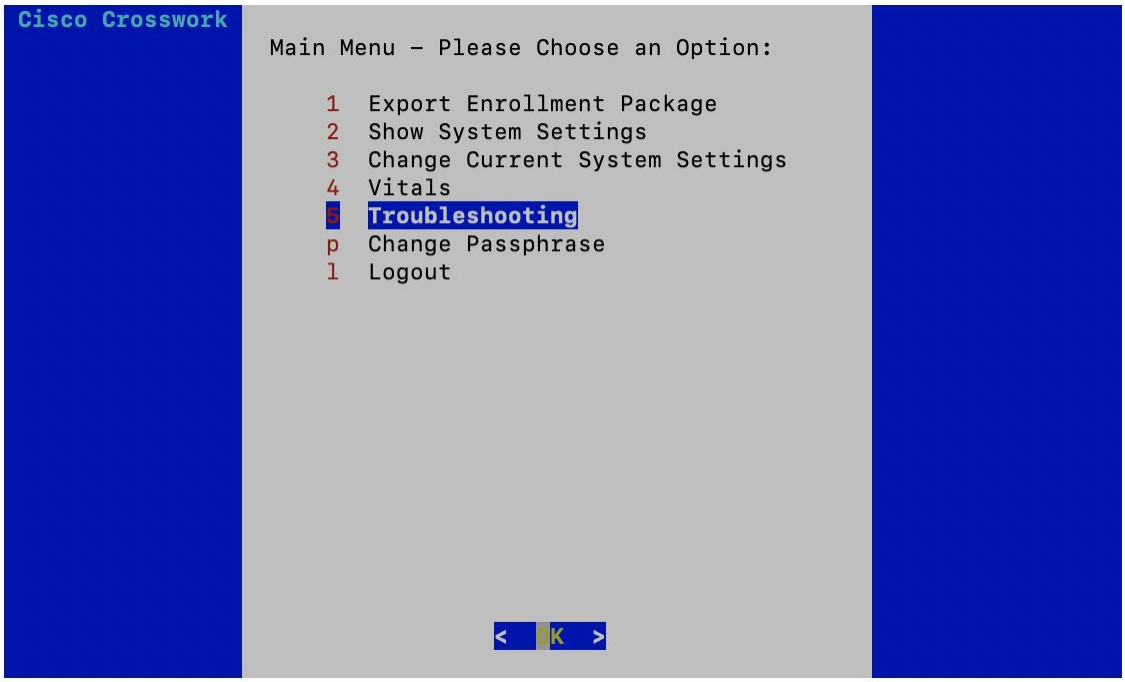
Troubleshooting

This section contains the following topics:

Troubleshooting

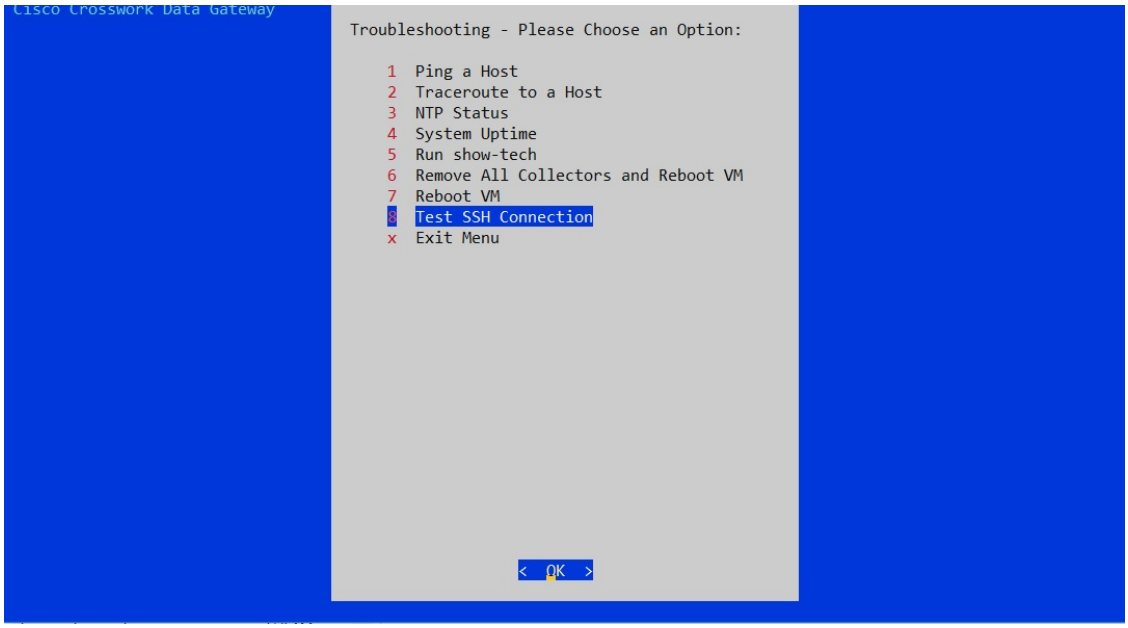
You can troubleshoot a Cisco Crosswork Data Gateway instance directly from the VM. Cisco Crosswork Data Gateway provides logs of errors, requests to the server, and changes made to the VM and reports any process failures/outages.

To access **Troubleshooting** menu, select **5 Troubleshooting** from the Main Menu and click **OK**, as shown in the following figure:



Cisco Crosswork Data Gateway opens the **Troubleshooting** menu that provides you the following options to troubleshoot your Cisco Crosswork Data Gateway instance:

Note The following figure shows the Troubleshooting Menu corresponding to **dg-admin** user. Few of these options are not available to **dg-oper** user. See Table Table 1.



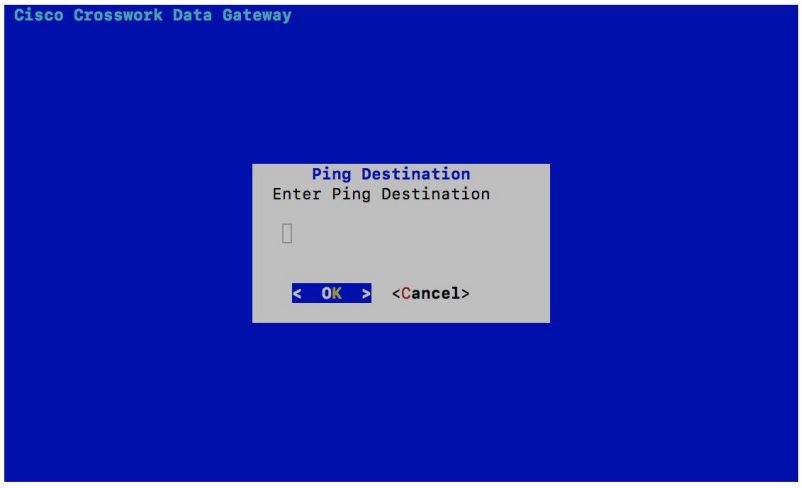
This section contains the following topics:

Ping a Host

To aid troubleshooting, Cisco Crosswork Data Gateway provides you Ping utility that can be used to check reachability to any IP address.

Step 1 From **Troubleshooting** menu, select **1 Ping a Host** and click **OK**.

Step 2 Enter the ping destination.



Step 3 Click **OK**.

Cisco Crosswork Data Gateway displays the result of the ping operation.

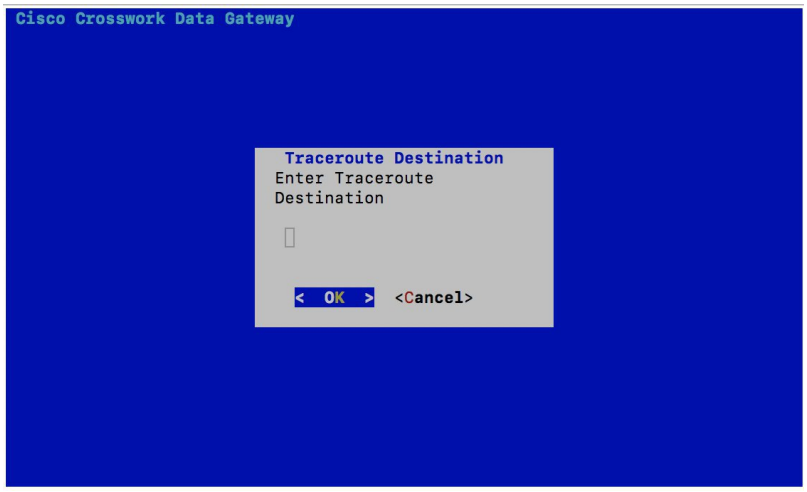
```
PING 172.23.92.143 (172.23.92.143) 56(84) bytes of data.
64 bytes from 172.23.92.143: icmp_seq=1 ttl=64 time=0.428 ms
64 bytes from 172.23.92.143: icmp_seq=2 ttl=64 time=0.368 ms
64 bytes from 172.23.92.143: icmp_seq=3 ttl=64 time=0.270 ms

64 bytes from 172.23.92.143: icmp_seq=4 ttl=64 time=0.574 ms

64 bytes from 172.23.92.143: icmp_seq=5 ttl=64 time=0.433 ms
64 bytes from 172.23.92.143: icmp_seq=6 ttl=64 time=0.487 ms
^C
--- 172.23.92.143 ping statistics ---
6 packets transmitted, 6 received, 0% packet loss, time 5107ms
rtt min/avg/max/mdev = 0.270/0.426/0.574/0.097 ms
Press any key to continue
```

Traceroute to a Host

Cisco Crosswork Data Gateway provides **Traceroute to a Host** option to help troubleshoot latency issues. Using this option provides you a rough time estimate for the Cisco Crosswork Data Gateway to reach the controller application.

Step 1 From **Troubleshooting** menu, select **2 Traceroute to a Host** and click **OK**.

Step 2 Enter the traceroute destination.



Step 3 Click **OK**.

Check NTP Status

Use this option to check the status of the NTP server.

Step 1 From **Troubleshooting** menu, select **3 NTP Status**.

Step 2 Click **OK**. The Cisco Crosswork Data Gateway displays the NTP server status.

```
Reference ID    : AB442641 (mtv5-ai27-dcm10n-ntp1.cisco.com)
Stratum         : 2
Ref time (UTC)  : Fri Jun 21 04:53:44 2019
System time     : 0.000044881 seconds fast of NTP time
Last offset     : +0.000057586 seconds
RMS offset      : 0.000080841 seconds
Frequency       : 21.559 ppm slow
Residual freq   : +0.009 ppm
Skew            : 0.144 ppm
Root delay      : 0.002095408 seconds
Root dispersion : 0.001190380 seconds
Update interval : 2062.6 seconds
Leap status     : Normal
Press any key to continue
```

Check System Uptime

Use this option to check system uptime.

Step 1 From **Troubleshooting** menu, select **4 System Uptime**.

Step 2 Click **OK**. The Crosswork Data Gateway displays the system uptime.

```
 05:11:55 up 3 days,  1:49,  1 user,  load average: 0.18, 0.12, 0.10
Press any key to continue
```

Run show-tech

Cisco Crosswork Data Gateway provides the option **show_tech** to export its log files to a user-defined SCP destination.

The collected data includes the following:

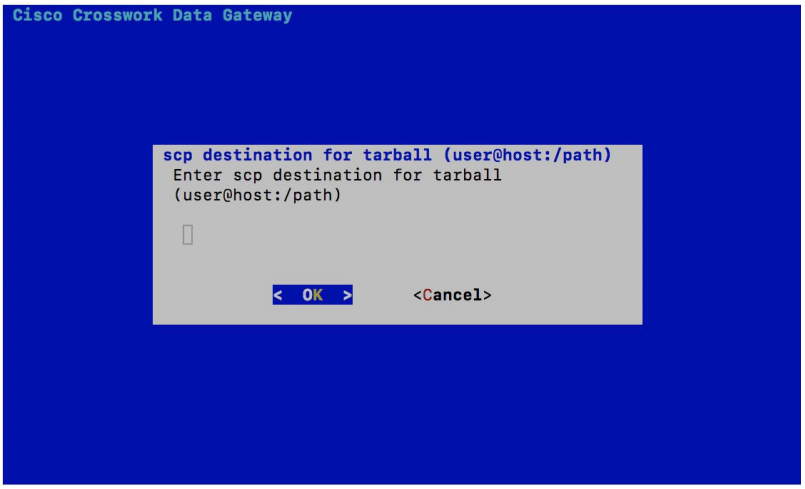
- Logs of all the Data Gateway components running on docker containers
- VM Vitals

It creates a tarball in the directory where it is executed. The output is a tarball named `CDG-<CDG-version>-year-month-day--hour-minute-second-*.tar.bz2`

The execution of this command may take several minutes depending on the state of Crosswork Data Gateway.

Step 1 From **Troubleshooting** menu, select **5 Show-tech** and click **OK**.

Step 2 Enter the destination to save the tarball containing logs and vitals.



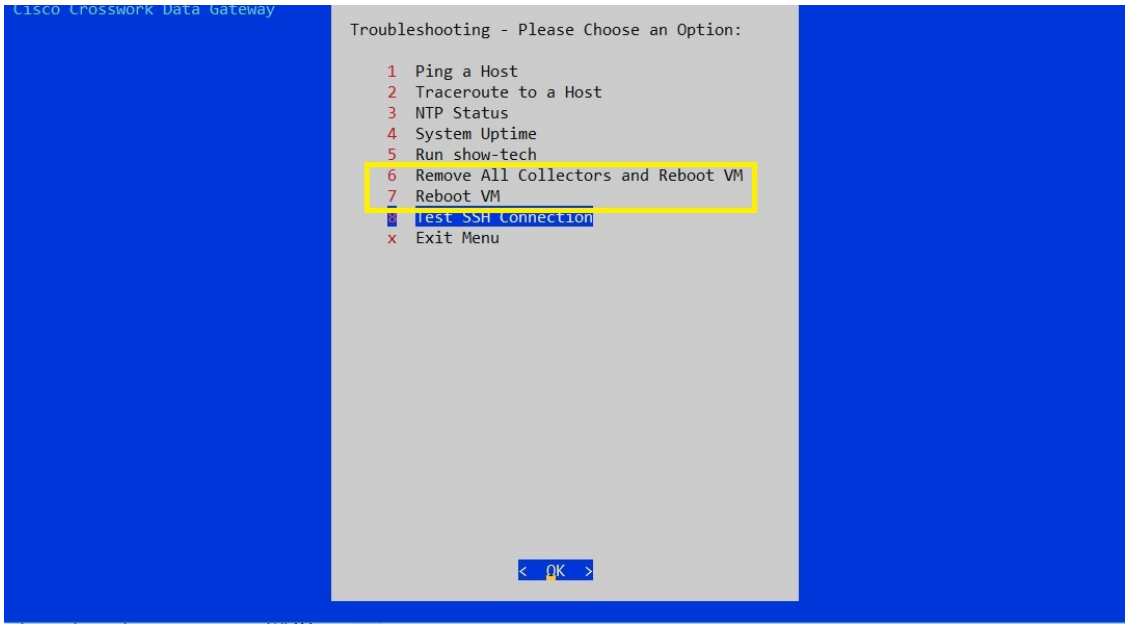
Step 3 Enter your SCP passphrase and click **OK**.

Reboot Cisco Crosswork Data Gateway VM

Note

- You can also reboot Cisco Crosswork Data Gateway from Crosswork Cloud.
- This task can only be performed by **dg-admin** user.

Cisco Crosswork Data Gateway gives you two options to reboot the VM:



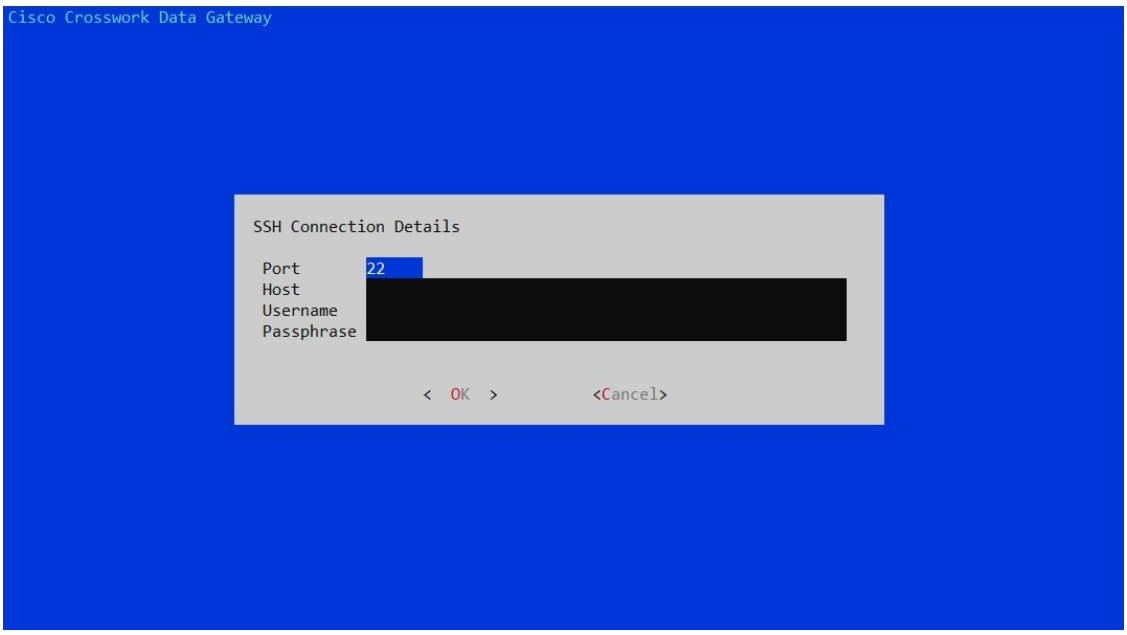
- **Remove All Collectors and Reboot VM**: Select this option from the **Troubleshooting** menu if you want to remove all the collectors (functional images) and reboot VM.
- **Reboot VM**: Select this option from the **Troubleshooting** menu for a normal reboot.

Test SSH Connection

Use this option to check the SSH connection between Cisco Crosswork Data Gateway and a remote host.

Step 1 From **Troubleshooting** menu, select **8 Test SSH Connection** and click **OK**.

Step 2 Enter the SSH connection details, namely port, host, username, and passphrase.



Step 3 Click **OK**.