ONAP in ETSI ZSM Architecture

A proposal for discussion by
Amdocs, DT, Ericsson, Huawei, Nokia
ETSI-ZSM ISG Role & Activities

Industry Specification Group Zero touch network and Service Management (ISG ZSM)

- Intention to provide future-proof, horizontal and vertical end-to-end operable framework
- The goal is to have all operational processes and tasks (e.g. delivery, deployment, configuration, assurance, and optimization) executed automatically, ideally with 100% automation
- Providing guidance for implementation of management interfaces as well as coordinating and giving directions to achieve automated end-to-end network and service management solutions and architecture
- Review and reuse existing standardized solutions wherever applicable, and conduct feasibility studies
Introduction

- ETSI-ZSM has the ambition of zero touch service management and has created an architecture
- The approach was shared with ONAP at the joint subcommittee meetings in April 2019
- As a follow-up it was agreed that ETSI-ZSM would make a proposal on how ONAP fits with the ZSM architecture, which will be later shared with the ONAP Architecture subcommittee for review
- This is an initial proposal.
  - It presents an option illustrating how ONAP based implementation (as a whole) would fit into the ZSM architecture
  - It presents an option illustrating how ONAP components would fit into the ZSM architecture and how the components map within a ZSM deployment
  - It’s also possible to have other combination options
What is the intent of this presentation?

• The focus is mapping an ONAP implementation architecture into a ZSM functional architecture

• Showcase "how there is no contradiction but rather a complement of views"

• Serve as a starting point for further collaboration
ZSM Scope

Domain Managed Infrastructure Resources

Physical  Virtual  XaaS

E2E Service Management Domain

Management Functions

Domain Integration Fabric

E2E Orchestration  E2E Intelligence  E2E Analytics  E2E Data Collection

Management Domain

Management Functions  Data Services

Domain Integration Fabric

Cross-domain Integration Fabric

Data Services

Legend

Offered set of ZSM services

Consumed set of ZSM services

Closed loops

ZSM framework consumers

ZSM Scope

E2E Service Management Domain

Management Functions

Domain Integration Fabric

E2E Orchestration  E2E Intelligence  E2E Analytics  E2E Data Collection

Management Domain

Management Functions  Data Services

Domain Integration Fabric

Cross-domain Integration Fabric

Data Services

Legend

Offered set of ZSM services

Consumed set of ZSM services

Closed loops

ZSM framework consumers
Management Services - Logical Groups

E2E Service Management Domain
- E2E service Orchestration
- E2E service Intelligence
- E2E service Analytics
- E2E service Data Collection

Cross-domain Integration Fabric

Management Domain
- Domain Control
- Domain Orchestration
- Domain Intelligence
- Domain Analytics
- Domain Data Collection

ZSM Scope

Cross-domain Data Services

Data Services
Implementation Options (for ONAP as a whole)
Implementation Options (for leveraging ONAP components)
Management Service Groups <-> ONAP components

E2E Service Management Domain
- E2E service Orchestration
- E2E service Intelligence
- E2E service Analytics
- E2E service Data Collection

Cross-domain Integration Fabric

Domain Control
- Domain Orchestration
- Domain Intelligence
- Domain Analytics
- Domain Data Collection

ZSM Scope

ONAP
- APPC
- SDN - C

Data Services
Management Service Groups <-> ONAP components

- E2E Service Management Domain
  - E2E Service Orchestration
  - E2E Service Intelligence
  - E2E Service Analytics
  - E2E Service Data Collection

- Cross-domain Integration Fabric

- Management Domain
  - Domain Control
  - Domain Orchestration
  - Domain Intelligence
  - Domain Analytics
  - Domain Data Collection

- ONAP
  - SO
  - VF-C

ZSM Scope
Management Service Groups <-> ONAP components
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- **E2E Service Management Domain**
  - E2E service Orchestration
  - E2E service Intelligence
  - E2E service Analytics
  - E2E service Data Collection

- **Cross-domain Integration Fabric**
  - Domain Control
  - Domain Orchestration
  - Domain Intelligence
  - Domain Analytics
  - Domain Data Collection

- **ONAP**
  - A&AI
  - Logging
  - DCAE
  - Multi-Cloud

**ZSM Scope**
Cross-domain Integration Fabric

Management Service Groups <-> ONAP components

ONAP

- AAF
- DMAAP
- MSB
- OOM
- External API
- MUSIC
- VID, CLI
Notes from the ETSI ZSM session at the ONAP joint sub-committee meetings in Antwerp, 26th September 2019