

Realize the Future with a Converged Industrial Edge



Reimagine information technology (IT) and operational technology (OT) convergence as a private operations cloud with native support for IT and OT applications.

Overcoming Challenges, Both New and Old

Barriers to Modernization



55%

of utility executives say justifying investments in electric vehicles, distributed storage, and microgrids to regulators is their top challenge¹

Need for Enhanced, Hardened Resilience



Extreme weather

is increasing in intensity and frequency³

Unforeseen Profit Pressures



10%

Global demand for electricity is predicted to fall as much as 10 percent due to the coronavirus crisis²

Rising Physical and Cybersecurity Risks



2000%

Increase in cyberattacks on OT from 2018 to 2019⁴

Four Reasons to Consider a Private Operations Cloud for Converged IT/OT

1

Automate to overcome the wide variations in IT and OT technologies, policies, and processes

Ensure all stakeholder requirements are met, with no compromise

2

3

Reduce truck rolls and accelerate new service deployments

Leverage cloud-native technologies to simplify and improve orchestration, control, management, automation, and cybersecurity

4

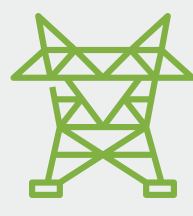
Accelerate Your Private Operations Cloud Success with Engineering Simplicity

Industry leaders Juniper, SEL, and Dragos jointly created an open, multivendor network reference architecture to deliver end-to-end network provisioning, monitoring and testing, and OT/ICS threat detection and mitigation.



Juniper

Secures networking from the data/control center across the WAN transport core, aggregation, and edge



SEL

Employs OT-SDN Ethernet to extend packet-based networking into the electrical substation with support for deterministic applications with millisecond timing resolution requirements



Dragos

Provides threat protection and incidence response for OT/ICS environments integrated with Juniper Connected Security threat-aware networking to ensure end-to-end cyber security

Build Your Converged Industrial Edge Faster and with Less Risk



To learn more about this joint solution from Juniper, SEL, and Dragos, contact your Juniper account representative at Juniper-SEL-OT-SDN@juniper.net or visit [Juniper's utility solutions page](#).

JUNIPER NETWORKS

1. "North American Energy Resilience Model," US Department of Energy, July 2019
 2. "Global Energy Review," International Energy Agency (IEA), April 2020
 3. "North American Energy Resilience Model," US Department of Energy, July 2019
 4. "X-Force Threat Intelligence Index," IBM, 2020