



DCAE – BP Generator Overview

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Design Artifacts - Tosca Lab (cli version)

Input - MS component spec file (json)

Output:

Models

- schema.yaml template.yaml translate.yaml (used by SDC/DCAE-DS) to generate composite cloudify blueprint
- policy.yaml (used by Policy and CLAMP)

Deployment Artifact

- cloudify blueprint (used by DCAE)

Current Gaps:

1. ToscaLab (standalone) current version unusable for model generation
2. ToscaLab (standalone) current version unusable for blueprint generation
3. SDC/DS doesn't support K8s compatible blueprint generation

Why Blueprint generator?

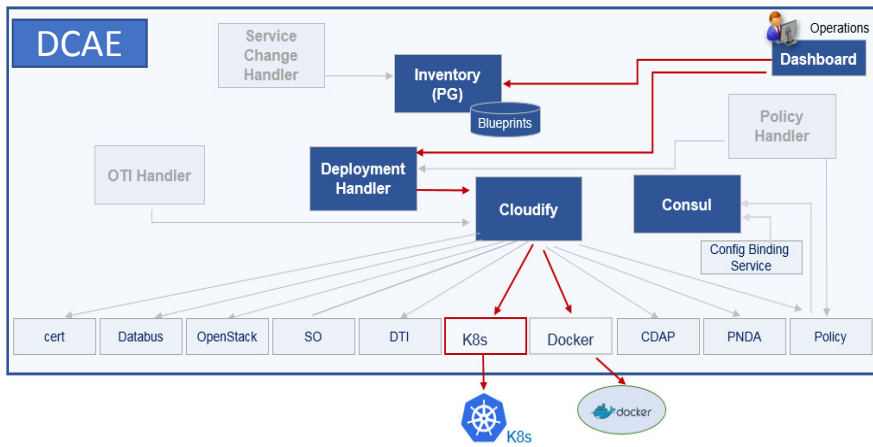
- Not all DCAE MS are deployed through CL flows
- Provide self-serve capability for DCAE MS for blueprint generation
- Abstract deployment artifact creation and focus on component modelling to improve reusability
- Remove Toscalab dependency for blueprint generation (for standalone components)

Onboarding prerequisite -

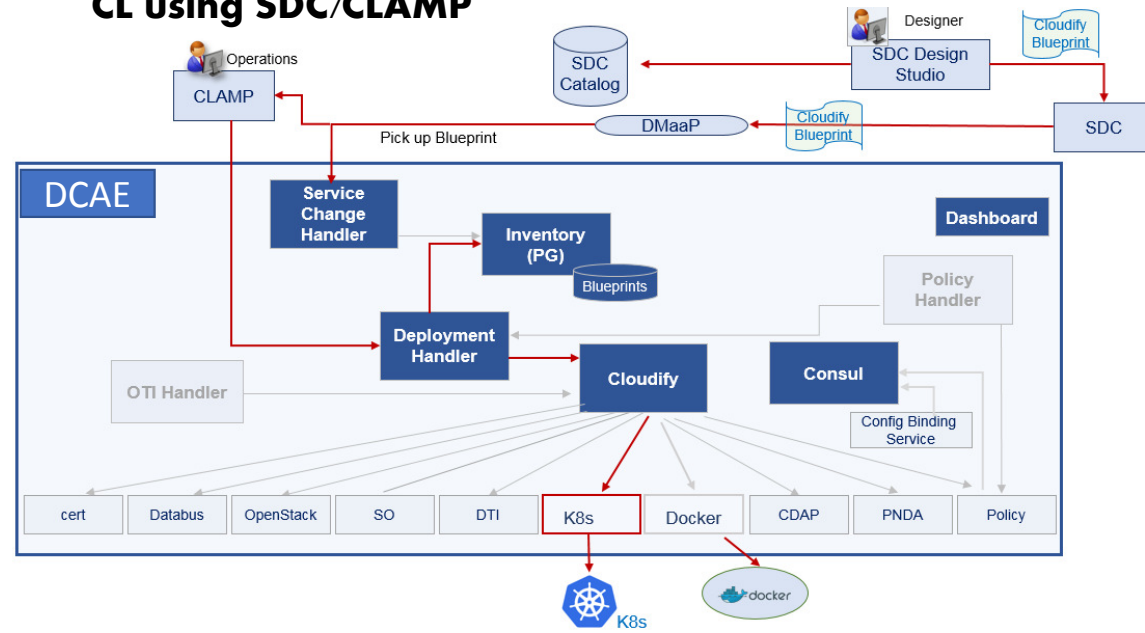
<https://docs.onap.org/en/dublin/submodules/dcaegen2.git/docs/sections/components/component-development.html>

DCAE Application – Deployment Workflow

Stand-alone (DCAE)



CL using SDC/CLAMP



Service Components (MS) DCAE Integration/Onboarding Impact - Dublin

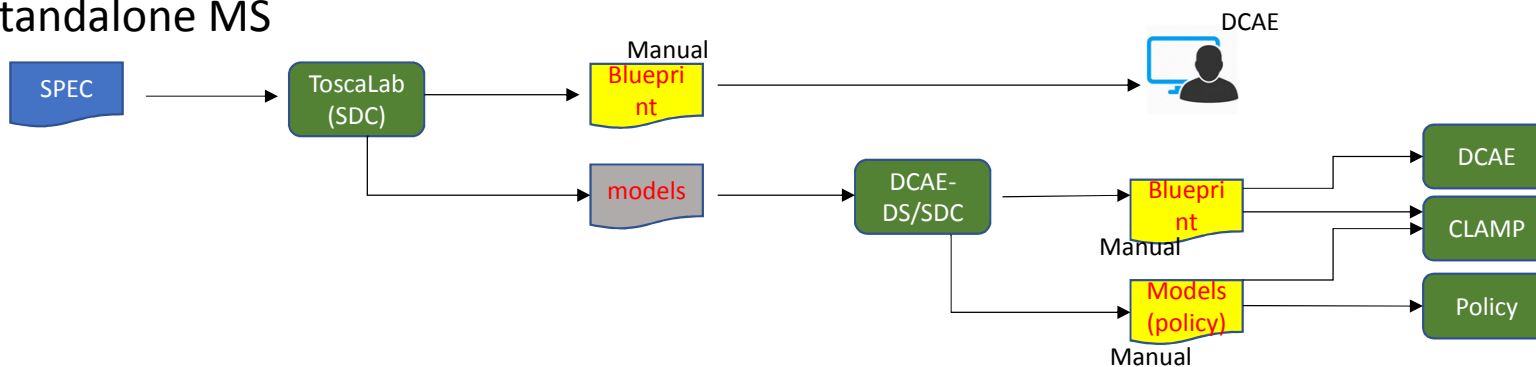
- [Option 1 : Static Components \(instantiated through DCAE-bootstrap\)](#)
Requires CBS integration
- [Option 2 : On-demand deployment through CLAMP](#)
Requires CBS integration + policy modelling + onboarding through SDC/CLAMP/Policy/DCAE flow
- [Option 3 : On-Demand deployment through DCAE-Controller cli/Dashboard](#)
Requires CBS integration + policy modelling

Note: Standalone with static configuration is also supported but current none of DCAE MS fits under this model

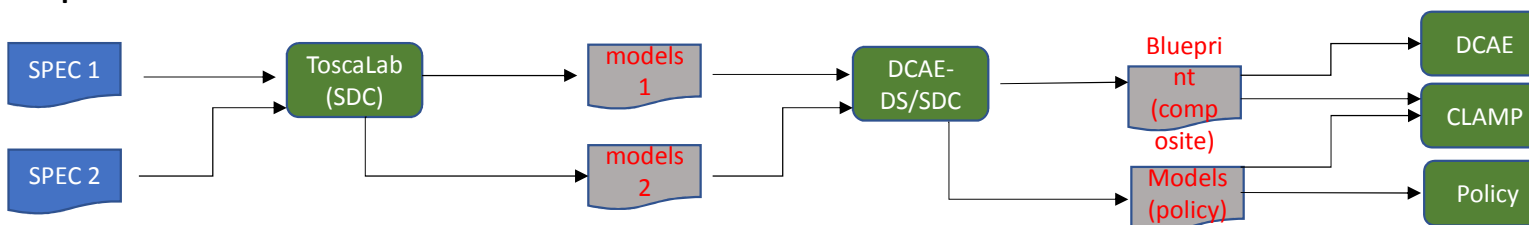
Reference : <https://wiki.onap.org/pages/viewpage.action?pageId=36963506>

ONAP DESIGN FLOW (Casablanca)

Standalone MS



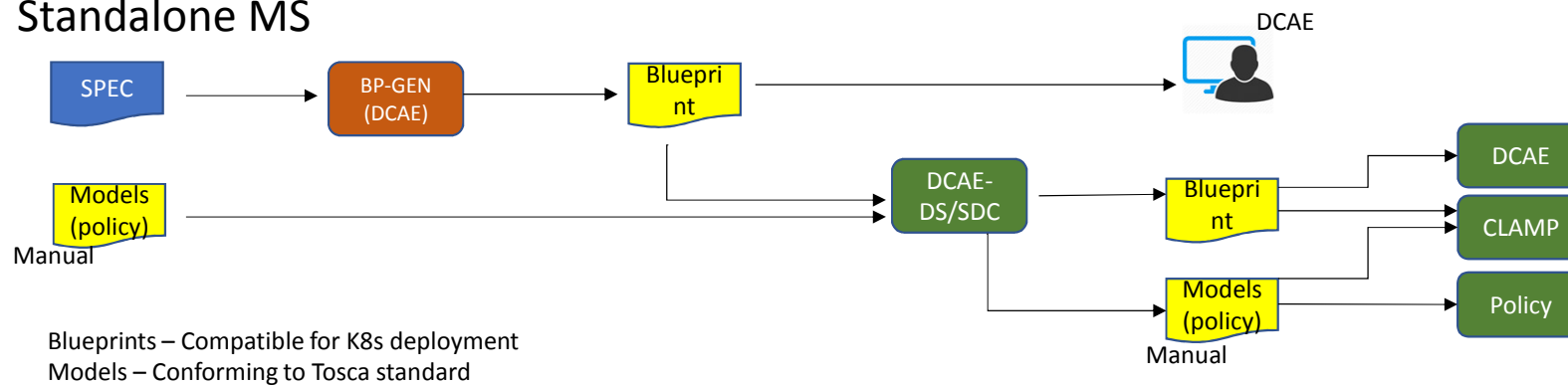
Composite MS



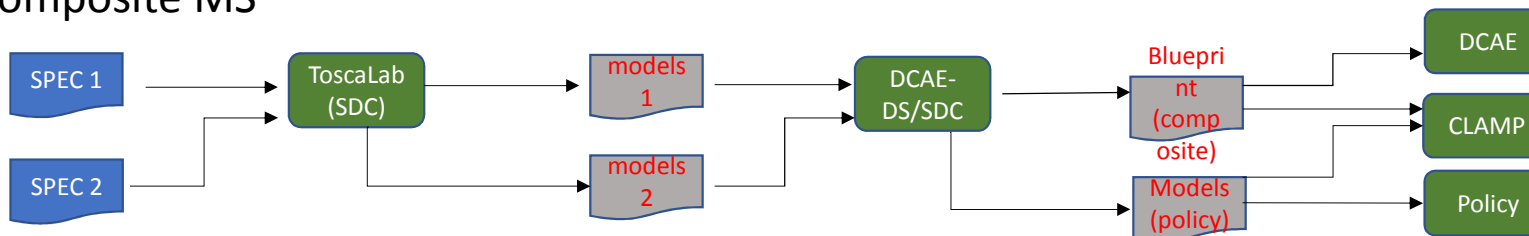
Blueprints – Not compatible for K8s deployment
Models – Not conforming to Tosca standard

ONAP DESIGN FLOW (Dublin)

Standalone MS



Composite MS



Blueprints – Not compatible for K8s deployment
Models – Not conforming to Tosca standard

BP-Generator Enhancement Plans (Future release)

- 1) Address current gaps for Policy Model generation
- 2) Blueprint to support dynamic topic/feed (DMaaP plugin integration) in K8S deployment (stand-alone service)

Other areas needing attention:

- 1) Composite service K8S blueprint generation through DCAE-DS
- 2) Intermediary model file generation (schema.yaml template.yaml translate.yaml)