



## Commands for Router Health Check

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### Sysadmin VM Health Check

Use the commands in the following table in System Admin EXEC mode to ensure that any errors or exception are resolved prior to and after migration.

Command	Description
<b>show chassis</b>	Verify that both Data Plane and Control Plane are connected.
<b>show platform</b>	Verify that all nodes are operational.
<b>show vm</b>	Verify that all VMs are running (both Sysadmin and XR).
<b>show install active</b>	Verify that the packages are <b>active</b> on all nodes.
<b>show install committed</b>	Verify that the packages are <b>committed</b> on all nodes.
<b>show controller switch reachable</b>	Verify that all RPs and LCs inserted in the router are listed.
<b>show controller switch mlap reachable</b>	Verify that all RPs are listed.
<b>show controller switch mlap statistics location</b> <i>location</i> <b>Note</b> Enter for every location.	Verify that all connected ports are in <b>Active</b> or <b>Standby</b> state; any ports in <b>UP</b> protocol state are unexpected.
<b>show controller switch summary location</b> <i>location</i>	Verify that the Physical and Admin State of all the connected ports are <b>UP</b> .
<b>show controller fabric plane all detail</b>	Verify the Fabric Plane state and Bundle state.

Command	Description
<b>show controller switch summary</b>	Verify the state of Exp Eth 0 and Exp Eth 1 ports. One port must be in <b>Active</b> (Forwarding) state, and one port must be in <b>Standby</b> (Blocking) state.  <b>Note</b> The state of the Ethernet port is decided by the system.  Verify that the connected ports are in up, active, and forwarding state. If the states are not displayed correctly, check the control Ethernet cabling.
<b>show controller fabric plane all statistics</b>	Check for CE, UCE, and Parity Errors.
<b>show controller fabric sfe s13 all</b>	Check the S13 ASIC state.
<b>show controller fabric sfe fia all</b>	Check the FIA ASIC states.
<b>show controller sfe driver rack rack_number</b>	Check the software state of the UFC.
<b>show sdr default-sdr pairing</b>	Provides info on which is the SDR lead.  <b>Note</b> By default, RACK0 RP node pair is set as SDR Lead.
<b>show context location all</b>	Checks for any crashes that might have occurred.

## XR VM Health Check

Use the commands in the following table in XR EXEC mode to ensure that any errors or exception are resolved prior to and after migration.

Command	Description
<b>show platform</b>	Verify that each node CPU displays <b>IOS XR RUN</b> , and that the config state is <b>NSHUT</b> .  Verify that all the slices of line cards (if present) are in <b>UP</b> state.
<b>show redundancy summary</b>	Verify Node and NSR status is <b>Ready</b> .
<b>show processes blocked location node_ID</b>	Check for blocked processes.  <b>Note</b> The "lpts_fm" process would be the only process in blocked state.
<b>show processes cpu location node_ID</b>	Check the CPU utilization.
<b>show controllers fia driver location node_ID</b>	Check the software state of FIA.
<b>show controllers pse summary location node_ID</b>	Check the PPE Utilization, Block Initialization, and Alignment Status.  <b>Note</b> The Routing and Packet drop checks are same as Classic XR.

# Fabric Health Check

Use the commands in the following table in System Admin EXEC mode to check the state of the fabric.

Command	Description
<b>show controller fabric cxp summary rack</b> <i>rack_number</i>	Verify that all CXPs are initialized properly (indicated by a “G” for each CXP plugged into the UFC ports).
<b>show controller fabric plane all detail</b>	Verify the following: <ul style="list-style-type: none"> <li>• Plane Mode is <b>B2B</b> (back-to-back), <b>SC</b> (single chassis), or <b>MC</b> (multi-chassis)</li> <li>• Plane State is <b>UP</b></li> </ul>
<b>show controller sfe driver rack 0</b>	Verify the following: <ul style="list-style-type: none"> <li>• The ASIC State is <b>NRML</b></li> <li>• The FGID DL is <b>Done</b></li> </ul>
<b>show controller fabric fgid program-error all</b>	Verify that all FGIDs are <b>Ok</b> .
<b>show controller fabric link port fia tx state down</b> <b>show controller fabric link port fia rx state mismatch</b>	Verify that Link down or Link mismatch are not displayed in the output.

