CMCC ONAP Community Lab

For R1 VoLTE Use Case E2E Integration Test, Sept 27th, 2017
CMCC Lab Overview for R1 VoLTE Case

Integrate with 3rd Part Specific Components

Commercial VIM/VNF/PNF Products

Integrate with 3rd Part Specific Components
# Hardware Racks Panel

**Bare mental Servers:**
- **17**
- **WAN PE Router (WAN): 2**
- **TOR Switcher:** 6
- **Firewall:** 2

**SPTN PE Router (WAN): 2**

**Bare mental Server: 11** (5 servers, 1 blade server with 6 nodes)

**S/W:**
- **Switcher:** 2
- **TOR:** 2

### Hardware Configuration

**Switcher:** 6
- **ZTE ZXCTN 6150 8 *6500-8**
- **ZTE ZXCTN 6150 8**
- **ZTE ZXCTN 608-G**
- **ZXR10 5960**
- **Server01 - HP DL580 Gen8**
- **Server02 - HP DL580 Gen8**
- **Server03 - HP DL580 Gen8**
- **Server04 - R5300-G3**
- **Server05 - R5300-G3**
- **Server06 - HP DL580 Gen8**
- **Blade Server E9000**
- **DC Gateway**

**Server01:**
- **HP DL580 Gen8**
- **ZXR10 5960**
- **Server02:**
- **HP DL580 Gen8**
- **Server03:**
- **HP DL580 Gen8**
- **Server04:**
- **R5300-G3**
- **Server05:**
- **R5300-G3**
- **Server06:**
- **HP DL580 Gen8**
- **Blade Server E9000 6U**
- **DC Gateway**

**Server02:**
- **Server03:**
- **Server04:**
- **Server05:**
- **Server06:**
- **Blade Server E9000 6U**
- **DC Gateway**

**TOR:**
- **ZTE ZXCTN 6150 8**
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The Progress in CMCC Lab

- Remotely access: **done**
- All hardware needed by VoLTE case: **on-site**
- Re-adjust network topology: **done**
- Software deployment:
  - TIC Core (complain with Mitaka): **done**
  - TIC Edge (VIO 4.0 (complain with Ocata): **done**
  - ONAP deployment environment (WindRiver R4 compliant with Newton, the same with Developer lab sponsored by Intel & WindRiver): **done**
  - All S-VNFMs from Huawei, Nokia, and ZTE are **ready**
  - All VNFs located in TIC core from HUAWEI/NOKIA/ZTE are successfully deployed manually, integration test with WindRiver Cloud is **done**
  - The VNFs, located in TIC Edge, integrate with VIO is in **working process**
- Next Step (High Level):
  - Debug/configure IMS/EPC service, make a VoLTE call successfully
  - Debug SDN overlay/underlay solution manually (Some test has been done in Vendor’s lab)
  - Deploy ONAP release candidate version to do the E2E integration test

CMCC Lab’s status can be tracked on JIRA

Lab Status

Following actions are being planned/In process in CMCC lab

<table>
<thead>
<tr>
<th>Action</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>TIC Core setup</td>
<td>In Progress</td>
</tr>
<tr>
<td>TIC Edge VIO 4.0</td>
<td>In Progress</td>
</tr>
<tr>
<td>ONAP deployment environment</td>
<td>In Progress</td>
</tr>
<tr>
<td>S-VNFMs from Huawei, Nokia, and ZTE</td>
<td>Ready</td>
</tr>
<tr>
<td>VNFs located in TIC core</td>
<td>Successfully deployed</td>
</tr>
<tr>
<td>VNFs located in TIC Edge</td>
<td>In working process</td>
</tr>
</tbody>
</table>

https://wiki.onap.org/display/DW/China+Mobile+Hosting
How To Use CMCC Lab

• **VPN Access**([https://wiki.onap.org/display/DW/China+Mobile+Hosting](https://wiki.onap.org/display/DW/China+Mobile+Hosting))
  - CMCC provides VPN access to its lab on an individual basis. You should open JIRA task in OPENLAB project, the component field should be CMCCLAB, and assign it to Chengli Wang, with some information like,
    • Intention, Duration, Name, mail address, Company, Linux Foundation ID, etc
  - Users may not share their VPN credentials with others. Sharing of VPN credentials will result in permanent loss of access to the lab.

• **Lab Usage**
  - No data, software or intellectual property that is not freely available to the community may be downloaded or stored in the lab.
  - No software may be downloaded or used in the lab without required licenses.
  - CMCC reserves the right to audit software and lab usage without notice and remove access of users who are not following the acceptable use policy

• **Network Bandwidth:**
  - Available bandwidth is limited and shared across all lab users, downloading excessively large files can interfere with other users, so the lab admin should be informed if users intend to download very large files or consume substantial bandwidth for any duration.
Thank You
Progress in CMCC Lab

Integrate with 3rd Part Specific Components

Legend

Integrate with 3rd Part Specific Components

Commercial VIM/VNF/PNF Products

INAP OPEN NETWORK AUTOMATION PLATFORM

Legend

Done

In process

Plan

Integrate with 3rd Part Specific Components

INAP OPEN NETWORK AUTOMATION PLATFORM

Legend

Done

In process

Plan