



ENABLE CONNECTIVITY FOR HPE 3PAR STORAGE

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CALL HOME BENEFIT

Periodically, the Service Processor transfers the diagnostic information such as system health information, configuration data, performance data, and system events to HPE 3PAR Central for remote diagnostic analysis and proactive fault detection.

Data is transferred frequently and maintained centrally on a historical basis, allowing for rapid, coherent analysis and problem resolution without on-site data collection or analysis dependencies that can prolong response.

Any critical alerts that are generated by the InServ are transferred immediately to HPE 3PAR Central for analysis and quick response, when necessary.

NETWORK PREREQUISITES FOR CALL HOME TO WORK

Firewall/port requirement for configuring inbound and outbound connectivity on HPE 3PAR arrays

Outbound connection enables diagnostic data transfer like alerts, InServ, SP log files, and configuration files for remote diagnosis. Inbound connection enables remote access to SP and InServ for authorized HPE 3PAR support personnel.

Below is the mode used for SP communication to HPE 3PAR Connection Portal for diagnostic data transfer (outbound) and remote access (inbound).

Secure Network Mode (4.1.0.GA-97-P012 to 4.4.0.GA-58-P004).

Firewall and port requirement

TABLE 1. Destination server details

Network requirement	Secure Network Mode
HPE 3PAR support portal IP address	Your DNS server should allow storage-support.glb.itcs.hpe.com to be resolved to 16.248.72.63— storage-support1.itcs.hpe.com and 16.250.72.82— storage-support2.itcs.hpe.com
Outbound connectivity	Port 443 (https) to be opened (outbound) between Service Processor IP and the following IP addresses: storage-support1.itcs.hpe.com —16.248.72.63 (primary) storage-support2.itcs.hpe.com —16.250.72.82 (secondary)
Inbound connectivity	Port 443 (https) to be opened (outbound) between Service Processor IP and the following IP addresses: c4118808.itcs.hpe.com (15.249.128.199) c4118809.itcs.hpe.com (15.249.128.195) c9118806.itcs.hpe.com (15.249.0.114) c9118807.itcs.hpe.com (15.249.0.118)

For SPs which are at SP OS levels

- 4.1.0.GA-97-P012 and above
- 4.2.0.GA-29-P008 and above
- 4.3.0.GA-24-P012 and above
- 4.3.0.GA-32-P013 and above
- 4.3.0.GA-17-P010 and above
- 4.4.0.GA-22-P002 and above
- 4.4.0.GA-30-P003 and above
- 4.4.0.GA-53-P005 and above
- 4.4.0.GA-58-P006 and above
- 4.4.0.GA-110 and above
- 4.4.0.GA-129 and above
- 5.0.3 and above



Firewall and port requirement

TABLE 2. Destination server details

Network requirement	Secure Network Mode
HPE 3PAR support portal IP address	Your DNS server should allow midway.ext.hpe.com to be resolved to 15.241.48.100 15.211.158.66 15.211.158.65 15.241.48.252 15.241.136.220 15.241.48.253 15.241.136.219 15.241.48.251 15.241.136.208 15.241.136.80 15.195.190.96 15.195.190.97 15.195.190.98 15.195.190.99 2620:a13:100:109 2620:a12:100:109 2620:a13:100:108 2620:a13:100:105 2620:a12:100:106 2620:a12:100:111 2620:a13:100:110 2620:a12:100:110
Outbound connectivity (file transfer from SP to HPE)/Inbound connectivity (remote access from HPE to the SP)	Port 443 (https) to be opened between Service Processor IP and the following IP addresses: 15.241.48.100 15.211.158.66 15.211.158.65 15.241.48.252 15.241.136.220 15.241.48.253 15.241.136.219 15.241.48.251 15.241.136.208 15.241.136.80 15.195.190.96 15.195.190.97 15.195.190.98 15.195.190.99 2620:a13:100:109 2620:a12:100:109 2620:a13:100:108 2620:a13:100:105 2620:a12:100:106 2620:a12:100:111 2620:a13:100:110 2620:a12:100:110

NOTE

If there is a Proxy server required for the communication, kindly make sure there are rules created in the proxy server between the SP IP and the IP addresses mentioned in the above table.



Additional note: Service Processor to InServ communication

While not related to remote connectivity to HPE 3PAR support portal, if the InServ and the Service Processor will be placed on different IP networks and there is an IP firewall in between them, the following ports must be opened for communication between the InServ and the Service Processor.

Port 22 (SSH)—Used for depositing and executing programmatically driven service scripts and for collecting an archive of diagnostic data (known as an InSplore)

Port 2540/2550 (CLI) and Port 5783—Used for gathering system health information, configuration data, and performance data

Port 5781 (Event Monitor)—Used for monitoring system events on the InServ

Port 8443—Used for web/GUI access in SP 5.x versions

HOW TO VERIFY IF CALL HOME IS SET UP AND WORKING

Verifying Call home from the HPE 3PAR system/array:

SP OS versions 4.x:

Option 1

Open SPOCC by entering the IP address of the Service Processor into a web browser. Click **Support** on the left menu -> Click on **SP Control** Menu -> Choose **File Transfer Monitor**.

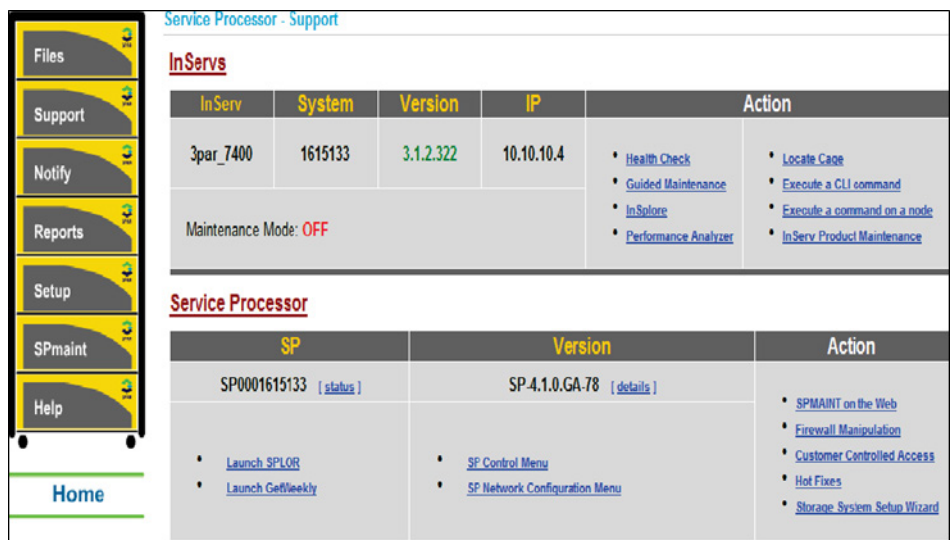


FIGURE 1. Sample output of SPOCC support interface



```

SPOCC Service Processor Onsite Customer Care
SP File Transfer Monitor:

Transfer Media: ethernet

Last transfer status
  Transfer time: Thu Jan 23 06:49:34 2014
  Target server: SP0001615133
  Local filename: /tmp/ftpGRP_1390477618.8121
  Server filename: is a group of 9 files
  Size in bytes: 7,393
  Status: Ok

Current transfer status
  No file transfer is in progress

Number of file(s) on
  transfer queue: 0
  retry queue: 0

Service Processor upload queue:      9 file(s)
SSAgent upload queue:                0 file(s)
Last file to start upload via the SSAgent:
  01-23-2014,06:45:10 SP0001615133.1615133.event.140123.052530.0-638125.CMB

```

FIGURE 2. Sample output of File transfer monitor on SPOCC

Option 2

Log in to the Service Processor establishing a CLI session (SSH).

On the SPmaint menu choose option 1—SP Control Status -> choose **option 6: File Transfer Monitor**.

```

1      SP CONTROL
      HPE 3PAR Service Processor Menu

Transfer media: ethernet  Transfer status: Ok

SP Control Functions

Enter Control-C at any time to abort this process

1 ==> Display SP Version
2 ==> Reboot SP
3 ==> Halt SP
4 ==> Stop StoreServ related Processes
5 ==> Start StoreServ related Processes
6 ==> File Transfer Monitor
7 ==> SP File Transfer Trigger
8 ==> Reset Quiesce state in Transfer process
9 ==> Mount a CDROM
10 ==> Unmount a CDROM
11 ==> SP Date/Time/Geographical Location maintenance
12 ==> Manage NTP configuration
13 ==> Display SP status

```

FIGURE 3. Sample output of option 1 on SPmaint menu



```

Transfer Media: ethernet

Last transfer status
  Transfer time: Thu Jan 23 06:56:45 2014
  Target server: SP0001615133
  Local filename: /tmp/ftpGRP_1390477963.8122
  Server filename: is a group of 10 files
  Size in bytes: 14,734
  Status: Ok

Current transfer status
  No file transfer is in progress

Number of file(s) on
  transfer queue: 0
  retry queue: 0

Service Processor upload queue:      0 file(s)
SSAgent upload queue:                0 file(s)
Last file to start upload via the SSAgent:
  01-23-2014,06:57:10 SP0001615133.1615133.event.140123.053705.0-638386.CMB

Enter 'q' to end monitoring and return to spmaint █
    
```

FIGURE 4. Sample output of File Transfer Monitor on SPmaint menu

The SSAgent upload queue will show files being emptied as and when the file transfer happens to our Collector Server.

SP OS versions 5.x:

Open HPE 3PAR Service Console (SC) by entering the IP address of the Service Processor followed by Port 8443 into a web browser. Check the Transfer Status and Transfer Process.

The screenshot displays the HPE 3PAR Service Console interface. At the top, it shows '3PAR Service Console' with a search bar and user icons. The main content area is titled 'Service Processor' and includes a 'Transfer' dropdown menu and an 'Actions' button. The interface is divided into several sections:

- General:**
 - File transfer: Enabled
 - Transfer status: Normal (indicated by a green dot)
 - Collection server: midway.ext.hpe.com:443
 - Proxy server: 10.12.59.48
- Remote Connectivity Status:**
 - Tested: Nov 26, 2018 3:43:48 PM CST
 - Last successful test: Nov 26, 2018 3:43:48 PM CST
 - Collection server: Normal (green dot)
 - Proxy server: Normal (green dot)
 - Gateway: Normal (green dot)
 - Transfer process: Normal (green dot)
- Last Transfer Status:**
 - Status: Normal (green dot)
 - Transfer time: Nov 26, 2018 4:09:15 PM CST
 - File name: SPMXN650337C.MXN650337C.evntlog.181126.160803.debug.CMB
 - Size: —
- Current Transfer Status:**
 - Files in transfer queue: 0
 - Last file added to transfer queue: Nov 26, 2018 4:08:15 PM CST
 - Files staged for transfer: 0
 - Priority 1: 0
 - Priority 2: 0
 - Priority 3: 0

FIGURE 5. Sample output of HPE 3PAR Service Console (SC)



HOW TO CONFIGURE CALL HOME FROM SSA TO RDA

SP OS versions 4.x:

1. Log in to **SP CLI** as **cpmaint** (password prompted).
2. From the **CPMAINT** main menu, type **11** for **Change Transport Agent** and press **Enter**.
3. Type **Yes** for Switch to RDA and press **Enter**.
4. Follow through the prompts.

```

What do you wish to do?
1 ==> OBSOLETE Change transport mode (Secure Network/SP)

2 ==> Display HPE 3PAR Secure Service Agent configuration
3 ==> Test connection to the HPE 3PAR Secure Service Policy Server
4 ==> Test connection to the HPE 3PAR Secure Service Collector Server
5 ==> Query status of the Transport Agent

6 ==> Reconfigure the HPE 3PAR Secure Service Policy Server
7 ==> Reconfigure the HPE 3PAR Secure Service Collector Server
8 ==> start/stop/restart the Transport Agent

9 ==> Disable file transfer
10 ==> Re-enable file transfer
11 ==> Change Transport Agent
12 ==> Enable Hostname Support for Proxy

X None of the above. Exit.

Please enter your selection:

```

FIGURE 6. Sample output of CPMAINT menu

```

HPE 3PAR Secure Service Agent Maintenance Task - MPCZ260101ZF

Transfer media: ethernet Transfer status: Ok

Currently running with Secure Network Mode with SSA

Enter Control-C at any time to abort this process

What do you wish to do?
1 ==> OBSOLETE Change transport mode (Secure Network/SP)

2 ==> Display HPE 3PAR Secure Service Agent configuration
3 ==> Test connection to the HPE 3PAR Secure Service Policy Server
4 ==> Test connection to the HPE 3PAR Secure Service Collector Server
5 ==> Query status of the Transport Agent

6 ==> Reconfigure the HPE 3PAR Secure Service Policy Server
7 ==> Reconfigure the HPE 3PAR Secure Service Collector Server
8 ==> start/stop/restart the Transport Agent

9 ==> Disable file transfer
10 ==> Re-enable file transfer
11 ==> Change Transport Agent
12 ==> Enable Hostname Support for Proxy

X None of the above. Exit.

Please enter your selection:
11
12:27:39 Reply-'11'
Once you switch to RDA, you cannot switch back to SSA.
Do you want to continue? ( yes or no ) [yes] -->

```

FIGURE 7. Sample output of option 11 on CPMAINT menu

NOTE

Starting with the release SP OS SP-4.4.0.GA-129 (MU8), the option to switch the transport agent from RDA to SSA is unavailable.

SP OS versions 5.x:

1. Log in to **SP Service Console (SC)** as **hpepartner** (password prompted).
2. Click on **Actions**, select **Edit SP configuration**.
3. Under the **Support** menu, change the **Transport Agent** from **SSA** to **RDA**
4. Click **OK**



Mail host name/IP	smtp.hpe.com
Mail host domain	hpe.com
Send test email	<input type="checkbox"/> Disabled
Transport agent	<input type="radio"/> SSA <input checked="" type="radio"/> RDA
Collection server	Production ▾

FIGURE 8. Sample output of Transport Agent on Edit SP Configurations

CROSS STACK ANALYTICS

This feature enables VM performance analytics in HPE InfoSight through collection of VM performance data in SP.

Enabling VMware® Integration on SP 4.4 MU7 (or later)

1. Select SPmaint from the Main Menu
2. Select StoreServ Configuration Management
3. Select Add StoreServ
4. Select Add VMware vCenter®
5. Configure one or more vCenter instances that hosts VMs on 3PAR StoreServ OS 3.2.2 MU4/MU6
6. Click Add to save the vCenter configuration

Enabling VMware integration on SP 5.0.3 (or later)

1. Select Systems from the Main Menu
2. Select the system and go to the Actions Menu
3. Select Edit System
4. In the Edit System wizard, select VMware Integration
5. Choose Add vCenter to configure one or more vCenter instances that hosts VMs on 3PAR StoreServ
6. Click Add and then OK to save the vCenter configuration
7. Connectivity is checked when the configuration is saved, and monitored every 30 minutes

IMPORTANT

Each connected vCenter instance must have VMware ESXi™ Hosts configured to use that HPE 3PAR's storage volumes and must have active VMs running on these HPE 3PAR backed volumes. Any vCenter failing to meet this condition will not have their VMware details exposed in HPE InfoSight.

NOTE

For any technical assistance with the Call home setup, you may contact HPE Support and get a ticket logged for SP connectivity.

Notify HPE 3PAR so the configuration can be set up correctly (especially for new installs).

Call HPE Support with the following details to get the device added correctly to the relevant HPE systems.



Reference guide

Following information to be updated on call

1. **Customer name**
2. **Customer address:**
Street, Address, City, State
Postal/Zip Code, Country
3. **HPE system serial number**—That is, USExxxxxxx, SGHxxxxxxx, CZxxxxxxx
4. **Service Processor (SP) ID**—Note: SP ID is located on the HPE InServ box. You can also find the SP ID on the sales order
5. **HPE sales order or purchase order #**—That is, 26Z023227001, 24Z036117001, 24Z047248001
6. **Customer HPE Passport ID/user name.** HPE Passport ID enables you to log in to HPE Support Center and view your HPE 3PAR devices in Insight Online. To obtain a HPE Passport go [here](#).

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