LSO Vision and Roadmap

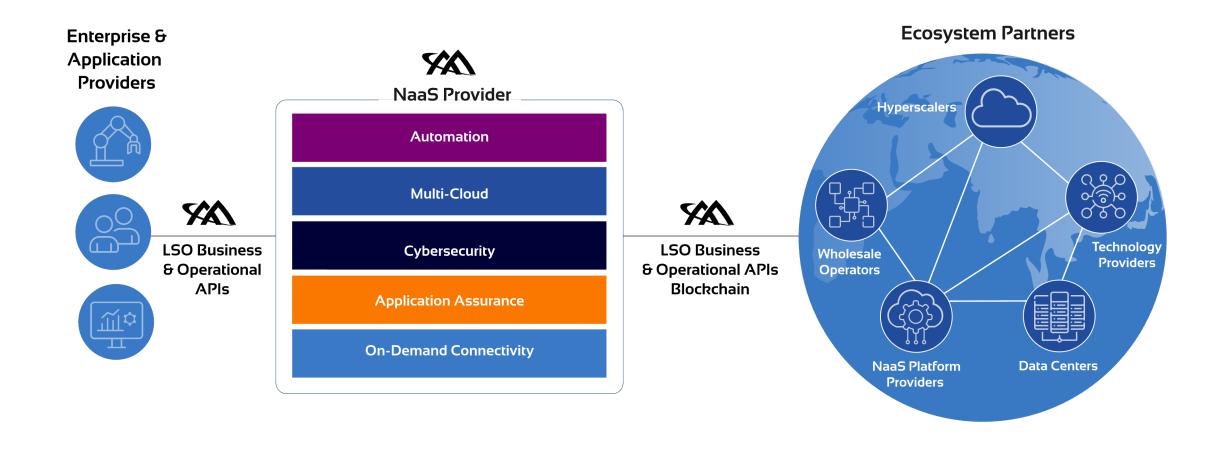




Pascal Menezes MEF, Co-founder & Chief Technology Officer

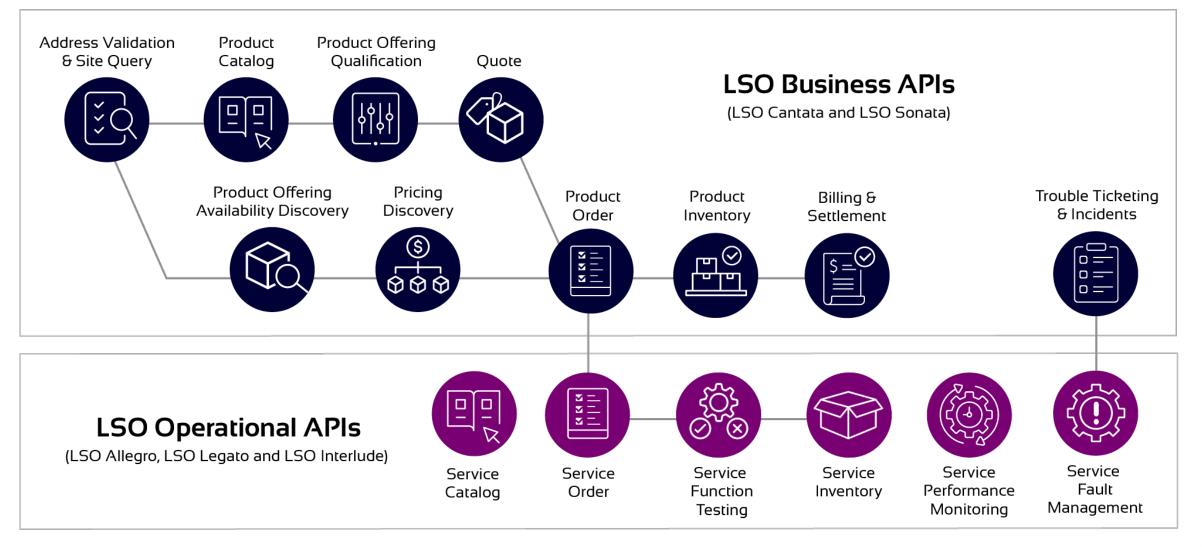
NaaS services will become fully API-driven and will require standards-based automation between ecosystem players





MEF has created or is in the process of creating more than 20 LSO business & operational APIs that can be used to support NaaS





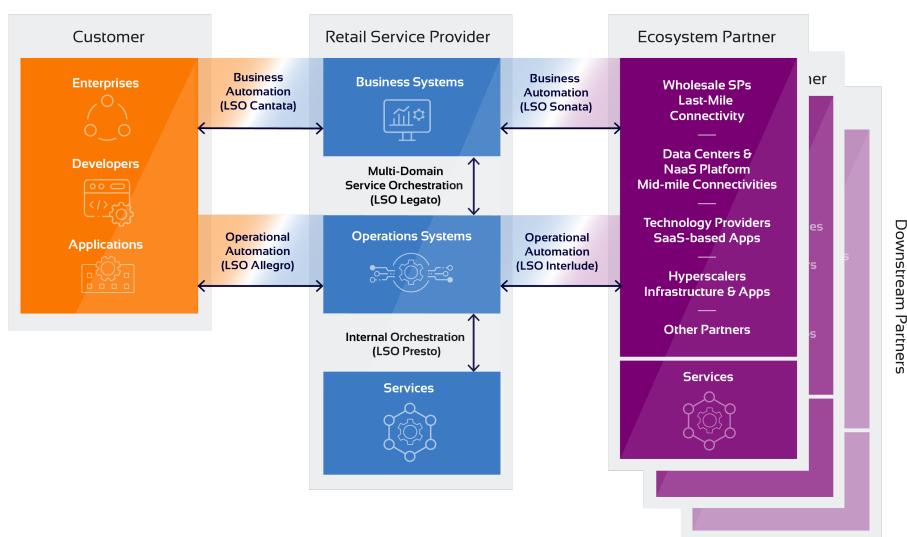
MEF LSO Blockchain & smart contracts play important roles in reducing friction in billing/settlement & enabling NaaS services





MEF's LSO Framework provides the model for automating the full lifecycle of services end-to-end across ecosystem participants

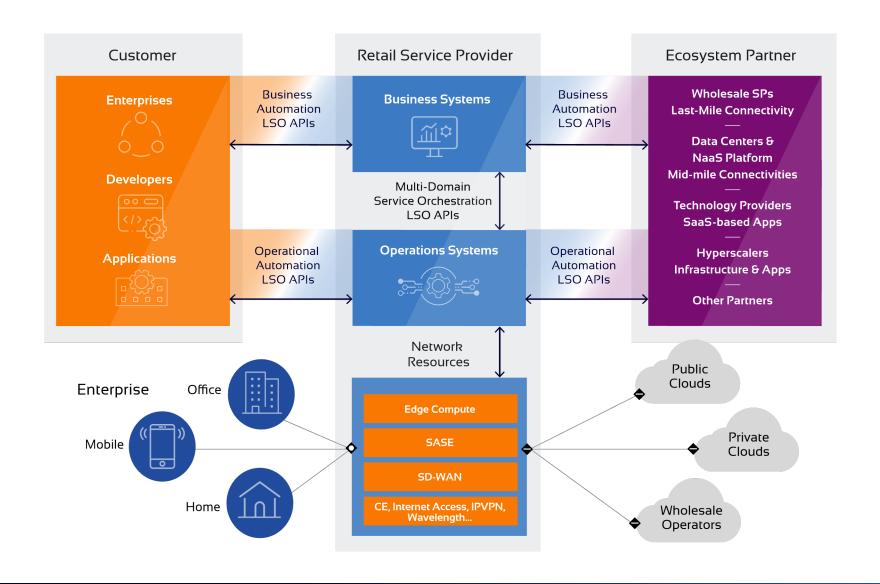




LSO = Lifecycle Service Orchestration

Use of LSO business & operational APIs throughout the supply chain facilitates an automated NaaS experience





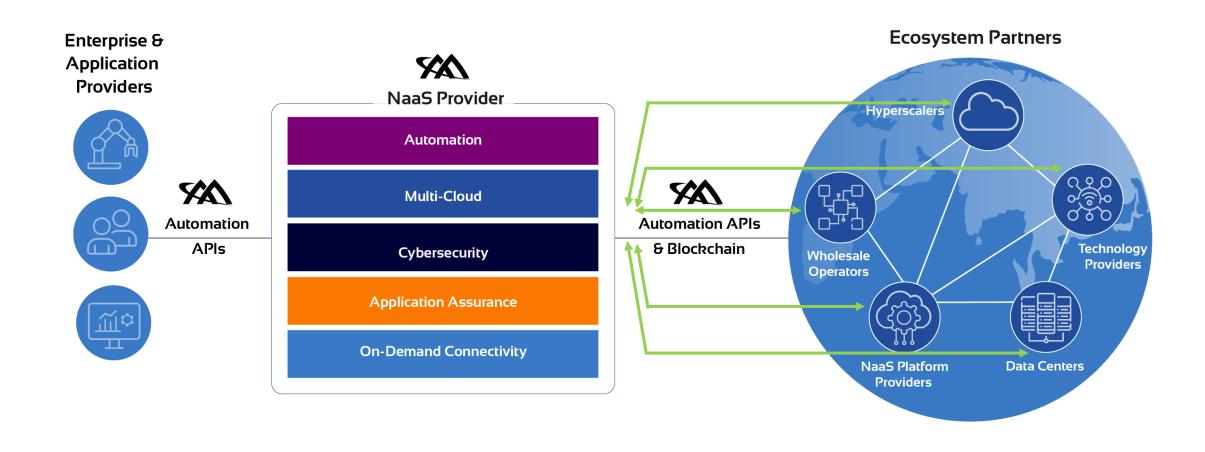
Application developers want to be able to interact with NaaS provider networks via intent





LSO APIs can fuel NaaS growth by enabling service ordering, delivery & management across horizontally integrated networks





Many flavors of product & service payloads can be blended with any LSO API envelope



Payloads

Coperator Ethernel

Internet Access

Wavelength

Etc.

Coperator Ethernel

Internet Access

Wavelength

Wavelength

Coperator Ethernel

Wavelength

Wavelength

Coperator Ethernel

Coperator Ethern

LSO API (Envelope)

LSO Products

MEF Standardized Products

Derived from MEF service standards

- Carrier Ethernet: E-Line, E-LAN, E-Tree and Access E-Line
- **IP**: Internet Access
- Optical Transport: Subscriber
 & Operator
- Network Slice: Subscriber
- SD-WAN: Applications
 8 Policies



MEF Endorsed Products

Non-MEF payload schemas sourced from outside MEF but documented and developed in conformance with MEF guidelines.



Partner Specific Products

Non-MEF payload schemas sourced from outside MEF but not documented.



MEF LSO APIs build & extend upon TMF APIs to provide tightly defined business context, plug-and-play interop & extensibility





Enhance Generic TMF APIs for Higher Fidelity

- MEF standardized or plans to standardize 20+ LSO business & operational APIs, most leveraging TMF APIs
- MEF expands context definition of parameters in TMF APIs
- MEF enhances TMF APIs w/optional parameters
- Governance & alignment to TMF API Domain Context Specialization (DCS) guidelines
- MEF's polymorphic approach combines product/service-agnostic envelopes + product/service-specific payloads



MEF API Resources for Better Developer & Deployment Experience

- Business Requirements and Use Case specifications
- API Developer Guides
- Static & dynamic binding approaches
- LSO Marketplace
- LSO solution providers & LSO partners
- LSO Onboard & Interop Test (OIT) Service
- Cloud-based certification
- LSO Partner Conferences/Summit
- LSO Adoption Tracker

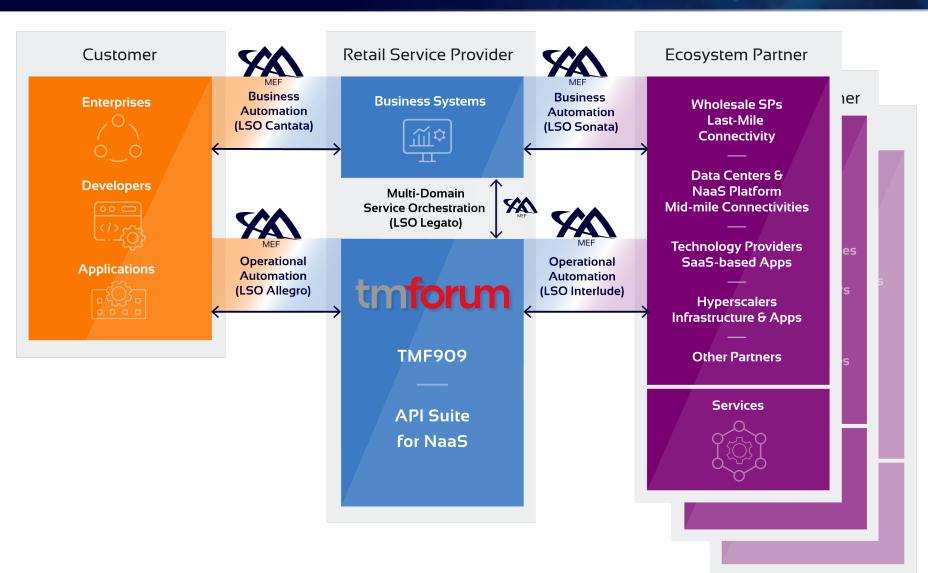


MEF-Defined Product and Service Schemas for Full Interoperability & Extensibility

- Committed to supporting nearly 20 MEFstandardized or MEF-endorsed product and service payloads
- Extensibility to create any product and/or service using MEF guidance documentation

The following illustrates how TM Forum's API Suite for NaaS is aligned to the MEF LSO architecture





Downstream Partners

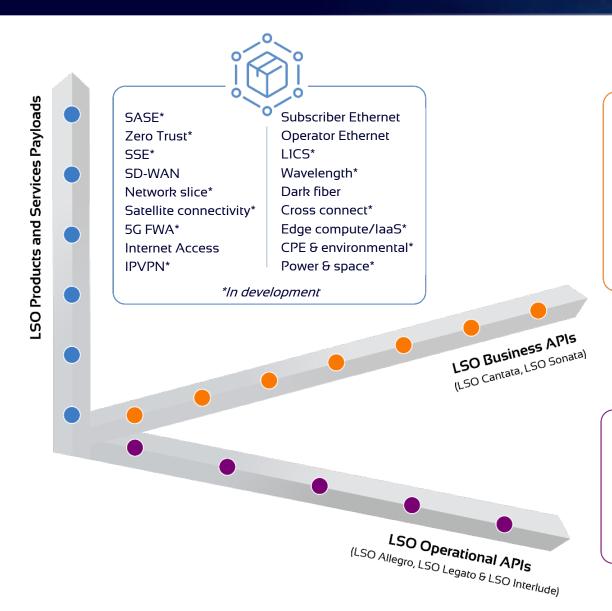
MEF is committed to supporting 20+ MEF standardized or MEF-endorsed product & service payloads that can be blended with LSO envelopes





MEF LSO APIs and Payload Roadmap







Address validation
Site query
Product catalog
Product offering
qualification
Product offering
availability discovery
Quote

Pricing discovery
Product Order
Product inventory
Trouble ticketing &
incidents
Appointment
Work order
Billing & settlement



Service provisioning & control
Service function testing
Service inventory
Performance monitoring profiles

Passive real-time & historical statistics
Threshold crossing alerts
Fault management
Streaming
management



