WHITE PAPER · OCNOS FOR SERVICE PROVIDERS

Democratizing the Network

After HPE + Juniper: The Case for Open Networking

The Ground Has Shifted

On July 2, 2025, HPE closed its $14 billion acquisition of Juniper Networks. The vendor relationship you signed in 2020 is now managed by HPE. The DOJ settlement that cleared the deal required HPE to divest its Instant On campus and branch business and grant competitors limited access to Juniper's Mist AIOps technology — the clearest signal yet that consolidation, not innovation, is reshaping the incumbent networking landscape.

For service providers, the questions are immediate and practical:

- Which Juniper SKUs survive the portfolio rationalization with HPE Aruba?
- How does HPE's enterprise-first orientation affect service provider roadmap priorities?
- What happens to the Paragon, Apstra, and Mist integration story your architects planned around?

IP Infusion's position is simple: the future of carrier and service provider networks belongs to operators who control their own stack — hardware choice, software roadmap, and optics ecosystem. Open networking is not a bet on a new vendor. It is a bet on architectural independence.

Why Juniper Mattered — and Why the Model Needs Updating

Juniper earned its reputation. The MX series, Junos maturity, and the engineering-first culture that produced segment routing, EVPN, and Trio silicon represented genuine innovation in an industry that badly needed it. Operators chose Juniper because it worked.

What changed is the cost of that choice. In 2024, Juniper placed the MX204 — one of its most widely deployed aggregation platforms — on its end-of-life list, only to revoke the decision months later. The platform remains in the catalog, but the episode exposed a structural reality: when a single vendor controls your silicon, software, and optics, you inherit every decision they make about their business — including the ones they reverse.

Add the HPE acquisition on top of that, and the 2020 logic for standardizing on Juniper no longer produces the same answer in 2026.

What IP Infusion Offers

OcNOS is a carrier-grade network operating system used by 600+ operators in 60+ countries, deployed on validated hardware from Edgecore, UfiSpace, Pegatron, and Delta. IP Infusion has been shipping OcNOS since 2014 and has been a network software company since 1999 — 25+ years of continuity, wholly owned and independently operated as a subsidiary of ACCESS CO., LTD.

The OcNOS stack delivers what service providers actually deploy:

- **Layer 2 and Layer 3 switching and routing** with full BGP, IS-IS, OSPF implementations
- **MPLS, MPLS-TP, Segment Routing (SR-MPLS and SRv6), EVPN** for traffic engineering and service delivery
- **IPoDWDM with 400G ZR and ZR+** coherent optics, validated across multiple vendors
- **IEEE 1588v2 Precision Timing** for mobile backhaul and fronthaul synchronization
- **VxLAN, RoCEv2, and MEF 3.0 Carrier Ethernet** — first open-networking NOS to achieve MEF 3.0 certification (October 2024)
- **Streaming telemetry, ACLs, control-plane security**, and a comprehensive management framework

OcNOS also holds the **Telecom Infra Project Validated Solution Gold Badge** for its Disaggregated Cell Site Gateway (DCSG) implementation, and participated in the **EANTC 2024 Multi-Vendor Interoperability Test** — one of the industry's most rigorous SR/EVPN/timing showcases, covering 87 test scenarios with 14 vendors.

Where Juniper Still Wins — and Why That Matters Less in 2026

Credibility requires candor. Before the comparison tables, we want to be clear about where a Juniper MX chassis still wins:

- **Largest-scale MPLS cores** with decades of Junos-specific operator tooling and 10M+ FIB scale
- **Operators deeply invested in Paragon, Apstra, or Mist** for automation and assurance
- **Environments where JTAC relationships and Junos-certified staff** outweigh TCO considerations

These are legitimate reasons to stay. But each assumes that the vendor you're standardizing on will remain strategically unchanged — an assumption the HPE acquisition and the MX204 reversal both call into question.

For **new-build aggregation, edge, mobile backhaul, CMTS replacement, IPoDWDM metro, and DCI** — the workloads that drive most service provider capex today — the economics and roadmap independence favor open networking.

Head-to-Head: OcNOS vs. Juniper, by Deployment Scenario

The comparisons below represent reference deployments. Methodology assumptions are summarized at the end of this section.

Scenario 1 — Mobile backhaul / aggregation / CMTS replacement

	OcNOS on UfiSpace S9510-28DC	Juniper MX204
Interfaces	2×100/400G QSFP-DD, 2×40/100G QSFP28, 24×1/10/25G SFP28	4×40/100G, 8×10G
Features	L2, L3, MPLS, EVPN, SR, QoS, Timing, **ZR+**	L2, L3, MPLS, EVPN, SR, QoS, Timing
Optics	Multi-vendor validated	Juniper-certified required
5-year TCO	**Up to ~60% lower**	Reference

Scenario 2 — Edge router with 100G aggregation

	OcNOS on Edgecore AS5916-54XKS	Juniper ACX5448-D
Interfaces	6×100G QSFP28, 48×1/10G SFP28+	35×10G, 2×100G, 2×200G (CFP2-DCO)
Features	L2, L3, MPLS, EVPN, SR, QoS, Timing	L2, L3, MPLS, EVPN, SR, QoS, Timing
5-year TCO	**Up to ~70% lower**	Reference

Scenario 3 — Data center interconnect / PE router

	OcNOS on UfiSpace S9600-56DX	Juniper ACX7100-32C
Interfaces	8×400G QSFP-DD, 48×100G SFP28	4×400G QSFP-DD, 32×100G SFP-28
Features	L2, L3, MPLS, EVPN, SR, QoS, Timing, ZR+	L2, L3, MPLS, EVPN, SR, QoS, Timing, ZR+
5-year TCO	**Up to ~60% lower**	Reference

> **Methodology (5-year TCO).** List pricing where publicly available, street pricing discounted per typical tier-2/3 service provider procurement (Juniper ~35%, IPI/ODM partners ~0–10%); includes 5 years of 24×7 support, RMA, and software subscription; excludes rack, power, and staff costs, which are comparable between architectures; optics priced at published third-party-validated list where applicable (Juniper SKUs priced at Juniper-certified optics list). Savings are scenario-specific and will vary with port mix, scale, and procurement leverage. Detailed per-line BOM available under NDA.

Proof, Not Pitch: Operators Who Replaced Juniper

These are public deployments where operators explicitly displaced Juniper (or Juniper plus Cisco) and moved to OcNOS on validated open hardware:

- **Haefele Connect** — "Traditionally a Cisco and Juniper operation." Haefele chose OcNOS on Edgecore hardware for L3 aggregation, exiting a legacy multi-vendor footprint for a single open stack.[7]
- **Celerity Internet / Gallatin Wireless** — fiber provider that upgraded from a prior MikroTik and Juniper network to OcNOS with IP Maestro on UfiSpace hardware.[8]
- **BroadStar** — replaced legacy Juniper switches for MDU residential access with OcNOS on open hardware — OcNOS delivering hardware independence without performance compromise.[9]

And for strategic-scale deployments:

- **eww ITandTEL (Austria)** — modernized a sovereign MPLS backbone on 400G ZR+ with OcNOS, a reference architecture for regional service providers.[10]
- **NTT and IP Infusion** — joint 400G IOWN open network solution, photonic-network architecture in production.[11]
- **Africa's largest mobile network operator** — designated IP Infusion as approved supplier for open and disaggregated networking across the group.[12]
- **Multinet (Pakistan)** — one of the world's largest open optical and packet transport nationwide IP network upgrades.[13]

Over 600 operators. Over 10,000 deployments. 25+ years of NOS engineering continuity. Independently operated under ACCESS CO., LTD. — a stable parent, not a consolidation target.

What to Do Next

If you are evaluating your Juniper footprint in light of the HPE acquisition, we can help you quantify the decision concretely.

- **Request a TCO workshop** — we will model your actual port mix and traffic profile against OcNOS on your choice of validated hardware.
- **Download the OcNOS SP Feature Matrix** for a line-by-line comparison against your current Junos features.
- **Read a customer migration story** — published migrations from Juniper, Cisco, and Nokia footprints across tier-1 and tier-2 service providers.

Contact: **sales@ipinfusion.com** · +1-877-699-3267 · www.ipinfusion.com/resources/ocnos-vs-juniper/

Sources & Citations

1. HPE press release: “Hewlett Packard Enterprise closes acquisition of Juniper Networks,” July 2, 2025. hpe.com/newsroom/press-release/2025/07/
2. U.S. Department of Justice settlement with HPE/Juniper, June 28, 2025. Divestiture of HPE Instant On; limited access to Juniper Mist AIOps licensing required of HPE.
3. Juniper MX204 EoL status — EoL announced in 2024 during COVID-era supply chain disruptions, then revoked. Public EoL/EoSL trackers (Router-Switch, Park Place Technologies, Service Express) reflect the revocation. No current EoS/EoL date published.
4. SDxCentral / IP Infusion, “OcNOS Achieves MEF 3.0 Certification,” October 2024. First open-networking NOS to achieve MEF 3.0.
5. IT Digest / Telecom Infra Project, “IP Infusion’s OcNOS Awarded TIP Validated Solution Gold Badge” — DCSG solution.
6. EANTC 2024 Multi-Vendor Interoperability Test — SDN, Segment Routing, EVPN, Time Synchronization — 87 test scenarios, 1,590 test results, 14 vendors. OcNOS tested on AS7712-32X hardware.
7. ipinfusion.com/press/haefele-connect-upgrades-network-with-ip-infusion/
8. ipinfusion.com/news/celerity-internet-and-wispwest-upgrade-networks-with-ocnos-and-ip-maestro-on-ufispace-hardware/
9. ipinfusion.com/press/broadstar-selects-ip-infusions-ocnos-disaggregated-solution-to-replace-traditional-hardware-switches-for-mdu-residential-access-applications/
10. ipinfusion.com/eww-itandtel-modernizing-a-sovereign-mpls-backbone-with-ocnos-400g-zr-switches/
11. ipinfusion.com/ntt-and-ip-infusion-announce-400g-iown-network-solution/
12. ipinfusion.com/africas-largest-mobile-network-operator-designates-ip-infusion-as-approved-supplier-for-open-and-disaggregated-networking/
13. ipinfusion.com/pakistans-multinet-chooses-ocnos-to-build-the-worlds-largest-open-optical-and-packet-transport-nationwide-ip-network-upgrade/

About IP Infusion. IP Infusion is a leading provider of open network software and solutions for carriers, service providers, and data center operators. OcNOS powers more than 10,000 deployments at 600+ operators across 60+ countries. Headquartered in Santa Clara, CA. Wholly owned and independently operated subsidiary of ACCESS CO., LTD. ipinfusion.com