



OPEN NETWORKING  
FOUNDATION



# What is ONF?

The Open Networking Foundation (ONF) is a non-profit, user-driven organization dedicated to accelerating the adoption of open Software-Defined Networking (SDN). We view SDN as a disruptive approach to networking that will change how virtually every company with a network operates.

SDN is a new approach to networking in which network control is decoupled from the data forwarding function and is directly programmable. The result is an extremely dynamic, manageable, cost-effective, and adaptable architecture that gives administrators unprecedented programmability, automation, and control. Implementing SDN via an open standard enables extraordinary agility while reducing service development and operational costs, and frees network administrators to integrate best-of-breed technology as it is developed.

SDN is revolutionizing the networking industry, offering a multitude of opportunities for ONF's 100+ member

companies of all sizes (from startups to global powerhouses), including network operators, service providers, enterprises, product companies of all sorts, resellers, and more. ONF Members define relevant architectural frameworks and technical standards, encourage the deployment of both the hardware and software SDN ecosystems, promote the SDN value proposition, and accelerate the adoption of SDN technologies and standards.

Today, our working groups continue to analyze SDN requirements, evolve the OpenFlow™ standard to address the needs of commercial deployments, and develop new capabilities to expand SDN benefits.

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## MEMBER BENEFITS

ONF membership provides an array of benefits, including:

- Hands-on opportunities to drive and participate in the formation of SDN through interactive working groups
- Ability to collaborate with the world's leading experts on SDN and OpenFlow, including the inventors, market leaders, and startups driving these amazing innovations
- Early access to emerging standards, frameworks, and use cases
- Royalty-free access to the OpenFlow protocol and associated standards, logos, trademarks, and intellectual property
- Opportunities to demonstrate thought leadership and improve market visibility for your company through ONF-sponsored activities
- No-cost participation in all ONF activities, including face-to-face meetings, regional meetups, and interoperability Plugfests for all company employees (including the member company subsidiaries)

## HOW YOU CAN CONTRIBUTE

Member involvement is primarily through a series of ONF Working Groups, technical discussion groups, and a market-education committee, all of which encourage proactive contribution both online and in person in a highly collaborative environment for participants in all geographies. Many member organizations participate in multiple groups that are designed to leverage the core competencies of each of our member organizations.



ONF is leading this fundamental change in networking, and invites you to join us on this exciting journey as we forge an end-user-centric future making the SDN promise a reality for customers everywhere.

## HISTORY

Launched in 2011 by Deutsche Telekom, Facebook, Google, Microsoft, Verizon, and Yahoo!, ONF is a nonprofit organization dedicated to rethinking networking, and quickly and collaboratively bringing to market SDN standards and solutions. ONF is accelerating the delivery and commercialization of SDN and fostering a vibrant market of products, services, applications, customers, and users.

## OPENFLOW

The OpenFlow protocol is the first standard interface specifically designed for SDN and is already being deployed in a variety of networks and networking products, both hardware-based and software-based. The standard enables networks to evolve by giving logically centralized control software the power to modify the behavior of network devices through a well-defined "forwarding instruction set."



## ONF MILESTONES

### 2011

- Created an organization dedicated to the growth and success of SDN
- Evolved the OpenFlow protocol from its academic roots to commercial viability
- Published OpenFlow Switch Specification 1.1.0 and 1.2
- Published OpenFlow Configuration and Management Protocol 1.0 (OF-Config 1.0)
- Created the Technical Advisory Group (TAG)
- Created new working groups to drive seamless migration
- Membership surpassed 50 companies

### 2012

- Member companies introduced 64 OpenFlow products to market
- 20+ vendors demonstrated the interoperability of the OpenFlow Standard at two PlugFest events
- Established first U.S. conformance testing lab
- Over 30 million OpenFlow-capable ports shipped
- Presented at 20 events
- Published a widely-cited white paper that defines Openflow based SDN
- Published OpenFlow Switch Specification 1.3.0 and 1.3.1
- Published OpenFlow Configuration & Management Protocol 1.1 (OF-Config 1.1)
- Membership surpassed 90 companies

### 2013

- Published OpenFlow Switch Specification 1.3.2
- Published OpenFlow Configuration and Management Protocol 1.1.1 (OF-Config 1.1.1)
- Approved OpenFlow Switch Specification 1.4
- Near completion of OpenFlow Switch Specification 1.5
- Launched the OpenFlow Software Driver Competition
- Created the ONF Chipmakers Advisory Board (CAB)
- Created the Research Associates Program
- Launched the OpenFlow Conformance Testing Program
- Held 3rd PlugFest interoperability event, planning 4th PlugFest Fall 2013
- Established first international certified testing lab in China
- Membership surpassed 100 companies