# Deploying Future Network Infrastructures

## NFV saves companies' time and money

*Stockholm, Sweden - December 2014 -* UnnA reveals the 'V-NM', a project designed to help enterprises to go one step further and faster by competitors. The project is built upon the concept of integration of SDN (Software Defined Networking) with NFV (Network Function Virtualization). NFV helps companies to reduce capital expenditures and create a scalable, flexible and cost saving network by spending less effort and time. On the other hand, SDN changes the current business scenario of depending on vendor specific equipments and protocols and provides the freedom to work on an open source platform to design and manage the network in a centralized way.

"The fact that the major networking vendors are spending billions of dollars in Openstack deployment should alert people who are not aware of this technology", says E. Kontothanasis, a member of the UnnA team.

Using Openstack, a software for creating and managing private cloud networks, we managed to reduce capital expenditures.  A fully functional virtual network is created without spending extra money for extra servers or Data Center fees. The new way of deploying networks gives flexibility to network engineers to deploy network services. Services are up and running with "one-button" click. It adds scalability as those services can be used by many enterprises and can be expanded on demand. Companies increase their revenues as the time for their services to reach the market is decreased.

OpenDaylight is an open source SDN platform that allows both operators/vendors and researchers  to come together to program network layers and market it with less time and complexity. It separates the control from the data plane, lets the network managers and designers to manage and program decisions sitting on top of the network and not having to go from device to device to make the changes.

For the project, group UnnA has used OpenStack running as an application on top of OpenDaylight. It displays an example where two companies' demands for services and network functions can be realized within the same ISP,  built with the combinatorial concepts of SDN and NFV. It uses all the latest features available from OpenStack and OpenDaylight such as FWaaS, LBaaS, VPNaaS, Flow programming, underlay redundancy and load balancing. Group UnnA  also developed a software called FlowGlance to display the flows of packets by monitoring the switches and dynamically updating any changes in them.

Visit us on our workshop on Thursday 8 January in KTH - Electrum building and learn more.

**About UnnA**

UnnA team was formed in August 2014 and started working successfully on the project V-NM. Over the months, the group has deployed a fully functional virtual network infrastructure using FWaaS (firewall as a service), LBaaS (load balancer as a service), VPNaaS (Virtual private Netwwork as a service) and routing capabilities. UnnA's goal was to implement a Virtual Network Management system that consists of a virtual topology and deploy functionalities to test and monitor the network. It achieved so by using various scenarios to analyze how the topology would respond in different settings.

Find out more here: https://www.kth.se/social/group/ik2200_ht14_unna/

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