

Important Notices for Hybrid Solid-State Drive (with Intel® Optane™ Memory) Replacement

- Illustrations in this flyer might look different from your product.
- The replacing process of hybrid solid-state drive is also applicable to Intel Optane memory.
- Update the UEFI BIOS to the latest version after installing a new system board into a machine which comes with a hybrid solid-state drive. Otherwise, the operating system might not start correctly.

Hybrid solid-state drive is a physical storage device that combines Intel Optane memory and solid-state drive. When you replace the hybrid solid-state drive, ensure that you follow the instructions in this flyer.

If your computer comes with a hybrid solid-state drive, the **Intel Optane Memory and Storage Management** program will be preinstalled on your computer.

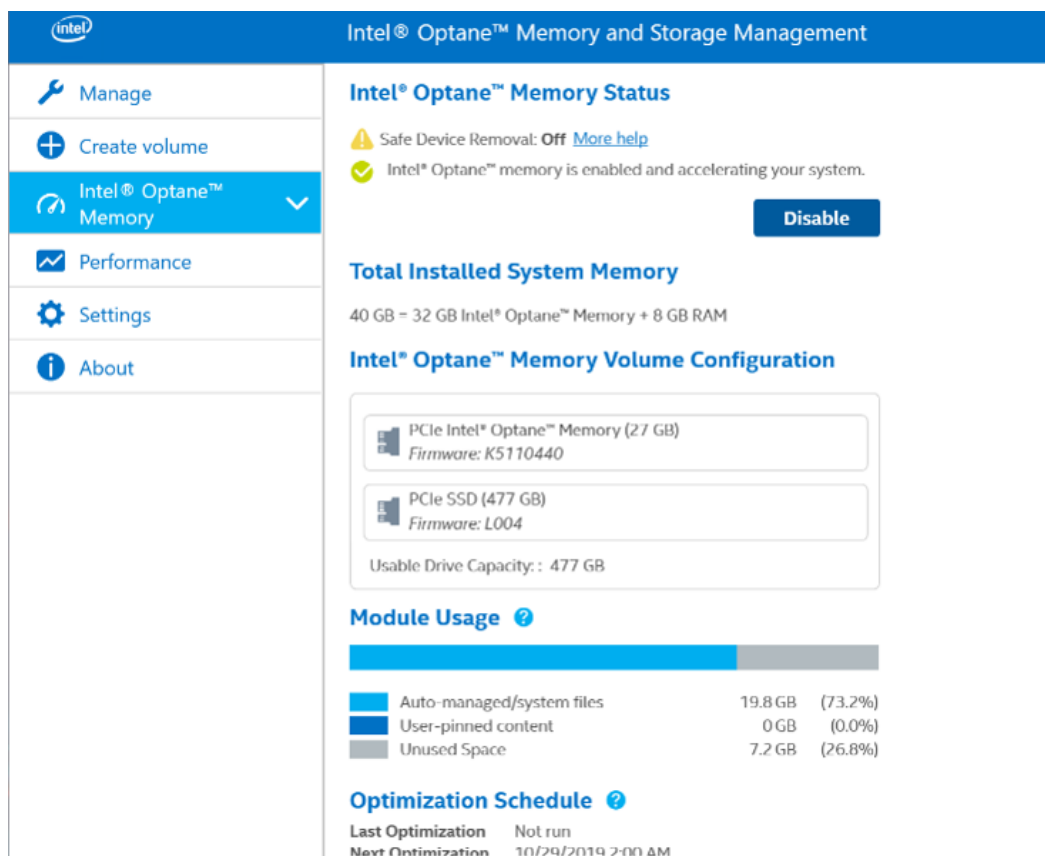
The complete replacing process includes the following steps:

1. "Disable the hybrid solid-state drive" on page 1
2. "Replace the hybrid solid-state drive" on page 8
3. "Reinstall the operating system" on page 8
4. "Enable the hybrid solid-state drive" on page 9

Disable the hybrid solid-state drive

Option one: Intel Optane Memory and Storage Management program (Recommended)

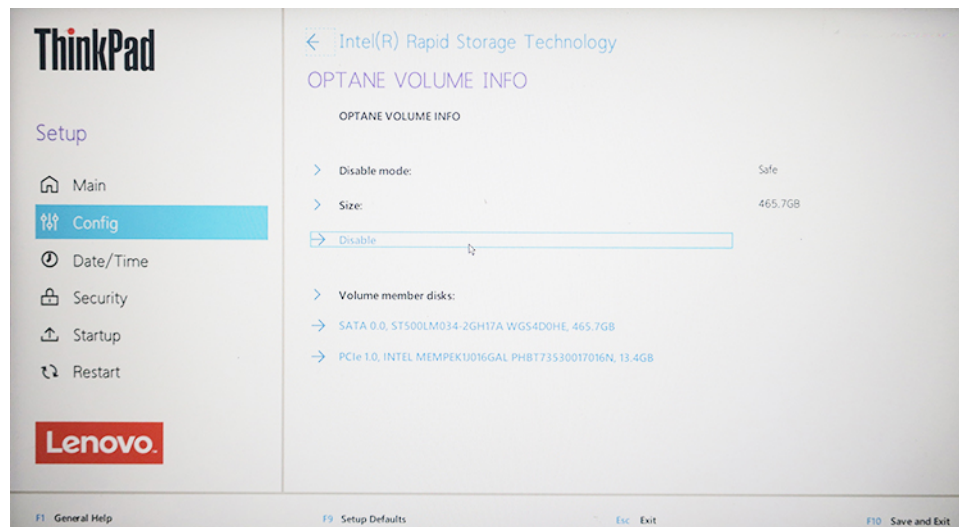
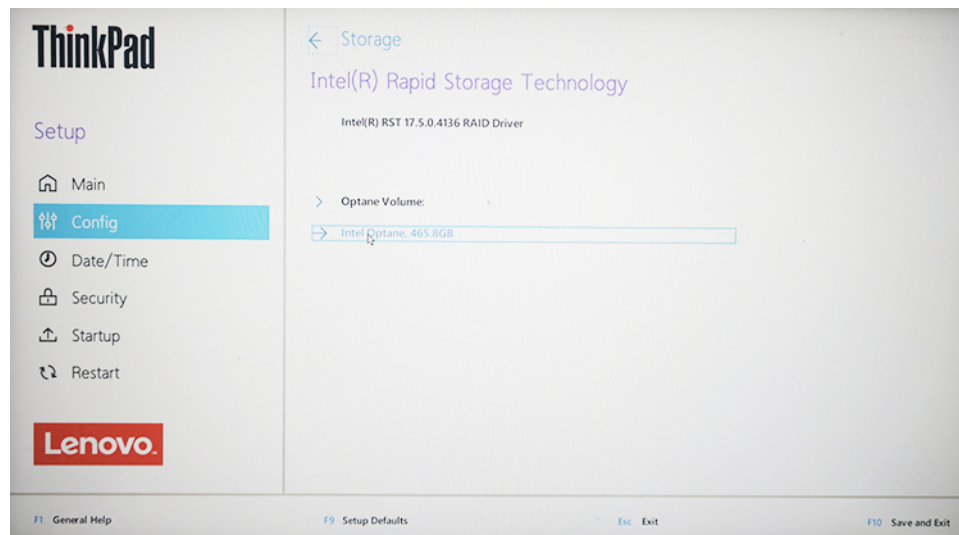
1. Go to Microsoft Store to download and install the **Intel Optane Memory and Storage Management** program.
2. Launch the program. Click **Intel Optane Memory → Disable**.



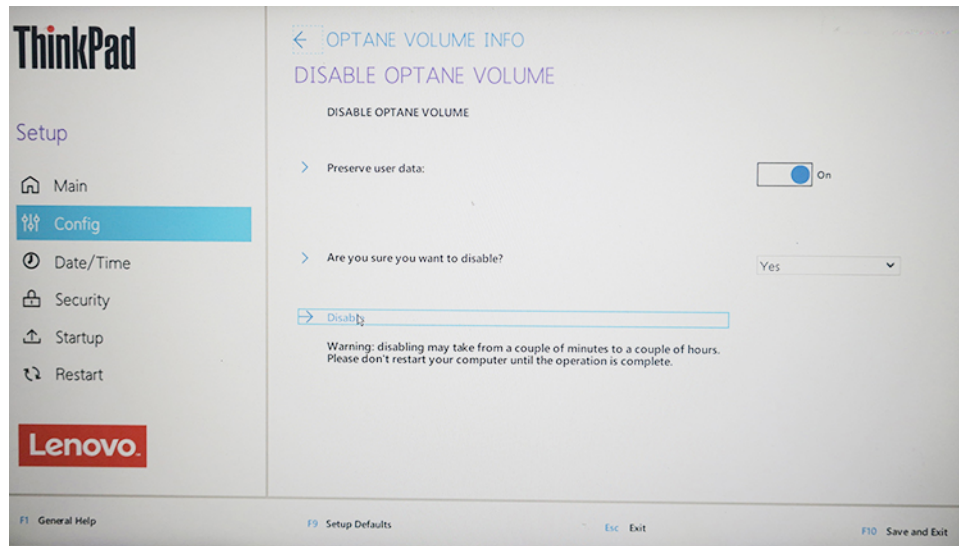
3. Follow the on-screen instructions to disable the hybrid solid-state drive.

Option two: the UEFI BIOS

- For ThinkPad notebook computers:
 - Restart the computer. When the logo screen is displayed, press F1 to enter the UEFI BIOS menu.
 - Select **Config → Storage → Intel (R) Rapid Storage Technology → Intel Optane → Disable**.



3. Select **Yes**. If you want to preserve the data stored in the drive, switch **Preserve user data** to **On**. Otherwise, all the data will be erased.
4. Select **Disable** and then follow the on-screen instructions to disable the hybrid solid-state drive.



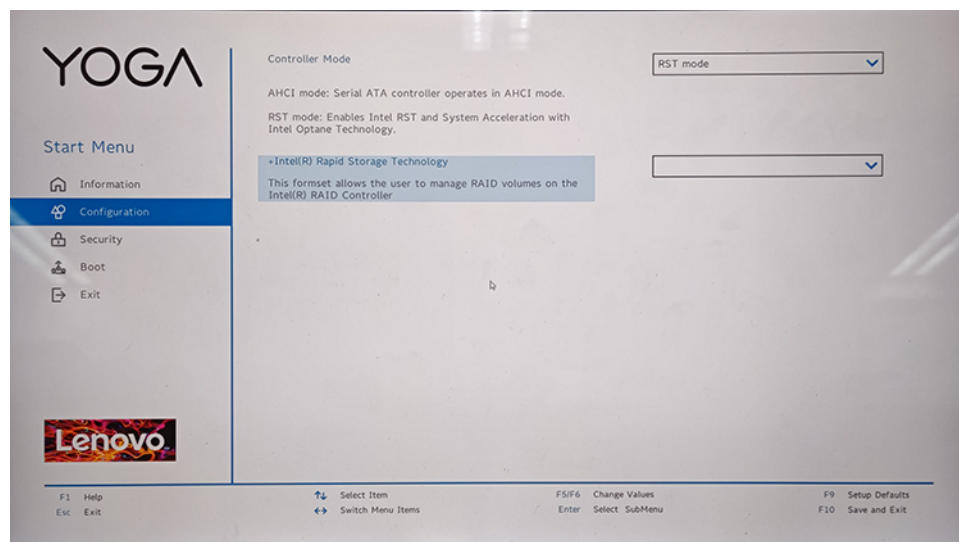
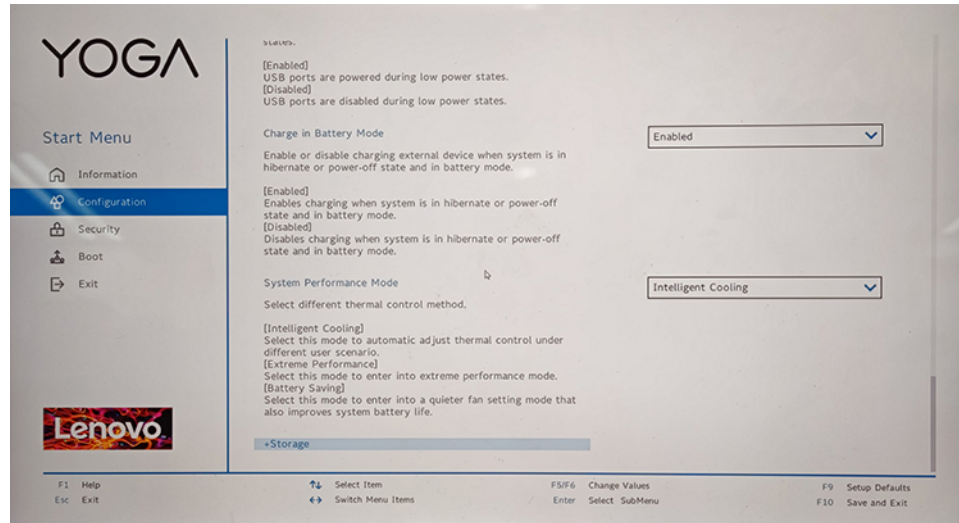
Note: It might take several minutes or even hours to complete the disabling process. Do not restart the computer until the process is completed.

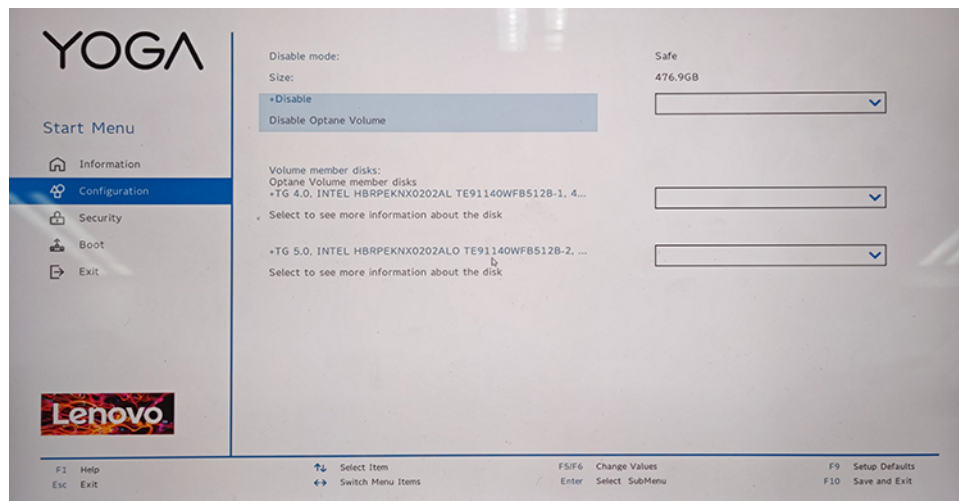
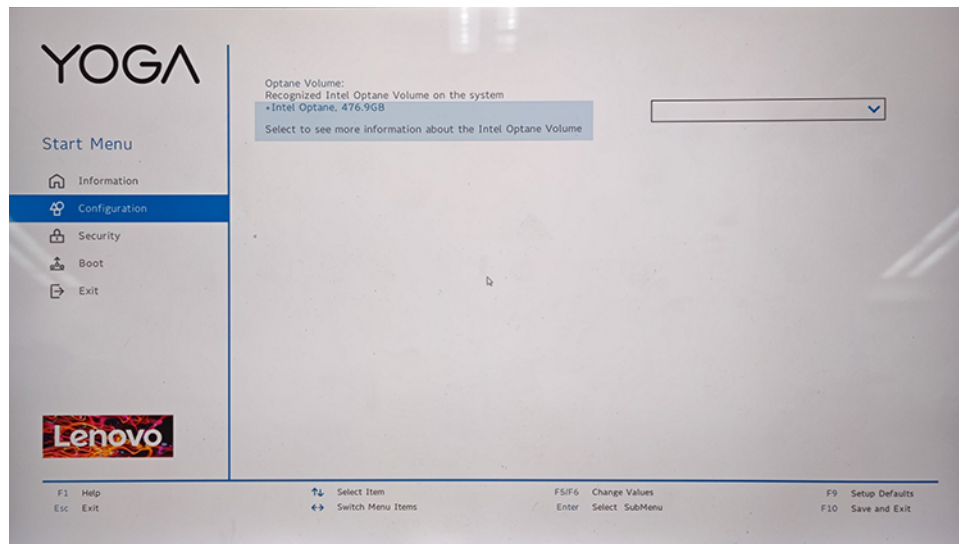
- For non-ThinkPad notebook computers:

1. Restart the computer. When the logo screen is displayed, press F2 or Fn+F2 to enter the UEFI BIOS menu.

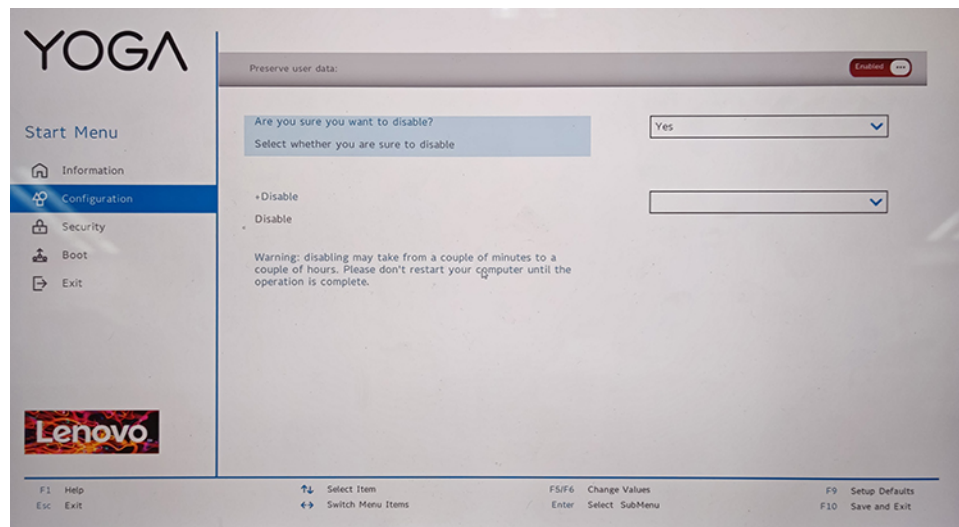
Note: For ThinkBook notebook computers, press F1 to enter the UEFI BIOS menu.

2. Select **Configuration → Storage → Intel (R) Rapid Storage Technology → Intel Optane → Disable**.





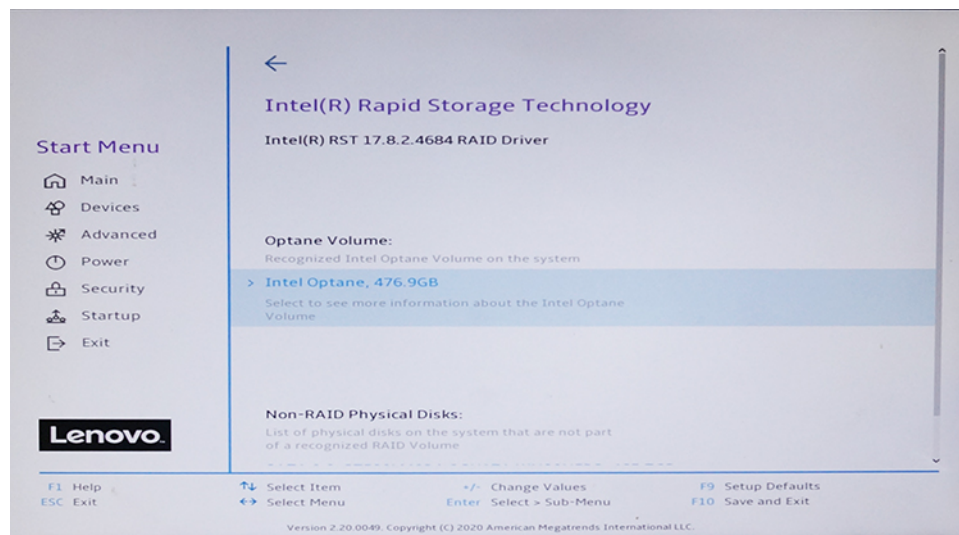
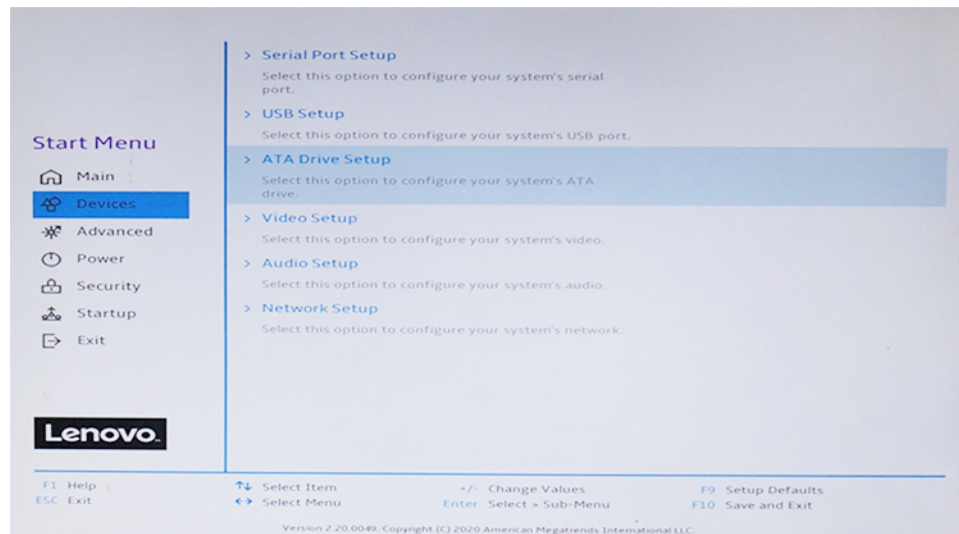
3. Select **Yes**. If you want to preserve the data stored in the drive, switch **Preserve user data** to **Enabled**. Otherwise, all the data will be erased.
4. Select **Disable** and then follow the on-screen instructions to disable the hybrid solid-state drive.



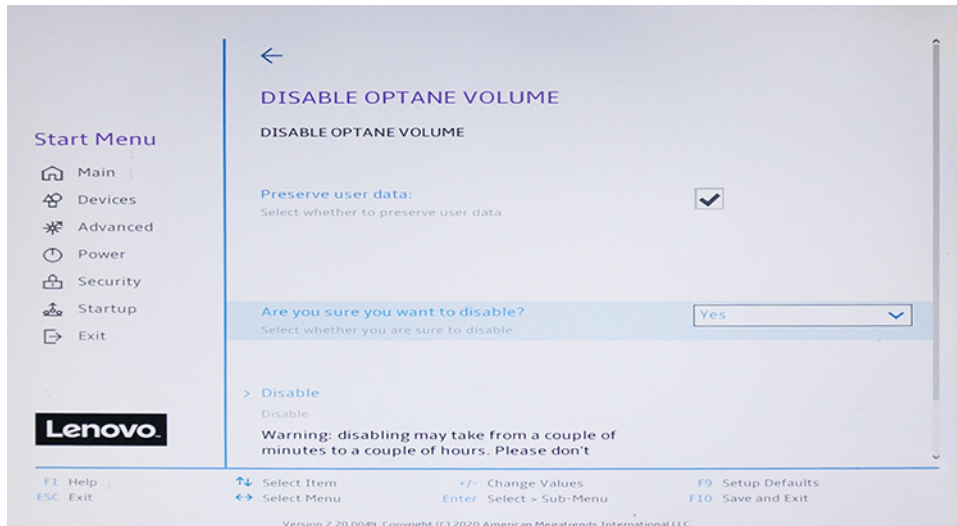
Note: It might take several minutes or even hours to complete the disabling process. Do not restart the computer until the process is completed.

- For desktop computers:

1. Restart the computer. When the logo screen is displayed, press F1 or Fn+F1 to enter the UEFI BIOS menu.
2. Select **Devices** → **ATA Drive Setup** → **Intel (R) Rapid Storage Technology** → **Intel Optane** → **Disable**.



3. Select **Yes**. If you want to preserve the data stored in the drive, select **Preserve user data**. Otherwise, all the data will be erased.
4. Select **Disable** and then follow the on-screen instructions to disable the hybrid solid-state drive.



Note: It might take several minutes or even hours to complete the disabling process. Do not restart the computer until the process is completed.

Replace the hybrid solid-state drive

Go to <https://support.lenovo.com> and locate the *User Guide* or the *Hardware Maintenance Manual* for your computer. Then, refer to the M.2 solid-state drive replacement section to replace the hybrid solid-state drive.

Reinstall the operating system

If your operating system is installed in the hybrid solid-state drive, you need to reinstall the operating system after the replacement.

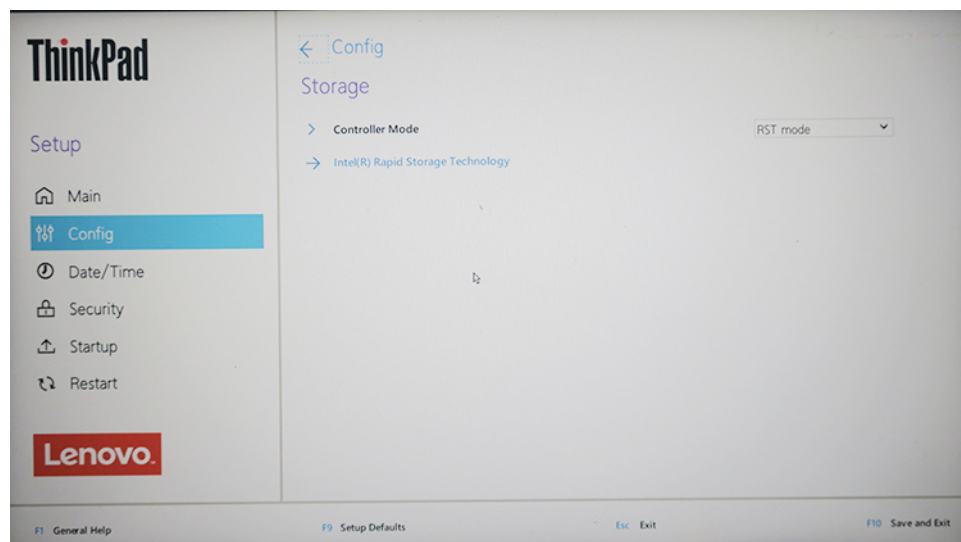
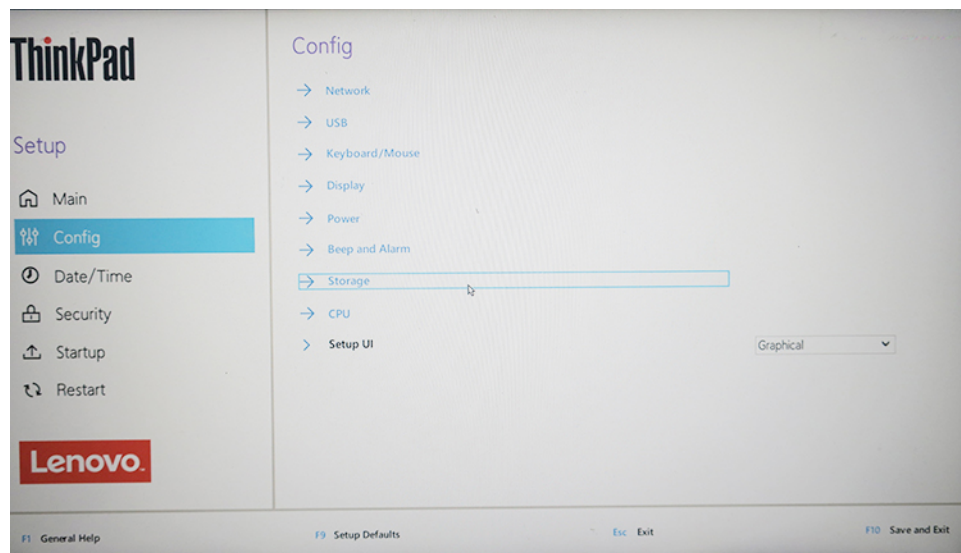
Enable the hybrid solid-state drive

Before enabling the hybrid solid-state drive, ensure that you read the following prerequisites.

- Two physical disks are listed in the UEFI BIOS menu and Device Manager menu.
- The version of the Intel (R) Rapid Store Technology (RST) RAID driver in the UEFI BIOS menu is later than 17.x.
- The version of the Intel RST controller driver under Device Manager is later than 17.x.
- The version of Intel management engine is 12.0.20.1301 or later.
- The version of the operating system is Windows 10 RS5 or later.
- RST mode is selected in the UEFI BIOS menu.

1. For ThinkPad notebook computers:

- a. Restart the computer. When the logo screen is displayed, press F1 to enter the UEFI BIOS menu.
- b. Select **Config → Storage → Controller mode → RST mode**.

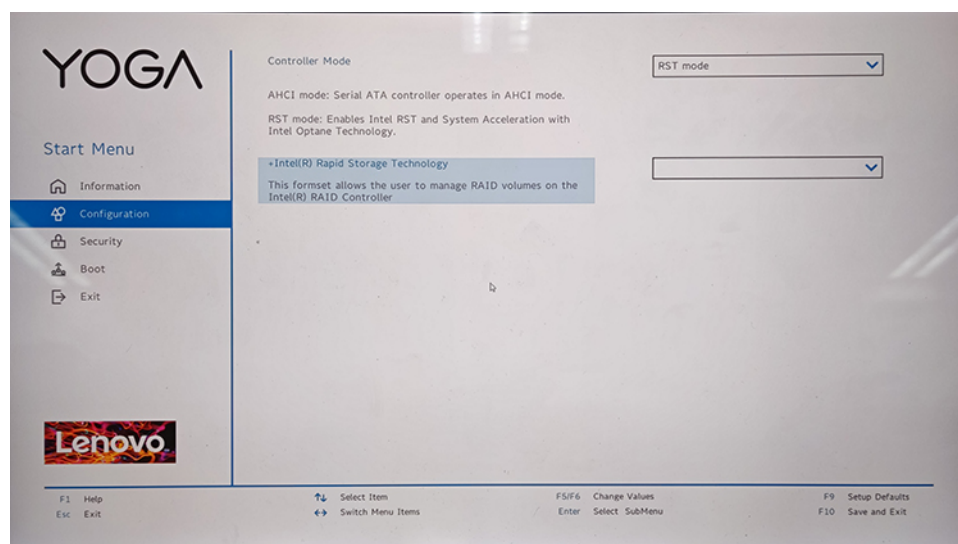
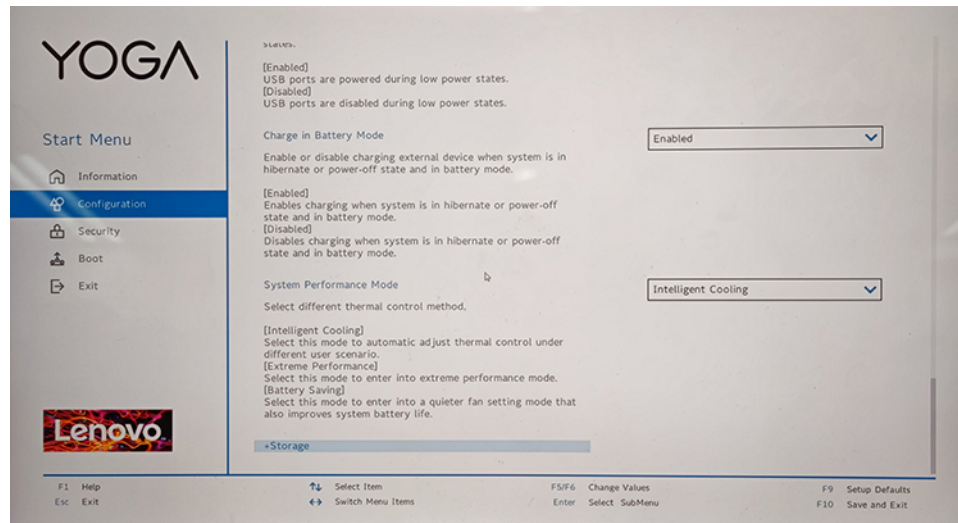


2. For non-ThinkPad notebook computers:

- a. Restart the computer. When the logo screen is displayed, press F2 or Fn+F2 to enter the UEFI BIOS menu.

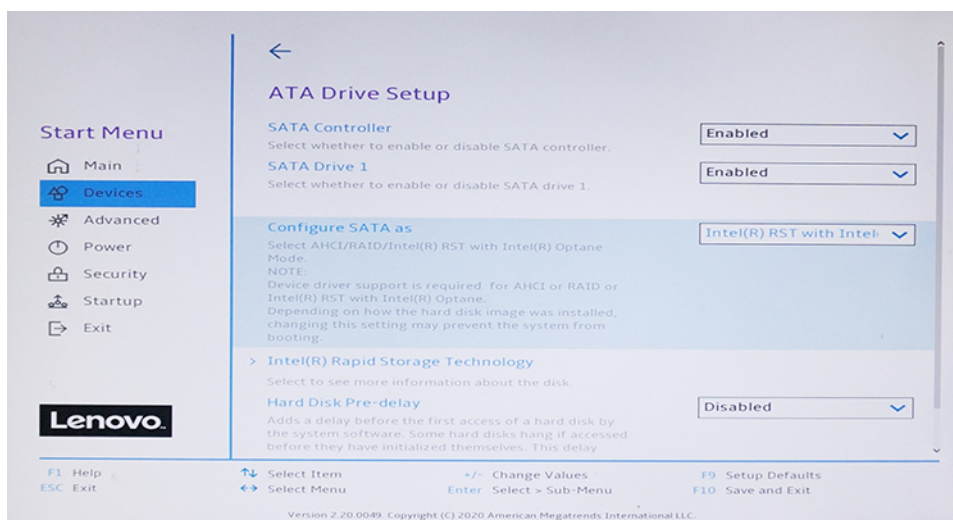
Note: For ThinkBook notebook computers, press F1 to enter the UEFI BIOS menu.

- b. Select **Configuration → Storage → Controller mode → RST mode**.



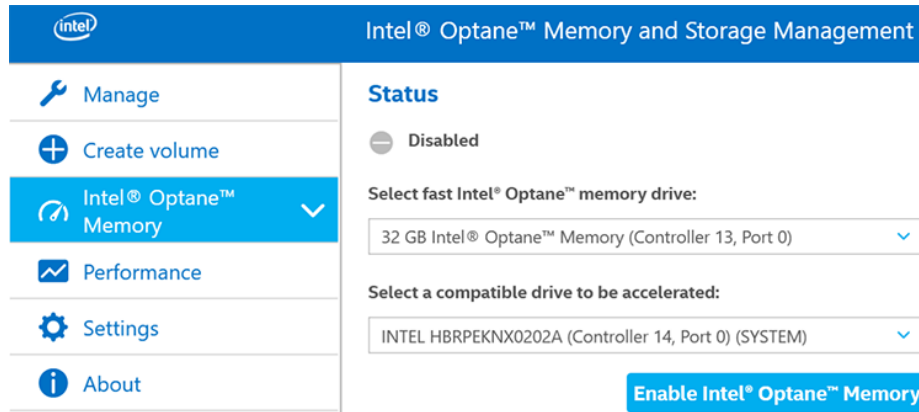
3. For desktop computers:

- a. Restart the computer. When the logo screen is displayed, press F1 or Fn+F1 to enter the UEFI BIOS menu.
- b. Select **Devices** → **ATA Drive Setup** → **Configure SATA as** and select Intel (R) RST with Intel (R) Optane.



Enabling procedure:

1. Launch the **Intel Optane Memory and Storage Management** program.
2. Click **Intel Optane Memory** → **Enable Intel Optane Memory**.



3. Follow the on-screen instructions to enable the hybrid solid-state drive.

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