Virtual Machine Issues

Disk Usage Notifications

Cisco Webex Meetings Server monitors the partition size and usage for all virtual machines (VM). When partition usage exceeds 90% on a VM, the system sends email to all Administrators. The systems sends an email every 4 hours until usage falls below the 90% threshold. When usage falls below 90%, the system sends another mail to notify Administrators.

Storage Unreachable Notifications

Cisco Webex Meetings Server monitors storage health and availability for all virtual machines (VM), except for the IRP VMs. If the storage for a VM isn't reachable, the system sends an email notification to all Administrators. The system sends an email every 4 hours until the VM connects to storage.

Monitoring stops during system reboots, updates, and major system alterations.

Administration Virtual Machine on Your Primary or High-Availability System is Down

Problem The administration virtual machine on your primary or high-availability system is down. You can view your system status by selecting **System** > **View More** > **Properties**. The Administration Site is

inaccessible and you see an error message in your browser window (for example, "We've hit a glitch in processing your request.").

Possible Cause There may be a problem with the management of the virtual machine in VMware vSphere.

Solution Obtain your VMware logs (kb.vmware.com) and provide them to your Cisco TAC representative. Your representative will use the logs to determine if there is a virtual machine issue on your system. Note that the Tasks and Events messages (virtual machine events from the Tasks and Events tab) are important for troubleshooting purposes.

A Virtual Machine Does Not Boot up after Deployment

Problem A virtual machine does not boot up after deployment.

Possible Cause The Cisco UCS Server (on which the virtual machine is deployed) does not meet the minimum requirements for the system size.

Solution Check the system requirements for your system size and ensure that there is enough CPU, memory, and free disk space. Refer to the *Cisco Webex Meetings Server System Requirements* for more information.

A Virtual Machine Fails and Cannot Be Recovered

Problem One of your virtual machines fails and you are unable to fix it even with the assistance of the Cisco TAC.

Possible Cause There are several possible causes including the following: you have a corrupt database, you have a faulty configuration, unsupported maintenance activity, power failures, hardware failures, and more.

Solution If a virtual machine on your high-availability configuration fails, remove the high-availability virtual machine from your system. Redeploy all of your high-availability virtual machines and then reconfigure the system for high availability. For more information, see the *Cisco Webex Meetings Server Administration Guide*. Similarly if an Internet Reverse Proxy virtual machine fails, you must remove that virtual machine from your system. Then redeploy and reconfigure your Internet Reverse Proxy virtual machine. For more information, see the *Cisco Webex Meetings Server Administration Guide*. For any other virtual machine, rebuild your system using the Disaster Recovery feature. For more information, see the *Cisco Webex Meetings Server Administration Guide*.

Virtual Machine Issues and Crashes

Problem Your virtual machine crashes and does not resume functioning.

Solution Attempt to perform the following solutions:

- **Solution** Attempt to restart your virtual machine from VMware vCenter.
- **Solution** If you took snapshots of your virtual machines, attempt to restore a snapshot.

Note **Solution** Snapshots might not contain all of your configuration information and you might have to perform some configuration tasks to restore all functions on your system.

- **Solution** If you configured a storage server, you can attempt to perform a disaster recovery procedure to restore your system. Refer to "Using the Disaster Recovery Feature" in your Administration Guide for more information.
- **Solution** If none of the above solve your problem, contact the Cisco TAC for assistance. You can contact the TAC at the following URL: http://www.cisco.com/cisco/web/support/index.html

Virtual Machine Is Unreachable

Problem The primary virtual machine is unreachable. Users cannot access the Administration site and cannot access the Webex site to start or schedule meetings. Administrators cannot make a SSH connection to the virtual machine. Fail over to the High Availability system does not occur.

Possible Cause The disk hosting the primary Admin virtual machine is inaccessible because it has failed.

Solution Using VMware vCenter, shut down the inaccessible virtual machine. By doing this, the failover process to the HA system completes successfully. When the hardware problem is resolved, contact Cisco TAC for assistance in restoring your primary virtual machine.

A Virtual Machine Repeatedly Reboots after a Power Outage

Problem A virtual machine is stuck in a reboot loop, after a power outage. The operating system does not load. No SSH or GUI access is available.

Possible Cause Your file system is corrupted.

Solution When the affected virtual machine boots, look for the following message on the console: **Booting Cent OS (<string_numbers_letters>) in <number> seconds**. Press any key to interrupt the boot process and display the GNU GRUB boot loader menu. Press **e** to edit the commands before booting the virtual machine. Press the down arrow key to select the **kernel** line and then press **e** to edit the kernel line. Append this text to the kernel line: **init=/bin/sh** (make sure there is a space before init). Press the Enter key to save your changes and return to the previous menu. Press **b** to boot. Mount the root file system by typing this command: **mount -o remount,rw / .** Invoke superuser mode by entering **su** at the command line to get root access. From there, enter **fsck** to check and repair your file system. Press **y** to the prompts to repair any issues found. After you are finished, reboot the virtual machine by using the RESET function in vCenter. If the issue is resolved, the virtual machine should boot normally. Check the system status by entering **hastatus** at the command line. If this does not work and TAC is unable to find any workaround, follow the Disaster Recovery process that is described in the *Cisco Webex Meetings Server Administration Guide*.

Virtual Machine Repeatedly Reboots

Problem The virtual machine on which the Cisco Webex Meetings Server OVA is deployed, repeatedly reboots.

Possible Cause NTP is not configured on the ESXi host.

Solution Configure NTP on your ESXi host, check the DNS on your ESXi host to make sure it is resolving the NTP server correctly, and then redeploy the OVA to the virtual machine.

NIC Teaming Issues

Problem You configured NIC teaming for failover and load balancing and all of your virtual machines seem to be running properly but you begin to encounter problems running the product at maximum load due to meeting failures.

Possible Cause Open your VMware vSphere console and determine if your NIC teaming is working properly on the UCS Servers that are hosting Cisco Webex Meetings Server virtual machines. This often occurs due to a failed connection from a NIC, forcing another NIC to take on the full network load. This is especially important if your NICs are Gigabit-Ethernet NICS since at maximum port load any one of your NICs would be running to maximum link capacity. So a catastrophic failure on one Gigabit-Ethernet NIC causes the entire networking load to fall on the other NIC, saturating the link and causing application-level issues within Cisco Webex Meetings Server.

Solution Put Cisco Webex Meetings Server in maintenance mode, fix or replace the failed NIC, and then restore service to end-users.