Orange Deploys ONAP In Production

ONAP MATURITY AND MODULARITY CRITICAL INGREDIENTS ON THE PATH TO NETWORK AUTOMATION

"ONAP holds a lot of promise for innovations in 5G and is also flexible and adaptable enough for other use cases like IP/MPLS backbone automation. It was relatively straightforward for us to integrate components like Active and Available Inventory (A&AI) , Service Orchestrator (SO) and the Controller Design Studio (CDS) to the network infrastructure. We consider it quite flexible because you don't have just one way to implement a use case; you have several ways."

– OLIVIER AUGIZEAU, NETWORK AUTOMATION PROJECT MANAGER, *ORANGE*

COMPANY

Orange is one of the world's leading telecommunications operators with sales of 42.3 billion euros in 2020 and 137,000 employees worldwide at 30 September 2021, including 79,000 employees in France. The Group has a total customer base of 266 million customers worldwide at 30 September 2021, including 222 million mobile customers and 22 million fixed broadband customers. The Group is present in 26 countries. Orange is also a leading provider of global IT and telecommunication services to multi-national companies under the brand Orange Business Services.

CHALLENGE

First, deep integration between Orange's IT applications and network infrastructure meant that each change in an IT application required a change in the network, and vice versa. Next, its network operations required more and more customizations, but Orange has fewer people to perform them, so network automation is a must. Finally, Orange wanted as much independence as possible from vendor lock-in, such as having to purchase network infrastructure with a management system controlled by the network infrastructure provider.

"We believe Orange Egypt success formula combines optimized CAPEX/OPEX with high QoS and the agility of orchestration. ONAP will be a main pillar in this equation and will give Orange Egypt an edge and accelerate our journey towards digital transformation."

–KAMAL KAMEL, *ORANGE EGYPT*

SOLUTION

Realizing a long-pursued goal of using the Open Networking Automation Platform (ONAP), Orange has deployed and trialed an automation framework powered by ONAP. The current use case, in production in Orange Egypt, includes automating network services, network connectivity and resource management inside IP/MPLS, and configuration changes such as provisioning virtual private networks.

Orange's automation framework, packaged as a distribution, takes advantage of mature ONAP components such as Service Orchestrator, Inventory, SDN Controller and Controller Design Studio. Especially valuable to this deployment is Active and Available Inventory (A&AI), the core engine Orange uses for resource modeling, service modeling and the relationship between services and resources. Orange has demonstrated that ONAP has reached the maturity and modularity for network operators to take combinations of ONAP projects and components from proof of concept to production.

BENEFITS

Orange sees the potential for using ONAP not only for 5G deployment but also for a wide variety of network automation tasks.

ONAP offers an important step on the path from the era of vendor lock-in to the freedom of the open source community. By successfully deploying an automation framework built in house, Orange is confident it can ultimately deliver a complete, end-to-end, open source orchestrator on any hardware and avoid vendor lock-in.

As network automation transforms telecom engineering into software development, the importance of flexibility in tools and frameworks increases. Orange has found that the versatility and adaptability of ONAP are well suited to this transformation.