

# PoC Demo #1

ZSM ISG Interim Meeting

Kista, Sweden – Ericsson

July 11, 2018

## **PoC Champions**

Serge Manning, Sprint

Michael Klaus, Deutsche Telekom

## **PoC Team Contact**

Dave Duggal, EnterpriseWeb

**Demo #1 Scenario:** ZSM framework performing autonomic closed-loop, automating end-to-end SLA management (multi-vendor, multi-domain, multi-VIM)

**Demo #1 Use-Case:** Secure VoLTE

**Demo #1 Story:** A healthy running service is degraded due to Denial-of-Service attack. ZSM Framework correlates events, auto-scales and assures

**PoC Team/Role:** Amazon Web Services (NFVI), Amdocs, (Customer Management), EnterpriseWeb (ZSM Framework), EXFO (Service Monitoring), Fortinet (Security VNF), Infosim (Resource Monitoring), Metaswitch (IMS VNF)

Note: demo also incorporates Open-Source projects (CORD and Radisys EPC)

### **PoC Contributions:**

- Demo #1 Video <https://vimeo.com/279707642/619706d16c>
- 'Straw Man' Information Model with Minimum Viable Data Models
- Model for an Intent-based Network Service
- Model for Domain Orchestrator to Domain Orchestrator Interface (DOr-DOr)
- Model for Abstracting Standard LCM Operations
- Sequence Diagrams describing model-based, event-driven, policy-controlled choreography

## 4.2 The Principles

Principle 01: Modularity

Principle 02: Extensibility

Principle 03: Scalability

Principle 04: Model-driven open interfaces

Principle 05: Closed loop management automation

Principle 06: Support for stateless components

Principle 07: Resilience for failure

Principle 08: Separation of concerns in management

## ZSM Requirements based on documented scenarios

PoC Scenario and Use-Cases cover 50% of requirements

Rough Mapping to ZSM Requirements included with set of PoC contributions

Future iterations of PoC will cover additional Scenarios and Use-Cases to demonstrate broader coverage

# PoC Demo #2

Layer 123, Den Hague

October 8, 2018

## **PoC Champions**

Serge Manning, Sprint

Michael Klaus, Deutsche Telekom

## **PoC Team Contact**

Dave Duggal, EnterpriseWeb

**Demo #2 Scenario:** ZSM framework dynamically interacting with External Systems to support 'Upselling' of SLAs by Customer Management System

**Demo #2 Use-Case:** Secure Video Service

**Demo #2 Story:** Customer running video and SLA is satisfied until they attempt to run HD video, QoS performance requirements not satisfied by SLA

**PoC Team/Role:** Amazon Web Services (NFVI, multiple zones), Amdocs (Customer Management), EnterpriseWeb (ZSM Framework), EXFO (Service Monitoring), Fortinet (Security VNF), Infosim (Resource Monitoring), Metaswitch (IMS VNF)

Note: demo also incorporates Open-Source projects (CORD and Radisys EPC)

- Zero-Touch Network and Service Management (ZSM) Framework is connected to external Customer Management (CM) System via NBI
- ZSM Framework is reporting Service Health to CM System (SLA for streaming performance where QoS metric being bit-rate)
- ZSM Framework continues to manage service w/in SLA thresholds
- CM System has its own internal application logic that performance is impacting QoS and will negatively impact Customer Experience – dynamically makes offer to upgrade SLA – customer takes offer
- CM System communicates change in SLA to ZSM Framework
- Change in SLA is a ZSM Framework event, it prompts re-evaluation of service performance relative to new upgraded SLA and will scale service to re-balance for upgraded SLA as per PoC Demo #1



## Presentation: Zero-touch Automation

### Automation Track

Thursday, October 11<sup>th</sup> at 11:25am

Amazon Room

## Demo: Visit us at Stand D6

At top of stairs, 2<sup>nd</sup> floor