Model Background and Achievements

• From use case:
  5G – Slicing (https://wiki.onap.org/display/DW/5G+-+Slicing) in Dublin Release

• Model Achievements:
  Enhanced Service Information Model for Nested and Shared Services – Basic instance filter function for nested service and support to describe capabilities and properties of a service. (https://wiki.onap.org/display/DW/Enhanced+Service+Information+Model+for+Nested+and+Shared+Services)

• New Features in R6:
  NETWORK SLICING in R6 Frankfurt (https://wiki.onap.org/display/DW/NETWORK+SLICING+in+R6+Frankfurt)
  Vertical Industry Oriented On-demand 5G Slice Service (https://wiki.onap.org/display/DW/Vertical+Industry+Oriented+On-demand+5G+Slice+Service)
Current Service Model
End-to-end Slicing model - Standard Network slice service model

- Mapping between communication services instances and NSI(s) in 3GPP 28.530:
Ongoing Work 1

End-to-end Slicing model - Standard Network slice service model

- Mapping between ONAP and 3GPP Slice model:

Stretch goal

Hope ONAP can support in R6
Ongoing Work 1

End-to-end Slicing model - Standard Network slice service model

- NST and NSST:
Ongoing Work 2

- End-to-end Slicing management – Slice service KPI monitoring
  - Use case: Vertical Industry Oriented on-demand 5G Slice Service
  - Specification Reference: 
    - 3GPP TS 28.554 V16.1.0 (2019-06)

3rd Generation Partnership Project; Technical Specification Group Services and System Aspects; Management and orchestration; 5G end to end Key Performance Indicators (KPI) (Release 16)
Ongoing Work 2

- End-to-end Slicing management – Slice service KPI monitoring
Customized KPI template:

Accessibility
KPI Name: RegisteredAMFSubNbrMean
Description: This KPI describe the total number of subscribers which is obtained by counting the subscribers in AMF that are registered to a network slice.
Time interval: 15min

NFKPI:
id: amf_id_1
nfName: AMF
KPI: RegisteredAMFSubNbrMean

id: amf_id_2
nfName: AMF
KPI: RegisteredAMFSubNbrMean

Logical formula definition:
RSSNSI = sum(amf_id_1, amf_id_2, ...)

ThroughputKPI
KPI Name: GTPInDataOctN3UPF
Description: This KPI is obtained by upstream throughput provided by N3 interface from NG-RAN to all UPFs which are related to the single network slice instance.
Time interval: 10min

NfkKPI:
id: amf_id_1
nfName: AMF
KPI: GTPInDataOctN3UPF

id: amf_id_2
nfName: AMF
KPI: GTPInDataOctN3UPF

Logical formula definition:
UTSNSI = sum(amf_id_1, amf_id_2, ...)

KPI Name: GTPOutDataOctN3UPF
Description: This KPI is obtained by downstream throughput provided by N3 interface from all UPFs to NG-RAN which are related to the single network slice instance.
Time interval: 10min

NfkKPI:
id: upf_id_1
nfName: UPF
KPI: GTPOutDataOctN3UPF

id: upf_id_2
nfName: UPF
KPI: GTPOutDataOctN3UPF

Logical formula definition:
UTSNSI = sum(upf_id_1, upf_id_2, ...)
Thank you