## <<< CFP SDC Global. Theme: Orchestration>>>

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## Resilient Workflow Automation in a Hybrid Cloud environment

Every service in the on-prem, cloud, or hybrid environments is a sequence of specific operations to realize a specific use case. Hence building custom workflows for each use case is demanding. If it is with a framework that is orchestration engine agnostic, then it is really compelling!

Currently, there are different Orchestration engines (Stackstorm, Argo, etc..) used based on the vendors, products, and environments. Each orchestration engine, demands specific syntactic and semantic rules for workflow development. This makes it harder to build and manage services in heterogeneous environments.

In this session, the authors present a unified orchestration and automation framework which is completely open-source and which can support heterogeneous orchestration engines in a pluggable extension way. Moreover, it provides custom workflow development and deployment agnostic to those orchestration backends.

The project has been developed under SODA Foundation , and it provides the capability to

- a) Create Service catalog i.e Workflow definition and dynamically connect to the desired orchestration engine
- b) There can be multiple 'services instance' created for a particular catalog, but when the orchestration engine changes, the service instance is un-affected
- c) Scale to different orchestration engines for different service instances of a particular service catalog. Ex: WF definition is to "spawn instances in cloud VPC with a particular startup script" in three different cloud providers using three different Orchestration engines
- d) Custom workflows and configurable automation

## **Objectives:**

- a) Create once, execute multiple times
- b) Plug N Play Orchestration engine
- c) Continuity of applications like "Ticket Remediation system" without the change in the backend
- d) Open-source solution