

Nokia Service Routing Architect

Nokia Certified

Service
Routing
Architect

The Nokia Service Routing Architect (SRA) certification is the most advanced certification level in the SRC program. Building on the NRS II certification, individuals certified at the SRA level are proven experts at all facets of service routing technology and networking. A workforce armed with SRA certified professionals enable operators to build stronger and more reliable networks and services, achieve a faster time-to-market, improve operational efficiencies, and ensure a high quality-of-experience for customers.

Market need

- Internet-era infrastructures can no longer meet the requirements for advanced multimedia and on-demand applications that enterprises need to operate their business.
- Enterprises need faster, more resilient packet-based network architectures with converged IP voice, data and video running over Layer 2 and/or Layer 3 business VPNs.
- Carriers need to support a highly reliable and flexible service mix to address enterprise requirements for both Layer 2 and Layer 3 VPN services such as virtual private LAN service (VPLS) and IP-VPNs.
- Competition is growing creating challenges for service providers to build and deliver more advanced and complex services.
- Entire markets are transforming rapidly with the convergence of voice and video over packet-based networks.
- Service providers need to accommodate and support the tremendous demands for content-rich applications and bandwidth-intensive services.
- User-centric broadband services – any content to any user at any time – need to be delivered in the most efficient and cost-effective way.
- Nokia's Triple Play Service Delivery Architecture (TPSDA) has become the blueprint for service providers' IPTV rollouts around the world.
- Service providers are challenged to develop, train, and maintain a highly skilled work force capable of working in advanced, multi-service network environments.

Certification objectives

- Provide the ability to evaluate the optimal implementation scenarios for Layer 2 and Layer 3 business VPNs such as VPLS and virtual leased lines (VLL).
- Provide the skill set to design, operate and troubleshoot Layer 2 and Layer 3 business VPNs.
- Provide in-depth understanding of IP technologies and routing protocols such as virtual private LAN service (VPLS), hierarchical VPLS (H-VPLS), virtual private routed networks (VPRNs), and multicast VPNs (MVPN).
- Develop a thorough understanding of BGP operation and provide experience with BGP policy configuration; provide an understanding of the key role of BGP in implementing administrative policies.
- Provide a thorough knowledge of quality of service (QoS) including an understanding of how to reduce jitter, packet loss, and latency.
- Develop the required knowledge to deploy highly reliable and scalable VPLS designs for broadband service aggregation and enterprise VPNs.
- Provide an enhanced career path with industry-leading certification that is recognized worldwide.



Benefits

- The SRA certification provides the highly advanced training and skills that expert-level engineers need for planning, operating, and troubleshooting complex multi-service networks.
- An SRA certified workforce translates into faster time-to-market with new services, troubleshooting and operational efficiencies and superior planning capabilities.
- This certification enables service providers to build a competitive advantage with a highly skilled team that can improve the performance and reliability of the network, deliver scalable layer 2 and layer 3 services, and deliver a superior customer service experience.
- Students will receive real-world experience with in-depth, hands-on training.
- Career paths are enhanced with industry-leading certification. Students gain the skills and credibility to work in complex network environments.

About the SRA certification

To achieve SRA certification, individuals must pass the required written and practical lab exams identified in the tables below – attending the recommended courses is optional.

The SRA certification is valid for three years. You must recertify to ensure your certification stays current. Re-certification requirements are available at networks.nokia.com/src/recertification. Ensure you continue to benefit from having earned an industry respected IP designation by recertifying within your recertification eligibility period.

For more information on the Nokia SRC Program, contact your local Nokia account representative or visit networks.nokia.com/src.

Credit for other IP certifications

If you have already received an IP certification from Cisco or Juniper, and your certification is still valid, you may be eligible to receive credit towards prerequisite written exams in the Nokia Service Routing Certification program. To find out which third-party certifications are eligible for credit, which SRC exam exemptions you may be qualified to receive, and instructions on how to request an exemption, please visit networks.nokia.com/src/exemptions. Please note that your third-party certification must be current/active to receive credit.

Nokia Service Routing Architect (SRA) certification

Course and written exam

The following courses are recommended but not mandatory. All courses include classroom hours and in-depth lab training. All exams are mandatory but may be completed in any order to obtain a certification.

Please note, students have the option of writing the SRA Composite Exam (4A0-C02) as a substitute/replacement for writing the following four exams from the table below: 4A0-102, 4A0-105, 4A0-106, 4A0-107

| Recommended courses | Course duration (days) | Mandatory exam | Mandatory exam pre-requisites |
|---------------------------------------|------------------------|----------------|-------------------------------|
| Nokia Scalable IP Networks | 4 | 4A0-100 | N/A |
| Nokia Interior Routing Protocols | 5 | 4A0-101 | N/A |
| Nokia Border Gateway Protocol | 4 | 4A0-102 | N/A |
| Nokia Multiprotocol Label Switching | 5 | 4A0-103 | N/A |
| Nokia Services Architecture | 4 | 4A0-104 | N/A |
| Nokia Virtual Private LAN Services | 5 | 4A0-105 | N/A |
| Nokia Virtual Private Routed Networks | 4 | 4A0-106 | N/A |
| Nokia Quality of Service | 5 | 4A0-107 | N/A |

Elective exams

In addition to the mandatory exams above, SRA candidates must also complete one (1) written exam from the following list of electives.

| Recommended courses | Course duration (days) | Elective exam | Mandatory exam pre-requisites |
|---|------------------------|---------------|-------------------------------|
| Nokia Multicast Protocols | 5 | 4A0-108 | N/A |
| Nokia Triple Play Services | 5 | 4A0-109 | N/A |
| Nokia Network and Service Router Security | 4 | 4A0-111 | N/A |
| Nokia IP/MPLS Mobile Backhaul Transport | 4 | 4A0-M01 | N/A |
| Nokia Mobile Gateways for the LTE Evolved Packet Core | 5 | 4A0-M02 | N/A |

Practical lab exam

In addition to the written exam requirements, the following lab exams are also required for SRA certification.

| Lab exam | Exam duration (hours) | Exam number | Mandatory exam pre-requisites |
|--|-----------------------|-------------|--|
| Nokia Network Routing Specialist II Lab Exam | 3.5 | NRSII4A0 | 4A0-100, 4A0-101, 4A0-103, 4A0-104 |
| Nokia Service Routing Architect Lab Exam | 8 | ASRA4A0 | 4A0-100, 4A0-101, 4A0-102, 4A0-103, 4A0-104, 4A0-105, 4A0-106, 4A0-107 |