on your Vostro 3020 Tower Desktop.

Your Vostro 3020 supports one of the following storage configurations:

- One 2.5-inch or 3.5-inch hard drive + one M.2 2230/2280 solid-state drive
- One M.2 2230/2280 solid-state drive

The primary drive of your Vostro 3020 varies with the storage configuration. For computers:

- With a M.2 drive, the M.2 drive is the primary drive


Table 9. Storage specifications

| Storage type | Interface type | Capacity |
|---------------------------------|-------------------------------|------------|
| 2.5-inch hard-disk drive | SATA AHCI, up to 6 Gbps | Up to 1 TB |
| 3.5-inch hard-disk drive | SATA AHCI, up to 6 Gbps | Up to 2 TB |
| M.2 2230 solid-state drive | PCIe NVMe, up to 64 Gbps | Up to 1 TB |
| M.2 2280 solid-state drive | PCIe NVMe, up to 64 Gbps | Up to 1 TB |
| M.2 2230 solid-state drive, QLC | PCIe NVMe, up to 64 Gbps. QLC | Up to 1 TB |
| M.2 2280 solid-state drive, QLC | PCIe NVMe, up to 32 Gbps. QLC | Up to 1 TB |

GPU—Integrated

The following table lists the specifications of the integrated Graphics Processing Unit (GPU) supported by your Vostro 3020 Tower Desktop.

Table 10. GPU—Integrated

| Controller | External display support | Memory size | Processor |
|--|---|----------------------|---|
| Intel UHD Graphics  NOTE: Intel UHD Graphics not available for computers shipped with 13th Generation Intel Core i5-13400F and 13th Generation Intel Core i7-13700F processors. | <ul style="list-style-type: none">One DisplayPort 1.4a (HBR2)One HDMI 1.4b | Shared system memory | <ul style="list-style-type: none">13th Generation Intel Core i3/i5/i7Intel Pentium GoldIntel Celeron |

GPU—Discrete

The following table lists the specifications of the discrete Graphics Processing Unit (GPU) supported by your Vostro 3020 Tower Desktop.

Table 11. GPU—Discrete

| Controller | Memory size | Memory type |
|-------------------------------|-------------|-------------|
| NVIDIA RTX 3050 | 8 GB | GDDR6 |
| NVIDIA GeForce GTX 1660 TI | 6 GB | GDDR5 |
| NVIDIA GeForce GTX 1660 SUPER | 6 GB | GDDR6 |

Audio

The following table lists the audio specifications of your Vostro 3020 Tower Desktop.

Table 12. Audio specifications

| Description | Values |
|--------------------------|---|
| Audio type | Integrated 5.1 Channel High Definition audio |
| Audio controller | Cirrus Logic CS8409 + CS42L42 |
| Internal audio interface | High definition audio interface |
| External audio interface | <ul style="list-style-type: none">One global headset jackOne audio line-out port |

Power ratings

The following table lists the power rating specifications of Vostro 3020 Tower Desktop.

Table 13. Power ratings

| Description | Option one | Option two | Option three |
|-----------------------------|---|---|---|
| Type | 180 W internal Power Supply Unit (PSU), 85% Efficient, 80 PLUS Bronze | 300 W internal PSU, 85% Efficient, 80 PLUS Bronze | 460 W internal PSU, 85% Efficient, 80 PLUS Bronze |
| Input voltage | 90 VAC–264 VAC | 90 VAC–264 VAC | 90 VAC–264 VAC |
| Input frequency | 47 Hz–63 Hz | 47 Hz–63 Hz | 47 Hz–63 Hz |
| Input current (maximum) | 3 A | 4.60 A | 5 A |
| Output current (continuous) | Operating: <ul style="list-style-type: none"> 12 VA - 15 A 12 VB - 14 A Standby: <ul style="list-style-type: none"> 12 VA - 1.50 A 12 VB - 3.30 A | Operating: <ul style="list-style-type: none"> 12 VA - 16.50 A 12 VB - 15 A 12 VC - 12 A Standby: <ul style="list-style-type: none"> 12 VA - 1.50 A 12 VB - 3.30 A 12 VC - 0 A | Operating: <ul style="list-style-type: none"> 12 VA - 16.50 A 12 VB - 15 A 12 VC - 12 A Standby: <ul style="list-style-type: none"> 12 VA - 1.50 A 12 VB - 3.30 A 12 VC - 0 A |
| Rated output voltage | <ul style="list-style-type: none"> 12 VA 12 VB | <ul style="list-style-type: none"> 12 VA 12 VB 12 VC | <ul style="list-style-type: none"> 12 VA 12 VB 12 VC |
| Temperature range: | | | |
| Operating | 5°C to 45°C (41°F to 113°F) | 5°C to 45°C (41°F to 113°F) | 5°C to 45°C (41°F to 113°F) |
| Storage | -40°C to 70°C (-40°F to 158°F) | -40°C to 70°C (-40°F to 158°F) | -40°C to 70°C (-40°F to 158°F) |

Operating and storage environment


This table lists the operating and storage specifications of your Vostro 3020 Tower Desktop.

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

Table 14. Computer environment

| Description | 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) | 0% to 95% (non-condensing) |
| Vibration (maximum)* | 0.66 GRMS | 1.30 GRMS |
| Shock (maximum) | 110 G† | 160 G† |
| Altitude range | -15.2 m to 3048 m (-49.87 ft to 10000 ft) | -15.2 m to 10668 m (-49.87 ft to 35000 ft) |

Table 14. Computer environment (continued)

| Description | Operating | Storage |
|--|-----------|---------|
|  CAUTION: Operating and storage temperature ranges may differ among components, so operating or storing the device outside these ranges may impact the performance of specific components. | | |

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



† Measured using a 2 ms half-sine pulse.

Getting help and contacting Dell Technologies

Self-help resources

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


Table 15. Self-help resources

| Self-help resources | Resource location |
|--|--|
| Information about Dell Technologies products and services | Dell Site |
| My Dell app |  |
| Tips |  |
| Contact Support | In Windows search, type <code>Contact Support</code> , and press Enter. |
| Online help for operating system | Windows Support Site |
| Access top solutions, diagnostics, drivers and downloads, and learn more about your computer through videos, manuals, and documents. | <p>Your Dell Technologies computer is uniquely identified using a Service Tag or Express Service Code. To view relevant support resources for your Dell Technologies computer, enter the Service Tag or Express Service Code at Dell Support Site.</p> <p>For more information about how to find the Service Tag for your computer, see Instructions on how to find your Service Tag or Serial Number.</p> |
| Dell Technologies knowledge base articles | <ol style="list-style-type: none"> 1. Go to Dell Support Site. 2. On the menu bar at the top of the Support page, select Support > Support Library. 3. In the Search field on the Support Library page, type the keyword, topic, or model number, and then click or tap the search icon to view the related articles. |

Contacting Dell Technologies

To contact Dell Technologies for sales, technical support, or customer service issues, see [Contact Support at Dell Support Site](#).

 **NOTE:** Availability of the services may vary depending on the country or region, and product.

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