

Workflow Designer

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| Target release | R2 |
| Epic | |
| Document status | DRAFT |
| Document owner | Srinivasa Vellanki |
| Designer | |
| Developers | |
| QA | |

Goals

- Enable Designers(Service Designer, VNF Owner or TechOps) to be able to specify the workflow for supporting VNF change management scenarios

Background and strategic fit

Currently Operation processes(workflows) are being developed by MSO developers, forcing Operations Team to wait for ECOMP software release cycles for any changes in the processes.

To allow for better agility the ask is to enable Designers to be able to specify the Service or VNF Operation processes(workflows).

Strategically Flow Designer is considered to be used in 3 major domain areas if not more..

1. Change Management - will be our focus for R2
 - a. There is little standardization in how to perform these operations across various Vendor VNFs, resulting in need of defining Workflow for VNF Change Management Operations
2. Service Assurance - Analysis in parallel to clarify architecture and requirements. Is it topology design?
3. Service Fulfillment - Workflows of SO can be generated from TOSCA Models of service and VNF i.e. declarative topology model driven workflows built by development as part of core platform capability and hence no needs in designer are anticipated at this time

High Level Solution



Assumptions

1. There is no need for Designer to define workflow for VNF and Service MACD operations.
2. SO is the only component for which workflows will be designed by designer in R2
3. Dependency between ActivitySpec is always Finish to Start. No need to support status to status dependency between ActivitySpec.
4. All the automated Activities are short-lived and idempotent.

Requirements

| # | Title | User Story | Importance | Notes |
|----|-------------------------------------|--|----------------------------|---|
| 1 | Design Workflows | Designer should be able to define workflows for various VNF operations | Must Have | |
| 2 | Workflow Changes | Operations should be able to introduce new workflows or changes to existing workflows based on existing ActivitySpecs with-out any dependencies on ONAP releases | Must Have | |
| 3 | Create ActivitySpecs | SO or other ONAP orchestration components having workflows defined by Designer need to be able to create(register) their ActivitySpecs. | Must Have | Created ActivitySpec need to be certified to be available for the designer to use in workflow designs. |
| 4 | ActivitySpec Categorization | Should be possible to categorize ActivitySpec so that they can be filtered based on workflow context. | Nice to Have | There might be ActivitySpec applicable to specific VNF categories. It might be possible to categorize Activities based on the workflow status in which they can be used. Concept of use of category is not matured will evolve in later releases. |
| 5 | ActivitySpec Inputs & Outputs | Should be possible to define ActivitySpec inputs and outputs | Must Have | |
| 6 | Certify ActivitySpecs | SO or other ONAP orchestration components need to be able to certify their ActivitySpecs so that the ActivitySpec are available for designer to use in workflows. | Must Have | |
| 7 | Deprecate ActivitySpecs | SO or other ONAP orchestration components should be able to deprecate ActivitySpec so that they can be restricted from being used in new workflows being designed by Designer. | Nice to Have | Deprecated ActivitySpec can continue to be used in workflows executed in SO or other ONAP orchestration components |
| 8 | Update ActivitySpecs | SO or other ONAP orchestration components should be able to update ActivitySpec. | Nice to Have OOS for R2 | |
| 9 | Delete ActivitySpecs | SO or other ONAP orchestration components should be able to deprecate ActivitySpec so that they no longer exist in the system | Nice to Have OOS for R2 | |
| 10 | Workflow BPMN Artifacts | Should be possible to generate workflows as BPMN artifacts. Should be BPMN 2.0 compliant. | Must Have | Should not put any constraints on the BPMN execution engine used. Should be possible to use any BPMN2.0 compliant workflow execution engine. |
| 11 | Workflow Designer is for a Designer | Workflow Designer is NOT a developer so the skills required to define a workflow design should not be of a developer. Activity Definition/Specification SHOULD abstract implementation details of the Activity from the Designer | Must Have | |
| 12 | Graphical Workflow Designer | Designer SHOULD be able to work with Graphical Representation of the workflow. Something like BPMN.IO | Must Have | |
| 13 | Workflow Controls | All the standard workflow controls should be supported. | Must Have | If any workflow controls cannot be supported, need to record in the OOS list. Or should we list the workflow controls supported in R2? |
| 14 | UI & UX Guidelines Compliance | All SDC components will comply to SDC UI Guidelines | Nice to Have | |
| 15 | Operational Cost | Workflow Designer should minimize introduction of new operational costs. | Must Have | Example.. No new storages to be introduced needing to manage their HA and Geo-Redundancy leading to additional operational costs. |
| 16 | | | | |

User interaction and design

Questions

Below is a list of questions to be addressed as a result of this requirements document:

| # | Question | Outcome |
|---|--|---------|
| 1 | What are the workflow controls supported in R2? | |
| 2 | How can we have workflow controls conditions be defined? | |

Not Doing

1. ActivitySpec versioning is OOS for R2

Attachments

| File | Modified |
|---|--|
| Microsoft Powerpoint Presentation ONAP SDC Workflow Designer High Level Overviewv6.pptx | Jul 17, 2018 by Srinivasa Vellanki |
| Microsoft Word Document ONAP Dublin Workflow Designer DRAFT.docx DRAFT Dublin Workflow Designer | Nov 21, 2018 by Chris Rapposelli-Manzo |

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