Troubleshooting Cisco vWAAS

This chapter describes how to identify and resolve operating issues with Cisco vWAAS.

This chapter contains the following sections:

Resolving Diskless Startup and Disk Failure

Before you begin

Under rare conditions, the Cisco vWAAS VM may boot into diskless mode if other VMs on the host VM server do not release control of system resources or the physical disks become unresponsive. The Cisco vWAAS device raises a **disk_failure** critical alarm for disk01 and the **show disk details** EXEC command shows disk01 as **Not used until replaced**.

Procedure

Step 1 Re-enable the disk.

Example:

```
vwaas# config
vwaas(config)# no disk disk-name disk00 shutdown force
vwaas(config)# exit
```

Step 2 Reload Cisco vWAAS.

Example:

```
vwaas# reload
```

Troubleshooting Cisco vWAAS Device Registration

You must register each Cisco vWAAS device with the Cisco WAAS Central Manager. If a Cisco vWAAS device is not registered with the Cisco WAAS Central Manager, the **Not registered alarm** is displayed when you use the **show alarms** command.

The following figure shows the output for the **show alarms** command, displaying one alarm not registered.

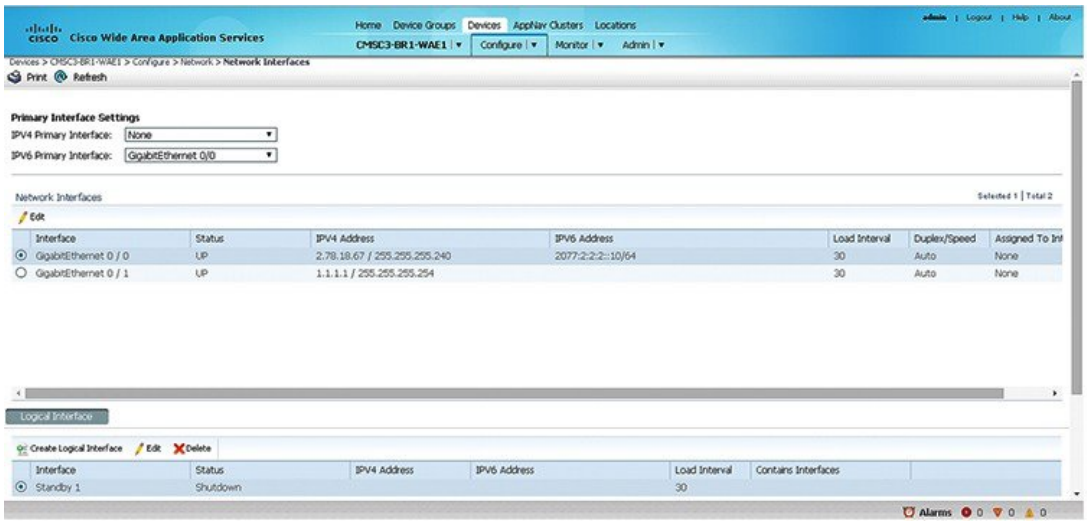
```
vWAAS# show alarms
Critical alarms:
---------------
None

Major alarms:          Module/Submodule     Instance
---------------        ----------------     -----------
Alarm ID               vwaas/model          vwaas/model     <----- Undersized alarm
1 not registered
. . .
Minor alarms:
---------------
None
```

Verifying Cisco vWAAS Virtual Interfaces

Two virtual interfaces are available on Cisco vWAAS devices, the Cisco WAAS Central Manager and the Cisco WAAS CLI.

- To display Cisco vWAAS virtual interfaces on the Cisco WAAS Central Manager, choose **Device >** *DeviceName* **> Configure > Network > Network Interfaces**. The **Network Interfaces** window appears.

Figure 1: Network Interfaces Window



To display the Cisco vWAAS virtual interfaces on the Cisco WAAS CLI, run the **show running-config interface** EXEC command. For additional details on the virtual interfaces, run the **show interface virtual 1/0** EXEC command or the **show interface virtual 2/0** EXEC command.

Troubleshooting Cisco vWAAS Networking

Before you begin

If you see no connections on the Cisco vWAAS device, use VMware VSphere Client to view the networking configuration and to check if the Cisco vWAAS device is connected to the correct vSwitch.

Procedure

Step 1 Identify which network label the network adapter is connected to.

Step 2 Determine the virtual switch that this network is connected to.

Step 3 Determine the physical NIC that is a member of this virtual switch.

Step 4 Verify that the configuration is correct.

Step 5 Verify that the virtual switch settings are correctly configured to reach the network.

Step 6 Verify the following on the Cisco vWAAS device: configured IP address, netmask, default gateway, and primary interface. For more information on these parameters, see Configuring Cisco vWAAS Settings in the chapter "Configuring Cisco vWAAS and Viewing Cisco vWAAS Components."

Step 7 From the Cisco vWAAS device, ping the default gateway and the Cisco WAAS Central Manager to verify that they are reachable.

Troubleshooting an Undersized Alarm

If the appropriate memory and hard disk resources are not allocated to the Cisco vWAAS device, the Undersized alarm is displayed when you run the show alarms command. The following figure show an example of this.

```
vWAAS# show alarms
Critical alarms:
----------------
None

Major alarms:       Module/Submodule     Instance
---------------     ----------------     -----------
Alarm ID            vwaas/model          memory      <----- Undersized alarm
1 undersized
. . .
Minor alarms:
----------------
None
```

Cisco WAAS and Cisco vWAAS provide three levels of alarms: **critical**, **major**, and **minor**. For more information on alarms and on the **show alarms** Exec command, see the *Cisco Wide Area Application Services Command Reference*.

The following table describes the fields displayed in the **show alarms** EXEC command output.

Table 1: Field Descriptions for the show alarms Command

Field	Description
Critical Alarms	Critical alarms affect the existing traffic through the WAE and are considered fatal (the WAE cannot recover and continue to process traffic. Critial alarms affect existing traffic through the WAE and are considered fatal: the WAE cannot recover and continue to process traffic.
Major Alarms	Major alarms indicate a major service (for example, the cache service) has been damaged or lost. Urgent action is necessary to restore this service. However, other node components are fully functional and the existing service should be minimally impacted.
Minor Alarms	Minor alarms indicate that a condition that will not affect a service has occurred, but that corrective action is required to prevent a serious fault from occurring.
Alarm ID	Type of event that caused the alarm.
Module/Submodule	The software module affected.
Instance	The object that this alarm is associated with, for example, memory. The **Instance** field does not have predefined values; each **Instance** value is application-specific.

Note You will not see the **Undersized** alarm if you are using valid OVA files to deploy Cisco vWAAS. If you see the **Undersized** alarm, delete the Cisco vWAAS VM and redeploy it using a valid OVA file.