5GINFIRE: Core MANO Service Management and Orchestration

Status of the MANO platform
8 March 2019
The 5GinFIRE MANO Platform
Architectural Details
Addressing Plan

• Agreements:

✓ General address space to be used by 5GinFIRE sites: 10.154.0.0/16
✓ Address space to be used at 5TONIC: 10.4.0.0/16
✓ Address space reserved for the VPN service: 10.154.255.0/24 & 10.154.254.0/24

• Current allocation of IP addresses to sites:

<table>
<thead>
<tr>
<th>Site</th>
<th>IP address space</th>
</tr>
</thead>
<tbody>
<tr>
<td>5TONIC</td>
<td>10.4.0.0/16</td>
</tr>
<tr>
<td>ITAv</td>
<td>10.154.0.0/20</td>
</tr>
<tr>
<td>UNIVBRIS</td>
<td>10.154.16.0/20</td>
</tr>
<tr>
<td>UFU</td>
<td>10.154.32.0/20</td>
</tr>
<tr>
<td>WINS_5G</td>
<td>10.154.48.0/20</td>
</tr>
<tr>
<td>5G-VINO</td>
<td>10.154.64.0/20</td>
</tr>
<tr>
<td>eHealth5G</td>
<td>10.154.80.0/20</td>
</tr>
</tbody>
</table>
Requirements for new sites

1. Utilization of a compliant VIM solution
2. Obtaining an appropriate IP address space, along with VPN credentials, from the 5GinFIRE network operations center
3. Configuration of the site with the allocated IP address space
4. Configuration of VPN endpoints, to connect the site to the overlay network of 5GinFIRE
5. Configuration of the appropriate VIM networks,
   – to enable control & data communications with the VNFs deployed at the entity’s datacenter,
6. Routing of control & data plane information across the local network segments of the external entity
Accessing the Running VxFs

- After deployment, experimenters should be able to access their resources under experimentation (i.e., VNFs)
- This is enabled through the VNF management network

- Experimenters will be provided a secure access to the 5GinFIRE NFV experimentation environment, through the 5TONIC VPN service
- Access rules will be enforced to protect infrastructure resources, blocking undesired flows and enabling the access to VNFs