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Huawei OptiX Alps-WDM

The Best TCO-effective Metro Solution

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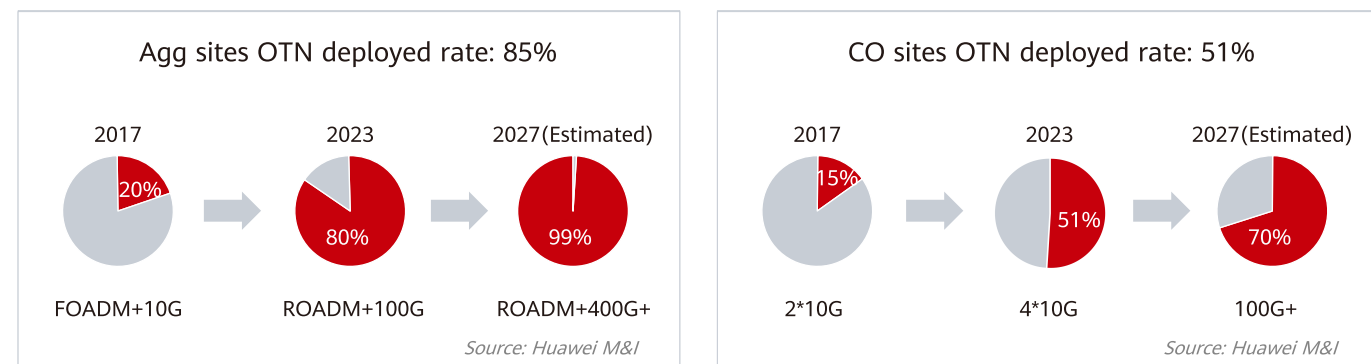
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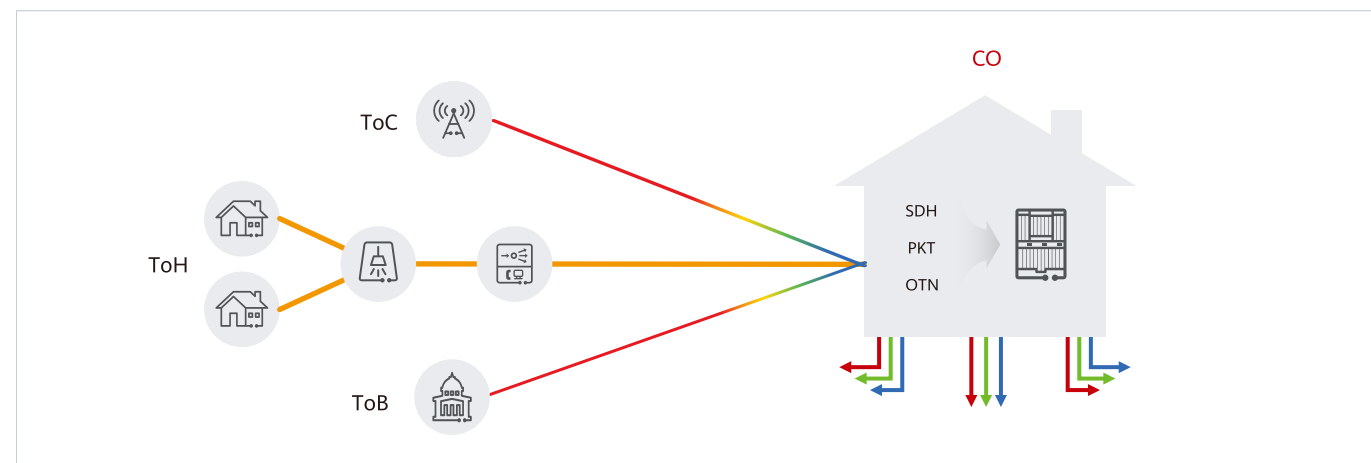
1 Metro network requires a new architecture

Deploying OTN devices at CO sites has become a trend for carriers. While facing this massive sites deployment, carriers need to deal with challenges in bandwidth, construction costs, and O&M.



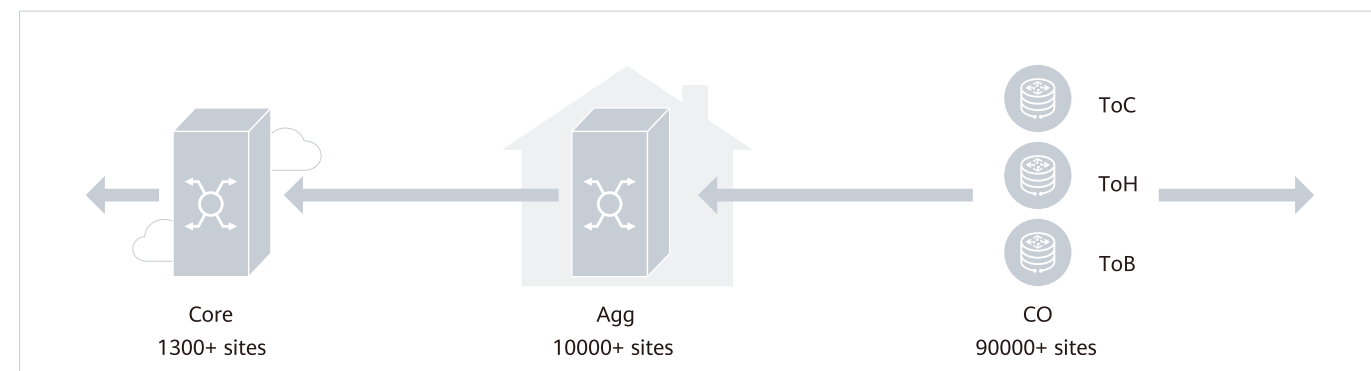
1.1 Metro network requires the bandwidth capability for metro areas

The rapid growth of traffic drives the construction of metro 100G+ capability. Traditional 100G can meet the requirement, but performance is excessive. Therefore, metro networks need 100G transmission technologies that adapt to their situation.



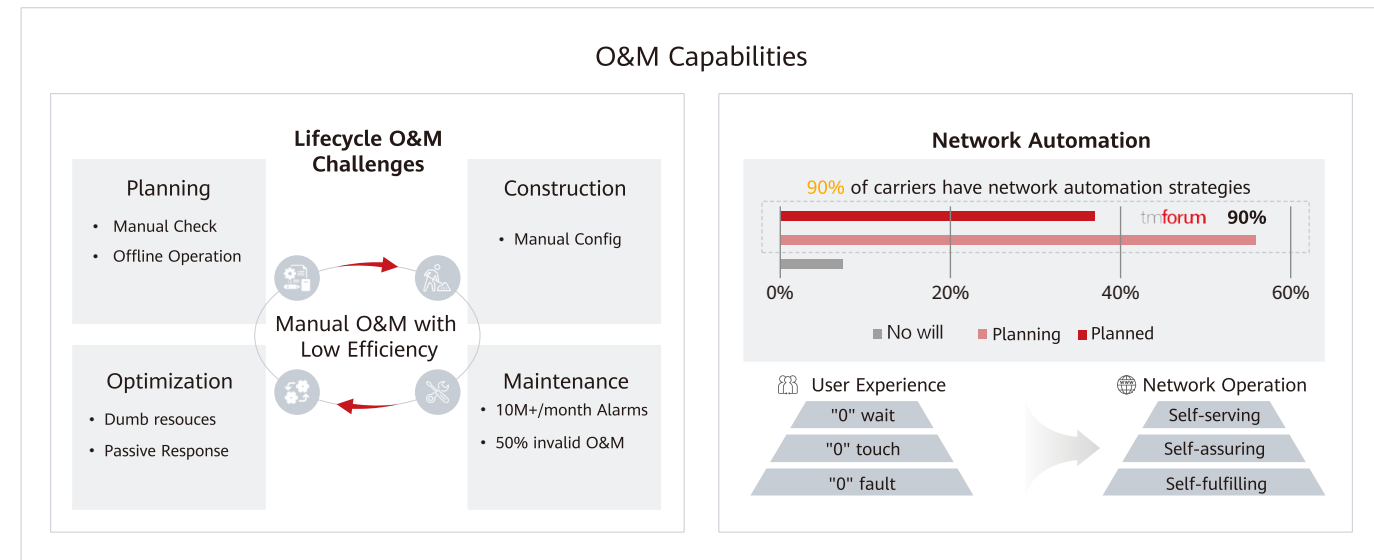
1.2 Metro Network requires a more flexible and cost-effective architecture

The expansion of OTN brings an exponential increase of sites. The backbone ROADM solution has high costs and traditional FOADM solution's flexibility is low. Therefore, a low-cost and wide-coverage solution is required to match metro scenarios.



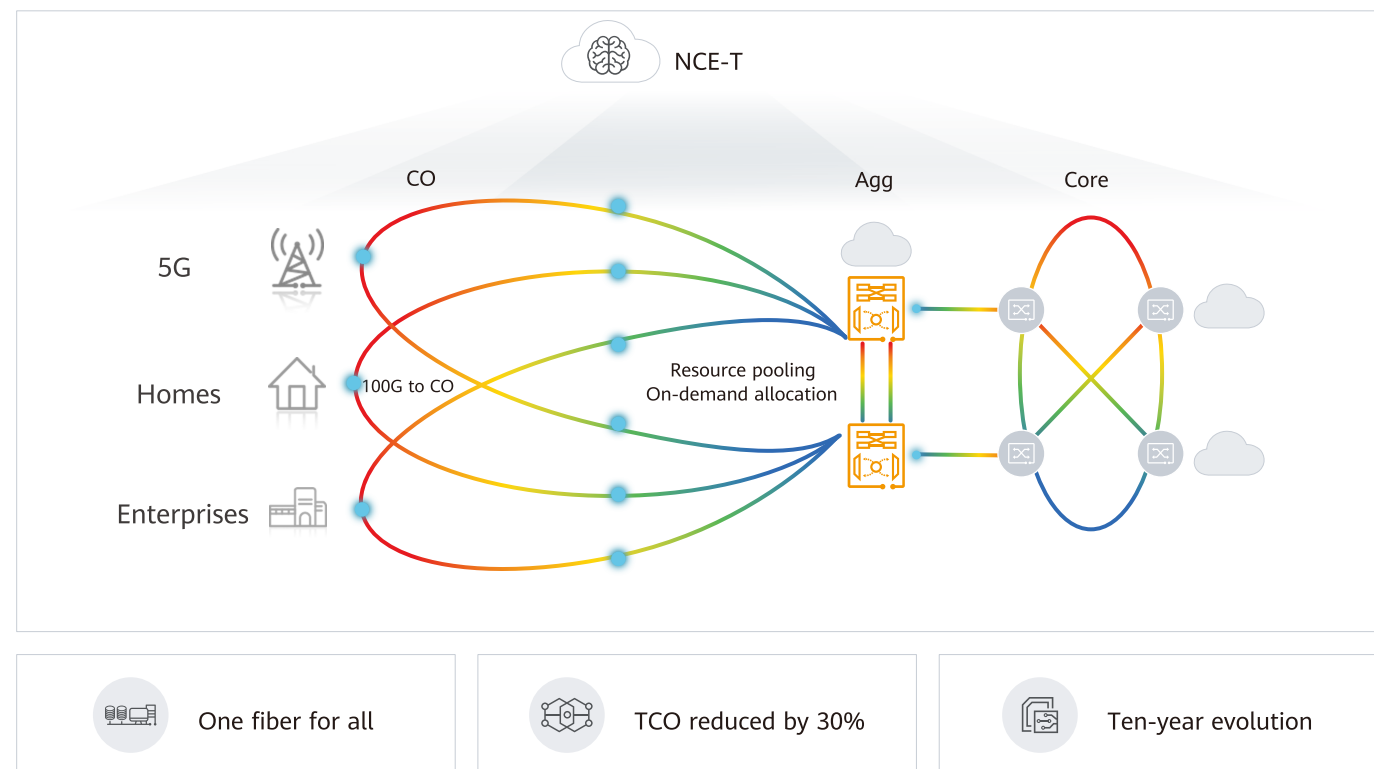
1.3 A large number of sites require a easier O&M method

The number of metro sites increases sharply. Massive service provisioning, configuration, and O&M are in urgent need of a simplified network O&M method.

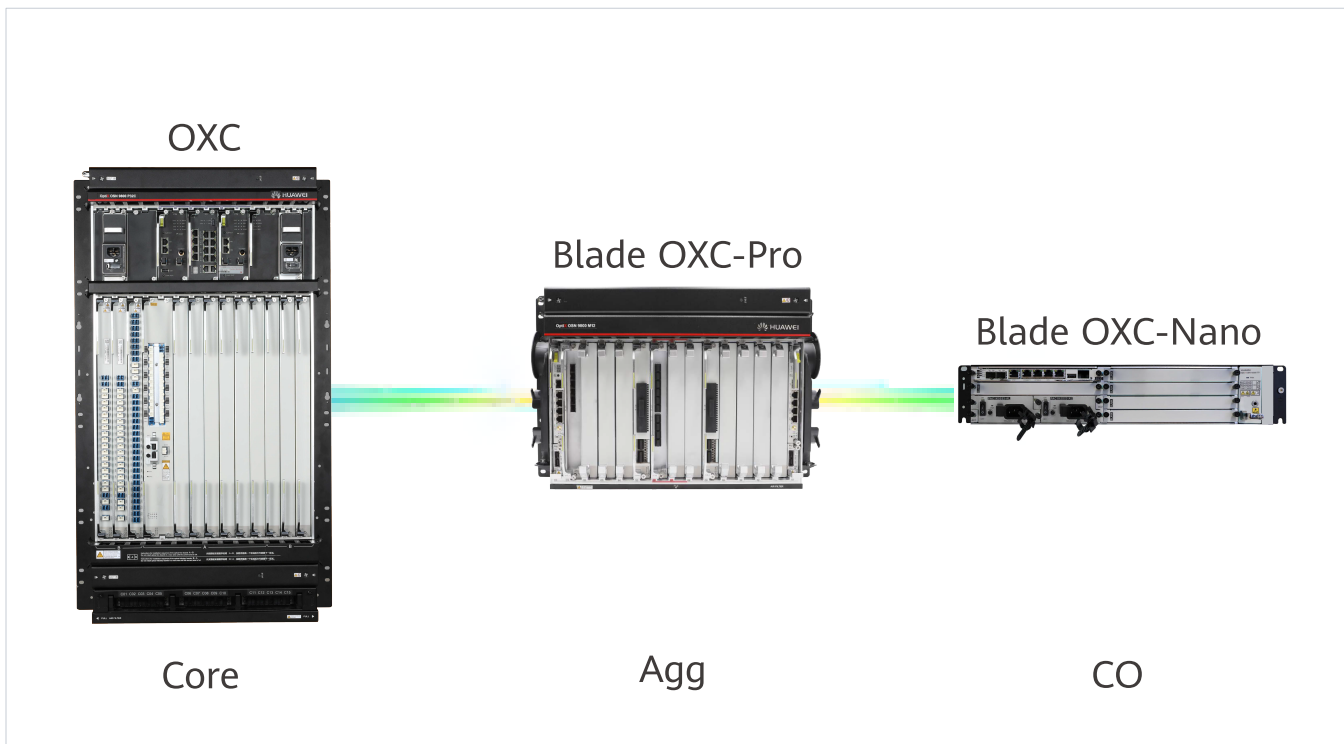


2 OptiX Alps-WDM

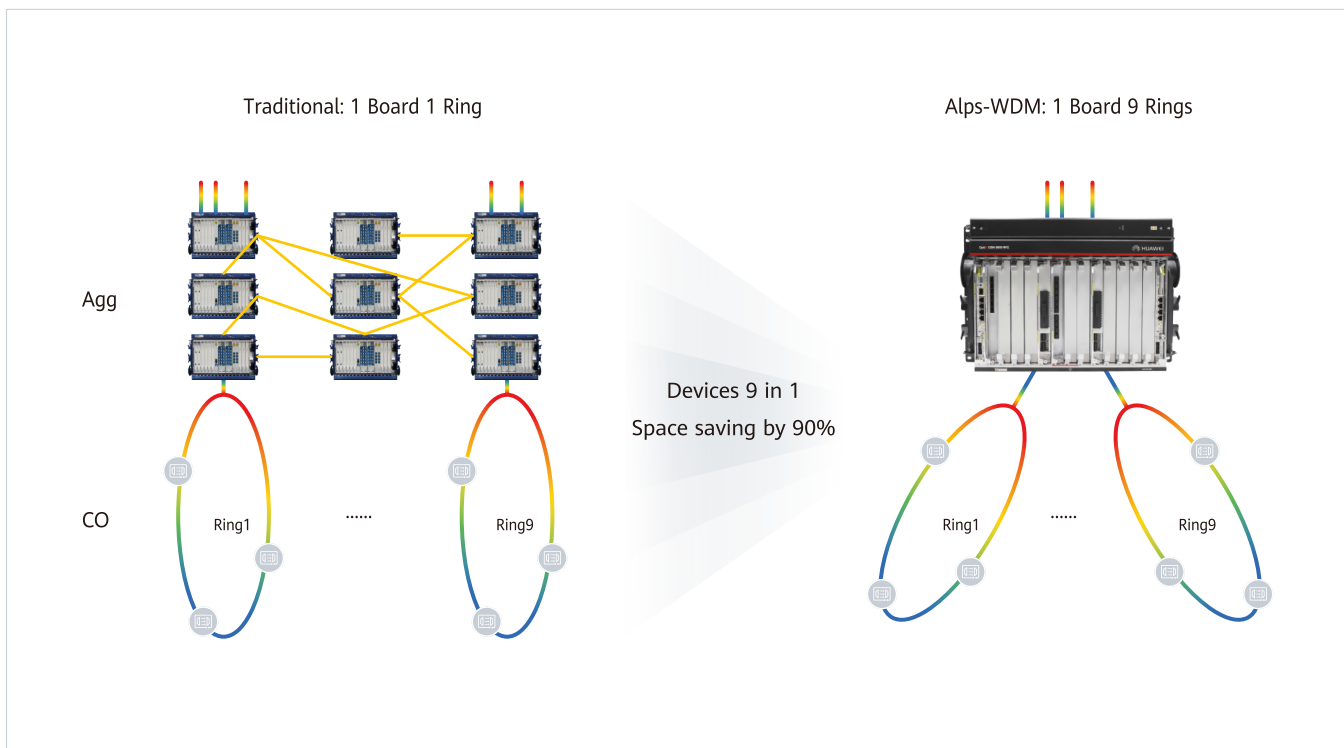
Through the innovative pooling architecture to meet the requirements for bandwidth evolution, simplified O&M, and ultra-low costs of metro networks



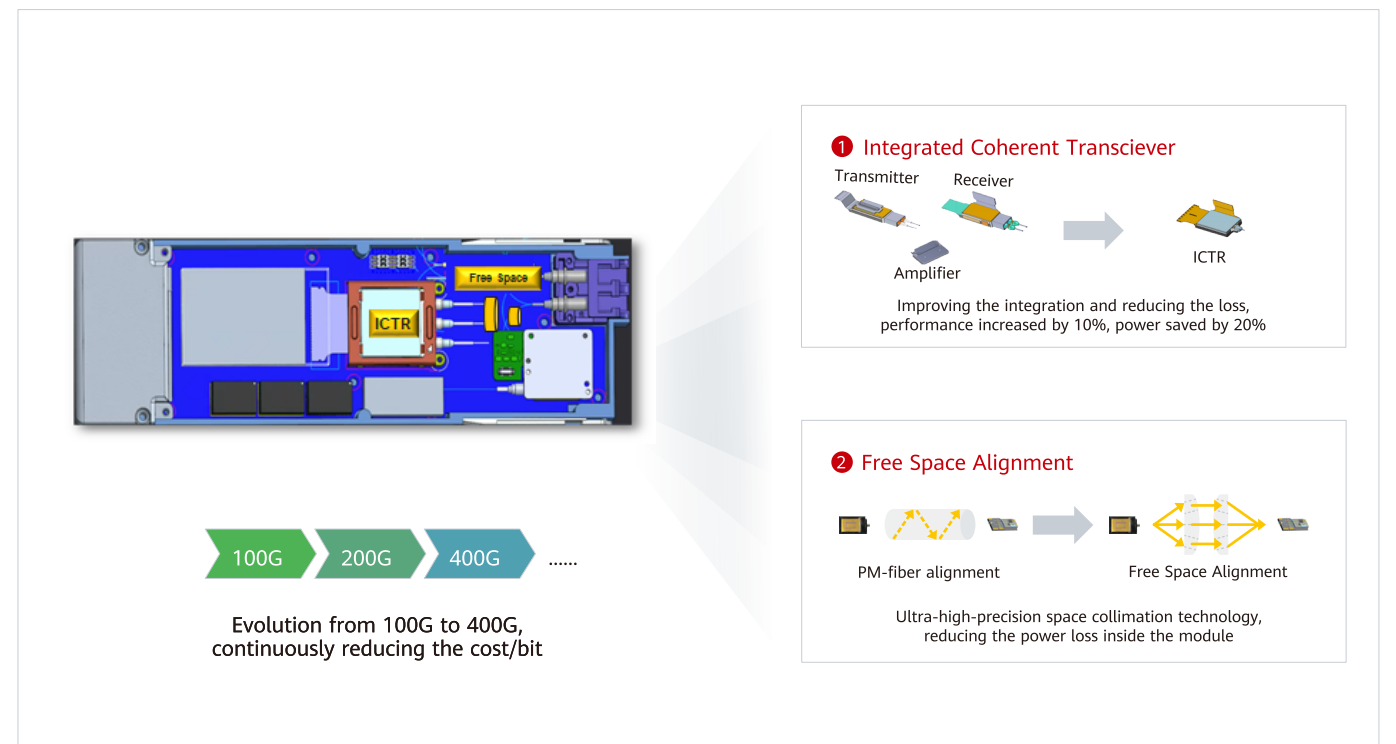
2.1 Simplified: E2E OXC, One-hop to Cloud



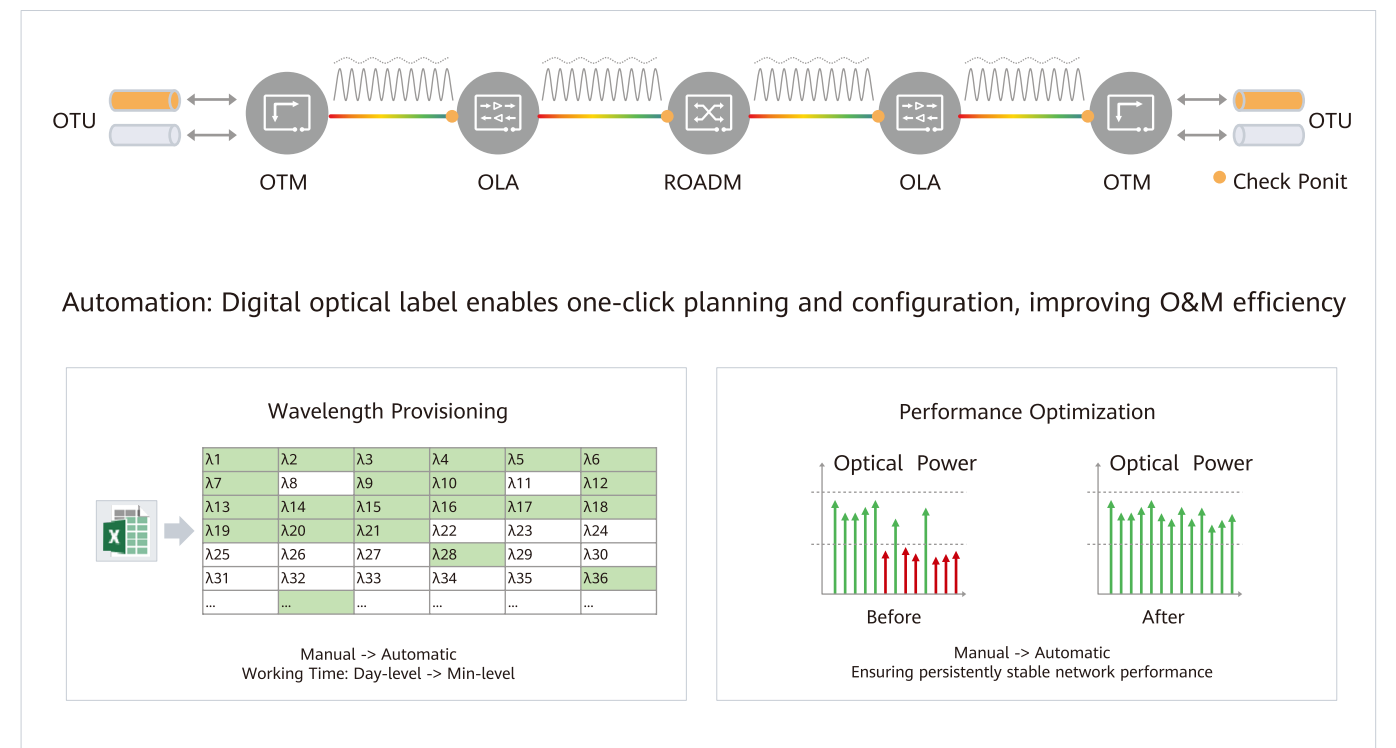
2.2 Pooling: On-demand Allocation, "0" Resource Waste



2.3 Long-term Evolution: 100G to CO, 400G Evolution



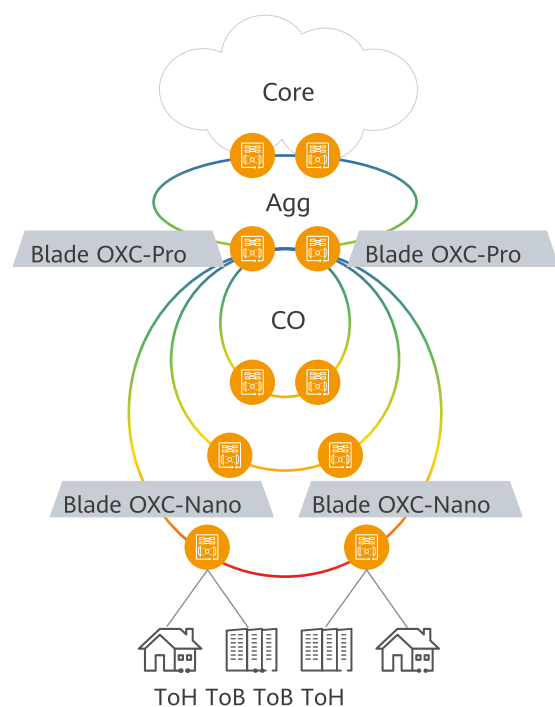
2.4 Agile: Digital Optical Label, Enabling Network Automation



3 Application Scenarios

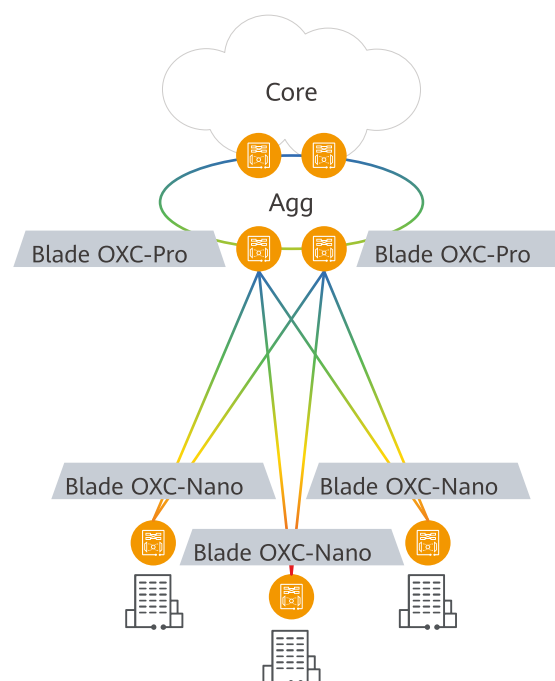
Application Scenarios of Alps-WDM Solution

Aggregation - CO



- ✓ Aggregation to CO: 10G -> 100G
- ✓ Traffic-driven network construction, especially high-value hot spot coverage

Private Line Rings



- ✓ Service growth on the customer's ring
- ✓ Easing device stacking pressure of Agg sites

4 Products

Devices

Ultra-high integration opto-electronic device, energy-saving and space-saving



OSN 9800 M24



OSN 9800 M12



OSN 1800V Pro



OSN 1800V Pro



OSN 1800II TP

Agg

CO

Boards

Optical-layer



WSS0609

Extended C-band, Supporting 9-ring Access



DAFS

Extended C-band, supporting 2 line direction



CMD4

4-port ROADM



DWSS4MD

ROADM and Supports OCH Protection

Electrical-layer



M411MP

9800 ponder board
Alps 100G module



N402MP

9800 line board
Alps 100G module



LTXMP

1800 ponder board
Alps 100G module



UNS4MP

1800 line board
Alps 100G module

5

Acronyms and Abbreviations

Abbreviation	Full Name
CO	central office
DC	data center
E2E	end to end
FEC	forward error correction
FOADM	fixed optical add/drop multiplexer
OTN	optical transmission network
OXC	optical cross-connect
ROADM	reconfigurable optical add/drop multiplexer
ToB	to business
ToC	to consumer
ToH	to home
TTM	time to market
WDM	wavelength division multiplexer
WSS	wavelength selective switch