

Industry trends

The acceleration of broadband access deployments – including fixed, fixed wireless, 5G, and cloud – have driven the need for more capacity in IP access and aggregation networks. In today's environment, however, capacity alone is no longer enough. There are now several other factors to consider:

- Digital transformation, along with the shift of critical enterprise applications to the cloud (and edge cloud), has driven the need for more deterministic connectivity.
- The proliferation of IoT devices has increased the global network threat landscape, driving the need for advanced network security capabilities in all areas of the network.
- The recognition of global networks as business- and society-critical infrastructure now drives the expectation that IP connectivity and infrastructure services must be highly reliable, resilient, and always on.

- Global sustainability initiatives, combined with the increasing cost of power, have driven the need for reduced equipment footprints and energy consumption.
- As networks become more complex and technology's pace of change accelerates, network automation enabled by open and extensible routing platforms will be key to ensuring efficient operations with the agility to adapt to new requirements as they emerge.

Next generation IP networks must be secure, assured, and sustainable from access through aggregation, edge, and core. They must also be built on a foundation optimized for automation and extensibility.



Introducing the Nokia 7730 Service Interconnect Routers (SXR)

As a network operator, you now have new objectives for your IP networks, with these evolving industry trends in mind:

- Building a network that your customers trust by delivering secure, and assured IP network services.
- Scaling your network efficiently and sustainably without compromising service quality.
- Modernizing your network operations to efficiently manage scale and complexity, and reduce risk.

Nokia delivers secure, assured, and sustainable platforms optimized for automation, leveraging industry-leading FP5 programmable routing silicon and a proven network operating system (NOS). Previously, however, these advanced capabilities have not been available or optimized for IP access and aggregation networks.

So, Nokia is expanding its marketleading IP routing portfolio with the introduction of a new family of IP routers. The next-generation Nokia 7730 SXR family delivers efficiency and flexibility, with a unique combination of a next-generation chip architecture and a forward-looking NOS:

- Secure connectivity is enabled via platform support for MACsec, ANYsec and DDoS mitigation with traffic inspection.
- Assured IP services are enabled through FPcx's design for deterministic performance with multi-level H-QoS.
- Available in modular and fixed platform variants, with an extended temperature range, to efficiently meet the requirements of IP access, aggregation, and edge locations.
- Designed from the ground up for a new era of network operations with the Nokia SR Linux open, extensible, and resilient NOS.
- Fully managed by the Nokia Network Services Platform (NSP) with its extensive toolset for network automation.

The 7730 Service Interconnect Router (SXR) family

7730 SXR-1-32D



7730 SXR-1x-44S

7730 SXR-1d-32D



-7730 SXR-R



7730 SXR-R6d



7730 SXP-P6dl

7730 Service Interconnect Router (SXR) features and benefits

Powered by the Nokia FPcx, the industry's newest and most capable network processor is:

- Performant: 5 Tbps capacity and 1GE to 400GE interfaces with full breakouts unlock the benefits of 112G SerDes technology to drive higher density, more energy-efficient optics (including coherent pluggable optics) and system versatility.
- Efficient: right-sized capacity, scale and interface speeds deliver industry-leading capabilities with lower TCO for IP access, aggregation, and edge network applications.
- **Capable:** 100% programmable network processor architecture with unique cluster capability, hierarchical

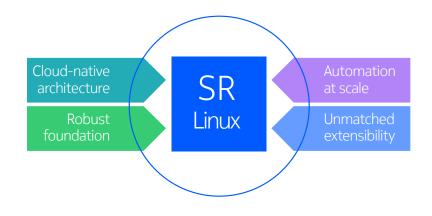
- memory, multi-level H-QoS, and superior scalability for services, tunnels, queues, counters, policers, and tables enables assured service delivery and innovation and maximal ROI through extended network lifespan.
- Secure: In-line, advanced filtering for DDoS mitigation, with large scale ACLs providing extensive match criteria flexibility, and line-rate encryption (MACsec/ANYsec on select platforms and adapters) provide advanced IP network security to mitigate against DDoS attacks and protect services and internal network links from security threats.

Nokia SR Linux is an open, extensible, and resilient network operating system designed to enable superior scalability, flexibility, and efficiency. SR Linux has:

- Cloud-native architecture: Linux-based NOS with a modular, state-sharing architecture
- Robust & reliable foundation: leveraging the field-hardened SR OS protocol stack and networking applications.
- Automation at scale: model-driven, full YANG coverage, unprecedented telemetry, designed for OpenConfig.
- Unmatched extensibility:

 a true app development platform
 with a Native Development Kit (NDK)
 and Python-based CLI.





Leveraging the Nokia difference

Only Nokia offers a comprehensive portfolio of network equipment, software, services, and licensing opportunities across the globe. With our commitment to innovation driven by the award-winning Nokia Bell Labs, we are a leader in the development and deployment of mission-, business-, and society-critical networks.

Our IP network products and solutions are built on a foundation of excellence and innovation in routing. We can help you:

- Build networks that your customers trust by deploying and delivering scalable, secure, and assured IP network services.
- Scale your networks efficiently and sustainably without compromising service quality.
- Help you be ready for the future through state-of-the-art network operations.

Learn more

To learn more about the Nokia 7730 SXR family and its industry leading technologies, please visit the:

7730 SXR product webpage

FPcx webpage

SR Linux webpage

Network Services Platform (NSP) webpage

For details about the industry leading Nokia IP routing portfolio, visit our IP networks portfolio web presence. Nokia OYJ Karakaari 7 02610 Espoo Finland

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About Nokia

At Nokia, we create technology that helps the world act together.

As a B2B technology innovation leader, we are pioneering networks that sense, think and act by leveraging our work across mobile, fixed and cloud networks. In addition, we create value with intellectual property and long-term research, led by the award-winning Nokia Bell Labs.

Service providers, enterprises and partners worldwide trust Nokia to deliver secure, reliable and sustainable networks today – and work with us to create the digital services and applications of the future.

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