## **MultiBoot**

User Guide

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## **Product notice**

This user guide describes features that are common to most models. Some features may not be available on your computer.

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## **1** About the boot device order

As the computer starts, the system attempts to boot from enabled boot devices. The MultiBoot utility, which is enabled by default, controls the order in which the system selects a boot device. Boot devices can include optical drives, diskette drives, a network interface card (NIC), hard drives, and USB devices. Boot devices contain bootable media or files that the computer needs to start and operate properly.



**NOTE:** Some boot devices must be enabled in Computer Setup before they can be included in the boot order.

The factory setting is for the computer to select the boot device by searching enabled boot devices and drive bay locations in the following order:



**NOTE:** Some of the boot devices and drive bay locations listed may not be supported on your computer.

- MultiBay or optical drive
- USB CD-ROM
- USB diskette drive
- USB superdisk
- Internal hard drive
- USB hard drive
- Network controller

You can change the order in which the computer searches for a boot device by changing the boot order in Computer Setup. You can also press f9 while the "F9 = Boot device menu" message is displayed in the lower-left corner of the screen when the computer starts up. Pressing f9 displays a menu that shows the current boot devices and allows you to select a boot device. Or, you can use MultiBoot Express to set the computer to prompt you for a boot location each time the computer turns on or restarts.

If MultiBoot is disabled, the computer uses a fixed boot order that consists of first searching for a drive A boot device. If none is found, the computer looks for a drive C boot device. Drive A boot devices include optical drives and diskette drives. Drive C boot devices include optical drives and hard drives.

The NIC does not have an assigned drive letter.



**NOTE:** An optical drive (such as a CD-ROM drive) can boot either as drive A or drive C, depending on the format of the boot CD.

The following list describes the factory setting for boot order in which drive letters A and C are assigned when MultiBoot is disabled. (The actual order varies by configuration.)

- Boot order for drive A boot devices:
  - 1. Optical drive in an optional docking device or in an optional external MultiBay that contains a disc formatted as drive A
  - 2. Optical drive in the internal MultiBay (select models only) that contains a disc formatted as drive A
  - 3. Diskette drive in an optional docking device or in an optional external MultiBay
- Boot order for drive C boot devices:
  - 1. Optical drive in an optional docking device or in an optional external MultiBay that contains a disc formatted as drive C
  - 2. Optical drive in the internal MultiBay (select models only) that contains a disc formatted as drive C
  - **3.** Hard drive in the computer hard drive bay
  - 4. Hard drive in an optional docking device or in an optional external MultiBay



**NOTE:** Because no drive letter is associated with the NIC, changing the boot order of a NIC does not affect the drive letters of the other devices.

# 2 Enabling boot devices in Computer Setup

The computer will boot to a USB device or a NIC device only if the device has first been enabled in Computer Setup.

To enable a USB device or a NIC device as a boot device, follow these steps:

- Open Computer Setup by turning on or restarting the computer, and then pressing f10 while the "F10 = ROM Based Setup" message is displayed in the lower-left corner of the screen.
- 2. To enable bootable media in USB drives or in drives inserted into an optional docking device (select models only), use the arrow keys to select System Configuration > Device Configurations, and then press enter. Use the arrow keys to select Enable in the USB legacy support field.



**NOTE:** The USB Port option must be enabled in order to use USB legacy support. Enable this option by selecting **System Configuration > Port Options**.

– or –

To enable a NIC device, use the arrow keys to select **System Configuration > Boot Options**, and then press enter. Use the arrow keys to select **Enable** in the **Internal network adapter boot** field.

 To save your preferences and exit Computer Setup, use the arrow keys to select File > Save Changes and Exit. Then follow the instructions on the screen.

Your preferences go into effect when the computer restarts.

NOTE: To connect a NIC to a Preboot eXecution Environment (PXE) or Remote Program Load (RPL) server without using MultiBoot, quickly press f12 when the "Network Service Boot" message appears in the lower-right corner of the screen (select models only).

## **3 Considering boot order changes**

Before changing the boot order, note the following considerations:

- When the computer restarts after the boot order has been changed, the computer attempts to start using the new boot order.
- If there is more than one type of boot device, the computer attempts to boot using the first of each type of boot device (except for optical devices). For example, if the computer is connected to an optional docking device (select models only) that contains a hard drive, this hard drive will be shown in the boot order as a USB hard drive. If the system attempts to boot from this USB hard drive and fails, it will not attempt to boot to the hard drive in the hard drive bay. Instead, it will try to boot to the next type of device in the boot order. However, if there are 2 optical devices, and the first optical device does not boot (either because it does not contain media or the media is not a boot disc), the system will try to boot to the second optical device.
- Changing the boot order also changes the logical drive designations. For example, if you start up from a CD-ROM drive with a disc formatted as drive C, that CD-ROM drive becomes drive C and the hard drive in the hard drive bay becomes drive D.
- The computer will boot from a NIC device only if the device has been enabled in the Built-In Device Options menu of Computer Setup and if booting from the device has been enabled in the Boot Options menu of Computer Setup. Booting from a NIC does not affect logical drive designations because no drive letter is associated with the NIC.
- Drives in an optional docking device (select models only) are treated like external USB devices in the boot order.

# 4 Choosing MultiBoot preferences

You can use MultiBoot in the following ways:

- To set a new boot order that the computer uses each time it is turned on, by changing the boot order in Computer Setup.
- To dynamically choose the boot device by pressing f9 while the "F9 = Boot device menu" message is displayed in the lower-left corner of the screen when the computer starts up.
- To use MultiBoot Express to set variable boot orders. This feature prompts you for a boot device each time the computer is turned on or restarted.

## Setting a new boot order in Computer Setup

To set a boot device order that the computer uses each time it is turned on or restarted, follow these steps:

- 1. Open Computer Setup by turning on or restarting the computer, and then pressing f10 while the "F10 = ROM Based Setup" message is displayed in the lower-left corner of the screen.
- 2. Use the arrow keys to select System Configuration > Boot Options, and then press enter.
- 3. Use the arrow keys to select Enable in the MultiBoot field.
- 4. Use the arrow keys to select the order that you prefer in the **Boot Order** fields.
- To save your preferences and exit Computer Setup, use the arrow keys to select File > Save Changes and Exit. Then follow the instructions on the screen.

Your preferences go into effect when the computer restarts.

## Dynamically choosing a boot device using the F9 prompt

To dynamically choose a boot device for the current start up sequence, follow these steps:

- Open the Select Boot Device menu by turning on or restarting the computer, and then pressing f9 while the "F9 = Boot device menu" message is displayed in the lower-left corner of the screen.
- 2. Use the arrow keys to select a boot device, and then press enter.

Your preferences go into effect immediately.

## Setting a MultiBoot Express prompt

To set the computer to display the MultiBoot startup location menu each time the computer is started or restarted, follow these steps:

- Open Computer Setup by turning on or restarting the computer, and then pressing f10 while the "F10 = ROM Based Setup" message is displayed in the lower-left corner of the screen.
- 2. Use the arrow keys to select **System Configuration > Boot Options**, and then press enter.
- 3. In the Express Boot Popup Delay (Sec) field, select the length of time in seconds that you want the computer to display the startup location menu before it defaults to the current MultiBoot setting (when 0 is selected, the Express Boot startup location menu is not displayed).
- 4. To save your preferences and exit Computer Setup, use the arrow keys to select **File > Save Changes and Exit**. Then follow the instructions on the screen.

Your preferences go into effect when the computer restarts.

## **Entering MultiBoot Express preferences**

When the Express Boot menu displays during startup, you have the following choices:

- To specify a boot device from the Express Boot menu, select your preference within the allotted time, and then press enter.
- To prevent the computer from defaulting to the current MultiBoot setting, press any key before the allotted time expires. The computer will not start until you select a boot device and press enter.
- To allow the computer to start according to the current MultiBoot settings, wait for the allotted time to expire.

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