

OpenFabrics Alliance

Interoperability Logo Group (OFILG)

May 2013 Logo Event Report

UNH-IOL – 121 Technology Drive, Suite 2 – Durham, NH 03824 – +1-603-862-0090 OpenFabrics Interoperability Logo Group (OFILG) – ofalab@iol.unh.edu

Abdel SadekDate:15 Aug 2013NetAppReport Revision:1.13718 N. Rock RoadOFED Version on Compute Nodes:3.5Wichita, KS 67226Operating System on Compute Nodes:SL 6.3

Enclosed are the results from OFA Logo testing performed on the following devices under test (DUTs): NetApp Pikes Peak (5468) NetApp Soyuz (5500)

The test suite referenced in this report is available at the IOL website. Release 1.47 (2013-Apr-16) was used.

http://iol.unh.edu/ofatestplan

The following table highlights the mandatory test results required for the OpenFabrics Interoperability Logo for the DUT per the Test Plan referenced above and the current OpenFabrics Interoperability Logo Program (OFILP).

Additional beta testing than reflected in this report was performed using the DUT. A separate report will outline those results.

| Test Procedures | IWG Test Status | Result/Notes |
|--------------------------------|-----------------|--------------|
| 11.1: Link Initialization | Mandatory | PASS |
| 11.2: Fabric Initialization | Mandatory | PASS |
| 11.5: SM Failover and Handover | Mandatory | PASS |
| 11.6: SRP | Mandatory | PASS |

Summary of all results follows on the second page of this report. For Specific details regarding issues, please see the corresponding test result.

Testing Completed 08 July 2013

Glenn A. Martin gmartin@iol.unh.edu

Review Completed 08 July 2013

Edward Mossman emossman@iol.unh.edu

OFA Logo Event Report – May 2013 DUTs: NetApp Pikes Peak (5468), NetApp Soyuz (5500)

Result Summary

The following table summarizes all results from the event pertinent to this IB device class.

| Test Procedures | IWG Test Status | Result/Notes |
|--------------------------------|-----------------|--------------|
| 11.1: Link Initialization | Mandatory | PASS |
| 11.2: Fabric Initialization | Mandatory | PASS |
| 11.5: SM Failover and Handover | Mandatory | PASS |
| <u>11.6: SRP</u> | Mandatory | PASS |

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Report Revision History

- v1.0 Initial working copy
- v1.1 Changed reported firmware version for Soyuz

Configuration Files

| Description | Attachment |
|---|------------|
| Scientific Linux 6.3 Configuration File | 9 |
| OFED 3.5 Configuration File | 9 |

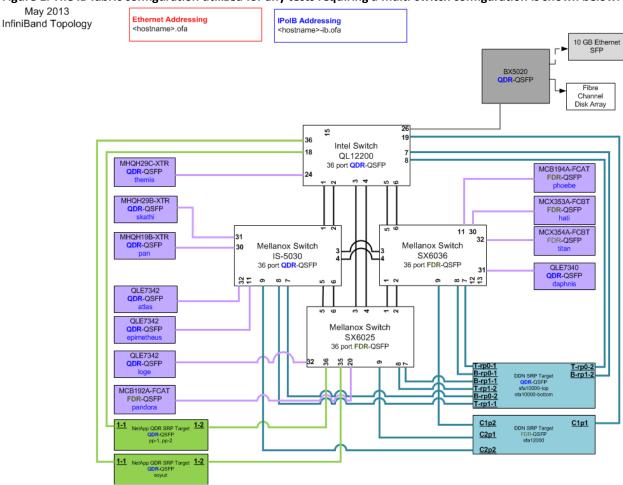
Result Key

The following table contains possible results and their meanings:

| Result: | Description: |
|-------------------|---|
| PASS | The Device Under Test (DUT) was observed to exhibit conformant behavior. |
| PASS with | The DUT was observed to exhibit conformant behavior however an additional explination |
| Comments | of the situation is included. |
| Qualified PASS | The DUT was observed to exhibit conformant behavior, with the exception of fault(s) or defect(s) which were previously known. |
| FAIL | The DUT was observed to exhibit non-conformant behavior. |
| Warning | The DUT was observed to exhibit behavior that is not recommended. |
| Informative | Results are for informative purposes only and are not judged on a pass or fail basis. |
| Refer to Comments | From the observations, a valid pass or fail could not be determined. An additional explanation of the situation is included. |
| Not Applicable | The DUT does not support the technology required to perform this test. |
| Not Available | Due to testing station limitations or time limitations, the tests could not be performed. |
| Borderline | The observed values of the specific parameters are valid at one extreme and invalid at |
| | the other. |
| Not Tested | Not tested due to the time constraints of the test period. |

DUT and Test Setup Information

Figure 1: The IB fabric configuration utilized for any tests requiring a multi-switch configuration is shown below.



| DUT #1 Details | | | |
|------------------------------|----------------------------------|--------------------|-------------|
| Manufacturer: | NetApp | Firmware Revision: | 07.86.32.00 |
| Model: | Pikes Peak (5468) | Hardware Revision: | 1.0 |
| Speed: | QDR | Located in Host: | NA |
| Firmware MD5sum: | 7842d43dc05552b1291d6097e15bfcc0 | | |
| Additional Comments / Notes: | | | |
| | | | |

| DUT #2 Details | | | |
|------------------------------|--------------|--------------------|-------------|
| Manufacturer: | NetApp | Firmware Revision: | 07.86.32.00 |
| Model: | Soyuz (5500) | Hardware Revision: | 1.0 |
| Speed: | QDR | Located in Host: | NA |
| Firmware MD5sum: | NA | | |
| Additional Comments / Notes: | | | |
| | | | |

Mandatory Tests - IB Device Test Results:

11.1: Link Initialization

| Results | | |
|---|--|--|
| Part #1: PASS | | |
| Discussion: | | |
| All links established with the DUT were of the proper link speed and width. | | |

| Link Partner | | Pikes Peak |
|--------------------------------------|-----------------------------|------------|
| QLogic 12200 (Switch) – QDR | | PASS |
| Mellanox SX6025 (Swi | tch) – FDR | PASS |
| Mellanox SX6036 (Swi | tch) – FDR | PASS |
| Mellanox IS-5030 (Swi | tch) – QDR | PASS |
| DataDirect Networks S | SFA12000 (SRP Target) – FDR | NA |
| DataDirect Networks S | SFA10000 (SRP Target) – QDR | NA |
| NetApp Soyuz (SRP Ta | rget) – QDR | NA |
| NetApp Pikes Peak (SRP Target) – QDR | | NA |
| Mellanox BX5020 (Gat | eway) - QDR | PASS |
| Host: themis | HCA: MHQH29C-XTR (QDR) | PASS |
| Host: pan | HCA: MHQH19B-XTR (QDR) | PASS |
| Host: skathi | HCA: MHQH29B-XTR (QDR) | PASS |
| Host: titan | HCA: MCX354A-FCBT (FDR) | PASS |
| Host: hati | HCA: MCX353A-FCBT (FDR) | PASS |
| Host: phoebe | HCA: MCB194A-FCAT (FDR) | PASS |
| Host: pandora | HCA: MCB192A-FCAT (FDR) | PASS |
| Host: atlas | HCA: QLE7342 (QDR) | PASS |
| Host: daphnis | HCA: QLE7340 (QDR) | PASS |

11.2: Fabric Initialization

| Subnet Manager | Result | |
|--|--------|--|
| OpenSM | PASS | |
| Result Discussion: | | |
| All subnet managers used while testing with OFED 3.5 were able to correctly configure the selected topology. | | |

11.5: SM Failover and Handover

| SM Pairings | Result | |
|---|--------|--|
| OpenSM | PASS | |
| Result Discussion: | | |
| OpenSM was able to properly handle SM priority and state rules. | | |

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11.6: SRP

| Subnet Manager | Result |
|--------------------|--------|
| OpenSM | PASS |
| Result Discussion: | |

With the exception of XXXX and YYYY HCAs which do not support SRP operations, core and extended SRP communications between all HCAs and all SRP targets succeeded while OpenSM was in control of the fabric.