HPE POINTNEXT

Enable connectivity for HPE 3PAR storage

Contents

Reference guide

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 (for SPs at SP OS 2.5.2.GA-11 P005 and 4.1.0.GA-97 to 4.4.0.GA-30).

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 remote3par.houston.hp.com to be resolved to 15.201.225.95 (primary) or 15.240.56.190 (secondary)
Outbound connectivity	Port 443 (https) to be opened (outbound) between Service Processor IP and the following IP addresses: remote3par.houston.hp.com—15.201.225.95 (primary) remote3par.houston.hp.com—15.240.56.190 (secondary)
Inbound connectivity	Port 443 (https) to be opened (outbound) between Service Processor IP and the following IP addresses: remote3par.houston.hp.com—15.201.225.95 (primary) remote3par.houston.hp.com—15.240.56.190 (secondary) g4t2481g.houston.hp.com—15.201.200.205 g4t2482g.houston.hp.com—15.201.200.206 g9t1615g.houston.hp.com—15.240.0.73 g9t1616g.houston.hp.com—15.240.0.74

For SPs which are at SP OS levels

4.1.0.GA-97–P012 and above

4.2.0.GA-29–P006 and above

4.3.0.GA-24–P008 and above

4.3.0.GA-32–P007 and above

4.3.0.GA-17–P010 and above

4.4.0.GA-22–P002 and above

4.4.0.GA-30–P001 and above

4.4.0.GA-53/58 and above

Firewall and port requirement

Table 2. Destination server details

Network requirement	Secure Network Mode
Outbound connectivity (file transfer from SP to HPE)	Port 443 (https) to be opened (outbound) between Service Processor IP and the following IP addresses: 16.248.72.63—storage-support1.itcs.hpe.com 16.250.72.82—storage-support2.itcs.hpe.com 15.203.174.94 15.241.152.51 15.241.152.50 15.241.136.80 15.241.52.60 15.241.52.59 15.203.174.96 15.241.48.100 15.211.158.66 15.211.158.65
Inbound connectivity (remote access from HPE to the SP)	Port 443 (https) to be opened (outbound) between Service Processor IP and the following IP addresses: c4t18808.itcs.hpe.com (16.249.3.18) c4t18809.itcs.hpe.com (16.249.3.14) c9t18806.itcs.hpe.com (16.251.3.82) c9t18807.itcs.hpe.com (16.251.4.224) g4t2481g.houston.hp.com—(15.201.200.205) g4t2482g.houston.hp.com—(15.201.200.206) g9t1615g.houston.hp.com—(15.240.0.73) g9t1616g.houston.hp.com—(15.240.0.74)

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

How to verify if call home is set up and working

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

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.

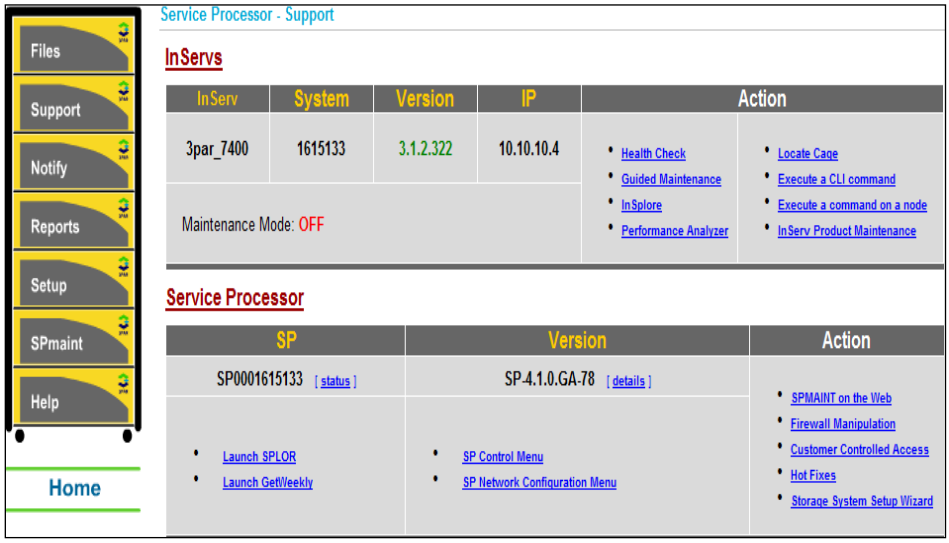

Figure 1. Sample output of SPOCC Support interface

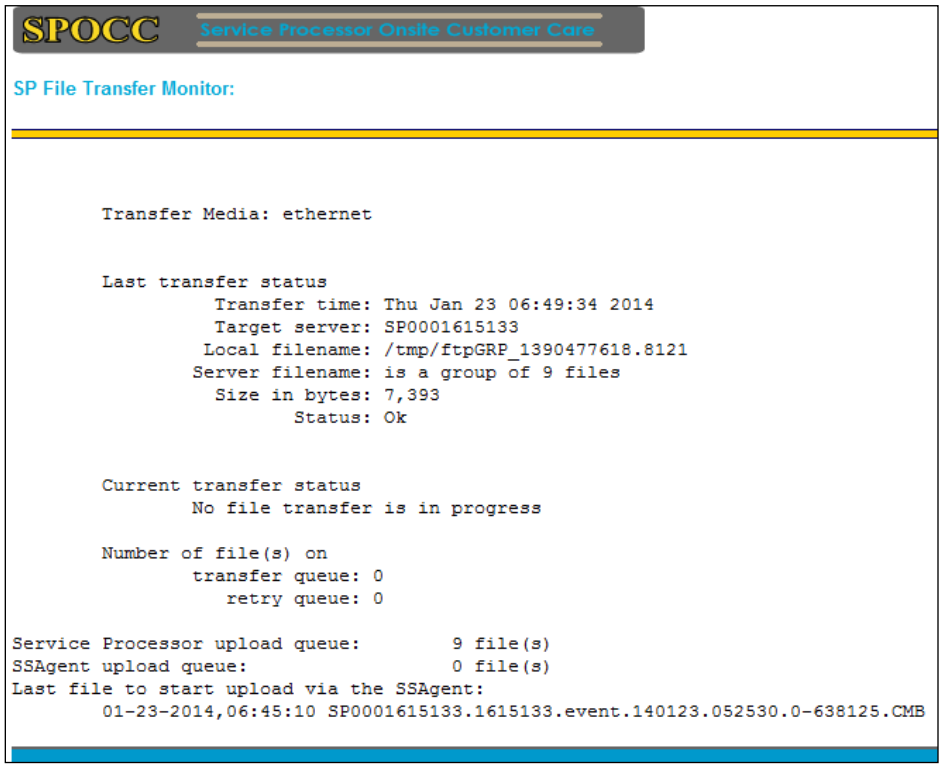

Figure 2. Sample output of File transfer monitor on SPOCC

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
         HP 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 InServ related Processes
 5  ==>  Start InServ 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.

If Call home is not configured with Secure Network Mode

The following screenshots show the File Transfer Monitor on the SP, which is not configured with Secure Network Mode:

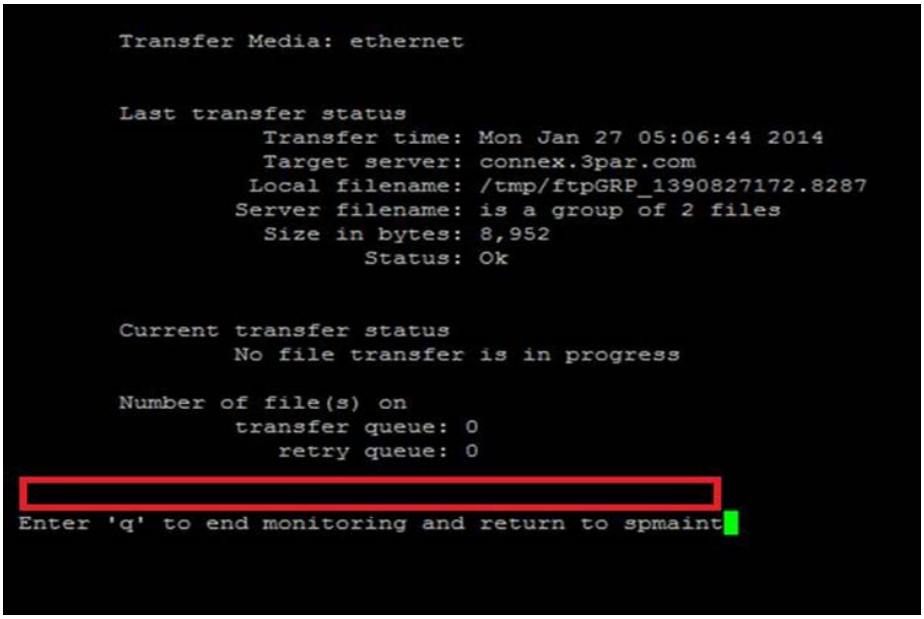

Figure 5. Sample output showing Call home not in Secure Network Mode

SSAgent queue will not be seen if Call home is not configured on the Service Processor.

How to configure Call home—if not configured

Follow the following mentioned procedure to configure the device in Secure Network Mode:

1. To migrate from SP Mode to Secure Network Mode.
2. Log in to SP as spvar (password prompted).
3. From the SPMAINT main menu, type **2** for **Network Configuration** and press **Enter**.
4. Type **2** for **Connection Portal control** and press Enter.
5. Type **A** for **Activate Secure Network Mode** to activate mode and follow through the prompts.

Detailed installation instructions are as follows:

To migrate from SP Mode to Secure Network Mode:

1. Log in to SP as spvar (password prompted).
2. From the SPMAINT main menu, type **2** for **Network Configuration** and press Enter.
3. Type **2** for **Connection Portal control** and press Enter.
4. Type **A** for **Activate Secure Network Mode** to activate mode and press Enter.
5. Verify the following message requirements, type **Y** and press Enter to continue.
6. Type the static IPv4 address assigned to the domain server or **none** and press Enter.
7. Based upon the system configuration requirements, type the specific confirmation to proceed with allowing HPE 3PAR Secure Service Policy Manager to communicate with HPE 3PAR Secure Service Collector. If choosing yes, enter the IP address of HPE 3PAR Secure Service Policy Manager and other details.
8. Type **yes** to allow remote access to the Service Processor.

9. Verify the data is correct and type **yes** to confirm.
10. Type **1** to assign the type of HPE 3PAR Secure Service Collector Server to connect with the SSAgent.
11. Type **no** to not require a proxy server to connect to the HPE 3PAR Secure Service Collector Server. If choosing **yes**, provide the details of the proxy server in the following questions.
12. Verify the data is correct and type **yes** to confirm. The SP initializes communication with the HPE 3PAR Secure Service Collector Server to complete configuration setting for communication access.

Sample screen output after step 12

```
 3PAR Secure Service Collector Server
          - Name/address:       Production
          - Proxy:              none


        Is this data correct? (yes or no)? [yes]
yes

invoking config..

Stopping all SP tasks ...
   No InSplore currently running
Disabling the firewall ...
Building skeletal SSAgent configuration file.
Applying and testing configuration values ...
AxedaAddManagedDevice:Added SP=SP09114, IP=127.0.0.1 to device file.

    Ping of localhost successful.
    Ping of public interface (10.112.132.184) successful.
    Ping of gateway (10.112.128.1) successful.
    There is no 3PAR Secure Service Policy Manager configured, test
bypassed.

    Starting agent ping test.
```

When the system communications configuration is complete, the following message appears. Press Enter to exit.

```
... Starting all tasks.
... Gathering a RESCUE file.
... Gathering a splor file.
config complete
Successfully configured Secure Network Mode

Press <enter/return> to continue
```

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.

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.

Learn more at

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