Fabric Health Tab

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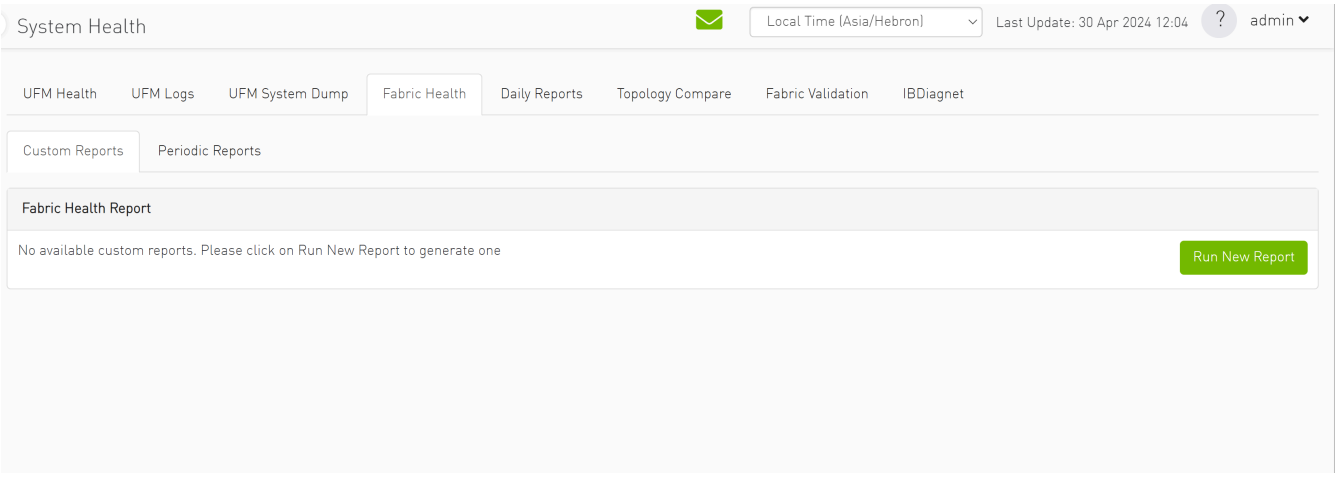
Through **Fabric Health** tab, you can access the fabric health reports. There are two kinds of reports:

- Custom Reports - The user can generate a report that runs a series of checks on the fabric on demand.
- Periodic Reports - An automatically generated report that is periodically generated by the UFM.

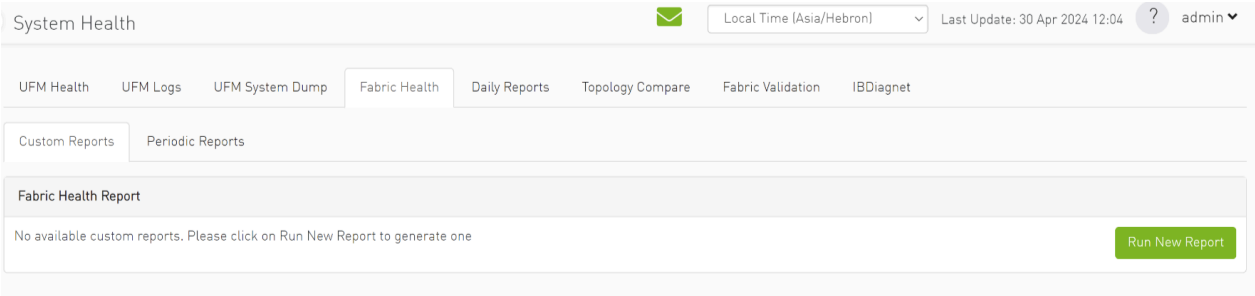
Each check that is run for a report triggers a corresponding event. Events are also triggered when a report starts and ends. For more information, see Events & Alarms.



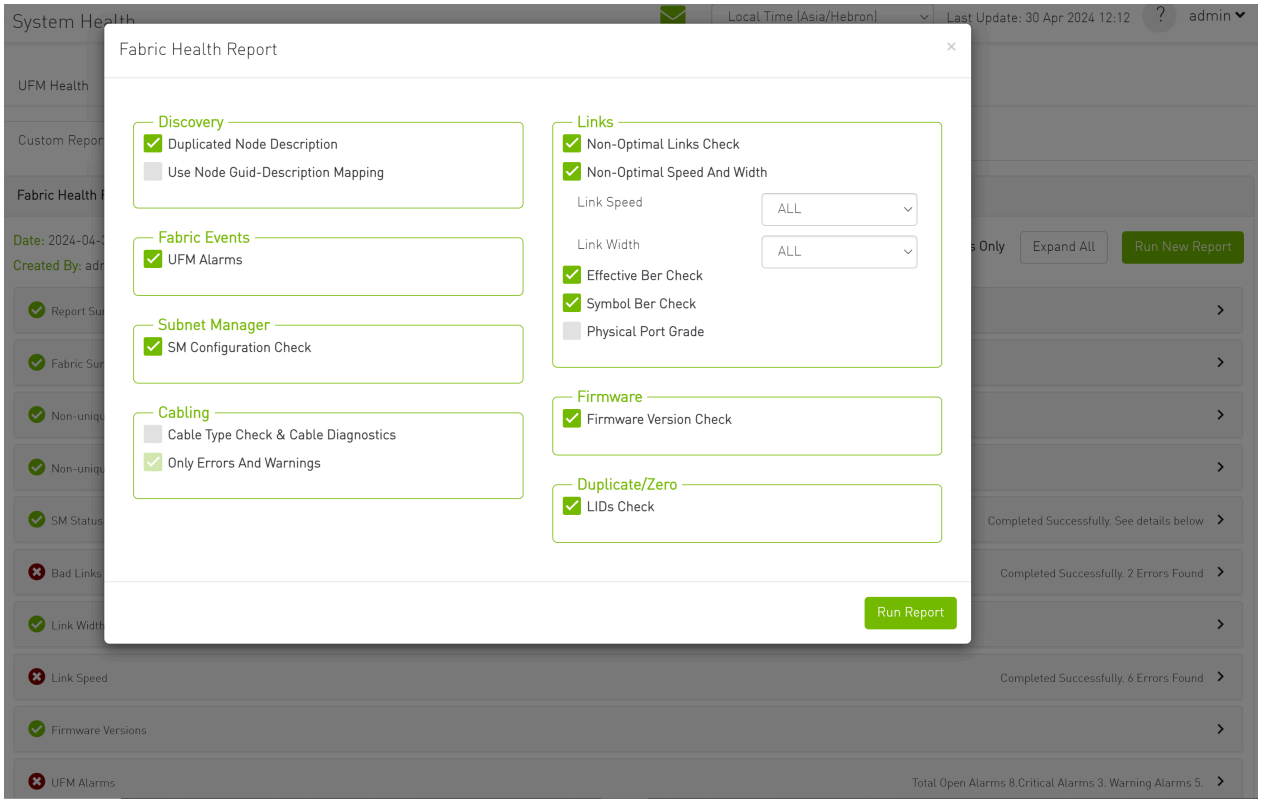
Custom Reports

To run a new report, do the following:

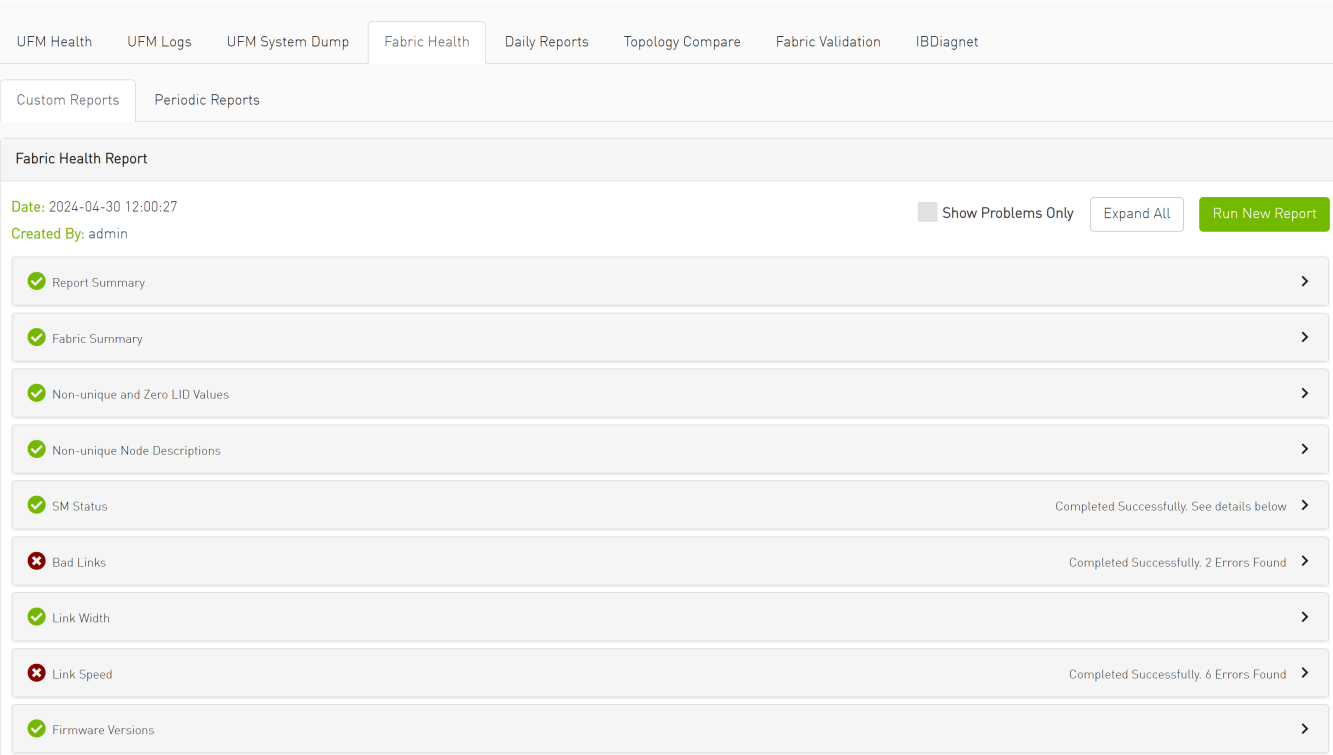
1. Click “Run New Report."



2. Select the desired fabric health checks to run in the Fabric Health Report window and click “Run Report."



Results will be displayed automatically:



The report displays the following:

- A report summary table of the errors and warnings generated by the report.
- A fabric summary of the devices and ports in the fabric.
- Details of the results of each check run by the report.

You can expand the view of each check or expand the view of all checks at once by clicking “Expand All."

To view only the errors of the report results, click the "Show Problems Only" checkbox.

The following table describes the checks included in the report.

Fabric Health Report Checks

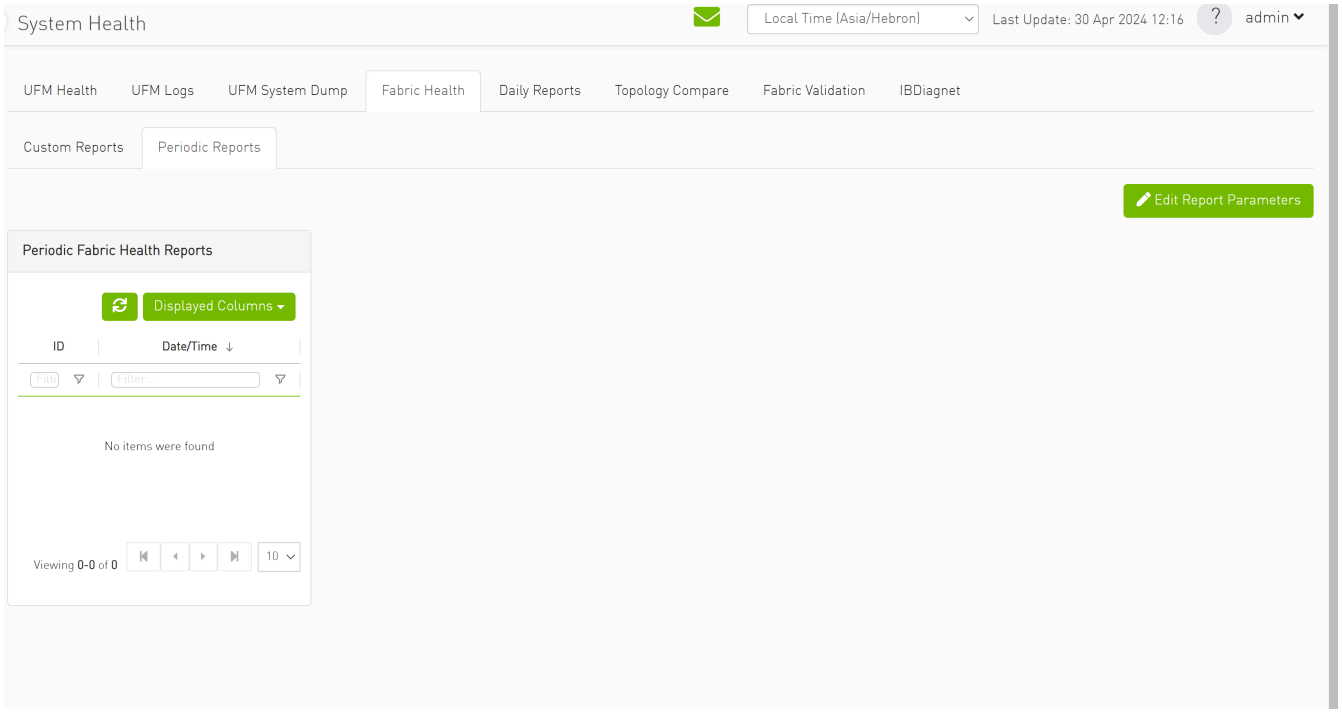
Check	Description	To run, select:
Duplicate/Zero LID Check	Lists all ports with same LID or zero LID value.	LIDs Check Default: Selected
Duplicated Node Description	Lists all nodes with same node description. Does not include switches with the same description.	Duplicated Node Description Default: Selected
Use Node GUID-Description Mapping	Enables the usage of a mapping file (between node GUID and node description) when running duplicate node description analysis of the fabric. This file is located on the UFM server side at: */opt/ufm/conf/sm_guid_desc_mapping.cfg,* and uses the following format (node_guid description): *0x248a070300702710 "Desc1"* *0x248a0703007026f0 "Desc2"* *0x0002c90300494100 "Desc3"*	**Use Node GUID-Description Mapping** Default: Unchecked **Note**: In order for this checkbox to be available, the Duplicated Node Description checkbox should also be selected. Otherwise, this checkbox will be greyed-out.
SM Check	Checks that: • There is one and only one active (master) Subnet Manager in the fabric.	SM Configuration Check Default: Selected

Check	Description	To run, select:
	• The master is selected according to highest priority and lowest port GUID. The report lists all SMs in the fabric with their attributes.	
Bad Links Check	Performs a full-fabric discovery and reports “non-responsive” ports with their path.	Non-Optimal Links Check Default: Selected
Link Width	Checks if link width is optimally used. • When a width is selected, the report lists the active links that do not meet the optimum for the selection. • When no width is selected (All), the test checks whether the enabled width on both sides of the link equals the configured maximum (confirms that auto-negotiation was successful).	None-Optimal Speed and Width Default: Selected Link Width: The default is ALL.
Link Speed	Checks if link speed is optimally used. • When a speed is selected, the report lists the active links that do not meet the optimum for the selection. • When no speed is selected (All), the test checks whether the enabled speed on both sides of the link equals the configured maximum (confirms that auto-negotiation was successful).	None-Optimal Speed and Width Default: Selected Link Speed: The default is ALL.
Effective Ber Check	Provides a BER test for each port, calculates BER for each port and check no BER value has exceeded the BER thresholds. In the results, this section will display all ports that has exceeded the BER thresholds. Note that there are two levels of threshold: Warning threshold (default=1e-13) and Error threshold (default=1e-8).	Effective Ber Check Default: Selected

Check	Description	To run, select:
Effective Port Grade	Provides a grade per port lane in the fabric, which indicates the current port lane quality.	Physical Port Grade Default: Not Selected
Firmware Check	Checks for firmware inconsistencies. For each device model in the fabric, the test finds the latest installed version of the firmware and reports devices with older versions.	Firmware Version Check Default: Selected
Eye Open Check	(For QDR only) Lists Eye-Opener information for each link. When minimum and maximum port bounds are specified, the report lists the links with eye size outside of the specified bounds.	Eye Open Check Default: Selected Minimum and Maximum port bound: By default no bounds are defined.
Cable Information	Reports cable information as stored in EEPROM on each port: cable vendor, type, length and serial number.	Cable Type Check & Cable Diagnostics Default: NOT selected because this test might take a long time to complete (40 msec per port)
UFM Alarms	Lists all open alarms in UFM.	UFM Alarms Default: Selected

Periodic Reports

The periodic reports are generated automatically upon UFM bring up.



To edit the report parameters, click the "Edit Report Parameters".