



Hewlett Packard
Enterprise

**HPE VMware Utilities User Guide VMware
vSphere 6.7 U3 for December 2019**

Part Number: P26506-001
Published: December 2019
Edition: 1

Contents

Introduction.....	4
Installing offline bundle on a vSphere 6.7 host using vSphere CLI 6.7 esxcli utility.....	4
Prerequisites.....	4
Installing offline bundles on a vSphere 6.7 host using VMware vCenter Update Manager.....	5
HPONCFG utility.....	5
HPONCFG command-line syntax.....	5
HPONCFG return codes.....	6
HPONCFG command file contents.....	7
Obtaining an entire configuration.....	8
Obtaining a specific configuration.....	9
Setting a configuration.....	9
HPONCFG command-line examples.....	10
BOOTCFG utility.....	10
BOOTCFG command-line syntax.....	10
BOOTCFG ESXCLI syntax.....	11
BOOTCFG return codes.....	12
BOOTCFG command-line examples.....	12
SSACLI utility.....	13
SSACLI command-line syntax.....	13
SSACLI ESXCLI syntax.....	13
TESTEVENT utility.....	16
TESTEVENT command-line syntax.....	16
TESTEVENT ESXCLI syntax.....	17
TESTEVENT return codes.....	18
TESTEVENT command-line examples.....	18
CONREP utility.....	19
CONREP command-line syntax.....	19
CONREP -s (Store to Data file).....	21
CONREP -l (Load from Data File).....	22
Support and other resources.....	24
Accessing Hewlett Packard Enterprise Support.....	24
Accessing updates.....	24
Websites.....	25
Customer self repair.....	25
Remote support.....	25
Subscription service.....	25
Documentation feedback.....	26

Notices

The information contained herein is subject to change without notice. The only warranties for Hewlett Packard Enterprise products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. Hewlett Packard Enterprise shall not be liable for technical or editorial errors or omissions contained herein.

Confidential computer software. Valid license from Hewlett Packard Enterprise required for possession, use, or copying. Consistent with FAR 12.211 and 12.212, Commercial Computer Software, Computer Software Documentation, and Technical Data for Commercial Items are licensed to the U.S. Government under vendor's standard commercial license.

Links to third-party websites take you outside the Hewlett Packard Enterprise website. Hewlett Packard Enterprise has no control over and is not responsible for information outside the Hewlett Packard Enterprise website.

Acknowledgments

Microsoft® and Windows® are trademarks of Microsoft group of companies.

UNIX® is a registered trademark of The Open Group.

Introduction

This section provides information about the utilities supported on VMware vSphere 6.7 U3 and updates. The following utilities are supported on VMware vSphere 6.7 U3 and updates host:

- HPONCFG — Command line utility used for obtaining and setting HPE iLO configurations.
- BOOTCFG — Command line utility used for configuring HPE server boot order.
- SSACLI – Command line utility used for configuration and diagnostics of HPE server SmartArrays.
- TESTEVENT –Command line utility used to request the HPE Insight Management WBEM providers generate the Information Test Indication with Provider Name “HP Test” and EventID 1, and the CPQ SNMP test trap with OID 1.3.6.1.4.1.232.11.2.8.1.0.11003.
- CONREP – Command line utility used to capture server configuration information. The configuration data can then be edited. The data can be further used to reset the configuration of the server or to duplicate the configuration on another HPE server.

Installing offline bundle on a vSphere 6.7 U3 host using vSphere CLI 6.7 U3 esxcli utility

This section provides information about installing the VMware vSphere 6.7 updates offline bundles on the vSphere host. You can use the `esxcli` utility in conjunction with offline bundles or with a depot.

Prerequisites

Install VMware vSphere Command-Line Interface 6.7 (vSphere CLI) on Microsoft Windows or Linux system. For information about importing or installing the vSphere CLI 6.7, see the *VMware vSphere Command-Line Interface Installation and Reference Guide* available at:

<http://pubs.vmware.com/vsphere-60/index.jsp#com.vmware.vcli.ref.doc/vcli-right.html>.

To install the offline bundle on an vSphere host, perform the following steps:

Procedure

1. Power off any virtual machines that are running on the host, and set the host into maintenance mode.
2. Transfer the bundle onto the vSphere host local path, or extract it onto an online depot.
3. Install the bundle on the vSphere host using any of the following command line:
 - a. Install remotely from client, with offline bundle available as online depot

```
~# esxcli -s <server> -u root -p mypassword software vib install -d <depotURL/bundle-index.xml>
```
 - b. Install remotely from client, with offline bundle available on vSphere host

```
~# esxcli -s <server> -u root -p mypassword software vib install -d <vSphere local path><bundle.zip>
```
 - c. Install from vSphere host, with offline bundle available on vSphere host

```
~# esxcli software vib install -d <vSphere local path><bundle.zip>
```
4. After the bundle is installed, reboot the vSphere host to initialize the utilities.

Installing offline bundles on a vSphere 6.7 host using VMware vCenter Update Manager

The offline bundle can also be installed from VMware vCenter Update Manager as a patch. For more information and detailed instructions, see the *VMware vCenter Update Manager Administration Guide* available at:

http://pubs.vmware.com/vsphere-60/index.jsp#com.vmware.update_manager.doc/GUID-B5FB88E4-5341-45D4-ADC3-173922247466.html.

HPONCFG utility

The HPONCFG utility supports the HPE servers that are listed in the *vSphere Server Support Matrix*. To visit the **vSphere Server Matrix** page, go to <http://vibsdepot.hpe.com> and under **Support Information** section, select **HPE server support matrix**.

Hewlett Packard Enterprise offers support for the iLO 3, iLO 4, and iLO5 features available on HPE servers with the HPONCFG utility.

HPONCFG is an online configuration tool used to set up and reconfigure iLO 3, iLO 4, and iLO5 without requiring a reboot of the server operating system. The utility runs in a command-line mode and must be executed from an operating system command-line.

Observe the following requirements before using HPONCFG:

- The iLO 3, iLO 4, and iLO5 Management Interface Driver must be loaded on the server.
HPONCFG displays a warning if the driver is not installed.
- HPONCFG requires minimum iLO 3, iLO 4, and iLO5 firmware versions. To determine the minimum firmware version required, see the *HPE SmartStart Scripting Toolkit Linux and Windows Editions Support Matrix*.

For more information on Integrated Lights-Out, see: <http://www.hpe.com/info/ilo>

HPONCFG command-line syntax

Use the following format at the command line:

```
hponcfg -f filename [] [-v] [-m minFw] -g [-m minFw] -w filename [-m minFw]
-r [-m minFw ] -h -? -u iLO_username -p iLO_password
```

The HPONCFG utility can be accessed from the location: `/opt/tools`.

! **IMPORTANT:** Because the `-w` argument does not capture certain types of information, such as the administrator password, data files created with HPONCFG using the `-w` argument cannot then be used as input files for HPONCFG, unless they are modified first.

Table 1: hponcfg Command Line Arguments

Argument	Function
-a, --all	This argument captures complete Management Processor configuration to the file. This option should be used along with the "-w" option.
-i, --input	This argument Get/Set Management Processor Configuration from the XML input received through the standard input stream.
-s, --substitute	This argument substitutes variables present in the input configuration file with the values specified in "namevaluepairs".
-f, --file=filename	This argument sets the iLO 3, iLO 4 or iLO 5 configuration based on the information in the XML input file named filename.
-l, --log=filename	This argument logs replies to the text log file named filename.
-v, --xmlverbose	Writes all the responses from iLO 3, iLO 4 or iLO 5.
-g, --get_hostinfo	This argument returns the host server name and serial number.
-m, --minfwlevel	This argument indicates to HPONCFG the minimum firmware level that must be present in the management device to execute the RIBCL script. If the minimum level is not met, HPONCFG returns an error without performing any additional actions.
-w, --writeconfig=filename	This argument writes the iLO 3, iLO 4 or iLO 5 configuration obtained from the device to the XML output file named filename.
-r, --reset	This argument resets the iLO 3, iLO 4 or iLO 5 to factory defaults.
-h, --help, --?	These arguments display simple help messages.
-b, --reboot	Reboot Management Processor without changing any settings
-u, --username	iLO Username
-p, --password	iLO Password

NOTE: On servers with iLO5, the iLO Username and iLO Password will need to be provided when the security state of the iLO is NOT Production.

HPONCFG return codes

This section provides description about the return code after running the command.

Table 2: hponcfg return codes

Value	Meaning
-1	ERROR: A general system error detected while running HPONCFG
0	Script succeeded.
1	Script failed
2	ERROR : Unable to shutdown the iLo Channel Interface
3	Firmware flash is in progress. Please wait for a while.
4	General error detected while checking firmware flash.
5	iLO Lights-Out functionality is Disabled. Please enable Lights-Out functionality before using this software . To Enable Lights-Out functionality: Set iLO Security Override Switch to ON and Use iLO ROM-based Setup Utility or iLO Browser interface to enable lights-out functionality.
7	You are not a root/superuser. Only root/superuser can access the utility.
9	ERROR: Please specify firmware level as numeric input
10	Could not get status of the Lights-Out Functionality
13 - 20	ERROR: Failed to capture the configuration

If the script itself fails, errors are reported in the log file created by HPONCFG.

HPONCFG command file contents

The `hponcfg` command can be used to perform the following tasks:

- Obtain an entire configuration
- Obtain a specific configuration
- Set a configuration

Obtaining an entire configuration

The `hponcfg` command can be used to obtain an entire configuration from an iLO 3, iLO 4 or iLO 5. In this case, the utility executes from the command line without specification of an input file. The name of the output file is given on the command line. For example:

```
/opt/tools # ./hponcfg -w config.xml
```

In this example, the utility indicated that it obtained the data successfully and wrote it to the output file as requested. The following is a typical example of the contents of the output file:

```
<HPONCFG VERSION="1.1">
<!--Generated 04/15/04 15:20:36-->
<MOD_DIR_CONFIG>
<DIR_AUTHENTICATION_ENABLED VALUE="N" />
<DIR_LOCAL_USER_ACCT VALUE="Y" />
<DIR_SERVER_ADDRESS VALUE="" />
<DIR_SERVER_PORT VALUE="25"/>
<DIR_OBJECT_DN VALUE=" " />
<DIR_OBJECT_PASSWORD VALUE="" />
<DIR_USER_CONTEXT_1 VALUE="" />
<DIR_USER_CONTEXT_2 VALUE=" " />
<DIR_USER_CONTEXT_3 VALUE="" />
</MOD_DIR_CONFIG>
<MOD_NETWORK_SETTINGS>
<SPEED_AUTOSELECT VALUE="Y"/>
<NIC_SPEED VALUE="100"/>
<FULL_DUPLEX VALUE="Y"/>
<IP_ADDRESS VALUE="XX.XXX.XXX.XX"/>
<SUBNET_MASK VALUE="xxx.xxx.xxx.x"/>
<GATEWAY_IP_ADDRESS VALUE="XX.XXX.XXX.X"/>
<DNS_NAME VALUE="ILOD234KJ44D002"/>
<PRIM_DNS_SERVER value="xx.xx.x.xxx"/>
<DHCP_ENABLE VALUE="Y"/>
<DOMAIN_NAME VALUE="americas.cpqcorp.net"/>
<DHCP_GATEWAY VALUE="Y"/>
<DHCP_DNS_SERVER VALUE="Y"/>
<DHCP_STATIC_ROUTE VALUE="Y"/>
<DHCP_WINS_SERVER VALUE="Y"/>
<REG_WINS_SERVER VALUE="Y"/>
<PRIM_WINS_SERVER value="xx.xx.x.xxx"/>
<STATIC_ROUTE_1 DEST="0.0.0.0" GATEWAY="0.0.0.0"/>
<STATIC_ROUTE_2 DEST="0.0.0.0" GATEWAY="0.0.0.0"/>
<STATIC_ROUTE_3 DEST="0.0.0.0" GATEWAY="0.0.0.0"/>
</MOD_NETWORK_SETTINGS>
<ADD_USER
USER_NAME="Administrator"
USER_LOGIN="Administrator"
PASSWORD="">
</ADD_USER>
<ADD_USER
USER_NAME="Landy9"
USER_LOGIN="mandy9"
PASSWORD="">
</ADD_USER>
<RESET_RIB VALUE="Y"/>
</HPONCFG>
```


For security reasons, the user passwords are not returned.

Obtaining a specific configuration

A specific configuration can be obtained using the appropriate XML input file. For example, here are the contents of a typical XML input file, `get_global.xml`:

```
<!-- Sample file for Get Global command -->
<RIBCL VERSION="2.0">
  <LOGIN USER_LOGIN="x" PASSWORD="x">
    <RIB_INFO MODE="read">
      <GET_GLOBAL_SETTINGS />
    </RIB_INFO>
  </LOGIN>
</RIBCL>
```

The XML commands are read from the input file `get_global.xml` and are processed by the device:

```
/opt/tools # ./hponcfg -f get_global.xml -l log.txt > output.txt
```

The requested information is returned in the log file, which, in this example, is named `log.txt`. The contents of the log file are shown below:

```
<GET_GLOBAL_SETTINGS>
<SESSION_TIMEOUT VALUE="30"/>
<ILO_FUNCT_ENABLED VALUE="Y"/>
<F8_PROMPT_ENABLED VALUE="Y"/>
<REMOTE_CONSOLE_PORT_STATUS VALUE="3"/>
<REMOTE_CONSOLE_ENCRYPTION VALUE="N"/>
<PREFER_TERMINAL_SERVICES VALUE="N"/>
<HTTPS_PORT VALUE="443"/>
<HTTP_PORT VALUE="80"/>
<REMOTE_CONSOLE_PORT VALUE="23"/>
<TERMINAL_SERVICES_PORT VALUE="3389"/>
<VIRTUAL_MEDIA_PORT VALUE="17988"/>
<MIN_PASSWORD VALUE="4"/>
</GET_GLOBAL_SETTINGS>
```

Setting a configuration

A specific configuration can be sent to the iLO 3, iLO 4 or iLO 5 by using the command format:

```
/opt/tools # ./hponcfg -f add_user.xml -l log.txt
```

In this example, the input file has contents:

```
<!--Add user with minimal privileges to test default setting of assigned privileges
to 'N'-->
<RIBCL version="1.2"/>
<LOGIN USER_LOGIN="x" PASSWORD="x">
  <USER_INFO MODE="write">
    <ADD_USER USER_NAME="Landy9" USER_LOGIN="mandy9"
    PASSWORD="floppyshoes">
      <RESET_SERVER_PRIV value="Y" />
      <ADMIN_PRIV value="Y" />
    </ADD_USER>
  </USER_INFO>
</LOGIN>
</RIBCL>
```

The specified user will be added to the device.

HPONCFG command-line examples

This section provides sample examples to run the utility.

Table 3: hponcfg command-line examples

Command-line argument	Description
<code>hponcfg -h</code>	This argument displays help information.
<code>hponcfg -g</code>	This argument returns the host server name and serial number.

To view the command usage options, run the following command:

```
/opt/tools # ./hponcfg -h
```

All options supported by the command are listed in the output.

To get the host server name and serial number, run the following command:

```
/opt/tools # ./hponcfg -g
```

The following output is displayed:

```
Lights-Out Online Configuration utility for ESXi Version 5.0-0 (c) Copyright 2011-2017 Hewlett Packard Enterprise Development LP  
Firmware Revision = 1.10 Device type = iLO 5 Driver name = ilo  
Host Information:  
Server Name: localhost.us.rdlabs.hpecorp.net  
Server Serial Number: xxxxxxxxxxxx
```

xxxx – As per customer’s environment.

To set the minimum firmware level, run the following command:

```
/opt/tools # ./hponcfg -m 1
```

The following output is displayed:

```
Firmware Revision = 1.10 Device type = iLO 5 Driver name = ilo
```

BOOTCFG utility

The `bootcfg` utility supports the HPE servers that are listed in the *vSphere Server Support Matrix*. To visit the **vSphere Server Matrix** page, go to <http://vibsdepot.hpe.com> and under **Support Information** section, select **HPE server support matrix**.

BOOTCFG is also supported when the system is booted in UEFI boot mode or Legacy BIOS.



This utility allows an application to set the device for the next subsequent boot of the system except where the option states it is persistent.

BOOTCFG command-line syntax

Use the following format at the command line:

```
bootcfg [-L -E] [-F -C -H -U] [-S -Q -R -P] [-b]
```

Table 4: bootcfg Command Line Arguments

Argument	Function
-L	Sets the persistent boot mode to legacy bios boot mode.  CAUTION: Installed OS may be boot-mode sensitive. It cannot boot an OS installed in UEFI mode, in legacy mode, and vice versa.
-E	Sets the persistent boot mode to UEFI bios boot mode.  CAUTION: Installed OS may be boot-mode sensitive. It cannot boot an OS installed in UEFI mode, in legacy mode, and vice versa.
-D	Sets default device as the boot option
-F	Sets Floppy Drive as the first boot device for the system boot
-C	Sets CD-ROM Drive as the first boot device for the system boot
-H	Sets Hard Drive as the first boot device for the system boot
-U	Sets USB as the first boot device for the system boot
-S	Sets system configuration utility as the boot device for the current boot
-Q	Sets quick configuration utility as the boot device for the current boot
-R	Sets ROM-Based Setup Utility (RBSU) as the boot device for the current boot
-P	Sets PXE client as the boot device for the current boot
-b	Bypasses F1 / F2 prompts

BOOTCFG ESXCLI syntax

The `bootcfg` utility is supported by the ESXCLI utility.

To view the command usage options, run the following command:

```
# esxcli bootcfg
```

The following output is displayed:

```
Usage: esxcli bootcfg {cmd} [cmd options]
Available Commands:
execute execute - bootcfg command with
options
```

```
parameter
help - show bootcfg help

show - show current bootcfg settings
```

To view the current boot settings, run the following command:

```
# esxcli bootcfg show
```

This System only support BIOS/Legacy boot.

```
Boot mode: 00 00 Legacy BIOS boot mode
```

```
Boot order:00 00: Normal Device first, normal boot process
```

For systems that are Legacy enabled boot mode, the following output is displayed:

```
Boot mode: 00 00 Legacy BIOS boot mode
```

```
Boot order:00 00: Normal Device first, normal boot process
```

To set the command parameter values, use the "execute" cmd and one of the options listed in below. The following is an example of the command to set the defaults:

```
# esxcli bootcfg execute -D
```

The following output is displayed for a system that is in UEFI boot mode :

This System only support BIOS/Legacy boot.

```
Boot mode:01 01 UEFI BIOS boot mode, UEFI optimized boot mode enabled
```

```
Boot order:00 00: Normal Device first, normal boot process
```

BOOTCFG return codes

This section provides description about the return code after running the command.

Table 5: bootcfg return codes

Value	Meaning
0	Indicates success
Non zero	Indicates failure

BOOTCFG command-line examples

This section provides sample examples to run the utility.

Table 6: bootcfg command-line examples

Command-line argument	Description
/opt/tools/bootcfg -h	This argument displays help information.
/opt/tools/bootcfg -D	This argument sets the default values.

SSACLI utility

The SSACLI utility supports HPE 300/500/700 and Blade servers with integrated SmartArray controllers and option controllers. The utility supports reporting and configuration of the SmartArray. Configuration includes the ability to create arrays; create, expand, and delete logical drives and many other advanced operations. The information provided in the guide is introductory and example focused. For more information, see *Configuring Arrays on HPE Smart Array Controllers Reference Guide* available at: http://www.hpe.com/support/CASAC_RG_en.

Additional references to *HPE Smart Storage Administrator guides and white papers* are available at: <http://www.hpe.com/info/ACU-manuals>.

SSACLI command-line syntax

Using VMware esxcli requires knowledge about the CLI usage. The VMware vSphere command line documentation is available at: <http://www.vmware.com/support/developer/vcli/>.

The following is an overview of the ESXCLI command-line format:

```
# esxcli {namespace} {object} {command} {cmd options} "command-string"
```

Table 7: SSACLI Command-Line Arguments

Argument	Function
esxcli	The <code>esxcli</code> application.
namespace	Each plugin must have an associated namespace which defines any environment or other system variables required by the application.
object	A plugin must have one or more associated objects which defines a single operation.
command	Prepares the <code>esxcli</code> target to accept a command-line string.
cmd options	Additional switches associated with the command itself (if necessary).
"command-string"	This is the string which dictates the operation that should be executed by the target application itself.

The current namespace and command names are: `ssacli` and `cmd` respectively. The `{cmd options}` parameter can be `cmdopts` or `-q`. There is no need for an `{object}` type for `ssacli` since the application operates on internal commands supplied in the `command-string`.

SSACLI ESXCLI syntax

The SSACLI utility is supported by the ESXCLI utility.

Use the following command syntax for all commands:

```
# esxcli -server="servername or IP" -user="username" -password="root password" ssacli cmd -q "command-string"
```

The `command-string` parameter supports same commands that are specified at the SSACLI interactive command-line interface.

This example shows the information about all the SmartArray controller on the server.

```
esxcli -server="servername or IP" -user="username" -password="root password"  
ssacli cmd -q "controller all show status "
```

The following output is displayed:

```
Smart Array P212 in Slot 9  
  Controller Status: OK  
  
Smart Array P410i in Slot 0 (Embedded)  
  Controller Status: OK  
  Cache Status: OK  
  Battery/Capacitor Status: OK
```

This example shows the detailed configuration information for the SmartArray controller in slot 0.

```
# esxcli -server="servername or IP" -user="username" -password="root password"  
ssacli cmd -q "controller slot=0 show config detail"
```

The following output is displayed:

```
  Smart Array P410i in Slot 0 (Embedded)  
  Bus Interface: PCI  
  Slot: 0  
  
  Serial Number: 5001438013A25C90  
  Cache Serial Number: PBCDF0CRH0J7SD  
  RAID 6 (ADG) Status: Disabled  
  Controller Status: OK  
  Hardware Revision: C  
  Firmware Version: 3.70  
  Rebuild Priority: Medium  
  Expand Priority: Medium  
  Surface Scan Delay: 15 secs  
  Surface Scan Mode: Idle  
  Queue Depth: Automatic  
  Monitor and Performance Delay: 60 min  
  Elevator Sort: Enabled  
  Degraded Performance Optimization: Disabled  
  Inconsistency Repair Policy: Disabled  
  Wait for Cache Room: Disabled  
  Surface Analysis Inconsistency Notification: Disabled  
  Post Prompt Timeout: 0 secs  
  Cache Board Present: True  
  Cache Status: OK  
  Accelerator Ratio: 25% Read / 75% Write  
  Drive Write Cache: Disabled  
  Total Cache Size: 1024 MB  
  Total Cache Memory Available: 912 MB  
  No-Battery Write Cache: Disabled  
  Cache Backup Power Source: Capacitors  
  Battery/Capacitor Count: 1  
  Battery/Capacitor Status: OK  
  SATA NCQ Supported: True  
  
  Array: A  
  Interface Type: SAS  
  Unused Space: 0 MB
```

Status: OK
Logical Drive: 1
Size: 136.7 GB
Fault Tolerance: RAID 1
Heads: 255
Sectors Per Track: 32
Cylinders: 35132
Strip Size: 256 KB
Full Stripe Size: 256 KB
Status: OK
Array Accelerator: Enabled
Unique Identifier: 600508B1001CB65083D63C5E781ABF65
Disk Name: vmhba2:C0:T0:L1
Mount Points: None
Logical Drive Label: A00D1AF35001438013A25C90F0BA
Mirror Group 0:
physicaldrive 1I:1:1 (port 1I:box 1:bay 1, SAS, 146 GB, OK)
Mirror Group 1:
physicaldrive 1I:1:2 (port 1I:box 1:bay 2, SAS, 146 GB, OK)

physicaldrive 1I:1:1
Port: 1I
Box: 1
Bay: 1
Status: OK
Drive Type: Data Drive
Interface Type: SAS
Size: 146 GB

Rotational Speed: 10000
Firmware Revision: HPDE
Serial Number: 6SD3FJVL0000B145MFXB
Model: HP EG0146FAWHU
Current Temperature (C): 36
Maximum Temperature (C): 46
PHY Count: 2
PHY Transfer Rate: 6.0GBPS, Unknown

physicaldrive 1I:1:2
Port: 1I
Box: 1
Bay: 2
Status: OK
Drive Type: Data Drive
Interface Type: SAS
Size: 146 GB
Rotational Speed: 10000
Firmware Revision: HPDE
Serial Number: 6SD3EVBH0000B144Q7RD
Model: HP EG0146FAWHU
Current Temperature (C): 37
Maximum Temperature (C): 49
PHY Count: 2
PHY Transfer Rate: 6.0GBPS, Unknown

unassigned

```

physicaldrive 1I:1:3
Port: 1I
Box: 1
Bay: 3
Status: OK
Drive Type: Unassigned Drive
Interface Type: SAS
Size: 146 GB
Rotational Speed: 10000
Firmware Revision: HPDE
Serial Number: 6SD3FK4A0000B145J6JK
Model: HP      EG0146FAWHU
Current Temperature (C): 37
Maximum Temperature (C): 48
PHY Count: 2
PHY Transfer Rate: 6.0GBPS, Unknown
...

```

These examples are not inclusive of all the capabilities of the `SSACLI` command. Commands and options for additional operations using the `SSACLI`, such as creating a logical drive, are documented in the *Configuring Arrays on HPE Smart Array Controllers Reference Guide*.

TESTEVENT utility

The `testevent` utility allows an application to request, so that the Insight Management WBEM Providers generate the Informational Test Indication with ProviderName “HP Test” and EventID 1, and the CPQ SNMP test trap with OID 1.3.6.1.4.1.232.11.2.8.1.0.11003.

The `testevent` utility also allows user to configure a test event interval time. The Insight Management WBEM Providers will check for the test event interval time value and periodically generate the Informational Test Indication with ProviderName “HP Test” and EventID 1, and the CPQ SNMP test trap with OID 1.3.6.1.4.1.232.11.2.8.1.0.11003.

The Insight Management WBEM Providers must be installed, enabled and running on the system where this utility is executed. The WBEM Providers must be configured to send indications to the listener. VMware SNMP traps must be enabled and configured to use WBEM indications as a source for SNMP traps.

The Informational Test Indication and the CPQ Test SNMP trap will be sent to any listener configured to receive indications from the system.

See the Insight Management WBEM Provider Datasheets for information on the test indication, and the SNMP Data Migration Guide for information on the test SNMP trap on the [Hewlett Packard Enterprise website](#).

TESTEVENT command-line syntax

Use the following format at the command line:

```
testevent [-E <timeinterval>] [-D -S -X -H]
```

Argument	Function
-E	Enable periodic event, timeinterval range = 1 to 255
-D	Disable periodic event
-S	Show periodic event information
-X	Generate Test Event
-H	View the option usage

TESTEVENT ESXCLI syntax

The `testevent` utility is supported by the `ESXCLI` utility.

To view the command usage options, run the following command:

```
# esxcli testevent
```

The following output is displayed:

```
Usage: esxcli testevent {cmd} [cmd options]
```

Available Commands:

```
periodicevent - Manage the periodic event configuration
```

Available Commands:

```
execute - execute the testevent command
```

```
help - show testevent help
```

To view the Periodic event configuration command usage options, run the following command:

```
# esxcli testevent periodicevent
```

The following output is displayed:

```
Usage: esxcli testevent periodicevent {cmd} [cmd options]
```

Available Commands:

```
disable - disable the periodic event
```

```
enable - enable the periodic event with timeinterval command option
```

```
show - show the current periodic event settings
```

To view the Periodic event configuration enable command usage options, run the following command:

```
# esxcli testevent periodicevent enable
```

The following output is displayed:

```
Usage: esxcli testevent periodicevent enable [cmd options]
```

Description:

```
enable - enable the periodic event with timeinterval command option
```

Cmd options:

```
-t|--timeinterval=<long> the timeinterval value range in days {1 to 255}  
(required)
```

To set a time interval value, run the following command:

```
# esxcli testevent periodicevent enable --timeinterval 3
```

The following output is displayed:

```
Periodic event has been successfully configured
```

```
Periodic event timeinterval :3 days
```

OR

```
# esxcli testevent periodicevent enable -t 3
```

The following output is displayed:

```
Periodic event has been successfully configured
```

```
Periodic event timeinterval :3 days
```

To show the time interval value configuration, run the following command:

```
# esxcli testevent periodicevent show
```

The following output is displayed:

```
Periodic event timeinterval :3 days
```

To disable the time interval value, run the following command:

```
# esxcli testevent periodicevent disable
```

The following output is displayed:

```
Periodic event has been successfully disabled
```

To request a test indication and test SNMP trap to be generated, run the following command:

```
# esxcli testevent execute
```

The following output is displayed:

```
Request successful. Test event will be generated.
```

TESTEVENT return codes

This section provides description about the return code after running the command.

Table 8: testevent return codes

Value	Meaning
0	Indicates success
1	Request failed. No test event will be generated.
2	Request failed, must be root.
3	Request failed, couldn't determine if WBEM Providers are installed and running.
4	Request failed, WBEM Providers are not installed and running.
5	Request failed. Invalid options.
6	Request failed. Unable to configure the periodic event.

TESTEVENT command-line examples

This section provides sample examples to run the utility.

Table 9: testevent command-line examples

Command-line	Description
<code>/opt/tools/testevent -H</code>	This argument displays help information.
<code>/opt/tools/testevent -X</code>	This argument generates Test Event.
<code>/opt/tools/testevent -E <timeinterval></code>	This argument enable Periodic event configuration with <timeinterval> value, where timeinterval range is 1 to 255.
<code>/opt/tools/testevent -S</code>	This argument shows Periodic event configuration.
<code>/opt/tools/testevent -D</code>	This argument disable Periodic event configuration.

CONREP utility

The conrep utility reads the state of the system environment settings to determine a HPE server configuration and writes the results to an XML data file. You can edit this file and use it to reset the system configuration on the same server or to duplicate the hardware configuration on another HPE server.

The utility uses the XML file called hardware definition file to determine what information to retrieve from and restore to the server. You can make a copy of this file and edit the copy to update new features or restrict features when capturing server configurations. The default `conrep.xml` file contains common hardware configuration settings for the supported HPE series servers. You can change the default using `-x` file option.

⚠ CAUTION: Improper modification of the `conrep.xml` file can result in the loss of critical data. Only experienced users should attempt to modify the file.

The server configuration information is captured in the default `conrep.dat` data file. This file is an XML data file which contains the actual system configuration retrieved from the ROM-Based Setup Utility (RBSU). You can edit this data file to restore the settings or use `-f` file option to change the default.

⚠ CAUTION: Improper modification of the `conrep.dat` file can result in the loss of critical data. Only experienced users should attempt to modify the data files. Because of the potential risk of data loss, take all necessary precautions to ensure that mission-critical systems remain online if a failure occurs.

The utility runs in a command-line mode and must be executed from an operating system command-line and can be accessed from the location: `/opt/tools`. You can also find the default `conrep.xml` file here.

The conrep utility supports the HPE servers that are listed in the *vSphere Server Support Matrix*. To visit the vSphere Server Matrix page, go to <http://vibsdepot.hpe.com> and select **HPE server support matrix** under Support Information section.

CONREP command-line syntax

```
conrep [-s | -l] [-x hardware_definition_file] [-f
system_configuration_data_file] [-h]
```

Table 10: CONREP command line arguments

Command-line Argument	Description
-s	This argument saves the system configuration to a file.
-l	This argument loads the system configuration from a file and writes it to the target server. If no file specified, default conrep.dat is used.
-x filename	<p>This argument defines the name and location of the XML Hardware definition file.</p> <p>For non-Gen10 servers, the default file is <code>/opt/tools/conrep.xml</code>.</p> <p>For Gen10 servers, the default file is <code>/opt/tools/conrep_gen10.xml</code>.</p> <p>If conrep is not run from directory <code>/opt/tools</code>, the option must be used.</p>
-f filename	This argument defines the name and location of the system configuration data file. The default file is conrep.dat.
-h	This argument displays help information.

Table 11: CONREP return codes

Value	Meaning
0	The command was completed successfully.
1	The hardware definition file (conrep.xml) is not found.
2	The system configuration data file (conrep.dat) is corrupt or not found.
5	The XML hardware definition file (conrep.xml) is corrupt or not appropriate for the current platform.
6	No XML tag defined in hardware definition file.
7	Invalid command line or usage error.
255	General error. See error message for details.

CONREP -s (Store to Data file)

This is an example of usage for HPE servers to extract BIOS settings using the default conrep.xml file and configuration stored in default conrep.dat file.

```
/opt/tools # ./conrep -s
conrep 4.0.0.0 - HP Configuration Replication Utility
Copyright (c) 2007-2014 Hewlett Packard Enterprise Development LP
System Type:HPE BL465c Gen8
ROM Date: 11/02/2013
ROM Family : A26
Processor Manufacturer: AMD
XML System Configuration: conrep.xml
Hardware Configuration: conrep.dat
Global Restriction: [3.40]
OK
Platform check:
[HPE BL ]match
Saving configuration data to conrep.dat
Conrep Return Code:0
```

Following is an example of usage of conrep tool when run from directory other than /opt/tools, using the default files:

```
/vmfs/volumes/mytoolsdir# /opt/tools/conrep -x /opt/tools/conrep.xml -s
conrep 4.0.0.0 - HP Configuration Replication Utility
Copyright (c) 2007-2014 Hewlett Packard Enterprise Development LP
System Type: HPE BL465c Gen8
ROM Date: 11/02/2013
ROM Family : A26
Processor Manufacturer: AMD
XML System Configuration: /opt/tools/conrep.xml
Hardware Configuration: conrep.dat
Global Restriction: [3.40 ]
OK
Platform check:
[HPE BL] match
Saving configuration data to conrep.dat
Conrep Return Code: 0
```

The conrep.dat is created in /vmfs/volumes/mytoolsdir.

Following is an example of usage for HPE servers to extract the BIOS settings from a BL465 Gen8 server and save the configuration to a "BL465conrep.dat" data file:

NOTE: BL465conrep.xml is a copy of /opt/tools/conrep.xml. Following example shows how to pass non-default file names.

```
/opt/tools # ./conrep -s -x BL465conrep.xml -f BL465conrep.dat
conrep 4.0.0.0 - HP Configuration Replication Utility
Copyright (c) 2007-2014 Hewlett Packard Enterprise Development LP
System Type: HPE BL465c Gen8
ROM Date :11/02/2013
ROM Family : A26
Processor Manufacturer: AMD
XML System Configuration: BL465conrep.xml
Hardware Configuration: BL465conrep.dat
Global Restriction: [3.40]
OK
Platform check:
```

```
[HPE BL ] match
Saving configuration data to BL465conrep.dat
Conrep Return Code: 0
```

CONREP -I (Load from Data File)

This is a simple example of usage for HPE servers to load the BIOS configuration settings from a previously captured/edited default conrep.dat data file to a BL465 Gen8 server.

```
/opt/tools # ./conrep -l
conrep 4.0.0.0 - HP Configuration Replication Utility
Copyright (c) 2007-2014 Hewlett Packard Enterprise Development LP
System Type: HPE BL465c Gen8
ROM Date: 11/02/2013
ROM Family : A26
Processor Manufacturer: AMD
XML System Configuration: conrep.xml
Hardware Configuration: conrep.dat
Global Restriction: [3.40 ]
OK
Platform check:
[HPE BL] match
Loading configuration data from conrep.dat
Conrep Return Code: 0
```

Following is an example of usage for HPE servers to load the BIOS configuration settings from a previously captured/edited data file (in this case BL465conrep.dat) to a BL465 Gen8 server:

```
/opt/tools # ./conrep -l -x BL465conrep.xml -f BL465conrep.dat
conrep 4.0.0.0 - HP Configuration Replication Utility
Copyright (c) 2007-2014 Hewlett Packard Enterprise Development LP
System Type:HPE BL465c Gen8
ROM Date:11/02/2013
ROM Family :A26
Processor Manufacturer:AMD
XML System Configuration: BL465conrep.xml
Hardware Configuration: BL465conrep.dat
Global Restriction: [3.40]
OK
Platform check:
[HPE BL] match
Loading configuration data from BL465conrep.dat
Conrep Return Code: 0
```

CONREP data file sample contents for HPE servers

The conrep.dat file contents the ROM section tags and values. You can view this file using the ROM Based Setup Utility (RBSU). See the *ROM Based Setup Utility User Guide* available at <http://www.hpe.com/info/enterprise/docs>.

A sample content of the data file generated by conrep is similar to the following:

```
<?xml version="1.0" encoding="UTF-8"?>
<!--generated by conrep version 4.0.0.0-->
<Conrep version="4.0.0.0" originating_platform="HPE BL460c Gen8"
originating_family="I31" originating_romdate="09/16/2013"
originating_processor_manufacturer="Intel">
<Section name="IMD_ServerName" helptext="LCD Display name for this
server"><Line0>localhost</Line0></Section>
```

```
<Section name="IPL_Order" helptext="Current Initial ProgramLoad device boot
order."><Index 0>00 </Index 0><Index 1>02</Index 1><Index2>01</Index
2><Index3>03</Index 3><Index 4>04</Index 4><Index 5>05</Index 5><Index 6>ff</
Index 6><Index 7>ff</Index 7><Index 8>ff</Index 8><Index 9>ff</Index 9><Index
10>ff</Index 10><Index 11>ff</Index 11><Index 12>ff</Index 12><Index 13>ff</
Index 13><Index14>ff</Index 14><Index 15>ff</Index 15></Section>
```

```
<Section name="IPL_Order_Size" helptext="Current Initial ProgramLoad device
boot order size."><Size0>06</Size0></Section>
```

```
<Section name="PCI_Devices" helptext="Lists of PCI devices and their
interrupts - not displayed if default values are set.">EMPTY_DELETE</Section>
```

Support and other resources

Accessing Hewlett Packard Enterprise Support


- For live assistance, go to the Contact Hewlett Packard Enterprise Worldwide website:
www.hpe.com/assistance
- To access documentation and support services, go to the Hewlett Packard Enterprise Support Center website:
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:
www.hpe.com/support/e-updates
 - Software Depot website:
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:
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

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

Customer self repair

Hewlett Packard Enterprise customer self repair (CSR) programs allow you to repair your product. If a CSR part needs to be replaced, it will be shipped directly to you so that you can install it at your convenience. Some parts do not qualify for CSR. Your Hewlett Packard Enterprise authorized service provider will determine whether a repair can be accomplished by CSR.

For more information about CSR, contact your local service provider or go to the CSR website: www.hpe.com/support/selfrepair.

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 following website:

www.hpe.com/info/insightremotesupport/docs

Subscription service

Hewlett Packard Enterprise recommends that you register your product at the Subscriber's Choice for Business website: <http://www.hpe.com/info/subscriberschoice>. After registering, you will receive email notification of product enhancements, new driver versions, firmware updates, and other product resources.

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 (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.