



# SPDK CHINA SUMMIT 2018 OPENING

Lin Zhou

Software Engineering Director

Network Platforms Group, Intel Corporation

# Notices & Disclaimers

Intel technologies' features and benefits depend on system configuration and may require enabled hardware, software or service activation. Performance varies depending on system configuration.

No computer system can be absolutely secure.

Tests document performance of components on a particular test, in specific systems. Differences in hardware, software, or configuration will affect actual performance. For more complete information about performance and benchmark results, visit <http://www.intel.com/benchmarks>.

Software and workloads used in performance tests may have been optimized for performance only on Intel microprocessors. Performance tests, such as SYSmark and MobileMark, are measured using specific computer systems, components, software, operations and functions. Any change to any of those factors may cause the results to vary. You should consult other information and performance tests to assist you in fully evaluating your contemplated purchases, including the performance of that product when combined with other products. For more complete information visit <http://www.intel.com/benchmarks>.

Benchmark results were obtained prior to implementation of recent software patches and firmware updates intended to address exploits referred to as "Spectre" and "Meltdown." Implementation of these updates may make these results inapplicable to your device or system.

Intel® Advanced Vector Extensions (Intel® AVX)\* provides higher throughput to certain processor operations. Due to varying processor power characteristics, utilizing AVX instructions may cause a) some parts to operate at less than the rated frequency and b) some parts with Intel® Turbo Boost Technology 2.0 to not achieve any or maximum turbo frequencies. Performance varies depending on hardware, software, and system configuration and you can learn more at <http://www.intel.com/go/turbo>.

Intel's compilers may or may not optimize to the same degree for non-Intel microprocessors for optimizations that are not unique to Intel microprocessors. These optimizations include SSE2, SSE3, and SSSE3 instruction sets and other optimizations. Intel does not guarantee the availability, functionality, or effectiveness of any optimization on microprocessors not manufactured by Intel. Microprocessor-dependent optimizations in this product are intended for use with Intel microprocessors. Certain optimizations not specific to Intel microarchitecture are reserved for Intel microprocessors. Please refer to the applicable product User and Reference Guides for more information regarding the specific instruction sets covered by this notice.

Cost reduction scenarios described are intended as examples of how a given Intel-based product, in the specified circumstances and configurations, may affect future costs and provide cost savings. Circumstances will vary. Intel does not guarantee any costs or cost reduction.

Intel does not control or audit third-party benchmark data or the web sites referenced in this document. You should visit the referenced web site and confirm whether referenced data are accurate.

© 2018 Intel Corporation.

Intel, the Intel logo, and Intel Xeon are trademarks of Intel Corporation in the U.S. and/or other countries.

\*Other names and brands may be claimed as property of others.

# 1.5 years after last SPDK Meetup

	2016 October Meetup	2018 March Summit
Attendees	~70	140+
Customer Topics	2	4
PRC Contributors (non-Intel)	0	~13
APAC Maintainers	0	2

# 1.5 years after last SPDK Meetup



# Since then, more collaborations with SPDK...

## 2016 Meetup Customer Sharing's:

- ✓ Accelerate Ceph via SPDK (by XSKY)
- ✓ Optimizing performance of all flash array via SPDK technique (by iStuary)

## 2018 Summit Customer Sharing's:

- ✓ iSCSI resource management and JSON configuration file (by Hitachi)
- ✓ User space storage system based on SPDK (by Alibaba)
- ✓ The combination of OpenSDS and SPDK (by Huawei)
- ✓ The path to performance optimization of fusionstor (by FusionStack)

# Since then, more SPDK components are integrated...

From:

- ✓ SPDK User Mode NVMe Driver

To:

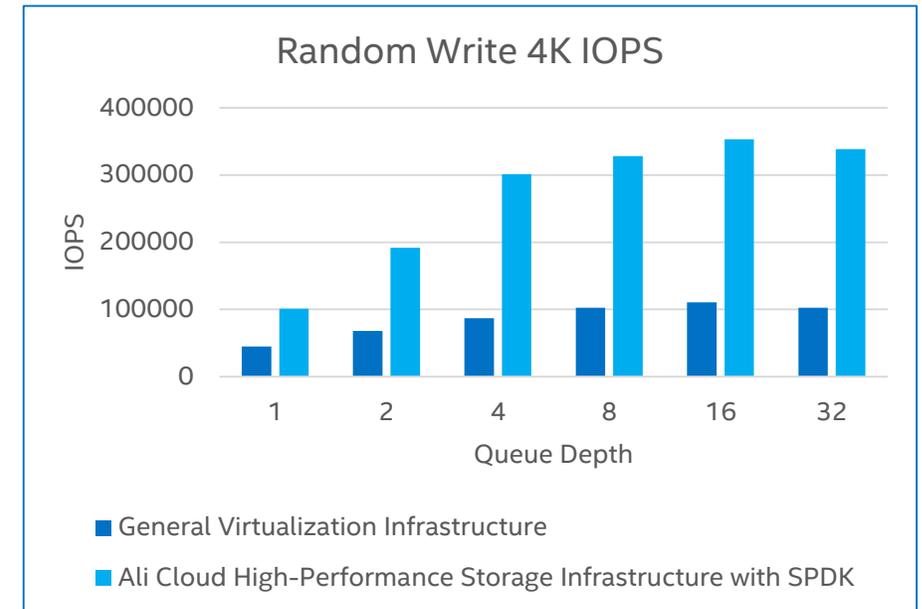
- ✓ SPDK NVMe-oF Target
- ✓ SPDK vhost Target
- ✓ SPDK iSCSI Target
- ✓ SPDK Blobstore
- ✓ SPDK Bdev Module
- ✓ .....

SPDK is building advanced  
user mode storage solutions!

Block Service, VM and Container, Database

# Since then, more PRC customers involved...

- Production Deployment
- Integration
- Evaluation



Ali Cloud sees 300% IOPS improvement and 70% latency reduction

Source: <http://mt.sohu.com/20170228/n481925423.shtml>

\* Other names and brands may be claimed as the property of others

# Agenda

SPDK China Summit 2018  
HOST : Yanbo Zhou , Software Engineer , Intel

TIME	TOPIC
09:00-09:30	Registration & Tea Break
09:30-09:40	Opening Address Lin Zhou, Software Engineering Director, Intel Network Platforms Group
09:40-10:20	《SPDK general introduction and update》 Jim Harris, Principal Engineer and SPDK Architect, Intel
10:20-10:50	《Intel solid disk product innovation》 Jinhe Ye, Application Engineer, Intel
10:50-11:20	《iSCSI resource management and JSON configuration file》 Shuhei Matsumoto, Engineering Manager, Hitachi, Ltd.
11:20-11:50	《User space storage system based on SPDK》 Pan Liu, Storage Expert, Alibaba
11:50-13:30	Lunch
13:30-14:00	《The combination of OpenSDS and SPDK》 Luwei He, Huawei Standard Engineer
14:00-14:30	《The path to performance optimization of fusionstor》 Wuqiang Qi, Storage architect, FUSIONSTACK
14:30-14:45	《Intel ISA-L Update and User Case Sharing》 Xiaodong Liu & Chunyang Hui, Software Engineer, Intel
14:45-15:00	Tea Break
15:00-15:30	《QoS Rate Limiting on SPDK Bdev and Ecosystem Related Tools》 Gang Cao, Senior Software Engineer, Intel
15:30-16:00	《SPDK programming framework and NVMe-oF optimization》 Ziye Yang, Senior Software Engineer, Intel
16:00-16:30	《Accelerating I/Os in virtualization via SPDK Vhost solution》 Changpeng Liu, Senior Software Engineer, Intel
16:30-17:00	《Process for Development and Testing in SPDK Community》 Qun Wan & Liang Yan, Senior Software Engineer, Intel

