ProLiant 100 Series Specification

CONREP For ProLiant 100 Series (Linux) User Guide

Version 1.04

01/06/2010

Using CONREP

The CONREP utility is supported for specific ProLiant 100 Series servers under a Linux environment. The Linux boot environment is described in the *HP SmartStart Scripting Toolkit Linux Edition User Guide PDF*. Note: This PDF file also describes other utilities that are not supported on ProLiant 100 series servers.

CONREP generates a hardware configuration script file (e.g. CONREP.DAT) used to duplicate the BIOS specific hardware configuration of one ProLiant server onto another. CONREP reads the state of the platform-specific BIOS configuration settings from a server and writes the results to an (*.DAT) XML file that can be edited by the user. The utility then uses the data in this data file to configure the hardware of another server.
CAUTION: Improper modification of the CONREP data or .XML files can result in the loss of critical data. Only experienced users of the HP SmartStart Scripting Toolkit 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.

CONREP uses a server model specific XML definition file to determine what BIOS related configuration information can be retrieved from and replicated to another server. When released by HP, each XML definition file will be named with the following format: conrep<server model>.xml (e.g. “conrepdl180g5.xml”) to properly identify the supported server model.
NOTE: Options or features not listed in a specific platform’s XML file (e.g. BMC related options) are not supported with CONREP and must be configured or replicated using some other utility, if any are available.
CAUTION: The user should make sure that the .XML file used is intended for the specific ProLiant 100 Series server model being configured by CONREP. Mismatched .XML files will result in corrupt configurations and unpredictable results.

CONREP command line syntax

conrep [-s | -l] [-xfilename] [-ffilename] [-?]

CONREP command line arguments

Arg	Description
-s	Command to store the BIOS configuration settings to a file.
-l	Command to load the BIOS configuration settings from a file and write it to the target server.
-xfilename	Define the name and location of the model specific XML definition file. The default file name is “conrep.xml”.
-ffilename	Define the name and location of the data file. The default filename is “conrep.dat”.
-?	Display the CONREP help information.

CONREP return codes

Value	Description
0	The command was completed successfully.
1	The XML definition file (e.g. conrep.xml) is bad.
2	The data file (e.g. conrep.dat) is bad.

CONREP -s (Store to Data File) Example Usage

To extract the BIOS settings from an SL160z G6 server and save the configuration to an "sl160zconrep.dat" data file:

```
[root@ilo002481b08134 conrep]# ./conrep -s -xconrepSL160zg6_20090728.xml -fsl160zconrep.dat
conrep 3.00 - SmartStart Scripting Toolkit Configuration Replication Program
Copyright (c) 2007-2009 Hewlett-Packard Development Company, L.P.

      System Type:              ProLiant SL160z G6
      ROM Date   :              07/28/2009
      ROM Family :              O33
      Processor Manufacturer :      Intel

XML System Configuration : conrep_SL160zg6_20090728.xml
Hardware   Configuration : sl160zconrep.dat

Saving configuration data to sl160zconrep.dat.
CONREP Return code: 0
```

NOTE: The file names after the –x and -f options should be specified, otherwise, the default file names Conrep.xml and Conrep.dat will be used, respectively.

NOTE: A platform specific XML file needs to be used for HP ProLiant 100-series servers. If you use the default name this may cause an error while running the CONREP utility.

CONREP –l (Load from Data File) Example Usage

To load the BIOS configuration settings from a previously captured/edited data file (in this case “sl160zconrep.dat”) to an SL160z G6 server:

```
[root@ilo002481b08134 conrep]# ./conrep -l -xconrepSL160zg6_20090728.xml -fsl160zconrep.dat
conrep 3.00 - SmartStart Scripting Toolkit Configuration Replication Program
Copyright (c) 2007-2009 Hewlett-Packard Development Company, L.P.

      System Type:              ProLiant SL160z G6
      ROM Date   :              07/28/2009
      ROM Family :              O33
      Processor Manufacturer :      Intel

XML System Configuration : conrep_SL160zg6_20090728.xml
Hardware   Configuration : sl160zconrep.dat

Loading configuration from sl160zconrep.dat.
ASM values not set! aborting

CONREP Return code: 0
```

NOTE: The “ASM values not set! aborting” message shown in the output above is a spurious error message meant only for 300-series and above ProLiant systems. It should be ignored if seen on an HP ProLiant 100-series server.

CONREP Data File Sample Contents

A typical data file generated by CONREP is similar to the following:

```
<Conrep_data>
<Section name="Controller_Order">
<Id0>0e 11 40 80 </Id0>
<Slot0>00 </Slot0>
<BusDev0>00 08 </BusDev0>
<Rest0>01 </Rest0>
<Id1>0e 11 ff ff </Id1>
<Slot1>00 </Slot1>
<BusDev1>00 78 </BusDev1>
<Rest1>c1 </Rest1>
/Section>
<Section name="Language">ENGUSAus </Section>
<Section name="System_WOL">Disabled</Section>
<Section name="System_APIC">Auto Set</Section>
<Section name="System_COMA">COM1</Section>
<Section name="System_COMA_IRQ">IRQ4</Section>
<Section name="System_COMB">Disabled</Section>
<Section name="System_COMB_IRQ">Undefined</Section>
<Section name="System_LPT">LPT1</Section>
<Section name="System_LPT_IRQ">IRQ7</Section>
<Section name="Diskette_Write_Control">Writes_Enabled</Section>
<Section name="NMI_Debug_Button">Disabled</Section>
<Section name="ACPI_Power_Button">Disabled</Section>
<Section name="ASR">Disabled</Section>
<Section name="ASR_Timeout">10 Minutes</Section>
<Section name="Thermal_Shutdown">Enabled</Section>
<Section name="RBSU_Language">01</Section>
<Section name="PXE_NIC1">Disabled</Section>
<Section name="PXE_NIC2">Disabled</Section>
<Section name="BIOS_Console">Disabled</Section>
<Section name="EMS_Console">Disabled</Section>
<Section name="Diskette_Boot">Enabled</Section>
<Section name="NumLock">On</Section>
<Section name="POST_Speed_Up">Enabled</Section>
<Section name="Integrated_Diskette_Controller">Enabled</Section>
<Section name="PCI_Bus_Reset">Enabled</Section>
<Section name="Hot_Plug_Reservation">Auto Set</Section>
<Section name="Memory_Protection">Standard ECC Protection</Section>
</Conrep_data>
```

CONREP Usage Flow