

HPONCFG User Instruction

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Description

The HPONCFG utility is an online configuration tool used to setup and reconfigure iLO and RILOE II from within the Windows and Linux operating systems 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.

Requirements

The HPONCFG configuration utility is for use on ProLiant servers containing iLO and/or RILOE II and executing one of the following operating systems:

- Windows NT Server
- Windows 2000 Server
- Windows 2003 Server
- Red Hat 7.2
- Red Hat 7.3
- Red Hat 8.0
- SLES 7
- United Linux 1.0

iLO based Server

For an iLO based servers, the server must have loaded onto it the iLO Management Interface Driver. The Smart Start operating system install process normally installs this driver. During execution, HPONCFG will warn if it cannot find the driver. If the driver is not installed, it must be downloaded from the HP website and installed on the server:

http://h18023.www1.hp.com/support/files/lights-out/us/locate/20_5867.html#0

For iLO based servers, HPONCFG requires iLO firmware version 1.41 or later.

RILOE II based Server

For a RILOE II based servers, the server must have loaded onto it the RILOE II Management Interface Driver. During execution, HPONCFG will warn if it cannot find the driver. If the driver is not installed, it must be downloaded from the HP website and installed on the server:

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http://h18023.www1.hp.com/support/files/lights-out/us/locate/20_5868.html

For RILOE II based servers, HPONCFG requires RILOE II firmware version 1.13 or later.

All Servers

For both iLO based servers and RILOE II based servers, the server must have loaded onto it the “sm2user.dll.” This file is automatically loaded along with the HP Insight Management Agents.

During execution, HPONCFG will warn if it cannot find the “sm2user.dll” file. This file can be installed separately from the component “HP Insight Management Agents for Windows 2000/Server 2003,” component number CP003732, that can be downloaded as a part of the ProLiant Support Pack at:

<http://h18004.www1.hp.com/support/files/server/us/download/18416.html>

After downloading the ProLiant Support Pack, extract its contents to a temporary directory. In the temporary directory, locate “CP003732.exe.” Extract the contents of this component to a temporary directory. In the temporary directory, locate the subdirectory “cqmgserv.” The “sm2user.dll” file can be found in this subdirectory. Copy the “sm2user.dll” file to the following directory on the server:

Winnt\system32\

Installation

Delivered Package

The HPONCFG utility is delivered in separate packages for Windows and Linux systems. For Windows systems, it is delivered as a softpaq. For Linux systems, it is delivered as a tar file. This same document is delivered as a part of each delivery package.

Windows Servers

To install HPONCFG, run the self-extracting executable delivered in this package from within a directory of your choice on the managed server. This will be the directory from which the HPONCFG utility is executed. This directory will also contain the XML formatted input scripts, and will store the output files from execution of the utility.

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Make sure that the appropriate Management Interface Driver is installed. The "sm2user.dll" file must also be installed. See the Requirements section above for details about where to obtain this driver and file.

Linux Servers

To install HPONCFG, copy the delivered zip file "hponcfg-windows bin.tar" to a temporary directory on the managed server. Use the tar utility to extract all of the files. The delivery package contains the following files:

- hponcfg-1.0.rh72-0.1.i386.rpm - RPM package for Red Hat 7.2
- hponcfg-1.0.rh73-0.1.i386.rpm - RPM package for Red Hat 7.3
- hponcfg-1.0.rh8-0.1.i386.rpm - RPM package for Red Hat 8.0
- hponcfg-1.0.sles7-0.1.i386.rpm - RPM package for SLES 7
- hponcfg-1.0.ul10-0.1.i386.rpm - RPM package for United Linux 1.0

Install the appropriate package using the "rpm" installation utility. An example command line is shown below.

NOTE: The "hprsm" RPM package must be installed before installing the "hponcfg" RPM package.

As an example, "hponcfg" RPM on Red Hat 8.0 can be installed by:

```
rpm -ivh hponcfg-1.0.rh8-0.1.i386.rpm
```

After installation, the "hponcfg" executable can be found in the "/sbin" directory.

Make sure that the appropriate Management Interface Driver is installed. See the Requirements section above for details about where to obtain this driver.

Execution

General

The HPONCFG configuration utility reads an XML input file, formatted according to the rules of the HP RIBCL language, and produces a log file containing the requested output. A few sample scripts are included in the HPONCFG delivery package. A package containing various and comprehensive sample scripts is available for download at:

<http://h18004.www1.hp.com/support/files/lights-out/us/download/20110.html>

Typical usage is to select a script that is similar to the desired functionality and modify it for the exact desired functionality.

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Note that, although no authentication to the iLO or the RILOE II is required, the XML syntax requires that the USER_LOGIN and PASSWORD tags be present in the LOGIN tag, and that these fields contain data. Any data will be accepted in these fields.

In order to successfully execute HPONCFG, the utility must be invoked as “Administrator” on Windows servers and as “root” on Linux servers. An error message will be returned by HPONCFG if the user does not possess sufficient privileges.

Windows Servers

Invoke the HPONCFG configuration utility from the command line, using the Windows “cmd.exe” (available from START->Run->cmd). HPONCFG will display a usage page if it is entered with no command line parameters. HPONCFG accepts as input an XML script formatted according to the rules of RIBCL (documented in the iLO User Guide and RILOE II User Guide in the section describing the use of CPQLOCFG).

The command line format is:

```
HPONCFG [/help][/?][/reset][f filename][l filename][w filename][get_hostinfo][m firmwarelevel][mouse | /mouse /dualcursor | /mouse /allusers]
```

See the “Command Line Parameters” section below for an explanation of the usage.

Linux Servers

Invoke the HPONCFG configuration utility from the command line. HPONCFG will display a usage page if it is entered with no command line parameters. HPONCFG accepts as input an XML script formatted according to the rules of RIBCL (documented in the iLO User Guide and RILOE II User Guide in the section describing the use of CPQLOCFG).

The command line format is:

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See the “Command Line Parameters” section below for an explanation of the usage.

Command Line Parameters

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HPONCFG accepts the following command line parameters:

- `/help or /?:` Display the help page.
- `/reset:` Reset the RILOE II / iLO to factory default values.
- `/f filename:` Set the RILOE II / iLO configuration from the information given in the XML input file that has name "filename."
- `/w filename:` Write the RILOE II / iLO configuration obtained from the device to the XML output file that has name "filename."
- `/l filename:` Log replies to the text log file that has name "filename."
- `/get_hostinfo:` Get the host's information. Returns the Server name and Server serial number.
- `/m:` Indicate to HPONCFG the minimum firmware level that should be present in the management device in order to execute the RIBCL script. If at least this level of firmware is not present, HPONCFG will return an error without performing any additional action.
- `/mouse:` Cause HPONCFG to configure the server for optimized mouse handling.

For example:

```
HPONCFG /f add_user.xml /l log.txt > output.txt
```

Obtaining an Entire Configuration

HPONCFG can be used to obtain an entire configuration from an iLO or a RILOE II. 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.

```
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 = "2.0">
<!-- 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 = ""/>
```

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```
<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 = "16.100.241.229"/>
  <SUBNET_MASK VALUE = "255.255.252.0"/>
  <GATEWAY_IP_ADDRESS VALUE = "16.100.240.1"/>
  <DNS_NAME VALUE = "ILOD234KJ44D002"/>
  <PRIM_DNS_SERVER value = "16.81.3.242"/>
  <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 = "16.81.3.247"/>
  <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>
```

Note that user passwords are not returned (for security reasons).

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>
```


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```
</RIBCL><?xml version="1.0"?>
<RIBCL VERSION="2.0"/>
<RESPONSE
  STATUS="0x0000"
  MESSAGE='No error'
 />
</RIBCL><?xml version="1.0"?>
<RIBCL VERSION="2.0"/>
<RESPONSE
  STATUS="0x0000"
  MESSAGE='No error'
 />
</RIBCL><?xml version="1.0"?>
<RIBCL VERSION="2.0"/>
<RESPONSE
  STATUS="0x0000"
  MESSAGE='No error'
 />
</RIBCL>
```

Contents of Log File

Setting a Configuration

A specific configuration can be sent to the iLO or RILOE II by using the command format:

```
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.