TM Forum and MEF collaboration

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TM Forum
Collaboration to accelerate the shift to dynamic and assured connectivity services orchestrated over more automated, interconnected networks.
MEF and TM Forum
MEF and TM Forum: Critical Mappings

- DSRA²/ B2B2X Open REST APIs
- Business Process Framework (aka eTOM)
- Application Framework (aka TAM)
- Information Framework (aka SID)

DSRA² Digital Services Reference Architecture
End-to-end MEF Alignment

Objective

Orchestrate

Assets

MEF LSO RA

MEF 55

MEF LSO is realized by extending TM Forum REST APIs

MEF-GIT

TM Forum Live Catalysts

Automate

Process Flows

MEF 50

TM Forum Business model canvas used to capture business flows

Service Lifecycle Frameworks

Adapt

Service Models

MEF 7.2

MEF 7.3 is aligned with TM Forum SID

MEF 7.3

Deliverables
<table>
<thead>
<tr>
<th>LSO Requirements Functional Area</th>
<th>Related MEF 50 Process Flows</th>
<th>Main Related TM Forum TAM Level 2 Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agile Product Offering / Service Design</td>
<td>Product Design; Service and Resource Design</td>
<td>Product Strategy / Proposition Management; Product Catalog Management; Product Lifecycle Management</td>
</tr>
<tr>
<td>Order Fulfillment Orchestration</td>
<td>Capture Customer Order</td>
<td>Solution Management; Customer Information Management; Customer Order Management</td>
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<tr>
<td>Service Control Orchestration</td>
<td>Capture Customer Order</td>
<td>Customer Self Management; Service Order Management; Service Inventory Management</td>
</tr>
<tr>
<td>Service Configuration Orchestration</td>
<td>Service Configuration and Activation</td>
<td>Service Catalog Management; Service Order Management; Service Inventory Management</td>
</tr>
<tr>
<td>Service Delivery Orchestration</td>
<td>Service Configuration and Activation</td>
<td>Service Order Management; Resource Order Management; Resource Process Management (Workflow/Integration)</td>
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</table>
## Mapping to LSO / MEF 50 / TAM - 2

<table>
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<tr>
<th>LSO Requirements Functional Area</th>
<th>Related MEF 50 Process Flows</th>
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<tbody>
<tr>
<td>Service Testing Orchestration</td>
<td>End-to-End Service Testing</td>
<td>Service Test Management;</td>
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<tr>
<td>Service Problem Management</td>
<td>Service Problem Management</td>
<td>Customer Problem Management;</td>
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<td>Service Problem Management</td>
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<td>Service Quality Management</td>
<td>Service Quality Management</td>
<td>Product Performance Management;</td>
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<td>Customer SLA Management;</td>
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<td>Service Performance Management;</td>
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<td>Service Quality Management</td>
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<tr>
<td>Billing and Usage Measurements</td>
<td>Billing and Revenue Management</td>
<td>Billing Events Management;</td>
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<td></td>
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<td>Usage Management;</td>
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<tr>
<td>Security Management</td>
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<td>Security Management</td>
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<tr>
<td>Analytics</td>
<td>Service Quality Management</td>
<td>Business Intelligence</td>
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<td>Policy-based Management</td>
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<tr>
<td>Customer / Partner Management</td>
<td>Establish Relationship between Service Provider and Access Provider</td>
<td>Customer Self Management;</td>
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<td></td>
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<td>Supplier/Partner Management</td>
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Mapping LSO RA to TM Forum Open APIs

• **Rationale**
  – Don’t re-invent the wheel
  – Accelerate and secure MEF deliverables
  – Promote MEF use cases to broader community
  – Promote LSO end-to-end orchestration pattern to broader range of use cases.

• **Work in progress (stable draft).**
  – Initiated in MEF
  – Now in TMF Open API program (TR258). Review, completion, test in Catalyst projects (PoCs) and Hacks at TM Forum Live! 2016 (last week of May).
  – Will be contributed back to MEF (May/June depending on feedback).
Open API Mapping Contribution

TR 258 [DRAFT] Mapping of TM Forum Open APIs to MEF Lifecycle Service Orchestration Reference Architecture

LSO Reference Architecture

Customer Domain
- Network Infrastructure
- Service Orchestration Functionality

SP Domain
- Infrastructure Control and Management
- ADAGIO (KCI-ECM)

Partner Domain
- Infrastructure Control and Management

Network Infrastructure

TM Forum Ecosystem API Portal

- Developer Quick Start Guide
- API Table
  - Trouble Ticket API REST Specification (TMF621) R14.5.1
  - Customer Management API REST Specification (TMF629) R14.5.1
  - Product Catalog Management API REST Specification (TMF620) R14.5.1
  - Product Inventory Management API REST Specification (TMF637) R14.5.1
  - Product Ordering API REST Specification (TMF622) R14.5.1
  - Billing Management API REST Specification (TMF636) R14.5.1
  - SLA Management API REST Specification (TMF633) R14.5.1
  - Usage/Management API REST Specification (TMF635) R14.5.1
  - Performance Management API REST Specification (TMF628) R14.5.1
  - Open Digital API Business Guide
Extracts of Mapping

**CANTATA:**
- Product Catalog Management
- Product Ordering
- Product Inventory
- Billing Management
- Usage Management
- Trouble Ticketing
- Service Level Agreement
- Customer Management
- Party Management
- Onboarding
- Quote Management
- Federated identity
- Service Qualification
- Appointment Management
- Address Management
- Test Management

**ALLEGRO:**
- Service Level Agreement
- Performance Management
- Usage Management
- Trouble Ticketing
- Service Ordering
- Activation and Configuration
- Service Qualification
- Service Inventory
- Service Catalog
- Service Problem Management
- Test Management
- Event?

**PRESTO:**
- Performance Management
- Usage Management
- Activation and Configuration
- SNMP
- XML and other legacy

**ADAGIO:**
- CLI
- NETCONF
- OpenFlow, etc.
MEF and TM Forum nicely complement each other.

Ensuring and maintaining alignment is critical.

Functional APIs for LSO is the next step.
Q&A
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