ATRIUM

ATRIUM OPEN SDN DISTRIBUTION (v 2015/A)

The Open Networking Foundation was formed in 2011 to promote adoption of open Software Defined Networking. As the industry continues to be transformed by SDN and Network Functions Virtualization, open source software has emerged as a vital element to validate use cases and implementations.

As a result, numerous SDN & NFV open source projects have proliferated, each guided by its own membership, priorities, and timetable. With the added challenge of inherently diverse hardware platforms, network operators are compelled to address the increasingly complex task of integration of their applications, controllers, and data planes, often with a distinct stack for each use case.

ONF Atrium represents a set of open source, software distributions designed to enable Open SDN applications. Atrium aims to simplify and accelerate open SDN adoption by making it easy to build applications in a multi-vendor environment. Simultaneously, it serves as an industry-level open testbed to investigate and validate SDN concepts. Figure 1 (below) maps Atrium into the ONF/SDN architecture.

BENEFITS

- Pre-qualified and integrated Atrium Open SDN stacks accelerate and simplify evaluation for SDN Applications over OpenFlow

- Pipeline abstraction layer supports multiple SDN Controller Frameworks and OpenFlow switch implementations

- Open Source reference platform offers feedback mechanism for open source components adopted
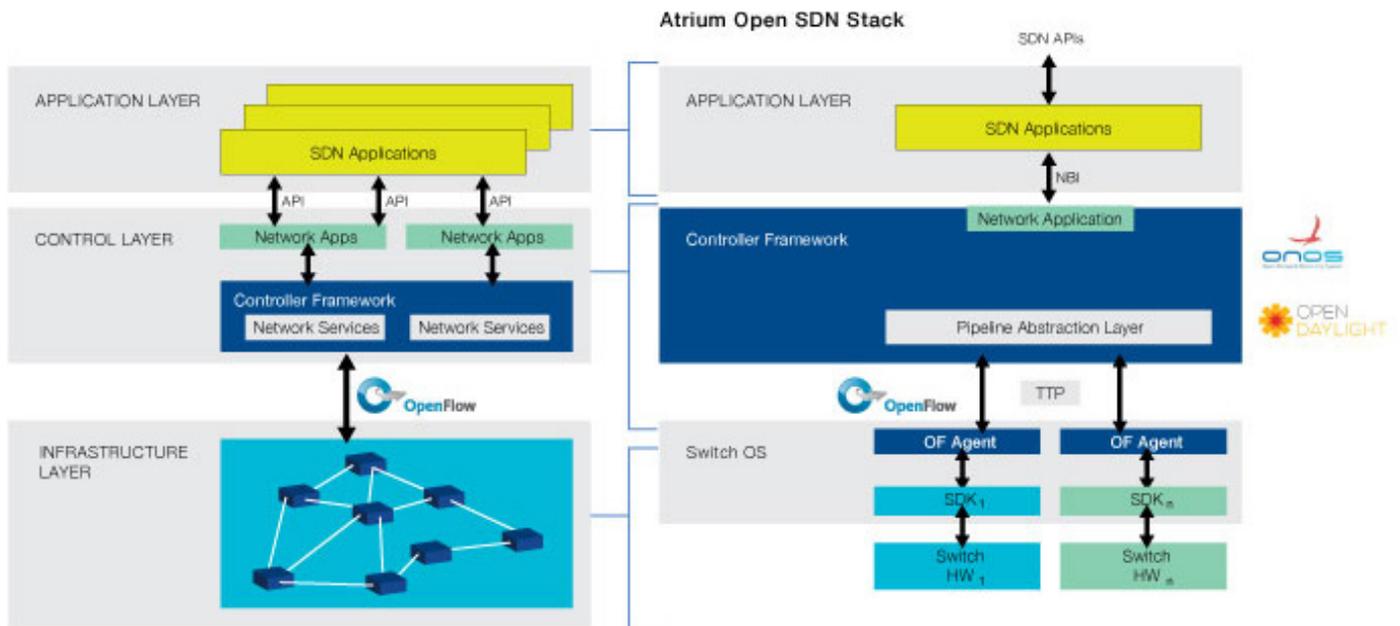

Figure 1: Atrium Open SDN Distribution mapping into ONF/SDN Architecture

ATRIUM – INITIAL RELEASE

Atrium 2015/A demonstrates the benefits of an Open SDN Distribution for an inter-domain routing application. While this version incorporates a particular SDN Controller Framework (ONOS), the explicit intent is to support multiple open source Controller Frameworks; work is already underway to integrate support for OpenDaylight, and additional open source components as well.

You can find more information on Atrium at http://opensourcesdn.org/ossdn-projects/

OPEN SOURCE

Atrium adopts some of the leading open source SDN components including:

http://www.onos.org/

http://www.opendaylight.org/

http://osrg.github.io/ryu/

ABOUT ONF

Launched in 2011 by Deutsche Telekom, Facebook, Google, Microsoft, Verizon, and Yahoo!, the Open Networking Foundation (ONF) is a growing nonprofit organization with more than 140 members whose mission is to accelerate the adoption of open SDN. ONF promotes open SDN and OpenFlow technologies and standards while fostering a vibrant market of products, services, applications, customers, and users.

For further details visit the ONF website at: http://www.opennetworking.org.