Resilient Workflow Automation in a Hybrid Cloud environment

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SODA Foundation
Agenda

- What is Workflow and Orchestration
- Resilient Workflow Definition
- Introduction to ‘Resilient workflow Automation (RWA)
- Why we need it
- How can it be solved
- Solution with SODA Orchestration
- High Level Design
- Demo
- Advantage Open Source
- Blueprint
  - “The way to get started is to quit talking and begin doing” - Walt Disney
Workflows & Orchestration??

- **Workflows are nothing but** “a sequence of tasks”

- Workflow Orchestration is simply:
  
  “bundling the tasks and facilitating it for an organized flow to provide seamless service and meet the SLA”

- **Workflow definitions are** STATIC

- **Orchestration engines can be** NON-STATIC

- **An Orchestration Engine can change as per business need**
Resilient Workflow Definition

- Segregate Workflow service with the Engine
- Workflow definitions are Resilient as no need to change the definitions if Orchestration engine is replaced
- Simple Plug N Play
Introduction to RWA

- Complex services in on-prem or cloud environment
- Need to define workflows and automate it
- Workflow orchestration is necessity
- Workflow Orchestration engine is necessary
- Segregate WF definition with WF Engine
Why we need it!!

Use case:

- Define Workflow *Once*, Use it *Anywhere*
- Workflow Orchestration engine agnostic
- Plug-n-Play with any engine
- Adaptive Framework
How!!

. Approach
  - Framework to define Workflow definition
  - Framework to instantiate instances of Workflow services
  - Transparent to the underlying Orchestration Engine
  - Change/migration of Orchestration engine doesn’t affect the Workflow service instance
  - Client is unaffected
High level design
Advantage Opensource

- An Opensource Orchestration Framework
- Can be customized as per requirement
- Just define the actions for orchestration engine
- Developed and maintained by community
- No vendor lock-in
Blueprint

- https://github.com/sodafoundation/orchestration
- https://github.com/sodafoundation/design-specs/blob/master/specs/capri/orchestration_automation_design.md
- https://github.com/sodafoundation
Thank You

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