



ONAP Orchestrated SD-WAN and Edge

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ONAP Orchestrated SD-WAN and Edge

01. Service provider Supply Models/ DGs/ BPMNs

02. Tenant Buy Service

- ONAP Create Public Cloud NS
- ONAP Call SD-WAN Controller to Create SD-WAN Network

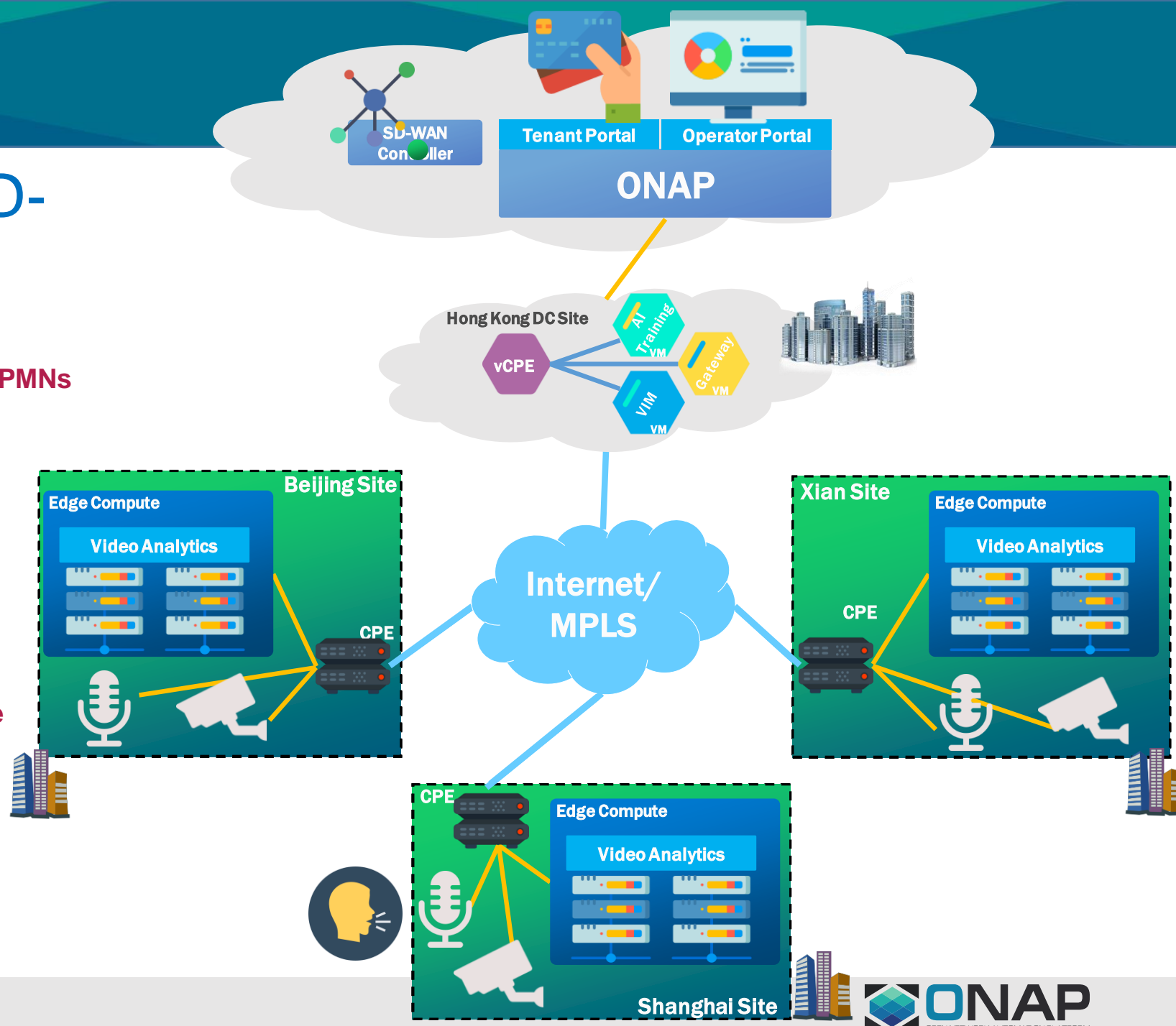
03. Physical CPE Plug and Play,

- SD-WAN Controller Configure CPE
- SD-WAN Controller Inform Site Online to ONAP

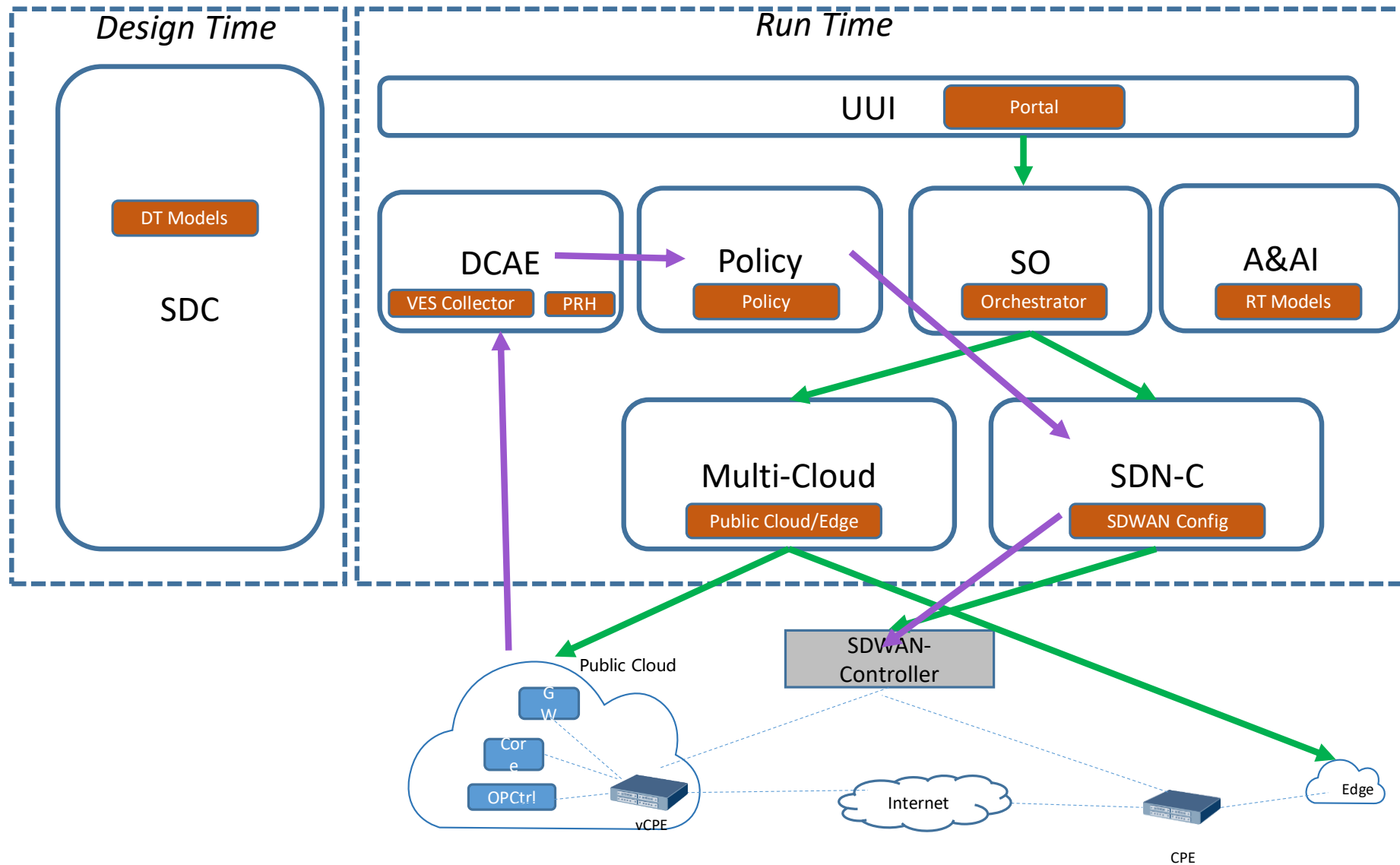
04. Edge Plug & Play

- ONAP Create Edge NS
- Camera & Echo PnP

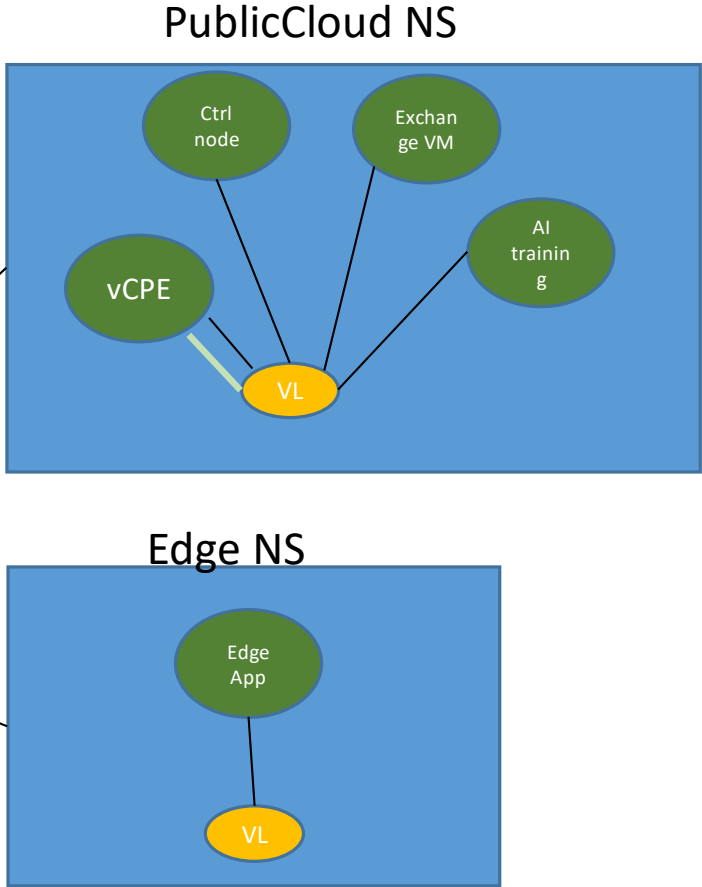
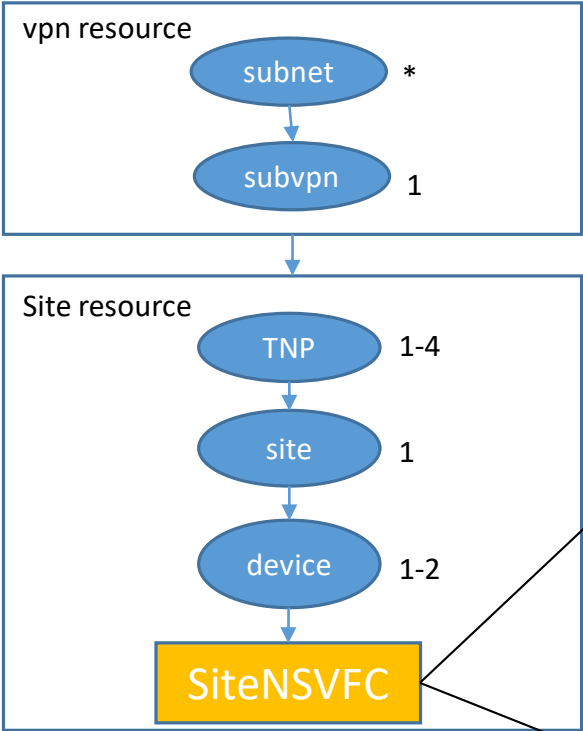
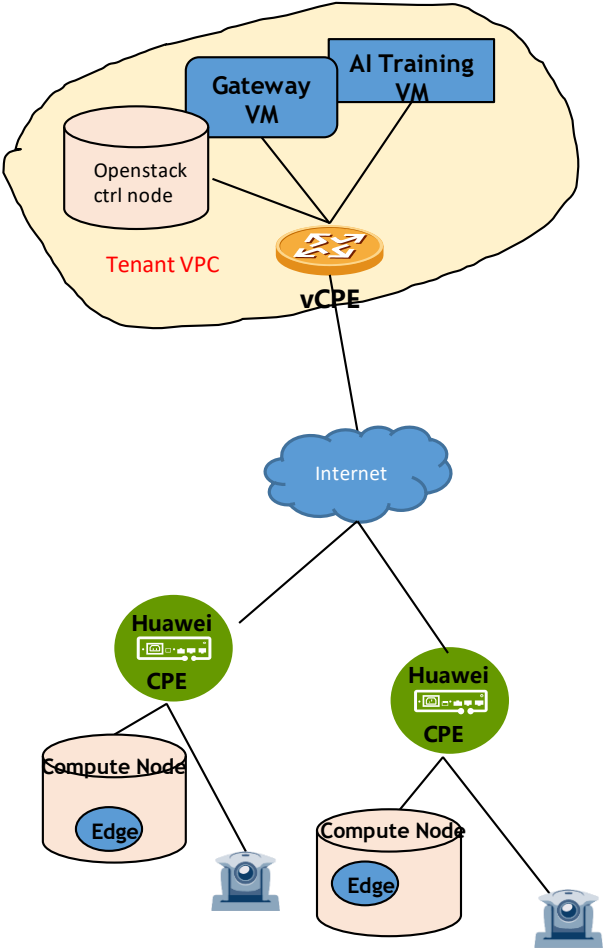
05. Bandwidth on Demand



What we do in ONAP



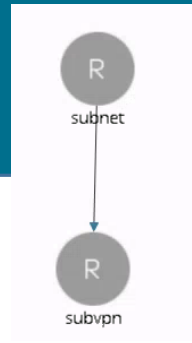
Model Design



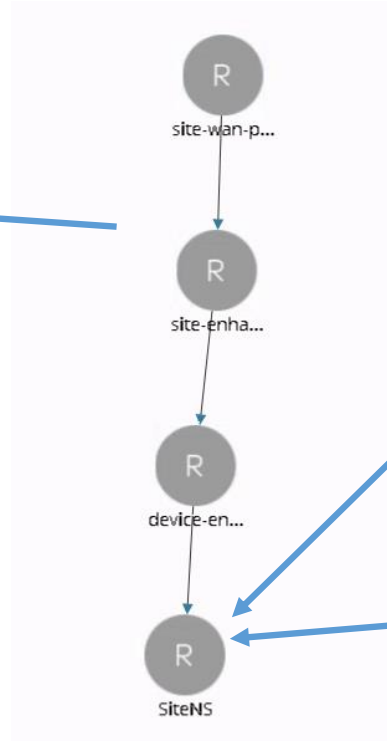
Service Design In SDC



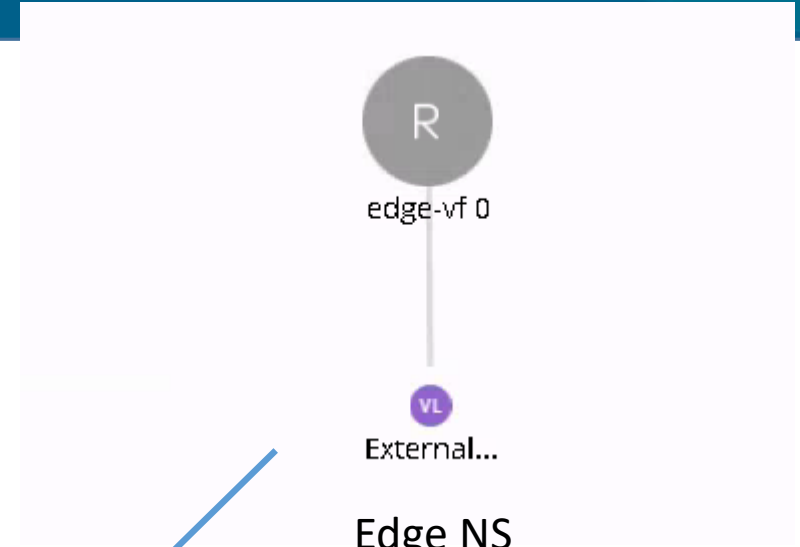
Service



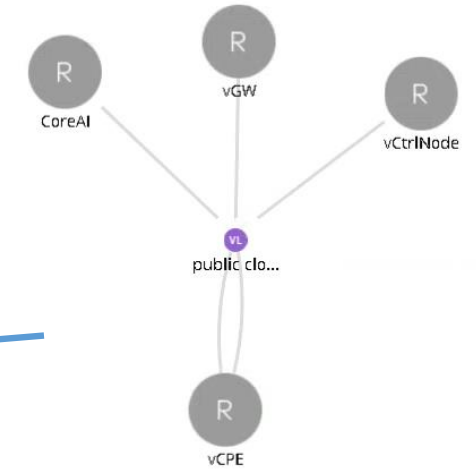
VPN VF



Site VF



Edge NS



Public Cloud NS

Thank You

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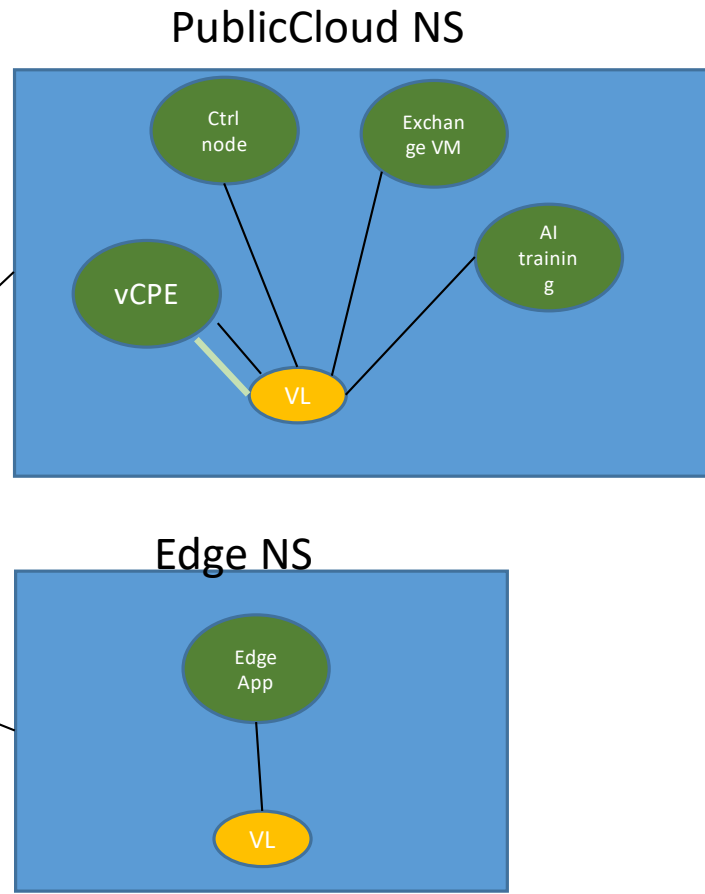
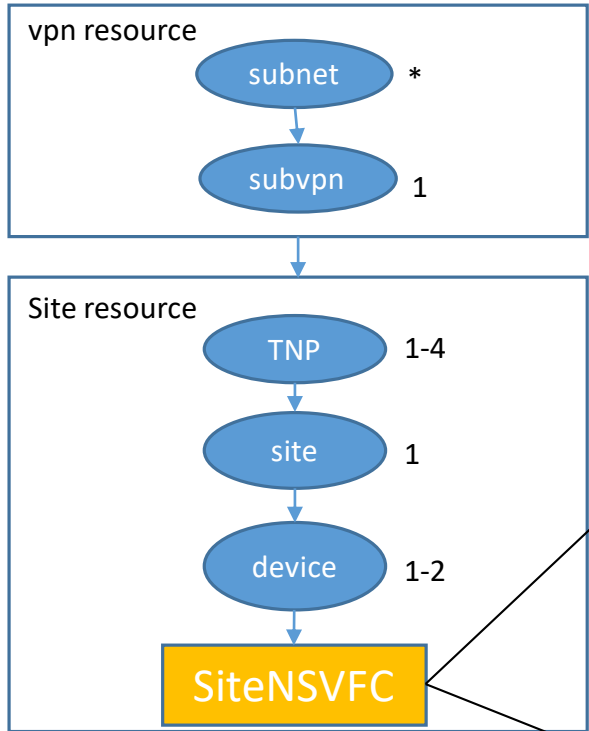
E2E Model Design- SiteNSVFC Support

New Datatype to SDC:

```

1  toska.datatypes.sdc.ModelKey:
2  derived_from: toska.datatypes.Root
3  properties:
4      invariantUUID:
5          type: string
6          required: false
7      UUID:
8          type: string
9          required: false

```



NSVFC:

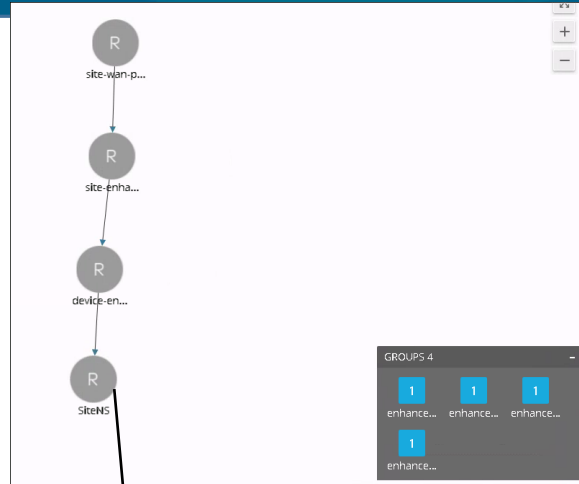
```

tosca_definitions_version: toska_simple_yaml_1_0_0
node_types:
  org.opencomp.resource.vfc.nsdv4:
    derived_from: org.opencomp.resource.abstract.nodes.VFC
    description: Used for map to nsd
    properties:
      name:
        type: string
        required: true
        description: the name of the nsd used, it should be one of the availables
      vimAssign:
        type: string
        description: VNF homing type, manual_assign/auto_homing
        constraints:
          - valid_values: ['manual_assign', 'auto_homing']
          required: false
          default: 'manual_assign'
    availables:
      type: map
      description: available
      required: true
      entry_schema:
        type: toska.datatypes.sdc.ModelKey
    requirements:
      - depends:
          occurrences:
            - 1
            - UNBOUNDED
          capability: toska.capabilities.Node
          node: toska.nodes.Root
          relationship: toska.relationships.DependsOn

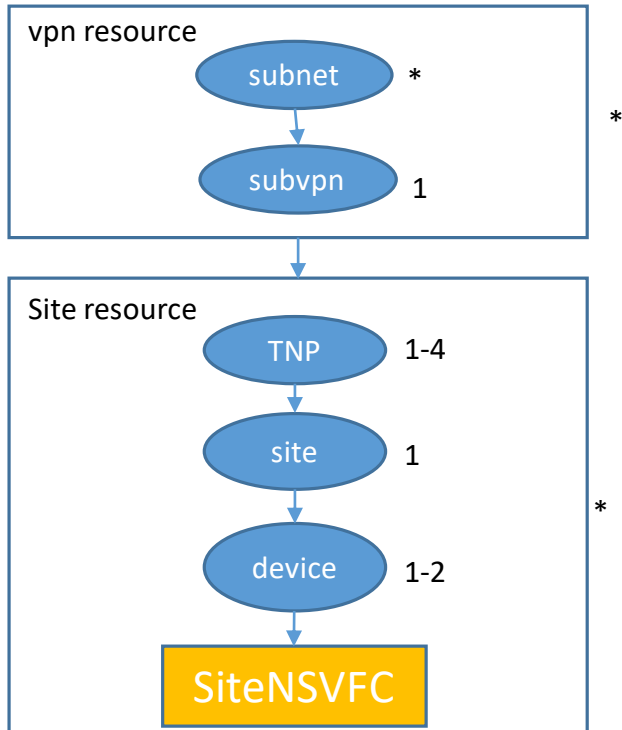
```

E2E Model Design- SiteNSVFC Support

Site Resource



VPN Resource

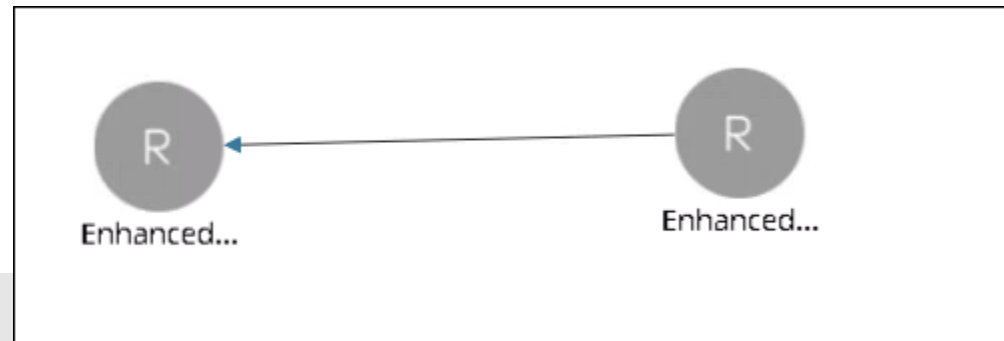


Availables

ModelKey	Value
PublicCloudNS	ModelKey
EdgeNS	ModelKey
invariantUUID	23edd22b-a0b2-449f-be87-d0941
UUID	881a5a9f-a38d-4e48-a9b2-976b5:

Add Two Availables for Public Cloud NS and Edge NS

VPN Service



TOSCA Model Example

```
tosca_definitions_version: tosca_simple_yaml_1_2
description: Template for deploying SD-WAN with a variable number of sites.
```

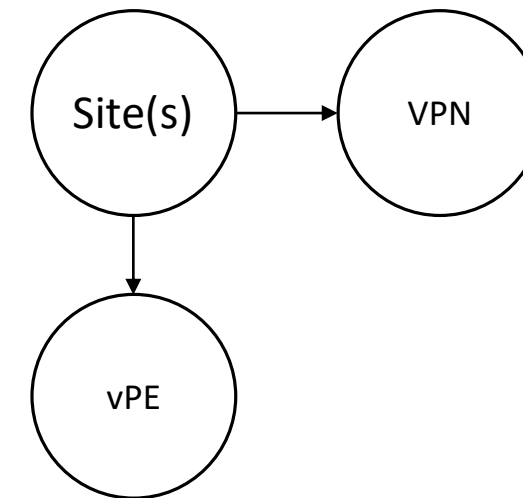
```
data_types:
  org.openecomp.datatypes.vfc.location:
    properties:
      location:
        type: string
      address:
        type: string
```

```
topology_template:
  inputs:
    numberOfSites:
      type: integer
```

```
locations:
  type: list
  entry_schema: org.openecomp.datatypes.vfc.location
```

```
node_templates:
  sdwan:
    type: VPN
  vpe:
    type: vPE
  site:
    type: VPNSite
    max_instances: { get_input: numberOfSites }
```

```
properties:
  location: { get_input: [ locations, INDEX, location ] }
  address: { get_input: [ locations, INDEX, address ] }
```



- Support list type of input.
- entry_schema is defined in data_type.

- The property is got by specifying INDEX from the list.

UI Enhancement for List Inputs

The screenshot shows the ONAP Properties Assignment interface. On the left, a sidebar lists navigation options: General, Deployment Artifact, Information Artifact, TOSCA Artifacts, Activity Log, Deployment, Properties Assignment (highlighted), and Req. & Capabilities. The main area is titled 'Properties Assignment' and features a table with columns: Property Name, Type, ES, and Value. The table lists properties such as 'address', 'controlPoint', 'description', 'emails', 'high_availability', 'latitude', 'location', 'longitude', 'max_instances', 'min_instances', and 'name'. The 'address' and 'location' rows are selected, indicated by blue highlights and checked checkboxes. Above the table, there are buttons for 'Declare' and 'Declare List', and a search bar. An orange callout box points to the 'address' and 'location' rows with the text '1. Check to properties to get value from list'. Another orange callout box points to the 'Declare List' button with the text '2. Click 'Declare list''. On the right side of the interface, there are tabs for 'Composition' and 'Property Structure', and a message 'NO PROPERTY SELECTED'.

1. Check to properties to get value from list

2. Click 'Declare list'

Property Name	Type	ES	Value
<input checked="" type="checkbox"/> address	string		
<input type="checkbox"/> controlPoint	string		
<input type="checkbox"/> description	string		
<input type="checkbox"/> emails	string		
<input type="checkbox"/> high_availability	string		
<input type="checkbox"/> latitude	string		
<input checked="" type="checkbox"/> location	string		
<input type="checkbox"/> longitude	string		
<input type="checkbox"/> max_instances	integer		
<input type="checkbox"/> min_instances	integer		0
<input type="checkbox"/> name	string		