NETSIA Broadband Suite

Community Update on Current Status
May 2022
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Agenda

➔ Our BB Suite\(^1\) Journey
➔ Ecosystem Expansions
➔ Achievements
➔ Tests Towards the Production
➔ Current Architecture at a Glance
➔ Target Architecture

\(^1\) Formerly known as Netsia SEBA+
Our Journey

2018 - Kick Off
- Project Initiation
- First Contributions
- Tests & Hardening
- NEM Layer
- Central BB Suite & GUI

2019 - Initial Deployment
- Tech-profiles and Mcast developments
- Verification Lab
- Physical Lab (in TT) with 512 ONUs
- Live with small scale CI/CD, automated tests

2020 - Network Integrations
- TT Network integrations, Multi-Tcont development
- Performance Improvements
- OAM Improvements
- GUI Enhancements
- Device Management
- New OLT and ONU verifications

2021 - Mass Production
- Mass Production, High amount of automated tests,
- Performance and Scale Improvements,
- New Controller work started,
- AES Encryption, OLT Disconnection,
- support for all TCONT types, Multi UNI,
- Error handling improvements, ONOS BW changes for IETF representation developments,
- New OLT and ONU verifications

2022 - 1M Target
- Increasing subscriber base
- 1M target contracted with TT
- New Controller
- BBF Native OLT Integration

- Strictly Confidential -
Ecosystem Expansions

We are working hard to expand the ecosystem

- OLT Verification/Certification Tests
- ONU Verification/Certification Tests
- Different vendor/different technology/ different type devices
  - Micro Plug OLTs
  - GPON, XGS-PON, Combo OLTs
  - SFP ONU
  - Layer 3 ONU

<table>
<thead>
<tr>
<th>OLT</th>
<th>ONU</th>
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<tbody>
<tr>
<td>certified to go to live</td>
<td>under the test</td>
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<tr>
<td>3 OLTs/2 Vendors (GPON,XGS,Combo)</td>
<td>4 Vendors</td>
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<td>4 Vendors</td>
<td>6 Vendors</td>
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Achievements

5 Lab Trials
5 operators in 4 countries

2 Live Integrations
2 operators in 2 countries

2 Friendly User Fields
2 operators in 2 countries

1 Mass Production
Turk Telekom
Tests Towards the Production

1. Functional Tests
   In Netsia Functional Test Lab

2. Automated Tests & Endurance Tests
   In Netsia Functional Test Lab, Endurance and Scale tests with HW and bbsim.

3. Small Scale Load Tests
   In Netsia Scale Lab, containing 120 ONUs.

4. High Scale Load Tests
   In TT Scale Lab containing 512 ONUs: Targeted to expand to 1024 ONUs

5. FUT
   In TT Friendly User Sites
NETSIA BB Suite Architecture
Target: Multi-Access, Multi Tenant Telco Edge

Global Orcherstrator (ONAP, ..)

Netsia BB Control Center

Monitor & Manage & Closed loops

Netsia BB Edge

Edge Cloud

OLT

Router

SP Backbone

Netsia BB Control Center

Netsia BB

Edge

Edge Cloud

Access

IP / MPLS

Residential Services

Business Connectivity Services

Mobile Wireless Services

Device Edge

Infrastructure Edge

PON Network

OLT

Splitter

ONU

IPTV

RG

Business Services

Mobile Services

Residential Services

Netsia BB Suite May 2022
Thanks