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Converged Networks and Mobility

Universal Aggregation for Service Convergence: Residential, Mobility & Business

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Unified Transport Platform

Move away from silos and toward common platforms for both

Traffic Types

- Residential
- Mobility
- Business

Network Layers

- Optical Transport (layer 1)
- Ethernet switching/OTN (layer 2)
- IP/MPLS routing (layer 3)

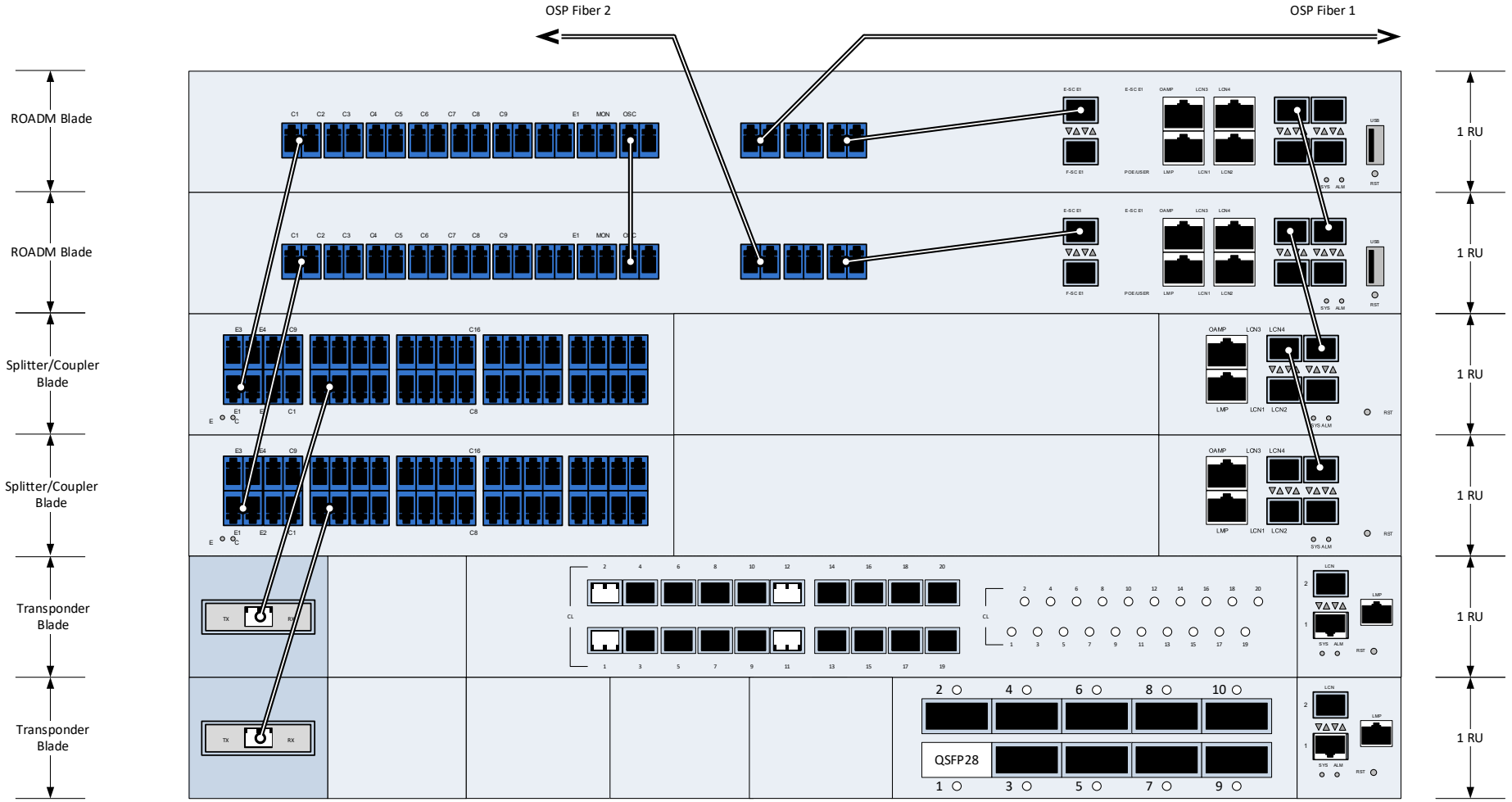
Drawbacks of Legacy Optical Network

i. Chassis-Based Platform
ii. Inefficient Scaling
iii. Client Interface Limitations
iv. Client-Side GCC0 Only
v. Manual Initial Turn-up Configuration
vi. Fixed Grid Only

Six Mandatory Attributes of The Unified Transport Platform

i. High Level Bandwidth Densification per Rack Space
ii. Building-block-like Scalability
iii. Full-set Client Interface Support
iv. Full-featured GCC0
v. Zero Touch Provisioning
vi. Flex-Grid

Unified Platform for Universal Aggregation



- Modular
- Blade-Centric
- Pizza-Box

Realization of The Six Mandatory Attributes

i. 1 Tbits/s Bandwidth Capacity Per One Rack Unit
ii. Pay-As-You-Grow. Small, granular initial investment
iii. OC192, 100GbE, and OTU4
iv. No Need for Out-of-Band Management Switch
v. Plug-and-Play with USB Key
vi. Increase The Spectral Efficiency by 25%

Conclusions

- Currently siloed in both:
  - Service types (Residential, Mobile, and Business)
  - Network layers (Layers 1, 2, and 3)
- Universal Aggregation breaks up those silos
  - Enhanced flexibility/scalability
  - More cost effective long term

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Thank You!

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