OFED for Linux
Status and Plans

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#OFADevWorkshop
Agenda

• General Goals and Charter
• EWG – OFED for Linux status update
  – OFED 3.5
• OFED Plans
• Open Discussion Items
• How to contribute
EWG General Goals and Charter

• Provide enterprise ready distributions of the Open Fabrics code for Linux
  – Includes providing backports to support several Linux kernel versions and Linux distributions
  – Includes comprehensive testing, validation, and hardening of the code
  – Includes software packaging, release notes, and software installers to allow for easy installation
  – Includes processes for bug tracking and problem resolution

• Provide a platform for experimental OFA technologies
EWG – OFED Linux Status

• Moved to the new process:
  – All code is based on upstream: kernel and user space
  – Only fixes accepted upstream are included
  – Using compat-rdma as a method for backports
  – MPI not included – but used for common testing

• Companies can provide experimental features based on OFED
  • E.g. ofed-3.5-MIC
OFED 3.5 GA Release

- Release date: Feb 14, 2013
- Kernel base: 3.5
- Main changes from OFED 1.5.4.1:
  - All kernel code is upstream
  - All libraries are taken directly from maintainers without changes
  - Backports done using compat-rdma module
  - Remove MPI packages from OFED
  - Removed SDP kernel module and libsdp, sdpnetstat
  - XRC is supported in kernel only
- OSes support:
  - RedHat EL6.2  2.6.32-220.el6
  - RedHat EL6.3  2.6.32-279.el6
  - SLES11 SP2  3.0.13-0.27-default
  - kernel.org  3.5
- MPI packages testing:
  - MVAPICH2 - 1.8
  - Intel MPI - 4.1
  - Open MPI - 1.6/1.6.1
OFED Process Update

• Integration and build ownership:
  – New owner - Rupert Dance and Soft-Forge
  – Now at transition phase
  – Many thanks to Vladimir Sokolovsky from Mellanox who performed this work till now

• Decided to have one major release each year
  – Use a stable (even) kernel base
  – Dot releases to add Distro support as needed
OFED Plans

• OFED 3.5.1  May 2013
  – Add RHEL 6.4 support

• Next Major release - start as fall 2013 (Sep)
  – Use stable kernel available at this time – 3.10 or 12
  – GA planed for Jan 2014
  – Emulex plan to add their driver support
Open Discussion Items

• Ubuntu
  – Should we add support?
  – Can be a major effort due to the different packaging

• Simplify the install script
  – Any volunteer?

• Move to compat library open source
  –Compat-rdma to be a subsystem under compat project
  – Rupert will examine this after integration ownership is done
  – Do we really wish to change again?

• How to get more people to help?
  – Should OFA hire some people?
  – Especially for the kernel code
If You Want to Help:

- Developing code:
  - Including back-ports in Linux
  - Reviewing code submitted to Linux kernel/libs
- Doing QA and testing
- Performance tuning
- Sending patches and comments to the mailing lists:
  - OFED for Linux: ewg@lists.openfabrics.org
  - General Linux development: linux-rdma@vger.kernel.org
  - Maintainers and git trees: http://www.openfabrics.org/downloads/MAINTAINERS
- Participate in EWG meetings
- Opening bugs in Bugzilla (https://bugs.openfabrics.org/)
  - When opening a new bug you can choose OpenFabrics Linux
Thank You