



Accelerating the Transition to Third Network Services

We recently had a chance to speak with Nan Chen, President of MEF, to get a feel for some of the important progress in the network world. The following are some of the questions and Nan's response on each.

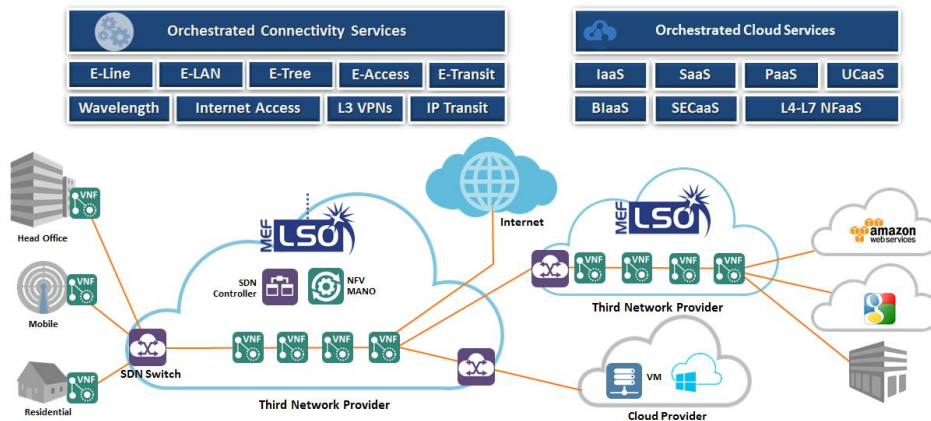
TR: What is MEF's primary focus right now?

Nan Chen: MEF is uniting industry efforts to enable agile, assured, and orchestrated connectivity and NFV-based services across multiple service provider networks. New Third Network services provide an on-demand experience with user-directed control over service capabilities and cloud connectivity.

Service providers worldwide want to offer these services over automated, virtualized, and interconnected networks that build upon a CE 2.0 (Carrier Ethernet 2.0) foundation and are powered by LSO (Lifecycle Service Orchestration), SDN, and NFV. To expand service reach

beyond their own networks and to deliver dynamic capabilities, service providers need a standards-based approach that facilitates seamless interoperability with other providers and enables end-to-end service automation with open APIs.

Emerging Third Network Services & Enabling Technologies



Source: MEF

TR: How does MEF16 align with your vision?

MEF16 brings together all of the key industry players who need to work together to accelerate the Third Network transition. This includes execs and other top experts from the world’s most innovative service providers, software and hardware technology suppliers, open source projects, and SDOs.

TR: What key work has MEF undertaken to realize this ambitious vision?

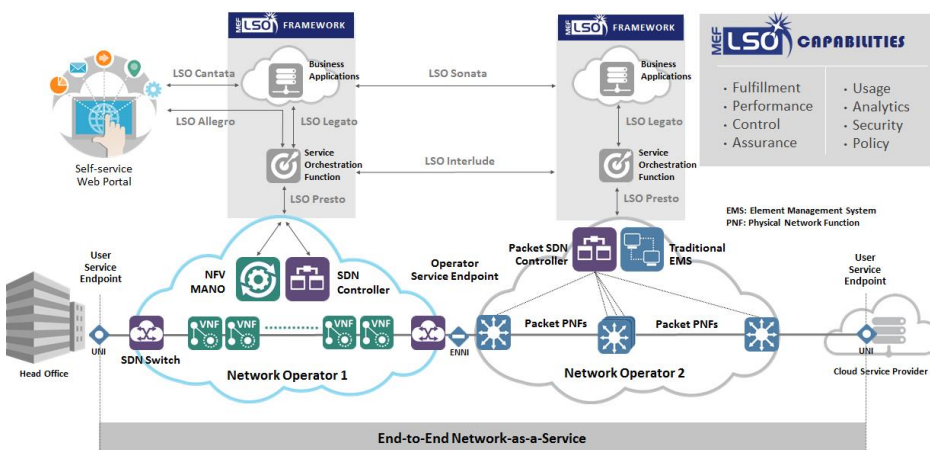
MEF’s strategic work is focused on four major areas: Third Network services, LSO, open initiatives, and certification programs.

On the services front, MEF is expanding beyond CE 2.0 to drive development of orchestrated Layer 1-3 connectivity services (such as wavelengths, CE 2.0, and IP) and orchestrated Layer 4-7 cloud services (such as NFV-based security). For example, MEF members have been working over the past several quarters to create a standard set of attributes that can be used to define IP services delivered over multiple interconnected provider networks. Standardized IP service attributes consistent with those of globally adopted CE 2.0 services will allow providers to leverage MEF LSO work to develop orchestrated IP VPN and Internet access services.

Given the exploding demand for cloud services, an important goal we have is to create a standards-based orchestrated network infrastructure that will permit end-users to access cloud applications on-demand from any cloud service provider and to do so with guaranteed performance SLAs, visibility, control, security, etc.

On the LSO front, earlier this year, MEF introduced our LSO Reference Architecture with open APIs to automate the entire service lifecycle for coordinated management and control across all network domains associated with delivering end-to-end services. LSO development will enable service providers to transition away from today's silo-structured BSS/OSS approach towards flexible end-to-end service orchestration that unleashes the power of SDN and NFV. We currently are advancing work related to LSO interfaces, open APIs, operational processes, and information models required for orchestrating services across multiple technology domains within a single operator and across multiple service and cloud providers.

Lifecycle Service Orchestration (LSO)



Source: MEF

Third, MEF has launched new open initiatives to maximize collaboration involving MEF members, open source projects, and other SDOs. Spearheaded by our CTO Pascal Menezes, open initiatives include the UNITE collaboration program, the LSO Hackathon, and new OpenLSO (Open Lifecycle Service Orchestration) and OpenCS (Open Connectivity Services) reference implementation work.

Finally, on the certification front, MEF is working to enhance and expand our services, equipment, and professional programs to include new elements related to orchestrated Third Network services.

TR: Can you elaborate on the relationship between LSO development and your open initiatives?

Nan Chen: It is clear that we must have standardized open APIs within an agreed-upon orchestration framework to enable on-demand connectivity and NFV-based services over multiple technology domains and multiple providers. We need 'East-West' APIs for automation of interconnectivity between operators, and we need 'North-South' APIs to orchestrate services across Packet WAN, optical transport, SD WAN, and other technology domains.

Timely creation of open API standards requires a more agile development model in which we realize specifications in code quickly, test things out in reference implementations, and provide feedback for further spec development.

We have created OpenLSO and OpenCS reference implementations and are working with prominent open source projects and MEF member companies to maximize alignment of market implementations with MEF's published and emerging LSO and connectivity services specifications.

TR: How will the emergence of orchestrated services impact competition?

Nan Chen: There's a real opportunity for those who embrace orchestrated services to put some distance between themselves and the rest of the market. Companies that already offer CE 2.0 certified services and are now embracing LSO, SDN, and NFV to deliver on-demand connectivity and NFV-based services generally are going to be among the fiercest competitors.

TR: Any closing comments?

Nan Chen: I would encourage service providers and technology suppliers to not just follow MEF work from a distance, but to look for ways to contribute across our four major work areas. The transition to Third Network services powered by LSO, SDN, and NFV is well underway, and we don't want to see anybody left behind.