Intel® Hybrid Cloud platform
Troubleshooting Usage Reporting Issues

The Intel® Hybrid Cloud server sends automated e-mail alerts if usage reporting is not successfully reported back to the Intel datacenter.

I [Steps to correct usage reporting issues under Microsoft* Windows](#)
II. [Steps to correct usage reporting issues under Linux*](#)

Required Network Settings Configuration

External firewall/router (i.e. a firewall that is not an appliance running on the Intel Hybrid Cloud server), forward the following ports (to the Remote/WAN IP address) on the Intel Hybrid Cloud Server:

(1) 64440, 65222 - used by the Intel Hybrid Cloud software stack
(2) 5910-5920 - VNC ports

NOTE: Confirm the external firewall is not blocking these ports. For details on port configuration, refer to the external router or firewall documentation.

I. Steps to correct usage reporting issues under Microsoft* Windows

Affected appliances include:
  - Microsoft* Windows Server 2008 R2
  - Appliances running Microsoft* Windows Server 2008 R2
  - Microsoft* Windows Small Business Server Standard 2008 and 2011
  - Microsoft* Windows Small Business Server Essentials 2011

(1) Check network connectivity
1.1 Connect to the Microsoft* Windows appliance via VNC console and login with the administrator account
1.2 Open a command prompt
1.3 If the appliance is configured on the remote network, issue a ping command on the Intel Hybrid Cloud server remote IP address or ping the local IP address.
1.4 If no response to the ping command,
  a. Make sure the appliance is configured on the correct network in the Intel Hybrid Cloud console
  b. Make sure the appliance is assigned with a valid IP address by checking network settings inside the Microsoft* Windows appliance.
  c. Configure Microsoft* Windows network settings and ensure Microsoft* Windows is able to ping the Intel® Hybrid Cloud before continuing on to step 1.5
1.5 If Microsoft* WIndows firewall setting is enabled, check and allow the following ports to be opened.
  a. IntelAEPort1 – TCP port 5179
  b. IntelAEPort2 – TCP port 5180
  c. IntelAEPort3 – TCP port 5181
  d. IntelVMLCPort – TCP port 64550

Allow programs to communicate through Windows Firewall

To add, change, or remove allowed programs and ports, click Change settings.

What are the risks of allowing a program to communicate?   🛡 Change settings

Allowed programs and features:

Name	Home/Work (Private)	Public
☐ BranchCache - Peer Discovery (Uses WSD)	☐	☐
☐ COM+ Network Access	☐	☐
☐ COM+ Remote Administration	☐	☐
☑ Core Networking	☑	☑
☑ DFS Management	☑	☑
☐ Distributed Transaction Coordinator	☐	☐
☐ File and Printer Sharing	☐	☐
☑ IntelAEPort1	☑	☑
☑ IntelAEPort2	☑	☑
☑ IntelAEPort3	☑	☑
☑ IntelVMLCPort	☑	☑

1.6 If Microsoft* Windows firewall setting is disabled, proceed to the next step 2.

(2) Check the ActivAeon* & VMLC agents

2.1 Inside of the Microsoft* Windows appliance, right click on Computer icon and select properties then click Advanced system settings > Environment variables

2.2 Check for the variable settings and configure as indicated below

   a. Variable name: <u>activAeon</u>, Variable value: '*c:\program files (x86)\activAeon\activAeon XA*'

   b. Variable name: <u>ihc_software</u>, Variable value: '*c:\program files (x86)\OEM\ihc*'

2.3 From Start menu, go to Administrative Tools > Services and check if the following services are started and setup for automatic startup. **activAeon*** and **VMLC** agents. If the service is not available, please contact Intel Customer Support.

   a. for Microsoft Windows Server 2008 R2* or appliances running in this operating system, look for the following services : **activAeon XA ACS, activAeon XA MSA, activAeon XA SUS Agent, vmlcagent**

   b. Microsoft Windows Small Business Server 2008/2011 Standard/Premium/Essentials*, look for the following services : **activAeon XA ACS, activAeon XA CMS, activAeon XA MSA, activAeon XA RSP, activAeon XA SUS Agent Client, activAeon XA SUS Client, vmlcagent**

Note : The **vmlcagent** service needs to be configured to start with the administrator account that was used when Microsoft* Windows was initially installed as an appliance. To do this, follow the steps below :

   a. On the vmlcagent service, click on the Log On tab, Under 'This account', select, 'log on as'
   b. Enter the initial administrator account that was used to install Microsoft* Windows
   c. Confirm by clicking OK.

2.4 Perform a stop and start on the vmlcagent. Not a restart.

(3) Initiate Usage Report

3.1 On the management PC, start a command prompt and initiate a usage reporting using the IXE command. The IXE command can be found at '*C:\program files (x86)\hybridcloudservermanager*'. The syntax is "ixe -h serverIP -u admin -p password -o initiate-usage-reporting". The command may take up to 5 minutes to complete.

3.2 Start the Intel® Hybrid Cloud server manager console and click on the Appliances tab then go to the Application tab -> choose Refresh button

2

3.3 If the application tab is empty then continue to *Step 4, Verification section*.

Note : If there is an error message stating VMLC is not able to report usage, perform a restart of the Microsoft* Windows appliance or under Start Menu, Administrative Tools ->Services, start/stop VMLC agent and then initiate usage report using the ixe command.
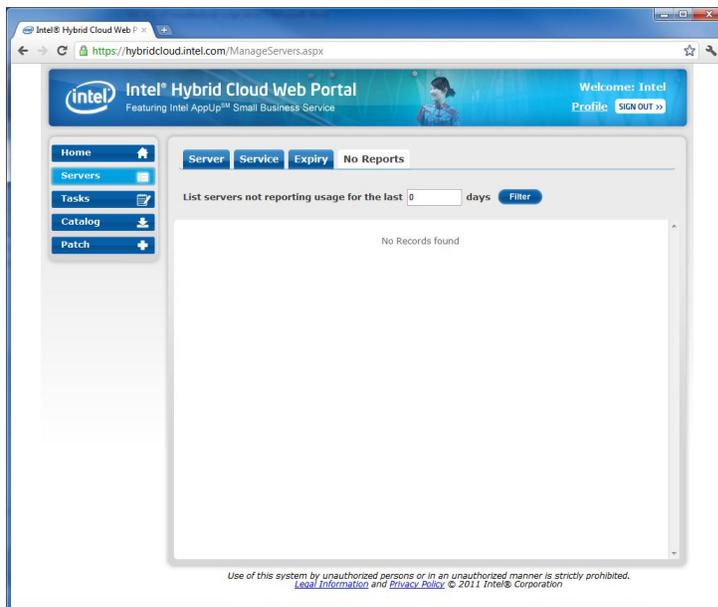
(4) Verification
4.1 On the management PC, open a web browser and connect to https://hybridcloud.intel.com and login using your MSP credential.
4.2 Click the Servers tab->No reports tab
4.3 Enter 0 days and click the filter button
4.4 If no servers are listed, steps 1-3 completed successfully. If servers are still listed, repeat Steps 1-3 for the server listed.

II. Steps to correct usage reporting issues under Linux*

1. Connect to Intel® Hybrid Cloud server manager console.
2. Verify the appliance is configured on the correct network by navigating to the appliance tab then click on the appliance with the failure and click on the configure tab (remote vs local network)
   a. Configure the network accordingly if necessary
3. Connect to the Linux* based appliance via VNC console and login
4. Type ifconfig and hit enter to check network setting
5. Perform a ping command on the Intel Hybrid Cloud server management IP.

   5.1 If the appliance is on the local network, ping 192.168.77.1 or the custom local IP of the IHC.
   5.2 If the appliance is on the remote network, ping the remote IP of the IHC

3

If ping is successful then continue to step 6 else debug appliance network

6. On the management PC, start a command prompt and initiate a usage reporting using IXE
   a. cd C:\program files (x86)\hybridcloudservermanager\
   b. ixe –h serverIP –u admin –p password –o initiate-usage-reporting
   c. Wait for Command Successful, which can take up to 5 minutes
7. On management PC, open a web browser and connect to https://hybridcloud.intel.com and login
8. Click the servers tab then click the no reports tab on the right
9. Enter 0 days and click the filter button
10. Ensure no server is listed. If servers are still listed, repeat from step 1 for all Linux* appliances

This applies to:

Intel® Hybrid Cloud platform

4