



DPDK Summit

Welcome

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Network Developer Evangelist



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DPDK

DATA PLANE DEVELOPMENT KIT

Summit



What is it?

A DPDK
community
event

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What is a community?



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What is a community?

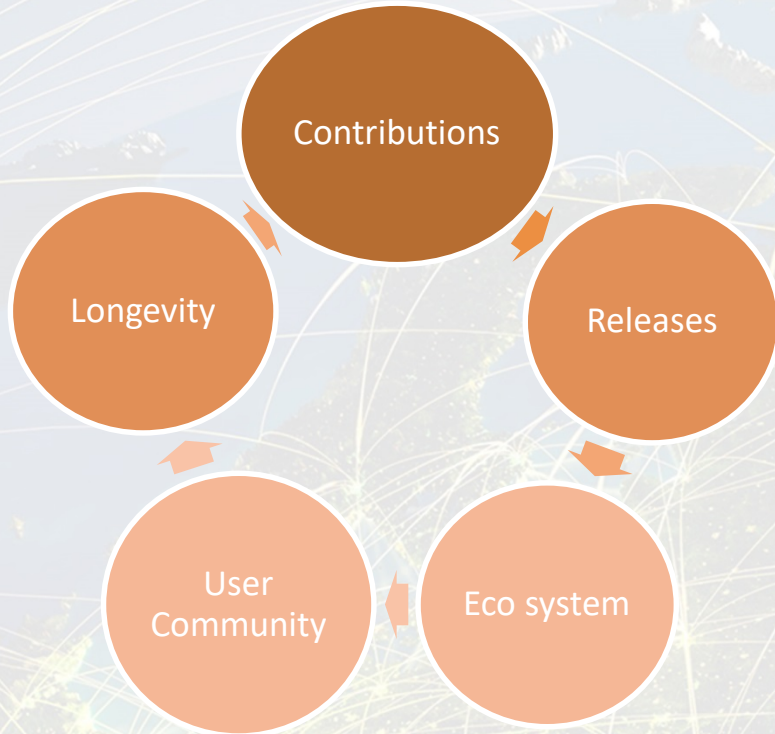
“A **community** is a small or large social unit (a group of people) who have something in common, such as norms, religion, values, or identity.” Wikipedia

Wikipedians 2012 →



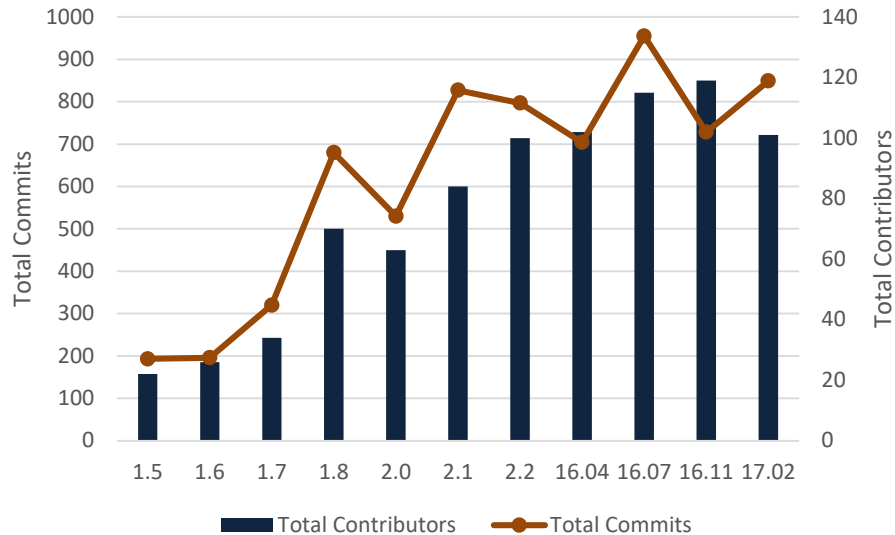
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How do you evaluate an Open source community



Open Source Stats

DPDK Release Stats



Major Contributors



A fully open source software project with a strong development community:

- BSD licensed
- Website: <http://dpdk.org>; Git: <http://dpdk.org/browse/dpdk/>

Multi-Architecture/Multi-Vendor Support

CPU Architectures

POWER 8


TILE-Gx
 EZCHIP TECHNOLOGIES

ARM v7/v8
 RehiveTech
 CAVIUM

Enhanced ARM Support

 CAVIUM
 NXP
 RehiveTech

Event API
 CAVIUM

SoC Enhancements
 NXP

2014

First non-IA contributions.

2015

Non-Intel NIC support.

2016

Significant ARM vendor engagement.

2017

SoC enhancements.
Non-Intel crypto.

ENIC
 CISCO

BNX2X
 BROADCOM

MLX4/MLX5
 Mellanox TECHNOLOGIES

ThunderX PMD
 CAVIUM

BNXT
 BROADCOM

ARMv8 Crypto
OcteonTX
LiquidIO
 CAVIUM

DPAA2
 NXP
AVP
 WIND

SZEDATA2
 liberouter

CXGBE
Chelsio
Communications
Accelerate

QEDE
 QLOGIC

ENA
SEMIHALF
EMBEDDED SYSTEMS

SFC
SOLARFLARE®

ARK
Atomic
Routes

NFP
 NETRONOME

Poll Mode Drivers

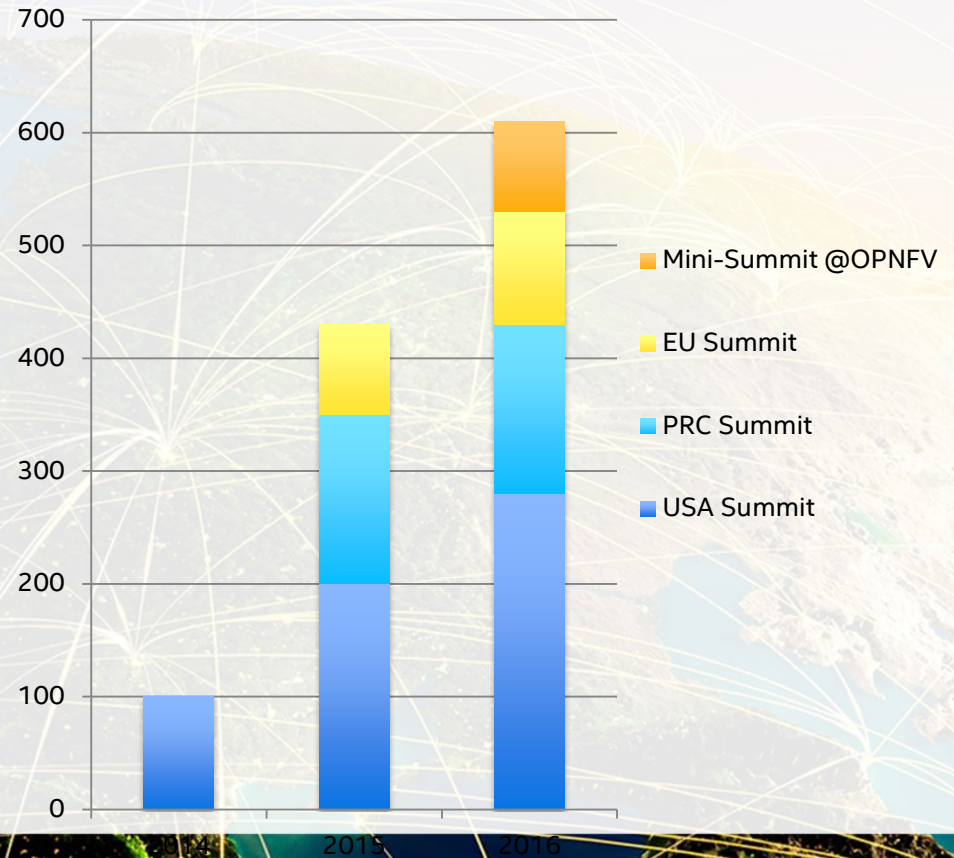
Linux Foundation Now Hosting DPDK

- Industry support: hardware, software vendors, multiple industry verticals
- 8 founding Gold member supporters, 5 Silver members



DPDK Summit Attendees (Worldwide)

First ever DPDK summit in India



DPDK Summit

DATA PLANE DEVELOPMENT KIT



Why are you here?

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Agenda, Day 1

Time	Schedule	Speaker	Company
8:00 am – 8:45 am	Registration		
8:45 am - 9:00 am	Introductions, Welcome and Agenda for the day	Sujata Tibrewala	Intel
9:00 am - 9:45 am	DPDK Architecture and Roadmap	Kannan Babu Ramia, Deepak K Jain.	Intel
9:45 am - 10:05 am	Supporting SoC devices in DPDK - Status Update	Hemant Agarwal, Shreyansh Jain	NXP
10:05 am - 10:30 am	DPDK on an Intelligent NIC	Vamsi Attunuru	Cavium
10:30 am - 10:55 am	Migrating from 10G to 25G	Jingjing Wu, Helin Zhang	Intel
10:55 am - 11:00 am	DPDK CookBook	Muthurajan JayaKumar	Intel
11:00 am - 11:15 am	Tea/Coffee Break		
11:15 am - 11:45am	Implementation of Flow-Based QoS Mechanism with OVS and DPDK	Karuppusamy M	Wipro
11.45 am - 12.00 pm	Fast Path Programming	Rajaraman Subramoniam, Praveen Desu	Happiest Mind
12:00 pm - 12:30 pm	Dataplane for Subscriber Gateways	Natarajan Venkataraman	Ericsson
12.30 pm - 2.00 pm	Lunch Break and Demo Zone Visits	Red Hat, Intel, TCS, Wipro, Avaya	

Agenda, Day 1

Time	Schedule	Speaker	Company
2:00 pm – 2:30 pm	Sample VNF in OPNFV	Ramia Kannan Babu	Intel
2:30 pm - 3:00 pm	Fast Data IO / Vector Packet Processor: Architecture overview	Shwetha Bhandari	Cisco
3:00 pm - 3:30 pm	Transport Layer Development Kit (TLDK)	Mohammad Abdul Awal	Intel
3:30 pm - 3:45 pm	Tea/Coffee Break		
3:45 pm - 4:15 pm	SFC with OVS-DPDK and FD.io-DPDK	Prasad Gorja	NXP
4:15 pm - 4:30 pm	DPDK Automation in Red Hat OpenStack Platform	Saravanan KR	Red Hat
4:30 pm - 5:00 pm	Packet Steering for Multicore Virtual Network Applications over DPDK	Priyanka Naik, Mitali Yadav	IT Mumbai
5:00 pm - 5:30 pm	Cryptodev API	Deepak K Jain	Intel
5:30 pm - 7:30pm	Evening Reception		

Agenda, Day 2

Time	Schedule	Speaker
8:30 am – 8:50 am	Registration	
8:50 am - 9:00 am	Introduction, Welcome and Agenda for the day	Sujata Tibrewala
9:00 am – 10:30 am	Building your own DPDK app from scratch	Yigit Ferruh
10:30 am -10:45 am	Tea/Coffee Break	
10:45 am -11:15 am	Building your own DPDK app from scratch(Contd.)	Yigit Ferruh
11:15 am - 12:15 pm	DPDK IP pipeline hands on lab (part 1)	Jayakumar Muthurajan
12:15 pm - 12:45 pm	Lunch Break	
12:45 pm - 2:15 pm	DPDK IP pipeline hands on lab (part 1)	Jayakumar Muthurajan
2.15 pm – 2.30 pm	Networking Break	
2:30 pm – 3:00 pm	Idea Roulette	Sujata Tibrewala
3:00 pm - 3:30 pm	How to build an optimized VNF using DPDK	Jayakumar Muthurajan , Jyoti Anand B, Rudramuni, Vishwesh M, S Deepak
3:30 pm - 3:45 pm	Tea/Coffee Break	
3:45 pm - 5:45 pm	How to build an optimized VNF using DPDK(Contd.)	Jayakumar Muthurajan , Jyoti Anand B, Rudramuni, Vishwesh M, S Deepak
5:45 pm - 6:00 pm	Wrap up and idea Roulette prizes	Sujata Tibrewala



THANK YOU