



M-CORD Demo

Installation, Deployment, Service Provisioning & Activation

Brigade Showcase at CORD Build 2017





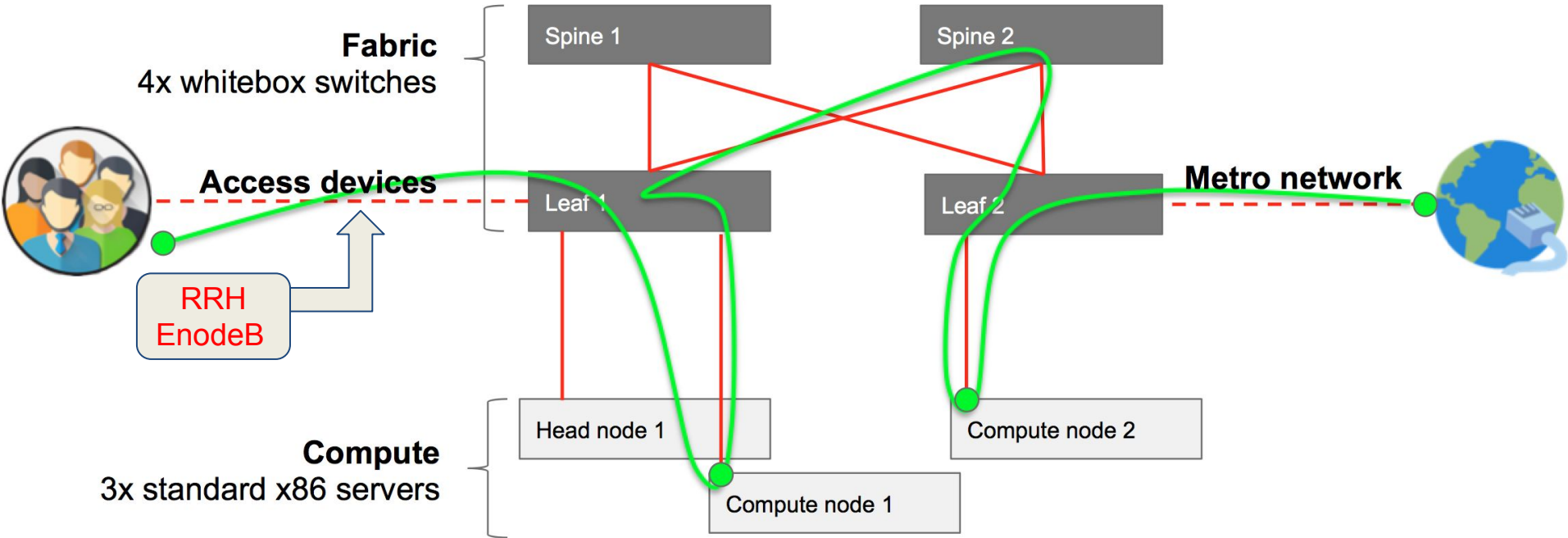
1. Full POD build for deployment & Demo
2. Cord in a box build for developers & Demo
3. EPC as a service & Demo

Sapan: feel free to modify any part !



Full POD build for deployment & Demo

Installation - Hardware requirement:



Installation - Software requirement



We have M-CORD services so far

- Layer 1 service list:

- vENB,
- vBBU
- vMME
- vHSS
- vSGW
- vPGW
- vSDN-Controller
- vSPGWC
- vSPGWU
- Internet-emulator

- Layer 2 service list:

- vEPC



- M-CORD service list demo:
 - See all the service in manifest list
 - Pull each service from Gerrit
 - During build, the the service will be automatically download, show in server
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- Deliver the M-CORD implementations for deployment:
 - Based on CORD platform
 - M-CORD Profiles
 - Configurations, Networks, Slices, Network-Slice links, network graphs...
 - M-CORD Services
 - Layer 1: vBBU, vMME, vSM, vMM, vHSS, vSGWC, vSGWU, vPGWC, vPGWU, vSPGWC, vSPGWU, InternetEmulator, vEnodebEmulator...
 - Layer 2: EPC as a service, Connectionless EPC as a service, Disaggregated MME based EPC as a service...
 - M-CORD VNFs
 - M-CORD Boxes (such as RRH)

Installation - Software requirement



For this demo, use will use:



- Image1 : vENB, which further includes three VNFs.
 - BBU(Closed source emulator)
 - MME(Closed source emulator)
 - APP Server (Closed source emulator)
- Image2: vSPGWC (Open source)
 - SGW control plane
 - PGW control plane
- Image3: vSPGWU (Open source)
 - SGW user plane
 - PGW user plane



Installation - Images

- Image4: License server
- Image5: License UI server
 - Ubuntu-14.04.5-server-amd64.iso, can be downloaded from Ubuntu website:
<http://releases.ubuntu.com/14.04/ubuntu-14.04.5-server-amd64.iso>
- Image 1,2,3 can be automatically downloaded during the build. Image 5 can be downloaded from Ubuntu website. You should contact us for Image 4.



- 3 VMs inside CORD, 2 VMs outside CORD

VM-Name	Openstack Flavor
vENB	m1.xlarge
vSPGWC	m1.large
vSPGWU	m1.xlarge

Full POD rebuild



- On CORD dev machine, not CORD dev VM
 - `make xos-teardown;`
 - `make clean-profile;`
 - `make -j4 build;`
 - `make compute-node-refresh`

CORD in a box for M-CORD developers



- **Step 1: Getting source code**

- `$ cd ~`
- `$ wget https://raw.githubusercontent.com/opencord/cord/cord-4.1/scripts/cord-bootstrap.sh`
- `$ chmod +x cord-bootstrap.sh`
- `$ ~/cord-bootstrap.sh -v`

- **Step 2: Build M-CORD v4.1**

- `$ cd ~/cord/build`
- `$ make DOBCONF=m-cord-spirent-virtual.yml config` (for cord build, we use `DOBCONF=m-cord-spirent-virtual.yml` config)
- `$ make -j4 build`

CORD in a box for M-CORD developers



- Rebuild `cordfile`
To get to the `cord` dev VM, run
 - ^ `make test-cord`
 - ^ `make test-cord-check`
 - ^ `make test-cord-file`
 - `make compute-node-refresh`

EPC as a service



How You Can Get Involved



Email list:

Add information about how people can get involved and where they should go to contact the brigade

Mailing list, Slack channel, regular meetings, etc.