

Maintaining Test Results During a Power Failure

Occasionally, a power fluctuation or outage may interrupt a test in progress. To insure that test results remain viable following such a situation, the Digital Lightwave NIC can be configured to save test results upon power failure events.

The interrupted test will continue automatically after the NIC reboots following such a power failure.

To enable the power failure recovery feature, a Realtime Action After Duration test must be running, and, for optical interfaces, the Transmit laser setting “Initial Laser State” must be set to ON.

Test results prior to a power loss are saved on a 15-minute basis. When the unit reboots following a loss of power, the latest set of saved results can be displayed (“Results” tab), as well as the elapsed time of the power failure. The test will continue to run and function as it did before the power failure occurred.

Note that to continue the 15-minute data saving cycle function, the Realtime Action After Duration setting must be re-configured after the unit recovers from a power failure.

To insure that the test results are saved, the steps below should be followed before the test is started:

1. For optical interfaces, the Transmit laser setting “Initial Laser State” must be set to ON. This setting is located under the Transmit Settings tab (it may be found under the SET 1 or SET 2 button). This instructs the unit to turn the laser on by default after a power failure.
2. For each test (essentially each processor tab) under the Test > SET 1 tab, the “Action after Duration” option must be set up for a “Realtime Actions” selection. Note that there are several options to choose from. If the results are not going to be sent to a printer, then a “Record Statistics and/or Events” option is recommended
3. Enter the desired User Header and Print Alive time for the Realtime test.
4. To activate the test, the “Restart” button (at the bottom of the main screen) must be selected to place the unit in this testing mode. This must be repeated for each test (essentially each processor tab) configured for Realtime tests.
5. The results are then saved in 15-minute time intervals. Example: Start of test > the NIC waits 15 minutes > results are saved > waits another 15 minutes > results are saved again, etc. Saved files will have a “.real” extension and can be found in the NIC system drive [**appl**] directory.
6. When the NIC unexpectedly loses power and reboots, the latest set of saved results for that test, as well as the elapsed time of the power failure, can be displayed in the Results screen.
7. After the unit recovers from a power failure and the restored test has concluded, the desired “Action after Duration” setting must be re-configured (and the “Restart” button selected) for each new test desired.

Following power restoration and the NIC unit reboot, select the Results tab – the saved results will show the history that is restored from the latest 15-minute cumulative data save cycle as well as the “power loss” alarm duration. The LED states and the Elapsed Time the test has been running are also restored.

Conclusion

In summary, make sure that (a) the laser setting “Initial Laser State” is set to ON (for optical interfaces), (b) the “Action After Duration” is set to any “Realtime Actions,” (c) the “Restart” button is selected to restart the test, and (d) these actions are performed for each desired processor and following each reboot.