



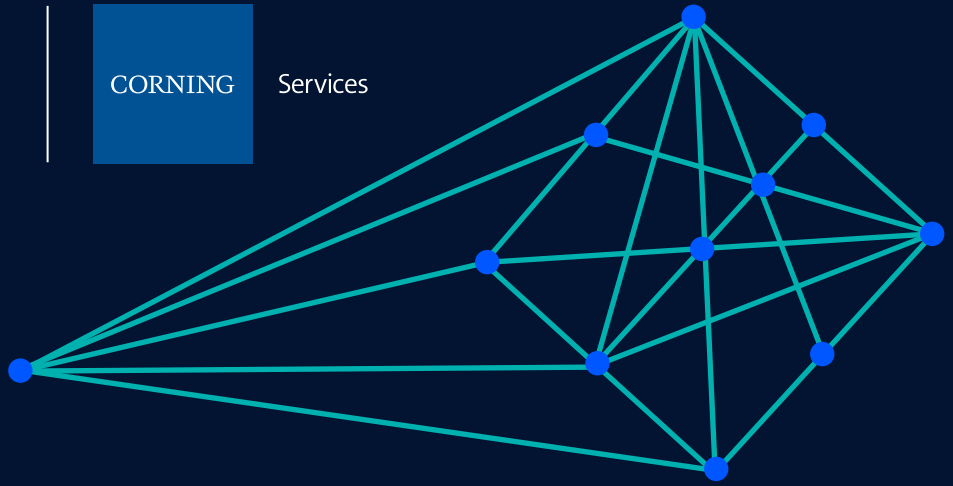
THE ELASTIC NETWORK



Services

APOLLO OPT9904X

EXTENDING OTN/PACKET SWITCHING TO THE NETWORK EDGE



Apollo OPT9904X extends the benefits of OTN switching into the aggregation and access portions of your network. Working seamlessly with Apollo core network OTN switches, OPT9904X maximizes E2E flexibility for wavelength grooming. It also enables SDN services like bandwidth-on-demand, as well as automated service restoration to guarantee high availability SLAs.



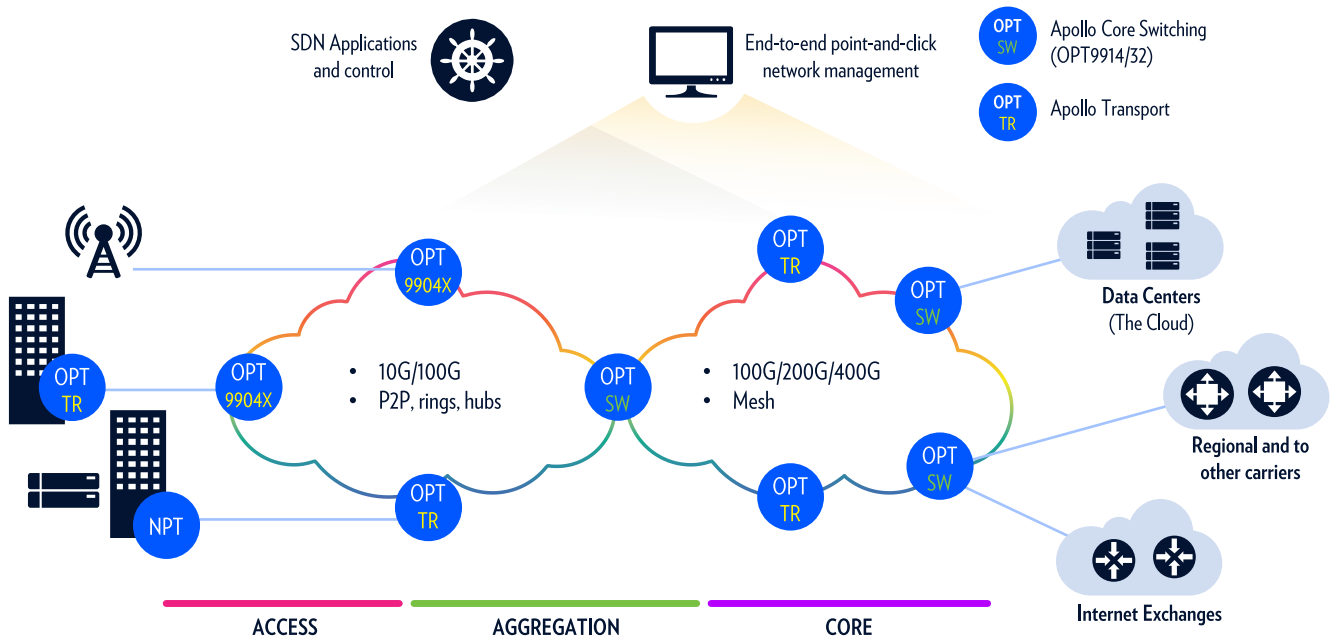
OPT9904X is based on a unique “fabric-less” design that enables smooth switching capacity expansion in 200G increments. This can total up to 800G per shelf, without having to invest in separate switching fabrics. Moreover, OPT9904X integrates packet services, generating savings by aggregating L2 traffic and reducing the number of costly router ports. OPT9904X is a member of the Apollo family of optical transport and switching platforms, delivering end-to-end transparent optical networking solutions for the broadest range of clients at the lowest cost per bit.

Most compact
ODU-XC in the market

Enables E2E
OTN switching solution

Integrated
packet services

High accuracy
mobile synchronization



Technical specifications

Topologies	Mesh, hub, ring
Spectrum	C-band Fixed spectrum - 96 channels at 50 GHz, 48 channels at 100 GHz Flexible spectrum at 12.5GHz resolution, with 37.5 GHz bandwidth for 100 Gbps network interface rate
Capacity	Shelf: 4 slots for cards Card: 200G single slot, 400G ready Switching: 0.8T, 2T ready. Universal fabric for OTN switching (ODUk cross-connect 0, 1, 2, 2e, 4, Flex) and packet switching (L2 and MPLS-TP)
MIO-200 single-slot 200G card	1 x 100G (CFP): <ul style="list-style-type: none"> OTU4 metro/regional pluggable CFP coherent transceiver with 15% SD-FEC or <ul style="list-style-type: none"> Direct detection 10x10 metro transceiver 100GbE client 12 x 10G (SFP/SFP+) supporting: <ul style="list-style-type: none"> Ethernet (1GbE, 10GbE) SDH/SONET (STM-1, 4, 16, 64/OC-3, 12, 48, 192) SAN (FC-1, 2, 4, 8, 10, 16) OTU (2, 2e, 4) Metro OTDR SFP
Switching fabric	No separate fabric card required. Switching is integrated in MIO-200 backplane for a unique pay-as-you-grow architecture.
Optical card support	Amplifiers, OMSP, OLP
Synchronization	SynchE and 1588V2 ready
Restoration	Wavelength Switched Optical Network (WSON)- wavelength level Automatic Switched Optical Network (ASON) – service level ODU SNC-N protection
HW redundancy	Power supply and fan redundancy modules High availability RCP main shelf controller
Dimensions	ANSI 19" rack: 221 mm height x 253 mm depth Front access to all cards
Power input	-40.5 VDC to -75 VDC
Environmental	Operating temperature: -5°C to +55°C Relative humidity: 5% to 90% (non-condensing)
SDN	Muse™ applications (e.g. Bandwidth on Demand, Scheduled Services)
Network management	LightSOFT® end-to-end, point-and-click network management
Performance monitoring	LightPULSE™ integrated real-time OSNR and other parameters

Specifications subject to change without notice

Contact us to find out how Apollo can build powerful and versatile optical networks



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European Countries

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