Akraino Blueprints and Blueprint Specification/Templates

A framework proposal

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Blueprints and Blueprint Specification/Release Templates

At the highest level the *Blueprint* defines the fundamental must have characteristics/components of any POD deployed using it

- e.g. A “Network Cloud” Blueprint deploys OpenStack using a k8s undercloud with Airship based LCM (etc)
- These are immutable attributes - if they are omitted or replaced a different blueprint results

Within a given blueprint a POD’s deployed components can be tailored by different *Blueprint Specifications*

- e.g. At each Akraino release of the Network Cloud blueprint its *Blueprint Specification Template* would contain the set of all verified possible plugins/options for each layer

Certification of hosted applications (e.g. VNFs) against a Blueprint and Specification is then possible

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### Network Cloud Blueprint Specification Template Release 1

<table>
<thead>
<tr>
<th>SDN</th>
<th>Overcloud</th>
<th>Undercloud CNI</th>
<th>Undercloud</th>
<th>Host OS layer</th>
<th>HW layer</th>
</tr>
</thead>
<tbody>
<tr>
<td>None (neutron)</td>
<td>OS Ocata</td>
<td>Calico</td>
<td>K8s 1.9</td>
<td>Ubuntu 14.04</td>
<td>Dell R720</td>
</tr>
<tr>
<td>ODL Boron</td>
<td>OS Pike</td>
<td>Multus</td>
<td>K8s 1.12</td>
<td>Ubuntu 16.04</td>
<td>HP DL360</td>
</tr>
<tr>
<td>TitaniumFabric R1</td>
<td>k8s</td>
<td>Flannel</td>
<td></td>
<td>Centos 6</td>
<td></td>
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<tr>
<td>TitaniumFabric R2</td>
<td></td>
<td></td>
<td></td>
<td>Centos 7</td>
<td></td>
</tr>
</tbody>
</table>

*This is for illustration and doesn’t contain all layers required for the NC blueprint*

*Red box selections show one possible specification within this blueprint*
Network Cloud Blueprint and Specification/Release Templates

Different Blueprints would have different options to select in the Blueprint Specification as the functionality deployed in such a POD would be different

   e.g. an IOT blueprint may not use OpenStack as a virtualization

The Specification Template of a given Blueprint can evolve in subsequent releases to add / remove functional layers