SDC 20

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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”*

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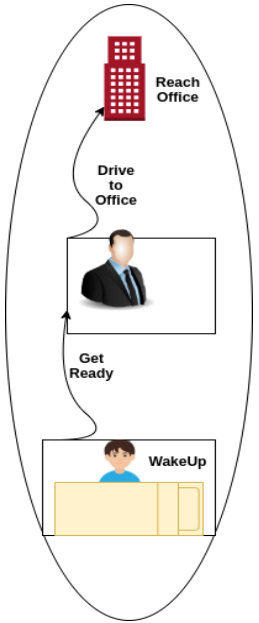
Workflows & Orchestration??

- 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



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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

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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

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Why we need it!!

Use case:

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

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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

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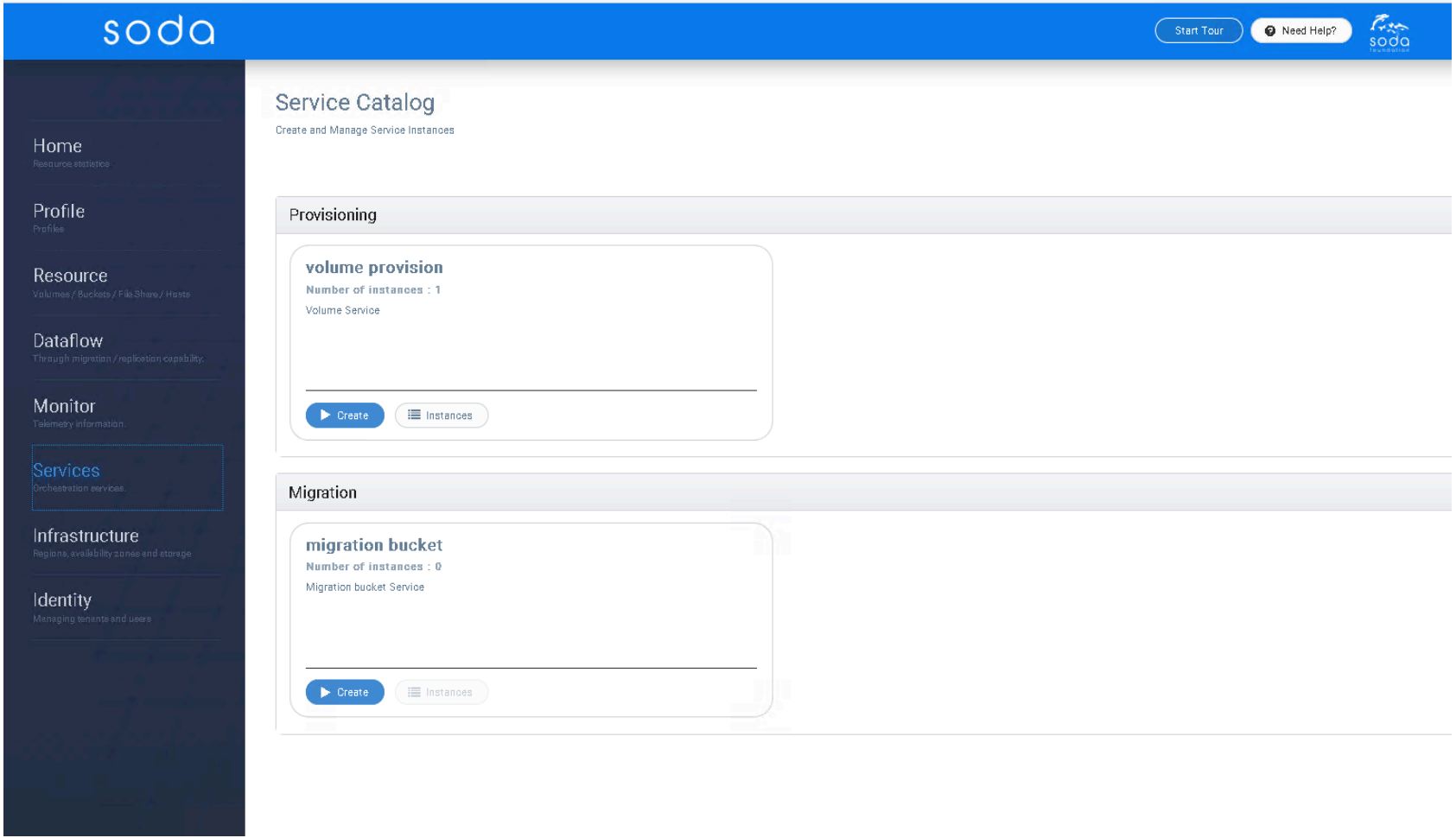

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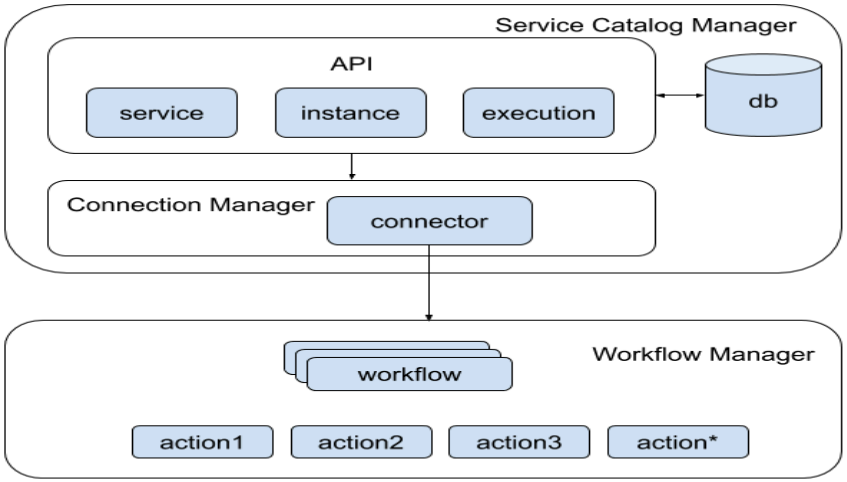
High level design



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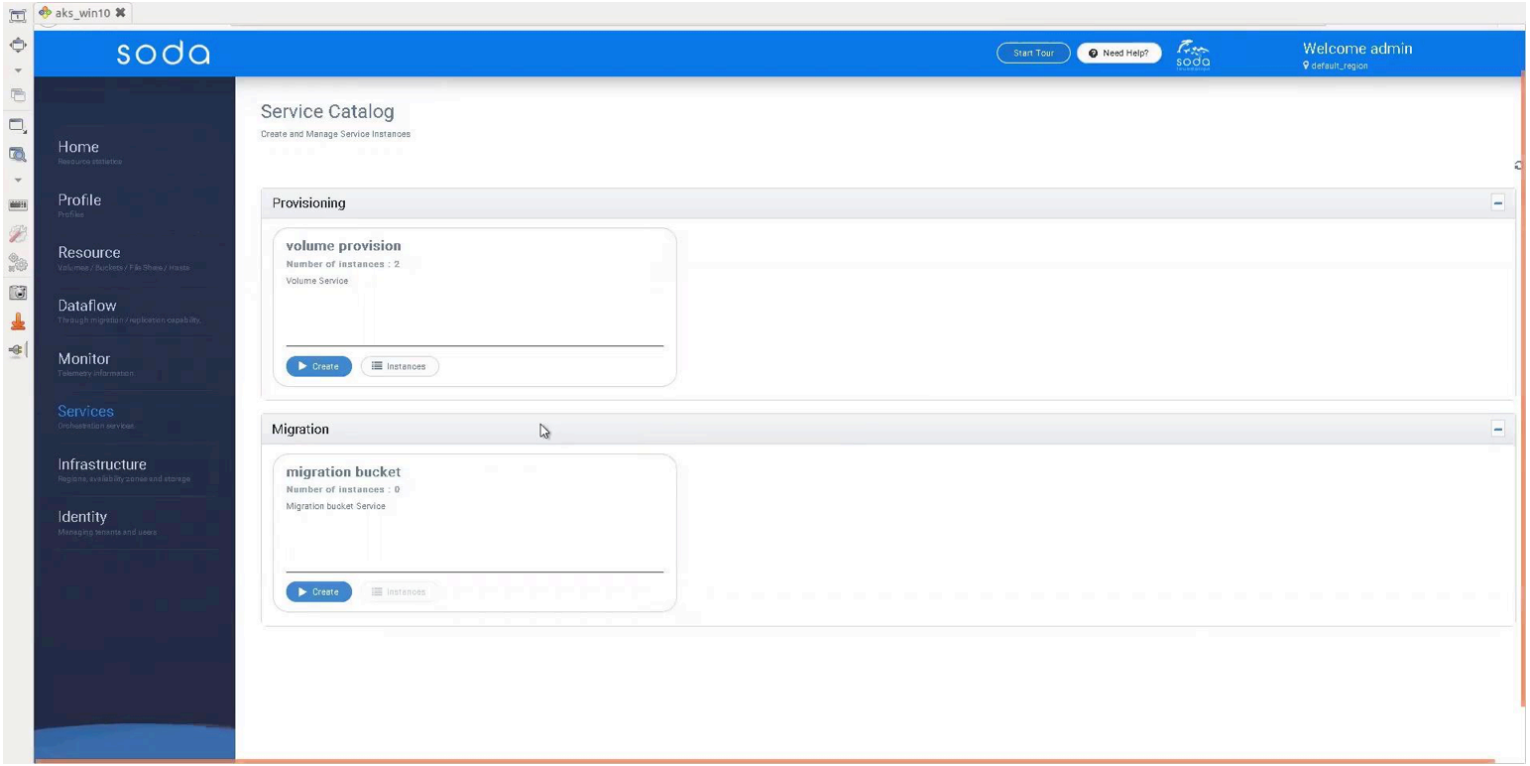
DEMO



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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

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Blueprint

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

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Thank You

[https://sodafoundation.io]

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