

DPDK Summit Kick-off

Jim St. Leger, Intel

@JimStLeger

DPDK Summit - San Jose - 2016



Welcome To The DPDK Summit 2016





https://www.meetup.com/Out-Of-The-Box-Network-Developers/

Out Of The Box Network Developers

Members Sponsors Photos Discussions More

Join us!



Welcome



Santa Clara, CA Founded Feb 25, 2016

Membera .

Jpcoming Meetups

Past Meetups

Our calendar

Help support your Meetup

Chip in

Organizers:

Sujata Tibrewala

Networking industry is at an inflection point. What happened to mainframes a few years ago is happening to networks today. It is time to work on networking software develop apps which will be the next big thing out of your garage . Design and Architect your own system , define your own functionality, your imagination is the only limit. We will just give you the tools in this meet up. Intel has been part of the open networking revolution for some time now . We have been optimizing tools such as Data Path Development Kit , Enhanced Platform awareness, Quick assist (data encryption and compression), Single Root I/O Virtualization, VT-d etc to make it easy to use General Purpose Computers for switching and routing . We will be organizing talks and halkathons around all these technologies and more as we go along the way. In the meantime you can log on to our networking developer zone:

https://software.intel.com/en-us/networking

We are looking forward to see you there and also hear from you what you want to see there to help you learn.

Join us

Join us and be the first to know when new Meetups are scheduled Who do I know here?

Log in with Facebook to find out

Welcome!

What's new



DPDK



Why Are We Here?



- ▶ Meet
- Listen
- Learn
- **Discuss**
- **►** Improve
- Grow

Some Logistical Help



► WiFi – Yes!

► Look at the back of your badge



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http://eventsxd.com/



2016 DSU Teaching &



Microsoft





Event Agenda, Details, Slides - EventsXD





http://eventsxd.com/





















...get a Windows VM, use your smartphone or tablet, or follow online

Event Agenda, Details, Slides - EventsXD





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#DPDKSummit







DPDK Summit Speakers































DPDK Summit Topic Tracks





Agenda – Day 1



| Time | Topic | Speaker |
|-------------|---------------------------------|------------------|
| 9-9:15 | Kickoff | Jim St. Leger |
| 9:15-9:45 | Roadmap | Tim O'Driscoll |
| 9:45-10:30 | DPDK & SoCs | Hemant Agrawal |
| 10:30-11:00 | Event Driven Programming RFC | Jerin Jacob |
| 11:00-11:15 | Break | |
| 11:15-11:45 | DPDK Crypto API | Deepak Jain |
| 11:45-12:30 | DPDK User Perspective | Sowmini Varadhan |
| 12:30-1:30 | Lunch | Rooftop Terrace |

| Time | Topic | Speaker |
|-----------|--------------------------------------|------------------------------|
| 1:30-2:15 | Flow Classification | Charlie Tai Sameh Gobriel |
| 2:15-3:00 | Max I/O Perf | Helin Zhang M Jay |
| 3:00-3:45 | 100G SSL & OVS | Eyal Cohen |
| 3:45-4:00 | Break | |
| 4:00-4:15 | Virtual Network Packet Monitoring | Dharmraj Jhatakia |
| 4:15-4:30 | vPE & FD.io | Cristian Dumitrescu |
| 4:30-5:45 | Technical Panel | Various |
| 6:00-8:00 | Networking Reception | Rooftop Terrace |

Agenda – Day 2

| Time | Topic | Speaker |
|-------------|-----------------------------------------------|-----------------------------------------------------------|
| 9:00-9:30 | Vhost-user/Virtio | Yuanhan Liu |
| 9:30-10:00 | Virtio for Containers | Steve Liang |
| 10:00-10:30 | Understanding DPDK Performance | Dr. Peilong Li |
| 10:30-10:45 | Break | |
| 10:45-11:15 | vSwitches: FD.io/VPP vs OVS | Thomas Herbert |
| 11:15-11:45 | PISCES SW Switch | Sean Choi |
| 11:45-12:15 | BESS: Berkeley Ext Soft Switch | Christian Maciocco |
| 12:15-1:15 | Lunch | Rooftop Terrace |
| 1:15-2:00 | Decibel: Data Center Storage | Mihir Nanavati |
| 2:00-2:15 | Scale-out NFV Environment: Routing VNFs | Tomoyo Hibi, Yoshihiro Nakajima, Hirokaza Takahashi |

| Time | Topic | Speaker |
|-----------|-----------------------------|--------------------------------|
| 2:15-2:30 | TLDK in FD.io | Konstantin Ananyev |
| 2:30-2:45 | DPDK in Overlay Networks | Aniket Daptari |
| 2:45-3:00 | Service Slicing Gateway | Hayato Momma |
| 3:00-3:15 | Programmable Data Planes | Prem Jonnalagadda |
| 3:15-3:30 | Break | |
| 3:30-4:00 | Upstreaming DPDK Code | John McNamara |
| 4:00-4:30 | Putting DPDK in Production | Anita Tragler Franck Baudin |
| 4:30-5:00 | DPDK Survey | Mike Glynn |
| 5:00-5:15 | DPDK In A Box | Dave Hunt |
| 5:15-5:25 | Summit Close | Jim St. Leger |
| Summit | | |

Agenda – Day 2

| | Topic | Speaker |
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| 10:00-10. | J 20 6 | Even |
| 10:30-10:45 | Break | Lven |
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| 11:15-11:45 | PISCES SW ° | |
| 11:45-12:15 | SO | JCC0 |
| 12. | | Rooftop Terrace |
| | or Storage | Mihir Nanavati |
| 2 | Scale-out NFV Environment: Routing VNFs | Tomoyo Hibi, Yoshihiro Nakajima, Hirokaza Takahashi |

| | Time | Topic | |
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| | 2:30-2:45 | 100 V | plari |
| | | NY' | Hayato Momma |
| 1 | SYN | ammable | Prem Jonnalagadda |
| | | Ann | |
| | 3:30-4. | | |
| | 4:00-4:30 | Putting Dr. Production | |
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Open Source Networking Software News



Open vSwitch Joins Linux Foundation Open Networking Ecosystem

SAN FRANCISCO – AUGUST 09, 2016 – The Linux Foundation, the nonprofit advancing professional open source management for mass collaboration today is announcing that Open vSwitch (OVS) is now a Linux Foundation Project. Open vSwitch is an open source virtual switch designed to enable network automation while supporting standard management interfaces and protocols.

In modern data centers, networking functions are increasingly performed by software running on servers, either as part of the application or within a hypervisor. While the traditional Layer-2 Linux bridge addresses many common networking tasks, Open vSwitch was created with a robust set of features and a high performance design to address the rapidly growing needs of SDN and virtual networking use cases.

Today, OVS is used within multiple commercial products as well as large production environments. OVS has been ported to multiple virtualization platforms, switching chipsets, and networking hardware accelerators. OVS works on a wide variety of systems, including Linux, DPDK, Hyper-V, and FreeBSD. It is used in a variety of SDN applications, including NFV and network virtualization; it is the most widely used networking back-end in OpenStack.

#DPDKSummit

Multilateral Professional Courtesy



- ► Focused listening
- ► Interactive discussions, but...
- ► Mind the clock

Community networking



Let's get started!

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