

2023-11 - ONAP: ACM-R Instance Migration

Topic Leader(s)

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Topic Description

30min [Saul Gill](#)

An important update to the ACM-R system has been made since the previous release. In addition to many other features, we now support live migration of instances from one Automation Composition Definition to another. These enhancements represent a natural progression of the functionality of ACM-R to support its growing user base.

Topic Overview

To get a feature, service, or capability working in modern networks is not straightforward. It is not as simple as deploying a microservice or running a workflow. Our features, services, and capabilities are now typically delivered using loose compositions of microservices, rules, algorithms, configurations, and workflows. Of course, we use workflows and deploy microservices, but how do we keep track of what workflow activated which service or what microservice instance enables a given capability. We must be able to deploy, keep track of, amend, and remove the compositions that combine to give us our features, services and capabilities, that is, we must manage those compositions. We use Automation Compositions for this purpose, along with a Participant-based architecture that allows the user to detail configuration, resources, properties and deployment logic at a high level. The Participants serve as adaptors to allow our Automation Composition Runtime to manage deployments and workflows on a wide variety of third party systems. We provide a module that can be used to create a Participant towards the system of your choice. This demo will show that, in addition to allowing initial management and deployment of large workflows, we now support live migrations of instances and workflows from a source-to-target Automation Composition - allowing us to step up to a more recent version of the workflow or down to an older version - with minimal downtime.

The demo will detail:

- The commissioning of tosca definitions that will serve as the model for the workflow to be deployed.
- The creation and deployment of instances - based on the tosca model.
- The monitoring and management of these instances and each element of the workflow.
- The commissioning of a newer set of tosca definitions to model changes that need to take place in the workflow.
- The migration of existing instances/elements to adopt the changes from the newly commissioned definitions.

Slides & Recording



YouTube

- Demo Recording (TBA)
- Slides [ONAP: ACM-R Instance Migration.pdf](#)

Agenda

ACM-R

- Slides for system explanation.
- Initial Questions
- Demo
- Closing Questions

Minutes

Action Items

