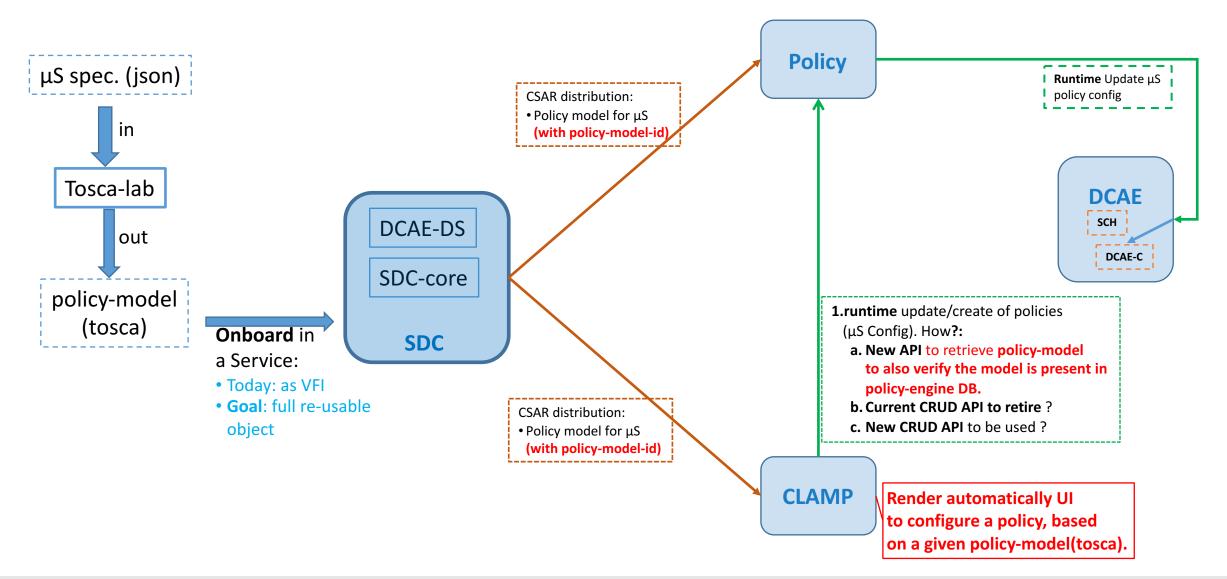


# Model Driven Control Loop Design (Dublin Release)

Gervais-Martial Ngueko, Igor Sklyar, Alex Shatov,....

January, 2019

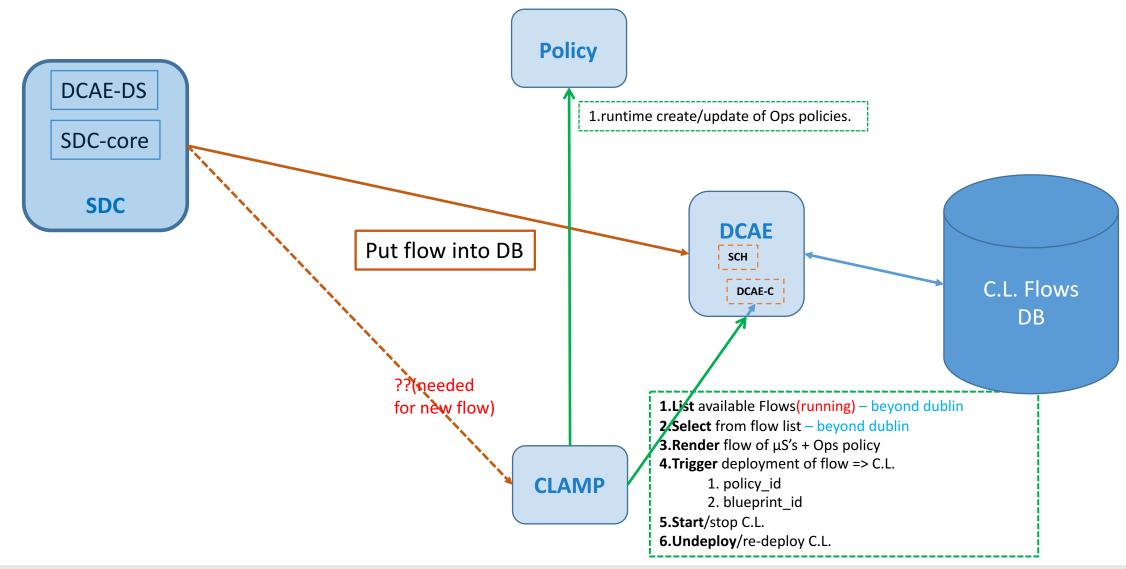
#### Policy-Models & Policies (overview)



#### Policy-Models & Policies (details)

- "Policy Model": (first naked template obtained using tosca-lab and onboarded in SDC)
  - SDC would generate the final policy model, this is a template
  - SDC would not present a GUI for the user to input default values (not everyone agrees TBD)
    - Model driven GUI representation is already supported –. And more correctly, if values are entered in SDC, they are not default. SDC screen would set templated values that suit the template.
  - Policy-model would be attached to a service in SDC (by dragging and dropping that resource into a service canvas)
  - SDC would distribute that policy-model as part of a CSAR for a service.
    - Policy and Engine would subscribe to SDC distribution and therefore receive policy-model
    - Policy Engine would expose API for CLAMP to query policy-model (not sure of the use at this point, will depend on blueprint discussion)
    - CLAMP is already subscribed to SDC distribution, so CLAMP can also parse the csar to extract policy-model for a given service
  - CLAMP will be able to use the policy-model to:
    - Render a UI for configuring a μS config policy
    - Call a policy API to create an instance of a policy based on that policy-model (for a given C.L flow/for a given µS instance/ for a shared already existing µS?).

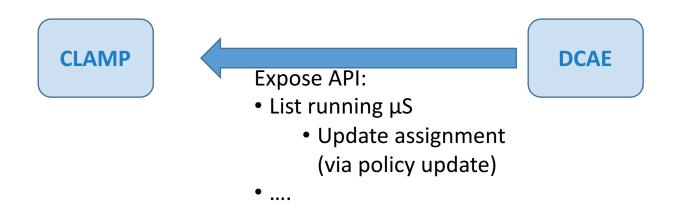
#### Control Loop Flow/Blueprint(BP)(overview)



#### Control Loop Flow/Blueprint(BP)(details)

- "Control Loop Flow/blueprint":
  - disclaimer: blueprint means here the specification of the flow, today it is the cloudify artifact but can be evolved to other (helm...).
    - DCAE designer could generate the blueprint, but it will be created out of band.
      another external tool could also create the flow. In any case the flow will be put into DCAE DB
      - creation of a BP/flow is supported using DCAE-DS. To comply to the below design, the BP needs to be distributed 'out of service' context which means it
      - DCAE would expose api to that DB so CLAMP can query the list of existing C.L flow (?not sure??, undeployed/deployed both ?)
      - The blueprint/flow must contains reference to the corresponding SDC mS policy-model, this is necessary in order for CLAMP to know which blueprints are usable for a given service and given the policy-models available for that service.
    - CLAMP would render the chosen blueprint/flow (as today) and allow configuration of each μS(including deployment mode see next section).

## Control Loop Flow Management - 1 (beyond Dublin)



### Control Loop Flow Management - 2 (beyond dublin)

- CLAMP should be the place where a user decide, for a given C.L flow for a service, if he wants to trigger a new deployment or re-use/share an existing µS.
  - Which means DCAE should expose the API to allow those operations (DCAE team ???)