



# Threshold crossing Alert - Dockerized microservice

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# Agenda

- ❖ Overview
- ❖ Usecases
- ❖ Deployment
- ❖ Demo
- ❖ References



## TCA Gen1 (Legacy)

- Introduced in Amsterdam release for ONAP usecases support
- Build as CDAP application
- Deployed on 7 node CDAP cluster
- Required CDAPBroker for relaying configuration updates

# Limitations

- ▶ R3 ONAP deployments were moving toward k8s
- ▶ CDAP/TCA dockerized using CDAP SDK
- ▶ Wrapper scripts to restart and configuration upload
- ▶ Image size
- ▶ Customization limited (security)

# TCA-Gen2

- ▶ Contribution from AT&T, Chinamobile
- ▶ Spring Boot framework
- ▶ Optimized DMaAP polling
  - ▶ Includes min,max,step-up and step-down interval. If no messages are found polling will be slowly reduced as per step-down interval upto max interval and will speed up to min interval if messages are found
- ▶ Periodic CBS fetch
- ▶ Mongo DB
  - ▶ Uses common/mongoDB for durable persistence
- ▶ Profiles based activation (cbs, dmaap, mongo)
- ▶ Exposes rest api
  - ▶ Manual testing
  - ▶ Inject messages for processing
  - ▶ Update policy



## Usecase

- ▶ vFirewall
- ▶ vDNS
- ▶ vCPE

Recieve VES-measurement events from  
DMAAP topic

Publish CL output (ONSET or ABATEMENT)

A dark blue rectangular area with a gradient from dark blue on the left to a lighter teal on the right. It features several white circles of varying sizes: a large one on the left, a medium one on the right, and two smaller ones at the top and bottom right. A lime green vertical rectangle is positioned in the top right corner.

DEMO

## Reference

- ▶ TCA-Gen2 repository  
<https://git.onap.org/dcaegen2/analytics/tca-gen2>
- ▶ TCA-Gen2 Deployment & Validation  
<https://wiki.onap.org/display/DW/DCAE+R6+TCA-GEN2+MicroService>
- ▶ TCA-Gen2 Release documentation  
<https://docs.onap.org/en/latest/submodules/dcaegen2.git/docs/sections/services/tcagen2-docker/index.html>
- ▶ TCA Enrichment  
<https://wiki.onap.org/display/DW/VES+event+enrichment+for+DCAE+mS>
- ▶ TCA-gen1 CL o/p structure (applies for TCA-gen2)  
<https://wiki.onap.org/display/DW/TCA+application>