Contents

1 Configuring Tech-Support

1.1 Introduction

1.1.1 Overview

Tech-Support is an information collection function that provides diversified information collection triggering modes according to requirements of the administrator, and collects information on faulty equipment in different modes.

1.1.2 Principles

1. Basic collection

In basic collection mode, the directory files registered by the log framework are collected, including configuration files, Syslog, and CLI operations.

2. Full collection

In full collection mode, the following fault information is collected:

- All fault log files
- Coredump files
- Service realtime fault information

3. Hotkey collection

When the console fails, you can use the hotkey @@@f to trigger one-click collection. For details about the collected content, see Full collection.

4. Reset key collection

Press the Reset key on the panel for less than 5s to collect the fault information. Five minutes later, the device is reset. For details about the collected content, see Full collection.

5. Storage of the collected content

The collected fault information is stored in the descending order of USB flash drive, **Flash:/**, and **Tmp:/**.

If the collected fault information is not stored on the USB flash drive, at most two compressed packages are stored.

6. Collection of real-time diagnostic information

When a fault occurs, you can run the **show system diag-info** command and necessary CLI commands in debug support mode to collect the related fault information and save it in **diag-info.txt** on the Flash.

1.2　Enabling the Tech-Support Function

1.2.1　Overview

You can use the Tech-Support function to collect detailed fault information of a device and use it for fault location.

1.2.2　Restrictions and Guidelines

- When the device is connected to the console port, you can also use the hotkey **@@@@f** to collect detailed fault information of the device. The **@@@@**f hotkey operation is often performed when the console crashes. The fault information is packaged in a way similar to the **tech-support package** command.

- Before enabling the Tech-Support function, you are advised to check whether the device has sufficient space to store the fault information.

- To avoid an information collection failure due to insufficient storage space, you are advised to insert the USB flash drive into the device before enabling Tech-Support to avoid information loss. You can use the TFTP function to transfer the compressed packages of the final fault information to a PC.

- If the collected files are too large, it takes a long time to collect the information and services may be affected. To prevent this problem, if the collected coredump files exceed 200 MB or the number of files is too large, a collection failure notification will be displayed. In this case, you need to use other commands to collect coredump files separately.

- The specific procedure is as follows:

a Run the **show coredump files** command to display the coredump file names.

```
Orion_B26Q# show coredump files
Directory of /xxx/xxx/xxx/ :
 core-xxx-xxx
```

b Enter the debug support mode, run the **execute diagnose-cmd copy** command to copy the coredump files to the **data** directory, and upload the files to the specified TFTP server.

```
Orion_B26Q# debug support
Orion_B26Q(support)# execute diagnose-cmd copy xxx/xxx/xxx/core-xxx-xxx /data
This operation will modify file? [Y/N]:y
Orion_B26Q(support)# exit
Orion_B26Q# copy flash:/ xxx/xxx/xxx/core-xxx-xxx tftp://xxx.xxx.xxx.xxx/
This operation may overwrite file[tftp:// xxx.xxx.xxx.xxx /core-xxx-xxx]?
[Y/N]:y
Press Ctrl+C to quit
!!!!!!!!!!!!!!!!!!!!!!!!!!!!
Copy success.
```

- The compressed packages of fault information are stored as follows:

o USB flash drive

　　If a USB flash drive is inserted into the device, the compressed packages are stored in the root directory of the USB flash drive. You can run the **dir usb0:** command to view these compressed packages.

o Flash directory

If no USB flash drive is inserted into the device, the compressed packages are preferentially stored in the Flash directory. You can run the **dir flash:** command to view these compressed packages.

○ **Tmp** directory (memory)

If no USB flash drive is inserted into the device and the Flash has insufficient space, the compressed packages are stored in the **Tmp** directory. You can run the **dir tmp:** command to view these compressed packages.

● To prevent excessive consumption of space on the storage media after the fault information is collected for multiple times, a maximum of three compressed packages of fault information can be stored on the same storage medium.

1.2.3 Procedure

(1) Enter the privileged EXEC mode.

enable

(1) Enter the debug configuration mode.

debug support

(2) Enable the Tech-Support function. The configuration tasks below are mutually exclusive. Please configure only one task.

○ Run the following command to enable the Tech-Support function:

tech-support package [*component-name* | **basic**]

○ Use the hotkey to enable the Tech-Support function.

@@@@f

This command takes effect only when the device is connected to the console port, and is invalid for remote connections, for example, Telnet or SSH connection.

(3) Run the diagnose command:

execute diagnose-cmd { [**device** *device-id*] [**slot all** | **slot** *slot-id* }] [**chip** *chip-id*] *shell-command* | **help** }

1.3 Monitoring

Run the **show** command to check the running status of a configured function to verify the configuration effect.

Table 1-1Monitoring

Command	Purpose
show system diag-info	Displays the diagnostic information when a fault occurs.