DCAE R2 and Forward

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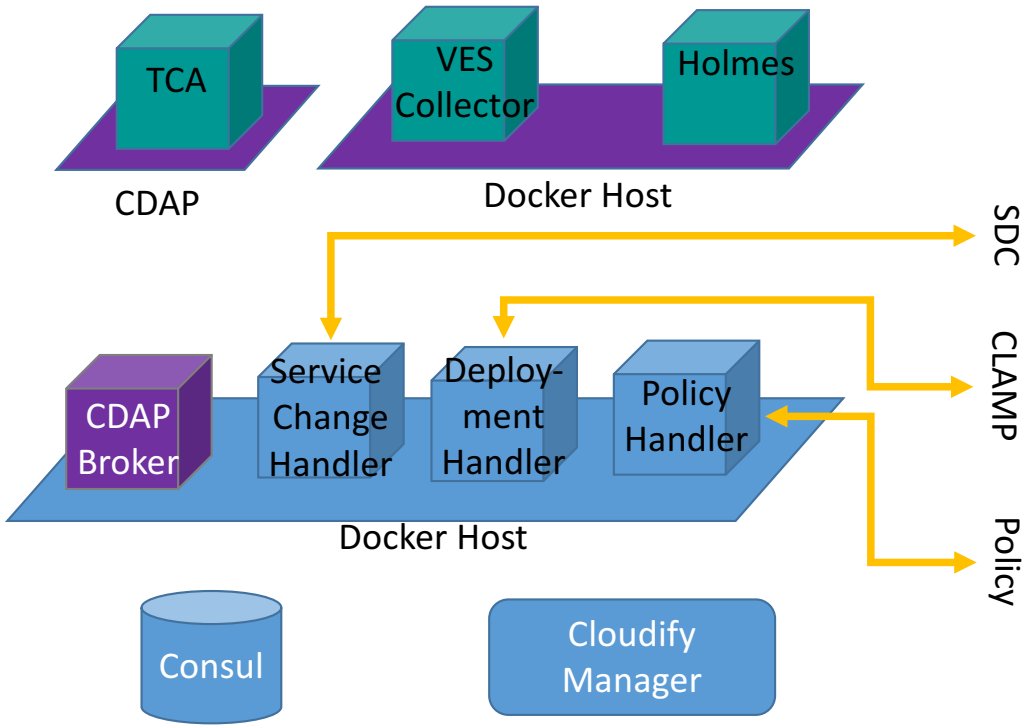
What is DCAE

- Data Collection, Analytics, Events
- It is a open, plug-able platform for “sensing and making sense” for ONAP
- Functional requirements
  - Of ONAP
    - Interfacing with other ONAP components
    - ”Model driven”
      - DCAE service components are modeled
      - Generated events are modeled
      - Operations are modeled
  - For ONAP
    - Able to incorporate the best collection and analytics technologies into a catalog
    - Able to collect, analyze, and generate actionable events following the requirements of control applications, e.g. delay, bandwidth, resource constrains, etc

R1 Embodiment

- Three types of components
  - Platform components
    - Cloudify manager,
    - Consul
    - service change handler
    - deployment handler
    - policy handler
    - (Docker host for platform components)
  - Services components
    - VES collector
    - TCA analytics
    - Holmes
  - Service-supporting platform components
    - CDAP
    - CDAP broker
    - Docker host for service components

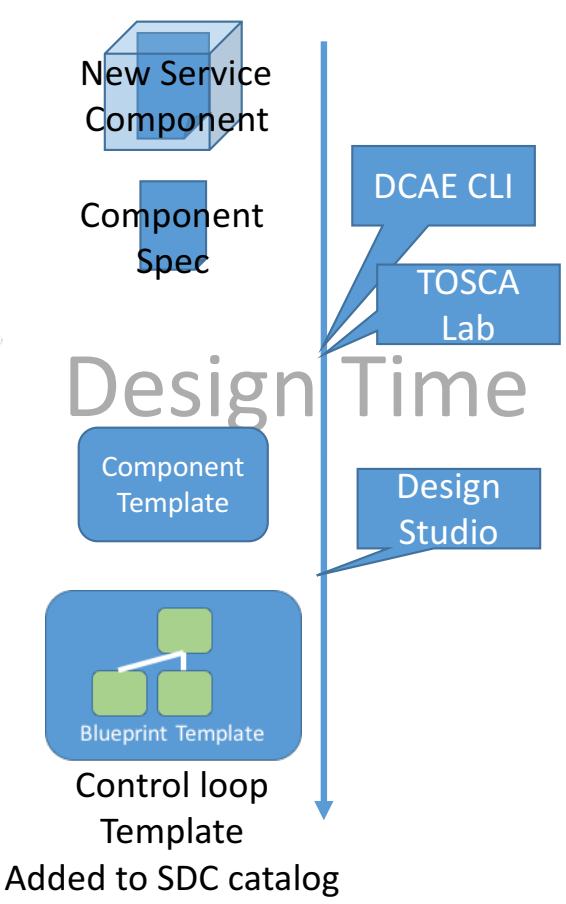


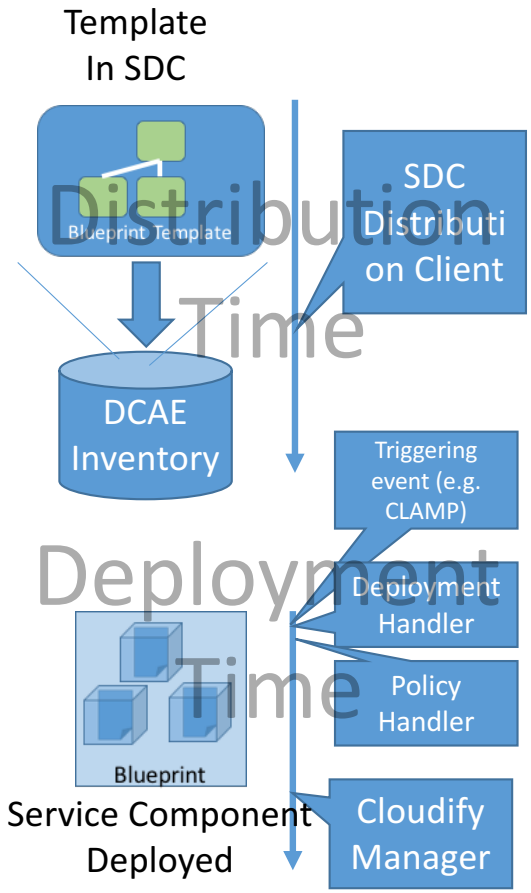
R2 Planning: “Non-functional”

- DCAE Lab configuration
  - Improving containers to avoid runtime software downloading
  - Simpler configuration
- DCAE in network clouds (multi cites of different resources e.g. edge and central)
- DCAE HA and Geo redundency
- Security
- Improve SONAR coverage (>50% or 70%) and addressing issues
- CSIT Automated Functional Testing for more components
- MSB integration
- Logging (ELK)

R2 Planning: Design Time

- Supporting on-boarding of new service components
  - API requirements
  - Component specification
  - TOSCA model template
- Design time tools
  - Existing code: DCAE CLI
  - New code: TOSCA Lab
  - Interfacing with other design time components:
    - CLAMP (triggering)
    - SDC (template)
    - Policy (configurations)





R2 Planning: Platform Enhancements

- Cloudify 4.x and containerization
- Component Reconfiguration /Reuse
- Support multiple policies per component
- Policy Queries for micro-services running in DCAE
- Policy Handler API alignment with Policy
- Postgres as container
- Support DCAE service component docker host with multiple ports
- DNS support enhancement
- AAF integration
- Consul as container (container cluster)

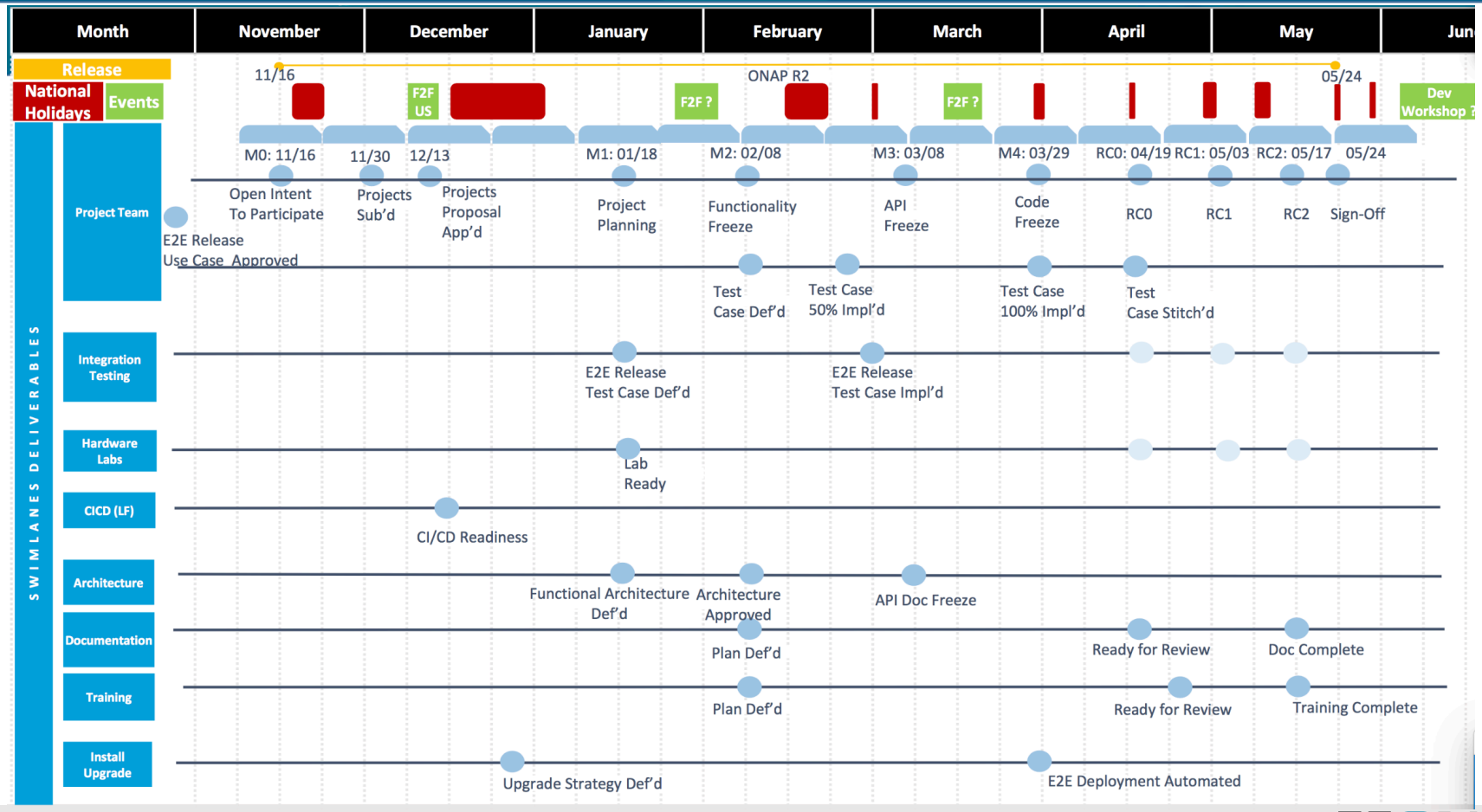
R2 Planning: Collection Catalog Enhancements

- VES extension for accommodating more information on the payload and support A&AI enrichment (with Alok on spec changes)
- Universal VES Adaptor
- Google Proto Buf collector (GPB to VES mapping)
- AVRO collector (AVRO to VES mapping)

R2 Planning: Analytics Catalog Enhancements

- PDNA
- Flink
- CDAP analytics maintenance and enhancements

R2 Timeline


Month
November
December
January
February
March
April
May
Jun
Release
National Holidays
Events
11/16
ONAP R2
05/24
F2F US
F2F ?
F2F ?
Dev Workshop ?
M0: 11/16
11/30
12/13
M1: 01/18
M2: 02/08
M3: 03/08
M4: 03/29
RC0: 04/19
RC1: 05/03
RC2: 05/17
05/24
SWIMLANES DELIVERABLES
Project Team
Open Intent To Participate
Projects Sub'd
Projects Proposal App'd
Project Planning
Functionality Freeze
API Freeze
Code Freeze
RC0
RC1
RC2
Sign-Off
E2E Release Use Case Approved
Test Case Def'd
Test Case 50% Impl'd
Test Case 100% Impl'd
Test Case Stitch'd
Integration Testing
E2E Release Test Case Def'd
E2E Release Test Case Impl'd
Hardware Labs
Lab Ready
CICD (LF)
CI/CD Readiness
Architecture
Functional Architecture Def'd
Architecture Approved
API Doc Freeze
Documentation
Plan Def'd
Ready for Review
Doc Complete
Training
Plan Def'd
Ready for Review
Training Complete
Install Upgrade
Upgrade Strategy Def'd
E2E Deployment Automated