



# CDS and ORAN O1 NETCONF Simulator Demo

13 October 2020

Vivekanandan Muthukrishnan

Aarna Networks

[vmuthukrishnan@aarnanetworks.com](mailto:vmuthukrishnan@aarnanetworks.com)

# Agenda

- Introduction to Network Topology Simulator
- Project Goals
- Review CDS Model
- Demo

# Network Topology Simulator (NTS)

- A framework that allows simulating NETCONF devices
- Allows registering VES event collector details
- Supports VES notifications
  - PNF Registration event
  - VES notifications normal, warning, major, critical
  - notification-delay settings
- Generic one and easy to extend the device simulation
  - Can simulate N number of devices
- Simple to use docker compose files
- Git repository
  - <https://github.com/Melacon/ntsim>

# Project Goals

- Extend NTS to create ORAN O1 interface simulator
  - Load 3GPP NRM YANG models
  - 3GPP NRM Model Git repo (SA88-Rel16)
    - <https://forge.3gpp.org/rep/sa5/MnS/tree/SA88-Rel16/yang-models>
  - Work in progress
- Simulate orchestration of Network Slice and Network Slice Subnet (NSS) from CDS
- Push Day-0 & Day-N Configuration changes from CDS

# Review CDS Blueprint

- Still work in progress
- CDS model to create multiple O1 simulator instances
- Config-Deploy to bring up O1 simulator docker containers



**ONAP**

OPEN NETWORK AUTOMATION PLATFORM

Demo