

The Third Network: In a nutshell

Key trends impacting Carrier Ethernet services market

Carrier Ethernet continues to gain acceptance among enterprises, due to the benefits it offers, as compared to internet: scalability, reliability, and cost efficient bandwidth. As enterprises continue to gain these benefits from Carrier Ethernet, they tend to drive NSP's efforts to stringent monitoring of SLAs for switched Ethernet services. Hence NSPs has started offering standardized SLAs for switched Ethernet services.

Private networks built on Carrier Ethernet technology provide assured bandwidth and security. But it lacks agility. It takes a significant amount of time to set up a Carrier Ethernet network across network operator domains. On the other hand, Internet is ubiquitous. It is agile, as it can be served on-demand. But it has security and performance issues. It would be great to have a data network combining the best of both worlds. Internet-like agility and on-demand service experience with CE2.0 like service assurance.

The Third Network initiative



With the above considerations in mind, MEF has come up with an initiative called as 'The Third Network'. The MEF's Strategy to implement the Third Network vision is to use Network as a Services (NaaS) principles; the solution is to develop a layered approach to break down complex problems, domain by domain or layer by layer. MEF Network as a Service is a self-service, on-demand network connectivity service delivered between physical or virtual service endpoints. It gives service providers the agility to deliver assured services backed by

SLAs. It gives unprecedented levels of network control for various cloud-centric applications and network connectivity services within the existing network architectures as well as emerging SDN and NFV implementations.

MEF is now standardizing lifecycle orchestration with layered abstraction to automate NaaS per layer, starting at Carrier Ethernet layer. The services in The Third Network will be orchestrated among all the participating service providers, operators and enterprises in order to provide coordinated end to end management and control. Orchestrating the network would mean to automate the service lifecycle management within and across network operator domains. This orchestration capabilities will drastically reduce the time to establish and modify the characteristics of the end to end service and will also assure the service quality.

If this becomes a reality, persons travelling on business would be free from depending on public networks or Wi-Fi networks to connect to VPNs. Business-class-network services would be delivered on-demand, across multi-carrier networks. Cloud service will be delivered seamlessly on-demand.

The work is already underway for defining the Lifecycle Service Orchestration APIs for existing network, NFV and SDN implementations to provide the abstraction to different layers. To promote the concept, MEF has formed an industry group named MEFunite which consists of industry standard bodies like ONF, IEEE and ETSI. Industry players are working closely to accelerate the deployment and realization of The Third Network.

References:

- [1] The MEF Third Network Vision and Strategy, November 2014.