UNIVERSAL ACCESS solution is designed for flexible wireline and mobile backhaul deployments to address increasing need for more bandwidth, network intelligence and SLA (service-level agreement) while optimizing operational efficiency. Supporting scalable L2 and L3 including seamless MPLS, Universal Access offers one of the highest capacity backhaul solutions with lower energy usage, high-precision timing, power over Ethernet and a fanless cell site router for higher resiliency. With Junos® Space, service providers have a single management tool across different product lines with intuitive GUI for operational simplicity.

NEW NETWORK PLATFORM ARCHITECTURE: ACCESS & AGGREGATION

The access and aggregation network is evolving to high-bandwidth, packet-oriented architectures to meet demand for increasingly symmetrical multimedia services on any device, anywhere and at any time. Delivering high quality of experience to fixed and mobile users is crucial and requires seamless integration of existing and new technologies. At Juniper, we developed Universal Access to provide a solution that enables service providers to build a network with higher capacity, better quality of experience and lower total cost of ownership.

Access and aggregation networks are evolving rapidly as service providers optimize networks for 4G/LTE, FTTX, fixed and mobile convergence, etc. Universal Access ensures that service providers have the solution they need today with the flexibility, intelligence and investment protection built-in for the future. Tackle anywhere, anytime, any device challenges and deliver a richer user experience with Juniper’s Universal Access.
ACCESS AND AGGREGATION ARCHITECTURE

VALUE PROPOSITIONS AND DIFFERENTIATORS

<table>
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<tr>
<th>VALUE PROPOSITIONS</th>
<th>DIFFERENTIATORS</th>
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<tr>
<td>Lower TCO</td>
<td>Juniper lowers cost of access and aggregation networks with a high-density, high-performance, routing and switching portfolio. With the new ACX Series, Juniper lowers power usage, provides fanless options, plus integration capabilities to consolidate and bring costs down.</td>
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<td>High capacity and scale</td>
<td>Juniper provides leading capacity and performance for aggregation networks where service providers need to distribute rich media such as video.</td>
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<tr>
<td>Quality of experience</td>
<td>Juniper provides high-precision timing devices in mobile backhaul networks that reduce dropped calls and jitter.</td>
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SOLUTION PORTFOLIO

**MX SERIES**

MX Series routers are ideal for IP/MPLS-based metro, aggregation and packet gateways for an MSP network. They offer all of the benefits of IP/MPLS—fast reroute, resiliency, reliability, and OAM. The MX Series implements a rich feature set for both Layer 2 and Layer 3 VPNs and extensive traffic engineering and OAM capabilities at large scale.

**ACX SERIES**

The ACX Series enables rapid deployment of wireless and wireline access services with high performance, Layer 2 and Layer 3 features including seamless MPLS with traffic engineering and high precision timing. They offer low power consumption with power over Ethernet support, reducing TCO while optimizing backhaul networks for 3G, G/LTE and small cell deployments.

**M SERIES**

The M Series with Circuit Emulation PICs, is deployed as aggregation site gateway, terminates pseudowire, sending TDM traffic to the base station controller, and ATM and IP traffic to the radio network controller.

**JUNOS SPACE**

Junos® Space-based management and service delivery is emerging as an innovative and feature rich environment for streamlining the management plane.

**TCA SERIES**

The TCA Series provides high precision timing and synchronization with synchronous Ethernet and IEEE 1588-2008 PTP support, ensuring quality of experience and less dropped calls.