Hewlett Packard Enterprise

HPE Dual 8GB MicroSD Enterprise Midline USB

User Guide

Abstract

This document includes feature, installation, and configuration information about the HPE Dual 8GB MicroSD Enterprise Midline USB and is for the person who installs, administers, and troubleshoots servers and storage systems.

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Introduction

Overview

This document outlines ProLiant server support of the HPE Dual 8GB MicroSD Enterprise Midline USB. The HPE Dual 8GB MicroSD Enterprise Midline USB is a dual-microSD card module providing data redundancy through a mirrored RAID-1 configuration. This microSD card module connects to an internal USB port and is configured upon boot.

Requirements

Observe the following requirements:

- Two microSD cards must be installed at all times or BIOS will flag an error case.
- Hewlett Packard Enterprise requires only one user LUN, formatted as FAT/FAT32.
- System ROM must be v2.20 or later.

Using flash media devices for integrated Hypervisors

This Hewlett Packard Enterprise-qualified blank USB key, blank SD card, or blank MicroSDHC card is provided for use with HPE ProLiant servers that support the VMware virtualization environment.

IMPORTANT: The USB key is designed for VMware boot. Hewlett Packard Enterprise Intelligence Provisioning does not support installing an operating system on a USB key.

Downloading HPE ESXi

Verify that your ProLiant server supports VMware ESXi.

For a list of ProLiant servers that support VMware ESXi, see the support matrix on the Hewlett Packard Enterprise website (**http://h17007.www1.hpe.com/us/en/enterprise/servers/supportmatrix/vmware.aspx#.WD8fi03ruUk**).

To use this key for VMware vSphere 5.1 or later:

1. Install the device in an internal slot in the server.
2. Download the HPE customized ESXi image from the Hewlett Packard Enterprise website (**http://www.hpe.com/info/esxidownload**).

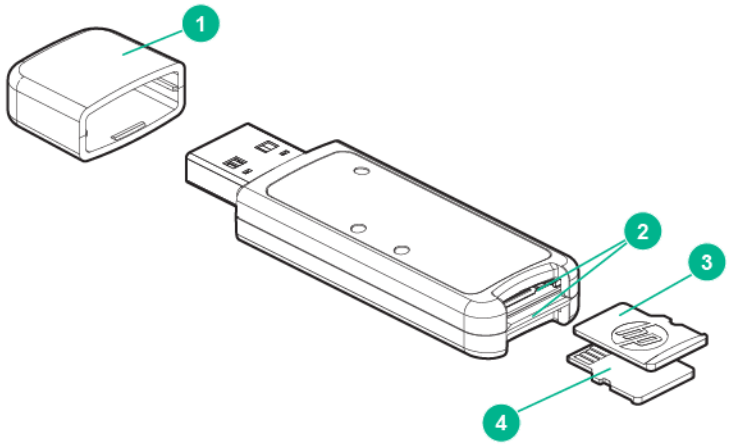
For more information, see the Hewlett Packard Enterprise website (**http://vibsdepot.hpe.com**).

Hewlett Packard Enterprise product QuickSpecs

For more information about product features, specifications, options, configurations, and compatibility, see the product QuickSpecs on the Hewlett Packard Enterprise website (**http://www.hpe.com/info/qs**).

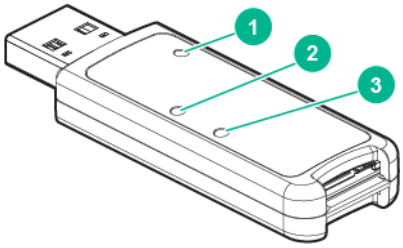
Component identification

Components



Item	Description
1	Cap
2	MicroSD card slot
3	SD1 card
4	SD2 card

LEDs



Item	Description	Status
1	Power LED	Green: Device is on and at least one microSD card is functioning Red: Both microSD cards have failed
2	SD2 LED	On: microSD card has failed Off: microSD card is healthy

Item	Description	Status
3	SD1 LED	On: microSD card has failed Off: microSD card is healthy

Installation and configuration

Replacing a failed microSD card module

IMPORTANT: This procedure requires system ROM version v2.20 or later.

If a microSD card fails a new HPE Dual 8GB MicroSD Enterprise Midline USB must be ordered. Only approved HPE microSD cards can be used with the HPE Dual 8GB MicroSD Enterprise Midline USB.

1. Note whether microSD card 1 or microSD card 2 failed via the 323 Error.
2. Power down the server.
3. Remove the microSD card module from the internal USB port.
4. Remove the working microSD card. This will be the new primary card.
5. Replace one of the microSD cards in the new microSD card module with the primary microSD card from the old microSD card module. You can install the primary microSD card in slot 1 or 2. Make a note of the slot number you installed the primary card into.

   CAUTION: Make sure to note the slot number you installed the primary microSD card into. Selecting the wrong slot number during configuration can result in data loss.

6. Install the microSD card module into an internal USB port.

Installing the microSD card module

1. Install the microSD card module into an available internal USB port.
2. Power on the server.

The microSD card module is automatically configured and ready for use.

Configuring a replacement microSD card module

The microSD card module must be configured prior to first use.

1. Power on the server.
2. Upon boot, the microSD module reports error message 325.
3. Press the **F9** key to enter **System Configuration**.
4. Select **System Health**, and then press **Enter**.
5. Select **View System Heath**, and then press **Enter**.
6. Select **System BIOS**, and then press **Enter**.
7. Highlight **Configuration required** and then press **Enter**. The **HPE Dual MicroSD** configuration menu appears.
8. Select the **Primary SD Card Selection** menu, and then select **SD1 Primary** or **SD2 Primary** based on which slot contains the primary card from the old device.
9. Press **F10** to save changes and exit the configuration menu.
10. Reboot the server.
11. Upon reboot, the device will be reconfigured and your original boot option will appear.

12. Select the primary SD card.

Event notifications

Error Cases

The following table lists the error messages and necessary user action associated with the microSD card module.

Error message	User action
321 - HPE Dual microSD Device Unsupported Configuration - A microSD card is not installed in Slot 1.	Install the microSD card that came with the device or replace the HPE Dual microSD device.
321 - HPE Dual microSD Device Unsupported Configuration - A microSD card is not installed in Slot 2.	Install the microSD card that came with the device or replace the HPE Dual microSD device.
322 - HPE Dual microSD Device Unsupported Configuration - No microSD cards are installed.	Install both microSD cards that came with the device or replace the HPE Dual microSD device.
323 - HPE Dual microSD Device Error - The microSD card in Slot 1 has failed.	Replace the HPE Dual microSD device and install the good microSD card from the original device in the new device to preserve data.
323 - HPE Dual microSD Device Error - The microSD card in Slot 2 has failed.	Replace the HPE Dual microSD device and install the good microSD card from the original device in the new device to preserve data.
324 - HPE Dual microSD Device Error - Both microSD cards have failed	Replace the HPE Dual microSD device.
325 - HPE Dual microSD Device Error - microSD cards have conflicting metadata. Configuration required.	Enter System Utilities and configure the primary microSD card using the System Health option.
326 - HPE Dual microSD Device Error - The microSD card in Slot 1 has failed. A microSD card is not installed in Slot 2.	Replace the HPE Dual microSD device.
326 - HPE Dual microSD Device Error - The microSD card in Slot 2 has failed. A microSD card is not installed in Slot 1.	Replace the HPE Dual microSD device.

HPE Agentless Management Service

VMware software bundles that include AMS

The following software bundles include Agentless Management Services and support the HPE Dual 8GB MicroSD Enterprise Midline USB:

- HPE Agentless Management Service Offline Bundle for VMware vSphere 5.1, 5.5, 6.0, or 6.5
- HPE ESXi Offline Bundle for VMware vSphere 5.1, 5.5, 6.0, or 6.5

SNMP traps and IML errors

HPE Agentless Management Service for VMware supports the following SNMP Traps and IML errors for the HPE Dual 8GB MicroSD EM USB Kit.

SNMP trap type	SNMP trap name	iLO Integrated Management Log error	Error severity
1010	cpqSeUSBStorageDeviceReadErrorOccurred	Boot From Flash Error (A read error has occurred on SD <num>. Current error count is <num>.)	Informational
1011	cpqSeUSBStorageDeviceWriteErrorOccurred	Boot From Flash Error (A write error has occurred on SD <num>. Current error count is <num>.)	Informational
1012	cpqSeUSBStorageDeviceRedundancyLost	Boot From Flash Error (Redundancy is lost. Replace failed device in slot SD<num>.)	Caution
1013	cpqSeUSBStorageDeviceRedundancyRestored	Boot From Flash Error (Redundancy is lost. Replace failed device in slot SD<num>.)	Repaired
1014	cpqSeUSBStorageDeviceSyncFailed	Boot From Flash Error (Card Sync Failed).	Caution

HPE SNMP MIB

HPE Agentless Management Service for VMware supports the following HPE SNMP MIB for reporting information for the HPE Dual 8GB MicroSD EM USB Kit:

- SNMP MIB: cpqstdeq.mib
- SNMP OID: .1.3.6.1.4.1.232.1.2.15.1 (cpqSeUsbPortTable)
- SNMP MIB details:
  - cpqSeUSBPortIndex
  - cpqSeUSBPortType)
  - cpqSeUSBPortHwLocation
  - cpqSeUSBPortStatus
  - cpqSeUSBPortDeviceName

- cpqSeUSBPortDeviceCapacity
- cpqSeUSBPortDeviceManufacturer
- cpqSeUSBPortDeviceModel
- cpqSeUSBPortDeviceFWVersion
- cpqSeUSBPortDeviceSerialNumber
- cpqSeUSBPortDevicePartNumber
- cpqSeUSBPortDeviceCount
- cpqSeUSBPortDeviceReadErrorCount
- cpqSeUSBPortDeviceWriteErrorCount
- cpqSeUSBPortDeviceReadThreshold
- cpqSeUSBPortDeviceWriteThreshold
- cpqSeUSBPortDeviceStatus
- cpqSeUSBPortDeviceFeature
- cpqSeUSBPortDeviceFailedSlot

HPE iLO

HPE iLO displays information about the HPE Dual 8GB MicroSD EM USB Kit through its GUI using SNMP data from the HPE Agentless Management Service for VMware.

iLO reports the following information:

- Location
- Product part number
- Serial number
- Product version
- Firmware version
- Status

Accessing Hewlett Packard Enterprise Support

- For live assistance, go to the Contact Hewlett Packard Enterprise Worldwide website (**http://www.hpe.com/assistance**).
- To access documentation and support services, go to the Hewlett Packard Enterprise Support Center website (**http://www.hpe.com/support/hpesc**).

Information to collect

- Technical support registration number (if applicable)
- Product name, model or version, and serial number
- Operating system name and version
- Firmware version
- Error messages

- Product-specific reports and logs
- Add-on products or components
- Third-party products or components

Accessing updates

- Some software products provide a mechanism for accessing software updates through the product interface. Review your product documentation to identify the recommended software update method.
- To download product updates, go to either of the following:
  - Hewlett Packard Enterprise Support Center **Get connected with updates** page (**http://www.hpe.com/support/e-updates**)
  - Software Depot website (**http://www.hpe.com/support/softwaredepot**)
- To view and update your entitlements, and to link your contracts and warranties with your profile, go to the Hewlett Packard Enterprise Support Center **More Information on Access to Support Materials** page (**http://www.hpe.com/support/AccessToSupportMaterials**).

IMPORTANT: Access to some updates might require product entitlement when accessed through the Hewlett Packard Enterprise Support Center. You must have an HP Passport set up with relevant entitlements.

Websites

- Hewlett Packard Enterprise Information Library (**http://www.hpe.com/info/enterprise/docs**)
- Hewlett Packard Enterprise Support Center (**http://www.hpe.com/support/hpesc**)
- Contact Hewlett Packard Enterprise Worldwide (**http://www.hpe.com/assistance**)
- Subscription Service/Support Alerts (**http://www.hpe.com/support/e-updates**)
- Software Depot (**http://www.hpe.com/support/softwaredepot**)
- Customer Self Repair (**http://www.hpe.com/support/selfrepair**)
- Insight Remote Support (**http://www.hpe.com/info/insightremotesupport/docs**)
- Serviceguard Solutions for HP-UX (**http://www.hpe.com/info/hpux-serviceguard-docs**)
- Single Point of Connectivity Knowledge (SPOCK) Storage compatibility matrix (**http://www.hpe.com/storage/spock**)
- Storage white papers and analyst reports (**http://www.hpe.com/storage/whitepapers**)

Remote support

Remote support is available with supported devices as part of your warranty or contractual support agreement. It provides intelligent event diagnosis, and automatic, secure submission of hardware event notifications to Hewlett Packard Enterprise, which will initiate a fast and accurate resolution based on your product's service level. Hewlett Packard Enterprise strongly recommends that you register your device for remote support.

For more information and device support details, go to the Insight Remote Support website (**http://www.hpe.com/info/insightremotesupport/docs**).

Acronyms and abbreviations

IML

Integrated Management Log

LUN

logical unit number

SD

Secure Digital

UEFI

Unified Extensible Firmware Interface

Documentation feedback

Hewlett Packard Enterprise is committed to providing documentation that meets your needs. To help us improve the documentation, send any errors, suggestions, or comments to Documentation Feedback (**mailto:docsfeedback@hpe.com**). When submitting your feedback, include the document title, part number, edition, and publication date located on the front cover of the document. For online help content, include the product name, product version, help edition, and publication date located on the legal notices page.