Repartitioning and Formatting a Removable Media Device

Product Advisory: **FYICOTS0002**

Product: COTS Removable Media

Versions Affected: All Versions Using USB Removable Media Devices

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Distribution: External

QUESTION:

How do I recover the full storage capacity of a removable media device that contains more than one partition?

SOLUTION:

A removable media device containing more than one partition, such as media used for firmware updates, has a reduced capacity based on the size of each partition. Reusing the same removable media device as election media may require more storage space than is available.You can correct this issue using one of the following options.

Option 1

Return your partitioned removable media device(s) to ES&S for replacement with unpartitioned devices. Refer to the ES&S SUPPORT section for contact information.

Option 2

Use the instructions in the RESTORING PARTITIONED MEDIA section of this advisory to recover the full storage capacity of a partitioned removable media device.

Caution   The reformatting process deletes all data in existing partitions. Any data currently stored on the removable media device will be destroyed. Use extreme caution when performing the steps described in this advisory.

RESTORING PARTITIONED MEDIA

Use the instructions in this section to recover the full storage capacity of a partitioned removable media device.

1) DOWNLOAD AND INSTALL DISK UTILITY SOFTWARE

Restoring a partitioned removable media device to full capacity requires the use of a third-party software product designed to reformat the device. ES&S recommends using the HP USB Disk Storage Format Tool, which is available on request from ES&S Technical Support.

Note

Contact ES&S SUPPORT to request a copy of the HP USB Disk Storage Format Tool software.

Alternately, you can download the HP USB Disk Storage Format Tool for all Windows operating systems from the following location.

http://download.cnet.com/HP-USB-Disk-Storage-Format-Tool/3000-2094_4-10974082.html

Note

The instructions in this advisory are based on HP removable Disk Storage Format Tool v2.2.3.

After acquiring the HP USB Disk Storage Format Tool, follow the manufacturer's instructions to install the tool on the appropriate PC.

2) REFORMAT THE REMOVABLE MEDIA DEVICE

Complete the following steps to restore the full storage capacity of a removable media device.

Warning

This procedure erases all data currently stored on the device and makes existing files unrecoverable. **Do not** perform this procedure on an EMS PC.

1. Insert the removable media device into the appropriate port on a non-hardened, non-EMS PC running Windows 7.

2. Open the HP removable Disk Storage Format Tool.

Note

It may be necessary to log into this PC as the administrator to complete this step.

3. In the **Device** drop-down menu, click to select the removable media device to be reformatted.
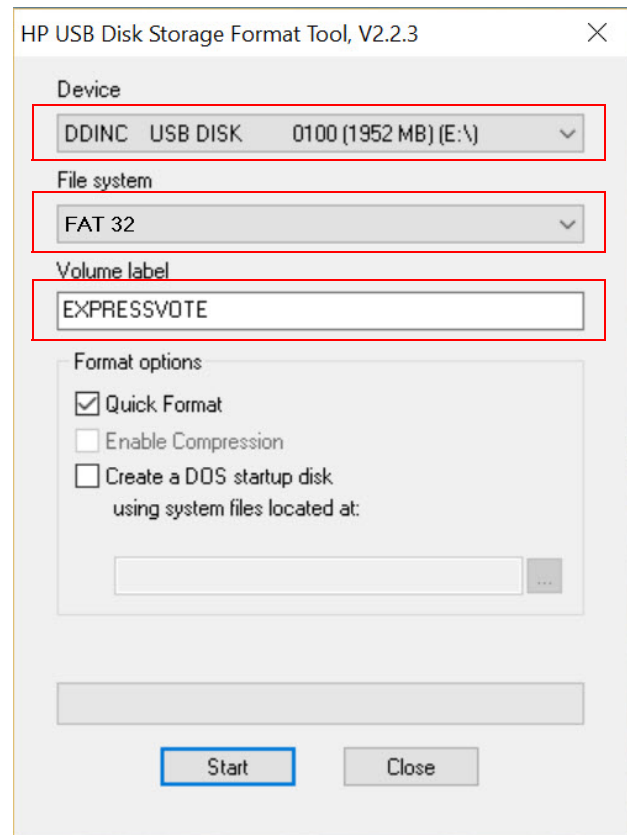
Important

Ensure that the correct device is selected in this drop-down menu. The following steps will erase all data currently stored on the selected device and make any existing files unrecoverable.

4. In the **File system** drop-down menu, click to select the **FAT 32** option.

5. In the **Volume label** field, edit the name for this volume.*

   *This step is optional.

HP USB Disk Storage Format Tool, V2.2.3   ✕

Device

DDINC   USB DISK   0100 (1952 MB) (E:\)   ⌄

File system

FAT 32   ⌄

Volume label

EXPRESSVOTE

Format options

☑ Quick Format
☐ Enable Compression
☐ Create a DOS startup disk
   using system files located at:

[   ]   [...]

[Start]   [Close]
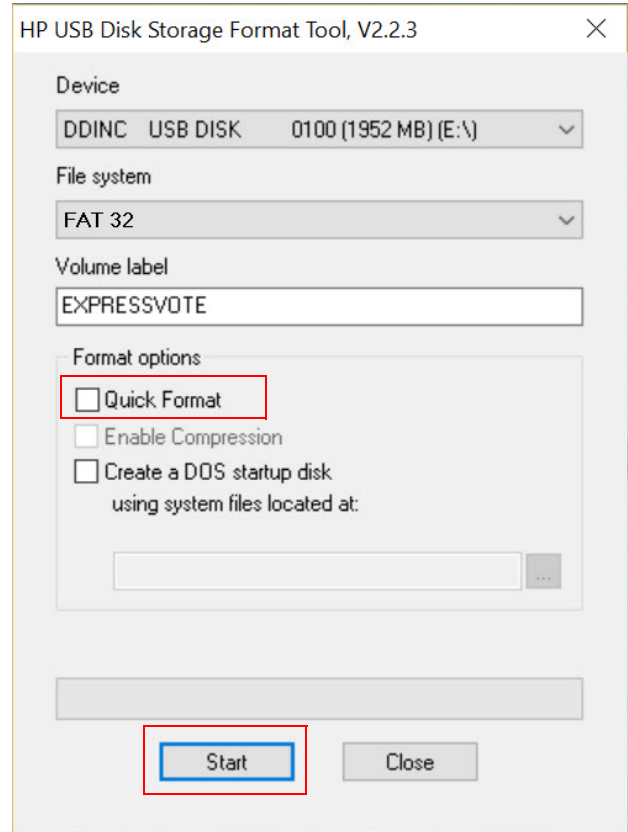
6. Under Format options, ensure the that **Quick Format** check box is blank, or not selected.

   Click to remove the check mark, if present.

7. Click **Start**.

HP USB Disk Storage Format Tool, V2.2.3	×

Device

DDINC USB DISK   0100 (1952 MB) (E:\) ⌄

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Format options

☐ Quick Format
☐ Enable Compression
☐ Create a DOS startup disk
    using system files located at:

[_____] [...]

[Start]   [Close]

The system displays the following confirmation dialog box.

8. Click **Yes** to proceed with this format.

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? WARNING! ALL DATA ON THE DDINC   USB DISK   0100 (1952 MB)
(E:\) DEVICE WILL BE LOST!
Do you want to proceed with this format?

[Yes]   [No]
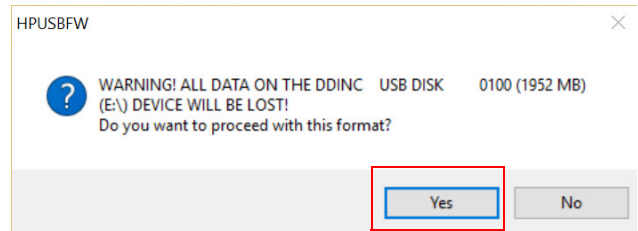
The system displays a progress bar indicating the progress of reformatting the selected device. Do not click Stop.

[_____] [...]

Formatting the device...

[███   ]
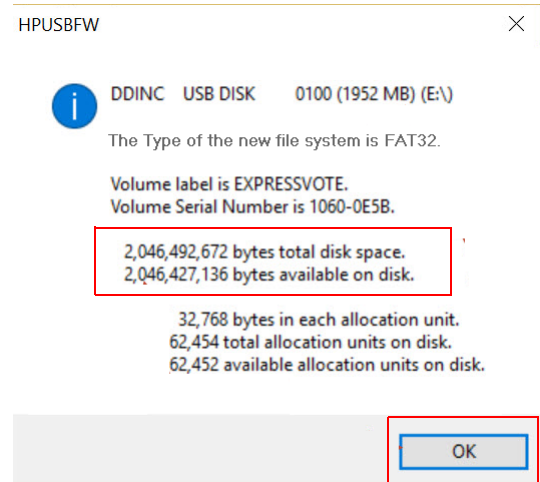
[Stop]   [Close]
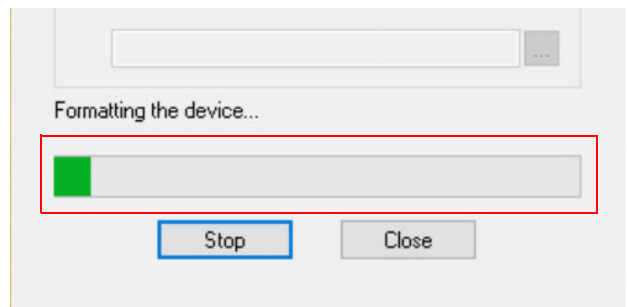
When the reformatting process is complete, the system displays the following confirmation dialog box displaying the total disk space in bytes, along with the volume of bytes now available.

Note If the full capacity of this removable media device is not recovered after completing theses steps, contact ES&S technical support for assistance.

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ⓘ DDINC USB DISK 0100 (1952 MB) (E:\)

The Type of the new file system is FAT32.

Volume label is EXPRESSVOTE.
Volume Serial Number is 1060-0E5B.

2,046,492,672 bytes total disk space.
2,046,427,136 bytes available on disk.

32,768 bytes in each allocation unit.
62,454 total allocation units on disk.
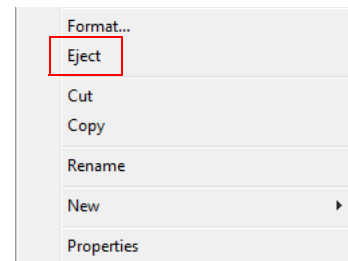62,452 available allocation units on disk.

OK

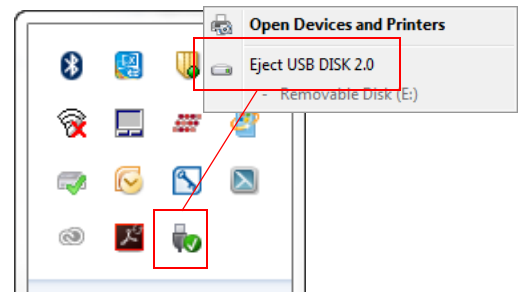9. Click **OK**.

This procedure is complete.

10. Use one of the following procedures to safely remove the removable media device.

In Windows Explorer, under Computer, right-click the removable drive. The system displays the context menu. In the context menu, click **Eject**.

-or-

In the notification area at the far right of the taskbar, click the **Safely Remove Hardware and Eject Media** icon. The system displays the context menu. In the context menu, click the **Eject** option for this removable media device.

Format...
Eject
Cut
Copy
Rename
New ▶
Properties

Open Devices and Printers
Eject USB DISK 2.0
- Removable Disk (E:)

11. Repeat these steps for any additional removable media devices with reduced storage capacity.

ES&S SUPPORT

For additional technical support, contact ES&S.

Telephone:	877-377-8683 (USA & Canada)
Fax:	402-970-1285
Write:	Election Systems & Software
	11208 John Galt Blvd
	Omaha, NE 68137 USA

ES&S support services are subject to the prices, terms, and conditions in place at the time of service.