



AT&T and Orange Collaborate on Open Source and Standardization Initiatives for Software-Defined Networking

Intelligence Moved from Customer Hardware to Network, Reducing Cost and Complexity

DALLAS and PARIS, July 20, 2016 – AT&T* and Orange have signed an agreement to collaborate on open source and standardization initiatives that will accelerate the standardization of software-defined networking (SDN) and network function virtualization (NFV) technologies. The companies are aligning on a strategic vision to move intelligence from customer hardware to the network, reducing cost and complexity. This effort will help the industry and business customers move faster towards a more agile, flexible and ondemand networking future.

Today, deploying new virtual network services and functions is complex. Network service providers (NSPs) and businesses alike have to deal with proprietary standards, closed architectures and multiple equipment vendors that have different platforms and specifications. AT&T and Orange will identify appropriate forums for industry standardization discussions to drive standardization efforts forward. By introducing common standards and interfaces, the industry would simplify technological integration, increase operational efficiency and reduce costs, resulting in shorter deployment cycles and a faster pace of innovation.

Building SDN and NFV technologies on common, open and interoperable standards will help solve today's challenges by delivering highly secure, intelligent, application-aware networking. This benefits both NSPs and business customers by enabling them to deploy services faster, customize their infrastructures in near real-time, and innovate more easily within an ecosystem of interoperable service and equipment providers.

Through a network-centric approach, AT&T and Orange are committed to making the SDN and NFV vision and benefits more accessible for both businesses and the industry. The two companies will concentrate on the following areas:

- Make customer premises equipment (CPE) and services truly universal by creating common specifications for premise-based devices, allowing them to work in different NSP environments and with different network function software providers.
- Streamline the onboarding process for virtual network functions (VNFs) by introducing common guidelines and templates that will mature the VNF provider ecosystem and make VNFs more plug and play.





 Develop standardized APIs that will enable SDN architectures from different NSPs to interoperate with each other, making deployment of virtualized network services and functions faster and easier.

"We're committed to defining a framework that will accelerate the adoption of SDN. Driving the industry toward a standardized approach will reduce the cost and complexity created by proprietary implementation of equipment in the network and on the customer premise," said Roman Pacewicz, Senior Vice President, Offer Management and Service Integration, AT&T Business Solutions.

"Everyone benefits when network services and functions are designed around a common ecosystem that is delivered on open platforms. Innovation can happen faster and more easily, and this model will also help improve reliability and security," said Didier Duriez, Senior Vice President, Global Solutions, Orange Business Services.

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About Orange

Orange is one of the world's leading telecommunications operators with sales of 40 billion euros in 2015 and 155,000 employees worldwide at 31 March 2016, including 96,000 employees in France. Present in 28 countries, the Group has a total customer base of 252 million customers worldwide at 31 March 2016, including 191 million mobile customers and 18 million fixed broadband customers. Orange is also a leading provider of global IT and telecommunication services to multinational companies, under the brand Orange Business Services. In March 2015, the Group presented its new strategic plan





"Essentials2020" which places customer experience at the heart of its strategy with the aim of allowing them to benefit fully from the digital universe and the power of its new generation networks.

Orange is listed on Euronext Paris (symbol ORA) and on the New York Stock Exchange (symbol ORAN). For more information on the internet and on your mobile: www.orange.com, www.orange-business.com, www.livetv.orange.com or to follow us on Twitter: @orangegrouppr.

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