Accelerating Innovation with ECOMP & ONAP

SDN and ECOMP: SDN allows us to move to a software-centric network running on a cloud environment. Think of our network as a giant computer and ECOMP is the brain, the operating system that manages it. SDN stands for software-defined network. This software-centric cloud environment creates a better, more secure, faster, and more cost-effective network where resources and functions are controlled dynamically.

1. ECOMP Creation
AT&T created ECOMP – Enhanced Control, Orchestration, Management, & Policy – to scale network services to help meet the surging growth of network traffic.
ECOMP works as the operating system – or the brain – controlling our Software-Defined Network (SDN).
Between 2006 and 2016, AT&T’s network traffic grew more than 250,000%. To meet this surge, AT&T programmers wrote more than 8 million lines of code to create ECOMP.

2. Opened up ECOMP to form ONAP
AT&T opened up ECOMP for others to use. In February 2017, the Linux Foundation announced the merger of ECOMP with another open source networking project to form “ONAP” – this stands for Open Network Automation Platform.
ONAP is a game-changing global operating system for network providers and software developers to use and collaborate on. This initiative seeks to create a common platform for building communications services within a software-based network cloud. In this way, ONAP will help service providers rapidly deploy new products and services by automating key network functions.

3. ONAP Today
Today, ONAP members serve 55% of all mobile subscribers in the world. That means more than half of all mobile subscribers could soon be using networks running on software code AT&T helped create.
ONAP membership is growing fast with Vodafone, Comcast, Fujitsu, and Samsung among the latest companies to join.

4. ONAP Tomorrow
As a common platform for building communications services, ONAP will both speed delivery of innovative new services and help meet the exploding consumer demand for more speed, more devices, and more applications.
Before ECOMP & ONAP
Ordering, designing, and building new network services could take months or over a year.

After ECOMP & ONAP
Process for designing, configuring, and building new network services could be reduced to minutes.

In the future, virtual reality and autonomous cars will work seamlessly by using ONAP software AT&T employees were instrumental in writing.
1. Chapman 8/30/17 Memo
   "By the end of 2016, our network traffic grew more than 250,000% since 2006. ECOMP was created to scale our network services to help meet the boost in network traffic expected by 2020 and beyond.

2. AT&T 9/13/17 Internal Blog
   Chapman 8/30/17 Memo
   "In Feb. 2017, The Linux Foundation announced the merger of the AT&T ECOMP platform and the open source networking project (called OPEN-O) to form ONAP, the Open Network Automation Platform."

3. AT&T 9/13/17 Blog

4. AT&T 9/13/17 Blog
   Chapman 8/30/17 Memo
   - BEFORE ECOMP: In recent years, a business might have to wait weeks if not months to order, design and build a network service across multiple locations, or change the bandwidth they need to support their business traffic.
   - AFTER ECOMP: Today, we operate in a self-serve mode where a business can design, configure and build their own network service, and scale their bandwidth on demand in minutes. We call that Network on Demand.
   CONSUMER BENEFITS: With the rise of data-intensive devices like virtual reality gear, ECOMP helps support set-up and control in near realtime. If you want to play a virtual game live with a friend and latency becomes an issue, the game will likely freeze. ECOMP lets you easily boost capacity to ensure the best experience.

Citations