Nokia Network Routing Specialist I

The Nokia Network Routing Specialist I (NRS I) certification is the starting point for the Nokia Service Routing Certification (SRC) Program. The NRS I is designed to give students basic knowledge of IP and Ethernet technologies and establishes a strong foundation for the NRS II, Mobile Routing Professional, Triple Play Routing Professional and Service Routing Architect Certifications.

Key learning outcomes

Upon successful completion, students will be familiar with the fundamentals of TCP/IP, routing, routing protocols, IP addressing and carrier Ethernet services, and will be well on the way to furthering their skills in broadband residential services, mobility services, and enterprise communication services.

Now with multiple learning paths to choose from – classroom, virtual classroom, and self-study – it has never been easier to obtain the Nokia NRS I Certification.

Market need

- Entire markets are transforming rapidly with the convergence of voice and video over packet-based networks. IP has established itself as the protocol of choice to enable convergence of video, voice and data services to meet the requirements of both consumers and enterprises.
- Carrier Ethernet is quickly transforming the service delivery architecture for virtual private networks (VPNs) and triple play service aggregation. The delivery landscape is changing for both consumer and enterprise services alike.
- Service providers need to accommodate and support the new demands for content-rich applications and bandwidth-intensive services based on IP and carrier Ethernet.
- Service providers are looking to evolve their network support staff's aptitude in IP and carrier Ethernet to deliver profitable consumer and enterprise services.

Certification objectives

- Serve as the starting point in the Nokia SRC Program for students with limited knowledge of IP and Ethernet technology.
- Provide an understanding of the transmission control protocol/Internet protocol (TCP/IP) suite.
- Identify the key functions of the Ethernet protocol.
- Identify the key functions of an IP network and IP addressing scheme.
- Provide an overview of Nokia's Managed Communications solution and Triple Play Service Delivery Architecture and related key concepts.
- Provide an overview of Layer 2 and Layer 3 business VPNs such as virtual private LAN service (VPLS), virtual leased line (VLL), and IP-VPNs (RFC 4364, formerly RFC 2547bis).
- Provide an understanding of IP technologies and routing protocols such as open shortest path first (OSPF), intermediate system-to-intermediate system (IS-IS), routing information protocol (RIP), border gateway protocol (BGP), VPLS, hierarchical VPLS (H-VPLS) and virtual private routed networks (VPRNs).
- Provide an overview of Nokia's Service Router and Ethernet Service Switch products.
- Provide an enhanced career path with industry-leading certification that is recognized worldwide.

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Benefits

- Students receive a solid grounding in IP routing protocols and carrier Ethernet for deployment in consumer triple play services and business VPNs.
- Career paths are enhanced with industry-leading certification. Students gain the skills and credibility to work in ever-evolving network environments.
- Building on the Nokia Network Routing Specialist I certification, network professionals can enhance their networking knowledge by obtaining the Nokia Network Routing Specialist II, the Nokia Triple Play Routing Professional and Nokia Service Routing Architect certifications.

Learning options

You can prepare for the NRS I certification exam in three ways:

- **Classroom:** Classes are conveniently delivered in a number of locations around the world. Visit networks.nokia.com/src to see a detailed course outline, schedule of classes, and the locations nearest you.
- **Virtual classroom:** Live, on-line, instructor-led training
- **Self-Study Guide:** Nokia Scalable IP Networks Self-Study Guide – this comprehensive book covers all of the Scalable IP Networks in-class course material and it includes example exam questions and lab exercises to illustrate key learning points. Visit networks.nokia.com/src to see a detailed description of our Self-Study Guide and what it includes. If you are interested in purchasing this publication, visit Amazon – www.amazon.com – quoting ISBN 978-0-470-42906-8.

Based on their experience and expertise, students may choose which courses to follow. Courses have suggested prerequisites. However, a certification will only be awarded to individuals who pass the written and lab exams required for their chosen certification. All exams identified per certification are mandatory, although the exams do not have prerequisites.

The NRS I certification is valid for three years. Re-certification requirements are available at networks.nokia.com/src/recertification.

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-part 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 the networks.nokia.com/src/exemptions web page. Please note that your third-party certification must be current/active to receive credit.

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Course and written exam

The following course is 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.

Recommended course	Course duration (days)	Mandatory exam	Mandatory exam pre-requisites
Nokia Scalable IP Networks	4	4A0-100	N/A