Residential CORD (R-CORD) Next Steps

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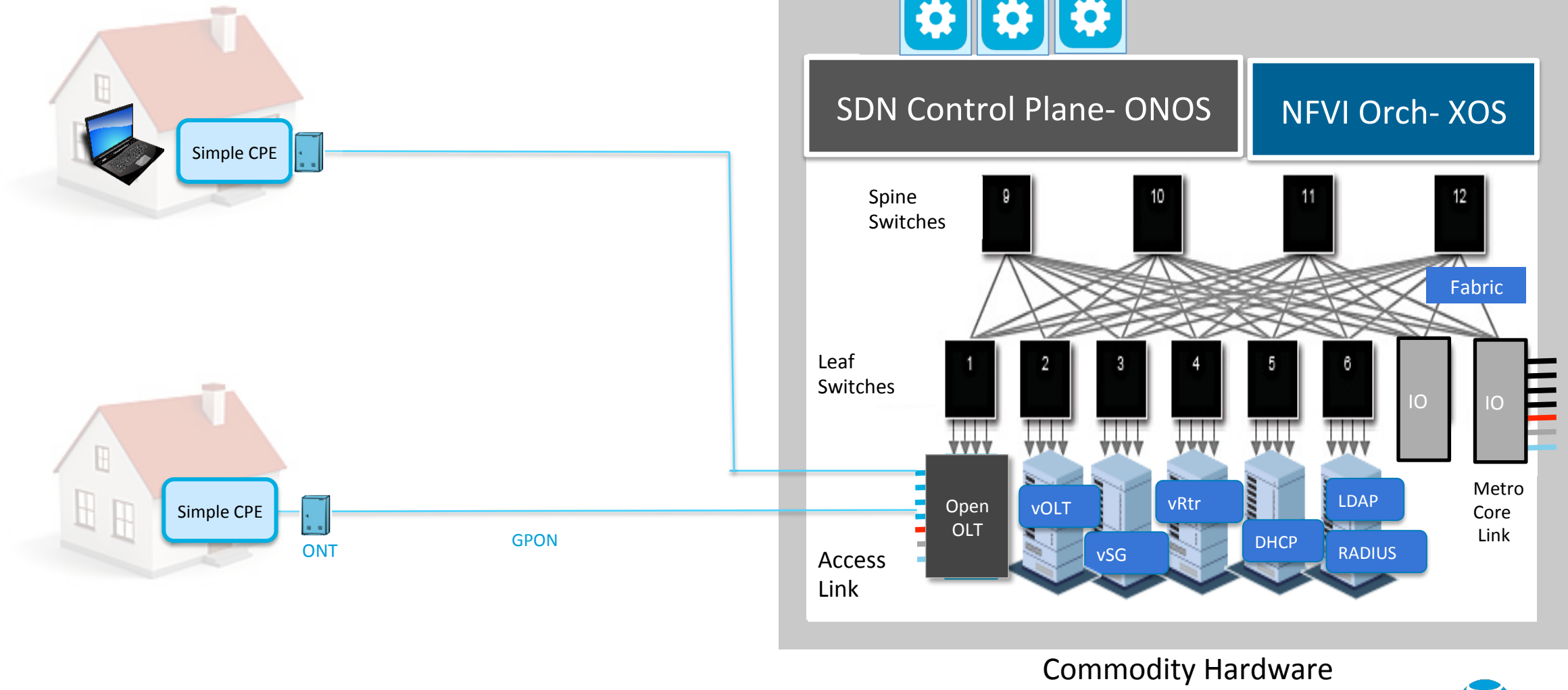
In Review: Access Using R-CORD



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In Review: R-CORD Value Proposition

Expand supplier ecosystem to include Open Source, startups, and non-traditional vendors.

Espouse open source and open spec. All of CORD is OCP and Open Source. There is nothing that is not re-usable or re-workable in CORD. No one holds CORD users hostage. All the hardware is as open as it gets. Absolutely no lock-in and easy interchangeability.

Shorten Time to Market. CORD was developed from inception to AT&T field trial in 9 months. Following the agile development and dev-ops model demonstrated by ON.Labs can help carriers learn to be agile and use dev-ops.

Collaboration – several carriers are collaborating on the CORD architecture, so it's got the benefits of community inputs and support. ON.Labs has collected 13 members, 40 Collaborating organizations and over 950 individual contributors.

Separate Innovation from commercialization. The open source community innovates on CORD, and several members commercialize it. This supports multiple business engagement models along the make-vs-buy spectrum.

New Service architectures. CORD provides a consumer cloud-bursting architecture. Many new types of services can be applied to consumer, business, both from wireline and wireless access… including integrating and homogenizing those market segments.

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CORD Controlled Devices

Expand the breadth and depth of access technologies and solutions supported by R-CORD

GPON
EPON
XGS-PON
G.Fast
DOCSIS

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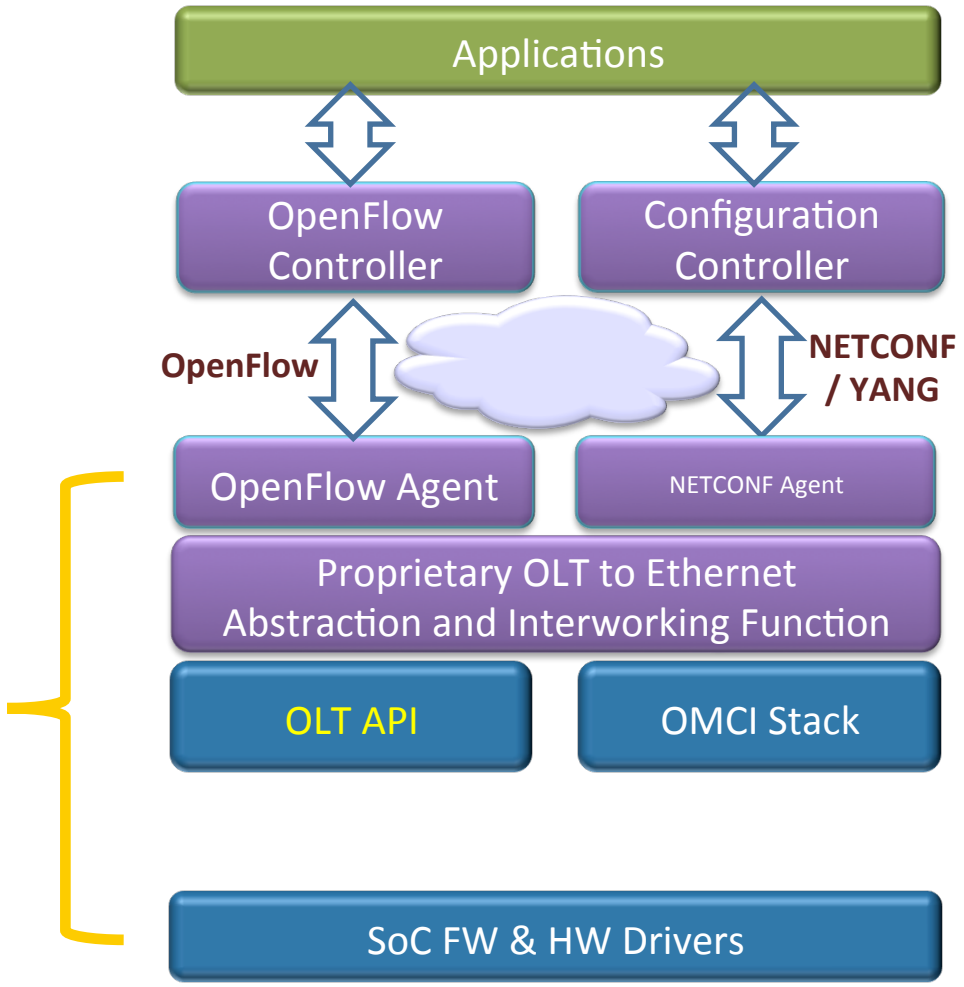
Open Access Software Stack

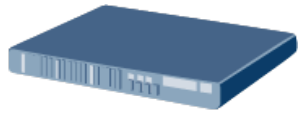
Open Agent

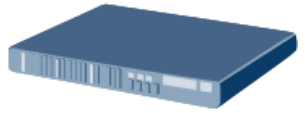


SDN controller, applications, and agents run on standard servers

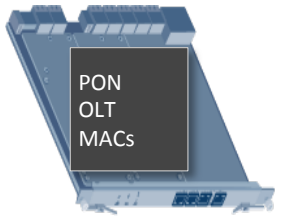
HW drivers runs on SOC

DC Server





GPON OLT IO Blade



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Operations Interface (Northbound Interface)

Survey workflows for existing subscriber and customer-care portals

Factor REST API into access device-specific and device-agnostic elements

Incorporate monitoring (including notifications) and diagnostics into NBI

Incorporate FCAPS (including configuration and for software) into NBI

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Virtual Service Gateway

Extend the features and capabilities of the existing vSG

Harmonize with VNF framework for 3rd party services

Create scaffolding to support using common VNF Frameworks in R-CORD

Develop the option for vBNG as a substitute for vSG

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CPE

Develop a Hybrid CPE that supports SDN control, slicing, and local capabilities

Support VNFs on CPE, with orchestration and control from the CORD controller

Support network slicing of access with appropriate controller diversity in CORD

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Scale and Performance

Benchmark the current R-CORD for performance, scale, and availability

Integrate DPDK for vSG and OVS

Integrate BESS switching and availability architecture

Characterize performance in multi-use CORD (e.g. R+M+E-CORD)

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What Else is Next?

Community relations?

Integrator and Vendor PoCs and Demonstrations?

From the Audience:

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Thank You!

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