

Updates on ONOS/CORD Korean Open Source Communities

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OpenStack Day Korea

Agenda



- SDN and ONF
- ONOS
- CORD
- ONOS/CORD Korean Community
- Upcoming Events

SDN Evolution and ONF



ON.LAB

- Non-profit, carrier and vendor neutral
- Provide technical shepherding, core team
- **Build community**
- Many organizations supports













Demonstrations

Deployments

Invention



2007 - Creation of SDN Concept





2007 - Ethane 2008 - OpenFlow 2009 - FlowVisor, Mininet, NOX 2010 - Beacon

Development

Platform







2009 - Stanford 2010 - GENI started and grew to 20 universities 2013 - 20 more camp uses to be added

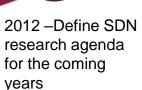


2008-2011 - SIGCOMM 2011 - Open Networking Summit, Interop















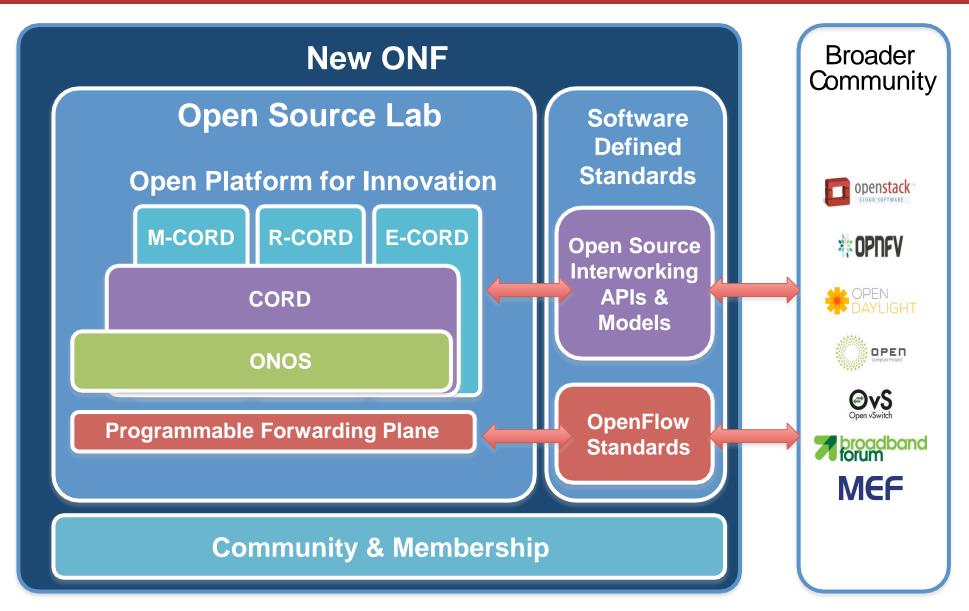




New ONF

New ONF – Restructuring for the Open Source Era

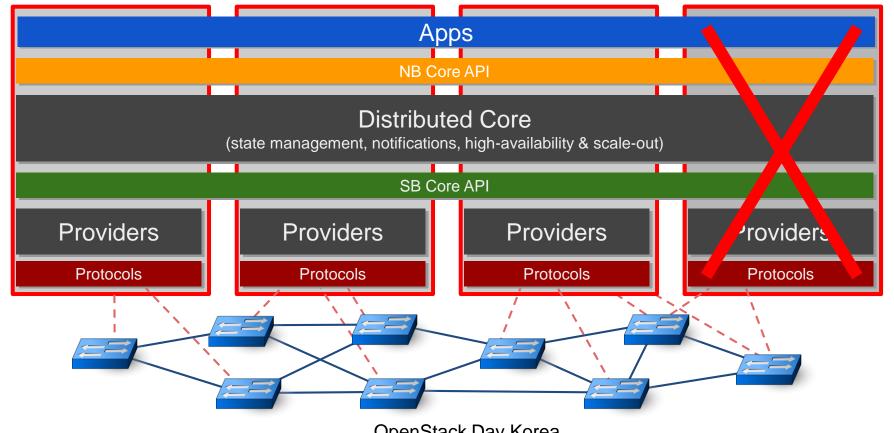




ONOS



- ONOS: Open Network Operating System
 - SDN OS for service provider networks
 - Highly available and scalable control plane



ONOS Community (1/2)



Partners



































Leading service providers make ONOS & SDN/NFV solutions relevant to them Leading vendors help make ONOS and SDN/NFV solutions real & ready for deployment OpenStack Day Korea

ONOS Community (2/2)



Collaborators



Collaborating organizations help grow the community and grow the impact

Release History









Q3/15 Drake
ONF ATRIUM
Secure Mode ONOS (KAIST)
VxLAN
Device Configuration



Q2/16 Goldeneye
CPMan Apps (POSTECH)
Intents using Flow Objectives
P4 DEMO support
YANG tool chain



Q1/15 Blackbird
Performance



Q4/15 Emu OPNFV SONA (SKT) AARNET KREONET-S (KISTI)





Q2/15 Cardinal
ONS Use Cases
SDN-IP
Packet Optical
R-CORD



Q1/16 Falcon
ONS Use Cases
{A, E, M, R} CORD
Disaggregated ROADM
DC Fabric Control
Global R&E Deployment

Q3/16 Hummingbird

RabbitMQ, Kafka Message buses
YANG NBI, SBI CODECs
ACTN Traffic Engineering
Distributed system primitives
SB - OSPF, ISIS, REST Client...

Every release: ++ Deployments, Applications, NB, CORE, SB, Test, Community, Performance....

ONOS Roadmap



Roadmap

Kingfisher

Platform enhancements

Regions & Layouts

Dark Theme

test suite

Features Dynamic Configuration NETCONF & RESTCONF SB RESTCONF NB Distributed Store Live Compiler Virtualization OF Agent External Connectivity **Embedding** GUI

QA – Performance whitepaper

features, Enhance Delta security

QA - Incorporate OF1.3 * 1.5

Loon

Platform hardening

Features

Dynamic Configuration Transactions & Optimizations Configuration Synchronizer

Virtualization

Snapshotting & Embedding OpenStack Integration

GUI

Additional overlays

gRPC

Core subsystems

Codebase Disaggregation

Intent

Domain & Transactions

QA-

TestON/Mininet automation enhancements

Features (incubation)

ISSU

Portable Kryo serialization Upgrade Coordinator

P4

P4 Runtime

qNMI

OpenConfig

M

Platform enhancements

Features

Dynamic Configuration

Sharding of Subtrees

Performance Improvements

Virtualization

Additional SB

Resiliency

GUI

Global Search

qRPC

Select apps

Explore automated gen

ISSU

Portable Kryo serialization

Upgrade Coordinator

P4 - P4 Runtime

gNMI - OpenConfig

QA

ONOS/CORD Working Group (1/2)



- ONOS/CORD Working Group (WG) https://www.facebook.com/groups/onos.kr/
 - Korean user and developer community for ONOS and CORD project
 - Initially launched at 5th, October, 2016
 - Members from 13 organizations
 - Cooperate with ONOS/CORD Ambassador program
 - http://ambassadors.onlab.us/































ONOS/CORD Working Group (2/2)



Activities

- Bi-monthly meetup with WG members
- Past meetups
 - 25th, October, 2016, Seoul Office, ETRI
 - 16th, December, 2016, Samhwa Tower, SK Telecom
 - 17th, February, 2017, Seoul R&D Campus, Samsung
 - 25th, May, 2017, Gangnam Toz







Upcoming Events (1/2)



- ONOS Build 2017
 - ONOS Developers' Conference
 - Annual Event
 - Date: 20th ~ 22nd, September, 2017
 - Location: Samsung R&D Campus
 - Organized by ONF, cooperated with Samsung

http://onosbuild.org





Upcoming Events (2/2)



- ONOS/CORD WG 4th Meetup
 - Topic: network virtualization
 - Date: 4th, August, 2017
 - Location: Jongro Toz

- CORD Build 2017
 - CORD Developers' Conference
 - Annual Event
 - Date: 7th ~ 9th, November, 2017
 - Location: QCT Cloud Technology Headquarters, US





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ONOS Community (1/2)



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