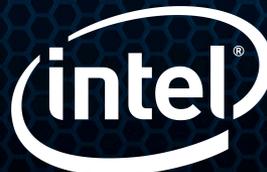12th ANNUAL WORKSHOP 2016

EWG WORKING GROUP UPDATE

Bob Woodruff, Software Engineering Manager

Intel® Corportation

[April 6, 2016]

AGENDA

- **EWG Charter**
- **OFA Process**
- **EWG – OFED releases last year**
- **EWG Roadmap**
- **How to contribute**

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EWG Charter

- **The charter of the EWG working group is to provide enterprise ready distributions of the Open Fabrics code (OFED) for Linux.**
  - That can be used (in whole or in part) to help enable in-box support of OFA S/W in Linux* distros
  - That can be used directly by customers on various Linux distro kernels that want the latest upstream code that is not yet in the Linux distros
  - That can be used as a basis for vendor provided value-add OFED derivatives
  - That is used for interoperability testing and OFA logo program
  - That is used for InfiniBand® Trade Association (IBTA) interoperability testing

OFED PROCESS

- **No major process changes over the last year.**
- **Current Process for OFED development**
  - OFA developers develop code and submit it upstream to kernel.org and the OFA user-space package maintainers via the linux-rdma list.
  - OFED kernel code is based on the upstream kernel code, with testing starting during the RC stage of kernel development.
  - OFED user-space packages are based on up-stream OFA user-space packages.
  - EWG adds backport patches to allow the upstream kernel code to run on various Linux distro kernels.
  - EWG adds any new experimental features that are not yet upstream but people want to test or use with the rest of OFED.
  - EWG adds cherry picked bug fixes from newer kernels to fix bugs discovered after the upstream kernel is released.
  - Package with all of the individual maintainer user-space packages, build and install scripts, and release notes.
  - Test the OFED RCs; Done by both the individual HW vendors and also by the OFA IWG.
  - Once all the critical bugs are resolved, release the OFED package via the OFA website.

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OFED Releases since last year

- **OFED-3.18**
  - Moved kernel base to kernel.org 3.18
  - Added support for new distros, RHEL* 7.1
  - Added OFI 1.0 (libfabric) from the OFIWG
  - Mellanox ConnectX4* ready
  - Updated user-space packages and cherry picked bug-fixes from later upstream kernel.org
    - - dapl-2.1.5
    - - fabtests-1.0.0
    - - libfabric-1.0.0
    - - librdmacm-1.0.21
    - - mstflint-4.0.1-1.42.g0d3b372
    - - infiniband-diags-1.6.5
    - - libibmad-1.3.12
    - - libibumad-1.3.10.2
    - - libiwpm-1.0.1
    - - libmlx5-1.0.2
    - - libocrdma-1.0.5
    - - mstflint-3.8.0-1.27.gf3d39b6
    - - opensm-3.3.19
    - - perftest-2.4-0.8.gd3c2b22
    - - srptools-1.0.3

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OFED Releases since last year

- **OFED-3.18-1**
  - Added support for new distros, RHEL* 6.7, SLES* 11 SP4
  - Added OFI 1.1 (libfabric) from the OFIWG
  - Updated user-space packages and cherry picked bug-fixes from later upstream kernel.org
    - -libocrdma-1.0.6
    - - perftest-3.0-0.1
    - - dapl-2.1.7
    - - infiniband-diags-1.6.6
    - - infinipath-psm-3.3-7_g05f6f14_open
    - - libiwpm-1.0.3
    - - libfabric-1.1.1
    - - fabtests-1.1.1
    - - ibacm-1.1.0
    - - libiwpm-1.0.3rc1
    - - mstflint-4.1.0-1.45.g1d75d01

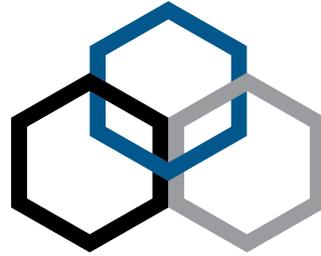# OFED Releases since last year

- **OFED-3.18-2 (in process)**
  - Added support for new distros, RHEL 7.2, SLES 12 SP 1
  - Added OFI 1.2 (libfabric) from the OFIWG
  - Updated user-space packages and cherry picked bug-fixes from later upstream kernel.org

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WHAT'S NEXT ? OFED-4.6 OR 4.7

- **Lots of upstream activity in progress on the linux-rdma list.**
  - RoCE V2
  - Intel® Omni-Path driver
  - New Intel® provided iWarp (i40) driver
  - Many kernel updates to isert, srpt, NFS/RDMA
  - Better virtualization support in IPoIB
  - And more…..
- **Most of this is likely for kernel.org 4.6 and/or 4.7**
- **Thus, next major OFED will likely target 4.6 or 4.7**
  - Depending on when most of this stuff gets upstream
- **Proposed distro support for latest RHEL 7.x (7.1 and 7.2) and SLES 12 and SLES 12 SP 1**
- **Can we drop support for RHEL 6 and SLES 11 kernels ?**

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**
  - **OFIWG Working Group: ofiwg@lists.openfabrics.org**
  - **OFVWG Working Group: ofvwg@lists.openfabrics.org**
  - **Maintainers and git trees:** http://www.openfabrics.org/downloads/MAINTAINERS
- **Participate in EWG meetings**
- **Opening bugs in Bugzilla (http://bugs.openfabrics.org/)**
  - When opening a new bug you can choose OpenFabrics Linux

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THANK YOU

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