

Welcome!

NET3012 – IP Architectures and Solutions (Nokia NRS II)

Course Professor: Michael Anderson

Lectures: Wed 4 – 5pm T230
Mon 2 – 4pm T230

Labs: A1 Mon 10 – noon T108
A2 Fri 8 – 10am T108

My Contact Info:

Office: T313

Office hours: As per schedule posted on course web site
... and at other times by appointment or email

Email: Michael.Anderson@AlgonquinCollege.com

Phone: 613-727-4723 ext 6217

... **Your contact info???** Remind.com – @17WNET3012

<http://michaelanderson.ca/17W-NET3012-010/ContactInfo-17WNET3012.pdf>

Course Objectives:

- ◆ To provide a solid understanding of IP *Services*, with an emphasis on MPLS and VPNs (L1, L2, L3).
- ◆ To increase your knowledge and skill of networking equipment, using Nokia equipment.
- ◆ To prepare you to complete your study of networking, following Nokia's NRS II curriculum.

For additional info on this course, please see the official **course outline**, as posted on the course web site. We'll look at a few items, including **schedule** (final week), textbooks, **tests**, marks allocation, and use of electronic devices in the classroom.

Course Prerequisite

You must have obtained a passing grade in NET3008. All students not meeting this requirement will be withdrawn from the course (if not already done).

Introductions

- Complete introductions from 1st lecture of NET3011 (according to registration lists, everyone in NET3012 also takes NET3011 or has taken a course with me previously)
- **NO** cell phones or laptops in lectures; **no** cell phones in labs (as in NET3011)
- Quick review of past course evaluations (course has run 3 times so far)

Required Resources

- Course web site: <http://www.michaelanderson.ca/17W-NET3012-010>
- Nokia account for remote access to lab equipment
- Lab book: hard-bound book with non-removable pages (same as always!)
- External HD or USB memory stick: for backups, etc.
- Printouts of labs (on a week-by-week basis)
- Required textbooks (provided free, courtesy of Nokia):
 - ✓ Alcatel-Lucent Network Routing Specialist II (NRS II) Self-Study Guide, by Glenn Warnock & Amin Nathoo, Wiley, 2011, ISBN: 978-0-470-94772-2 / 978-1-118-17813-3
 - ✓ Multi-Protocol Label Switching (MPLS) and Service Architecture (SA) course texts from Nokia
- Suggested textbooks:
 - ✓ Alcatel-Lucent Scalable IP Networks Self-Study Guide by Kent Hundley, Wiley Press 2009, ISBN: 978-0-470-42906-8

Week 1: Assigned Readings & Lab work

- Just like NET1002 where you registered on the Cisco Academy site, you need to complete a Nokia confidentiality agreement
- Lab 01 prelab:
 - **create** your **Nokia** corporate **account**; use your **Algonquin email!!**
 - familiarize yourself with standard lab topology
 - familiarize yourself with layers of passwords required for remote access
- Download free ebook and etextbooks (after Nokia confidentiality agreement); "install" your free ebook so you can start reading it
- Lab 1 post-lab: book a MySRLab session; connect & use MySRLab
- Due next Wed (subject to availability of NRS-II textbook):
 - Read in NRS-II: pp 1-32; scan the Forward; Introduction (first 3 pages)
 - Read in NRS-II: Ch 11, pages 473-513
 - Expect a quiz** every week eg. beginning of **every** Mon lecture (don't be late!!)

Schedule for Regular Weekly Due Dates

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	'3012 in-class Q				'3011 in-class Q	
'3012–A1 post-lab		'3011 Cisco Q		'3012–A2 post-lab	'3011-A1/2 post-lab	

Post-lab and Cisco online quiz deadlines are 11:59pm (i.e. midnight), except the deadline for NET3011 post-labs is 12:59pm (after lunch).

Need to Balance Lab sections

Still seeking 1 student to transfer from Mon section A1 to Fri section A2. Tnx!

New Material: Course Overview

- Who is Alcatel-Lucent? – purchased by Nokia (completed in Feb 2016)
- Material taken from Modules 0-1 of Nokia MPLS courseware:
 - Comparison of Cisco vs Nokia certification tracks
 - What *are* IP services? - A brief introduction
 - What *is* MPLS? - A brief introduction
 - What *is* a VPN, really?
- How different is Nokia networking equipment?
 - Whirl-wind comparison of Cisco & Nokia CLI (in lab this week)

Getting Signed-up with Nokia

You should receive an email at your Algonquin student email from learning.services@Nokia.com with the subject "Nokia Student Portal Account Activation" which gives details of the following steps.

1. Create an Nokia corporate account
 - you must use your **Algonquin email** address!
 - request "General Access"
 - Wait for a response from (?) iCare <icare@Nokia.com> titled (?) "Welcome to Nokia.com <your name>"
2. Activate / initialize your SRC student account; credentials are provided in the email above shortcut: <https://networks.nokia.com/src/studentportal>
3. Complete the confidentiality agreement: go to Online Agreements & Orders
4. Go to the Downloads section to grab the course notes (MPLS and SA)

Details for accessing the NRS-II Self Study Guide e-textbook are outlined below.

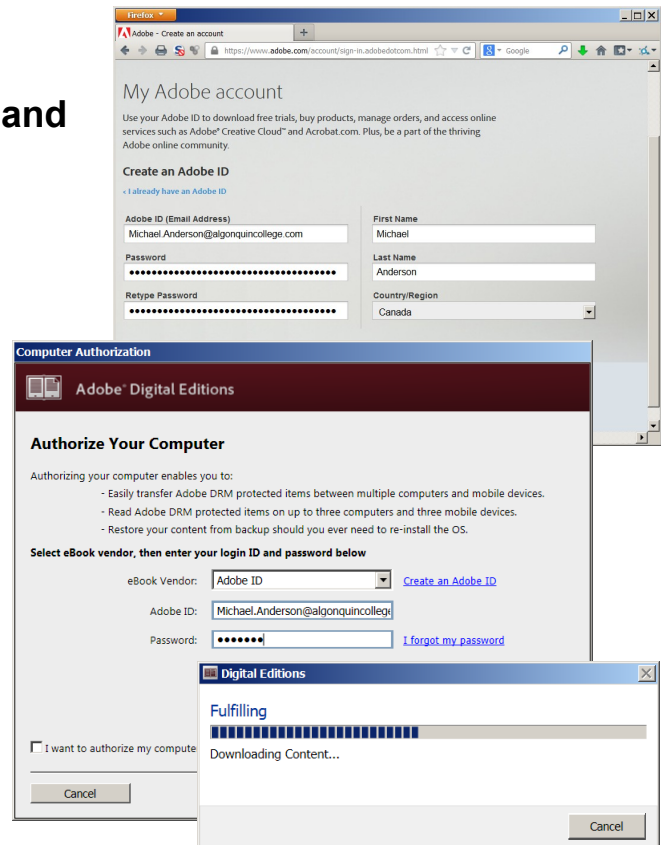
Access to Nokia Resources

1. Course Materials – pdf textbook access: *download from SRC Student portal*
– NRS II ebook access: *details forthcoming by email*
2. Lab Access – Trio for remote access: Aventail VPN (always) plus
either regular lab access **OR** MyNetworkLab access

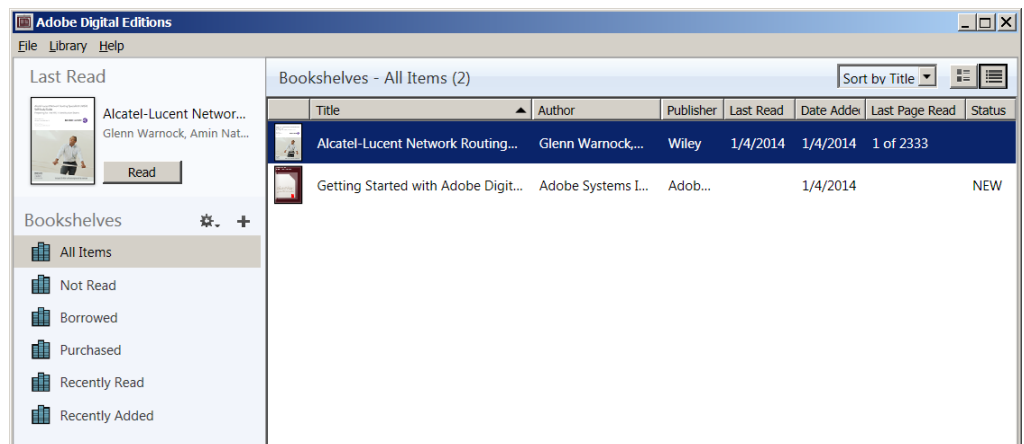
NRS II ebook access (Overview)

An message will be sent to your Algonquin email account from sr.publications@nokia.com. It will contain details instructions and links.

1. Create an "Adobe ID" (ie. an account)
2. Install *Adobe Digital Editions (ADE)* and authorize your computer
3. **Verify** that ADE works correctly using sample ebooks from Adobe.
4. Download your file copy using the link supplied in the email.
NB: one-time download only!!



You can now read the NRS II ebook on your computer.

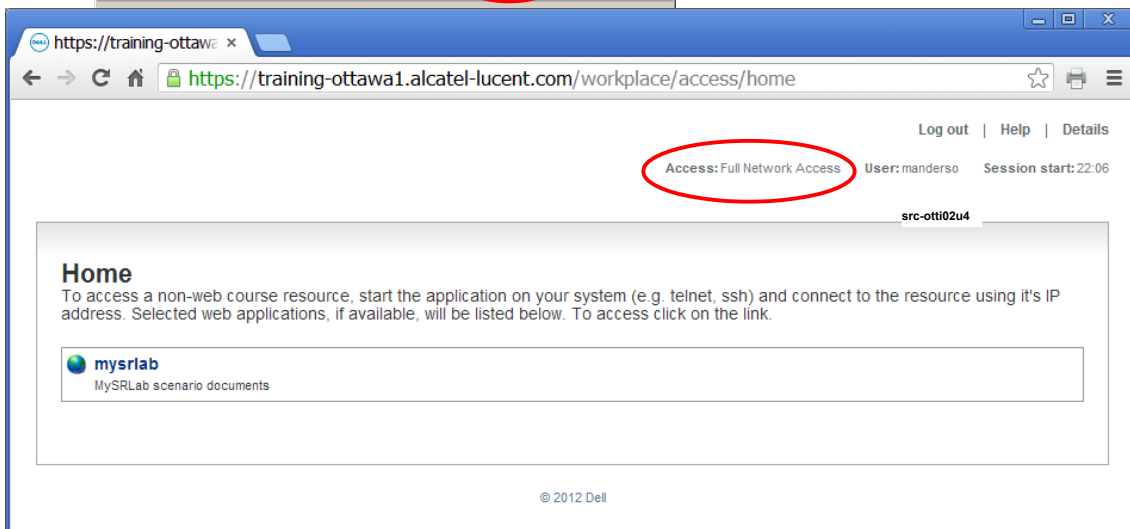
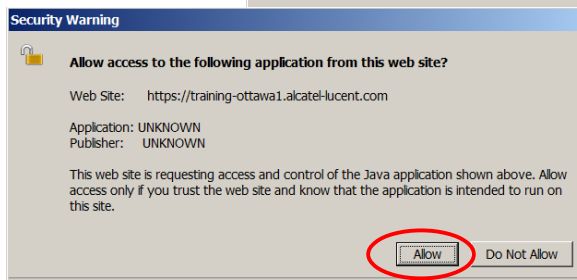
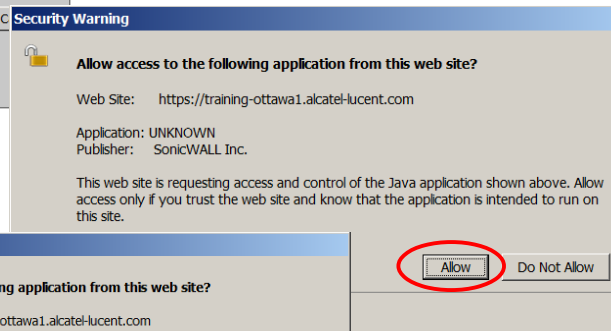
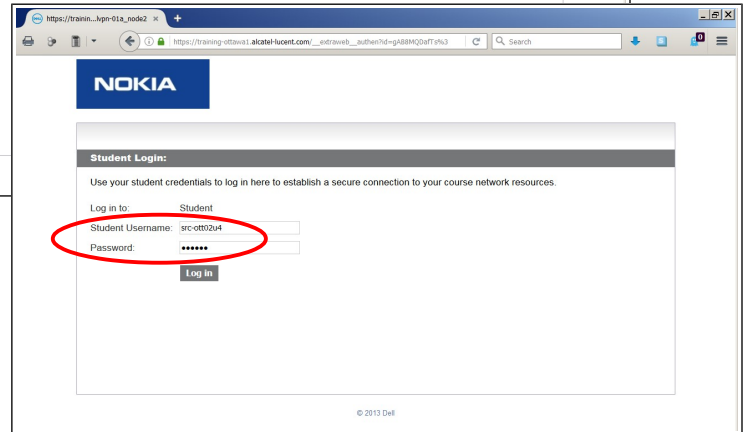
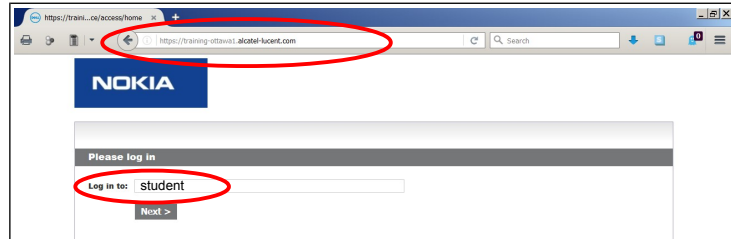


Follow additional instructions to transfer the pdf to other devices.

Trio for remote access: Aventaill VPN for regular lab access & MySRLab access

Regular lab access: <https://training-ottawa1.alcatel-lucent.com/>

1. Browser-based VPN (must have activeX or Java!)
2. Log into service: **student**
3. Use **lab-access** credentials (Blackboard)
4. Permit all requests to allow Java VPN to run
5. Launch Telnet sessions to your assigned routers.

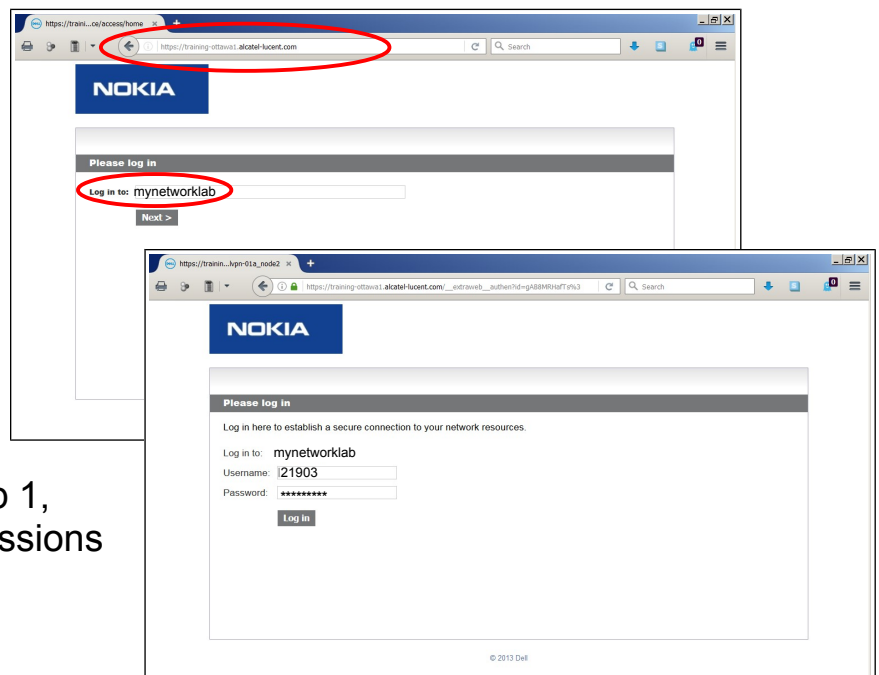


Booking extra practice (Live demo??)

1. Normal browser access to <https://src.alcatel-lucent.com/src/mynetworklab>
2. Login using your Nokia corporate web-site account (Algonquin email + chosen password)
3. In the section "My Unreserved Sessions", click Reserve Session.
4. Choose "SR Standard Lab" for the Lab Type; choose a time, then Submit
5. You should book a single 3-hr practice session each week
(... You should have plenty of lab sessions but if you run out, please let me know and we should be able to get more sessions.)
6. There will be a post-lab exercise **every week!** There is are a **limited** number of lab sets available, so **do not expect** to get a booking if you leave it until the last minute! Book ahead now for every week!

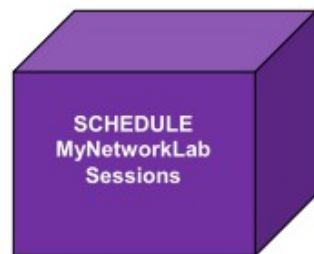
Extra practice **access**: <https://training-ottawa1.alcatel-lucent.com/>

1. Browser-based VPN
(must have activeX or Java!)
2. Log into service:
mynetworklab
3. Use one-time **numeric** account + password
(sent via email)
4. Permit all requests to allow Java VPN to run
5. Using the addressing chart supplied during Lab 1, launch multiple Telnet sessions to all the routers.

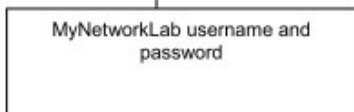
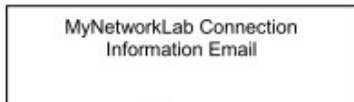
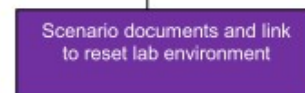
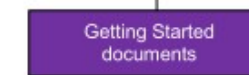
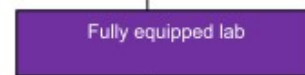
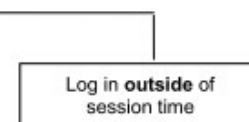
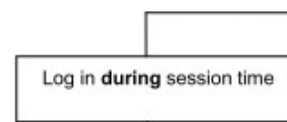
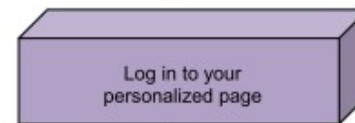




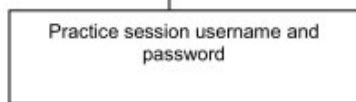
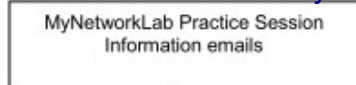
<https://www.alcatel-lucent.com/src/mysrlab>



<https://training-ottawa1.alcatel-lucent.com/>

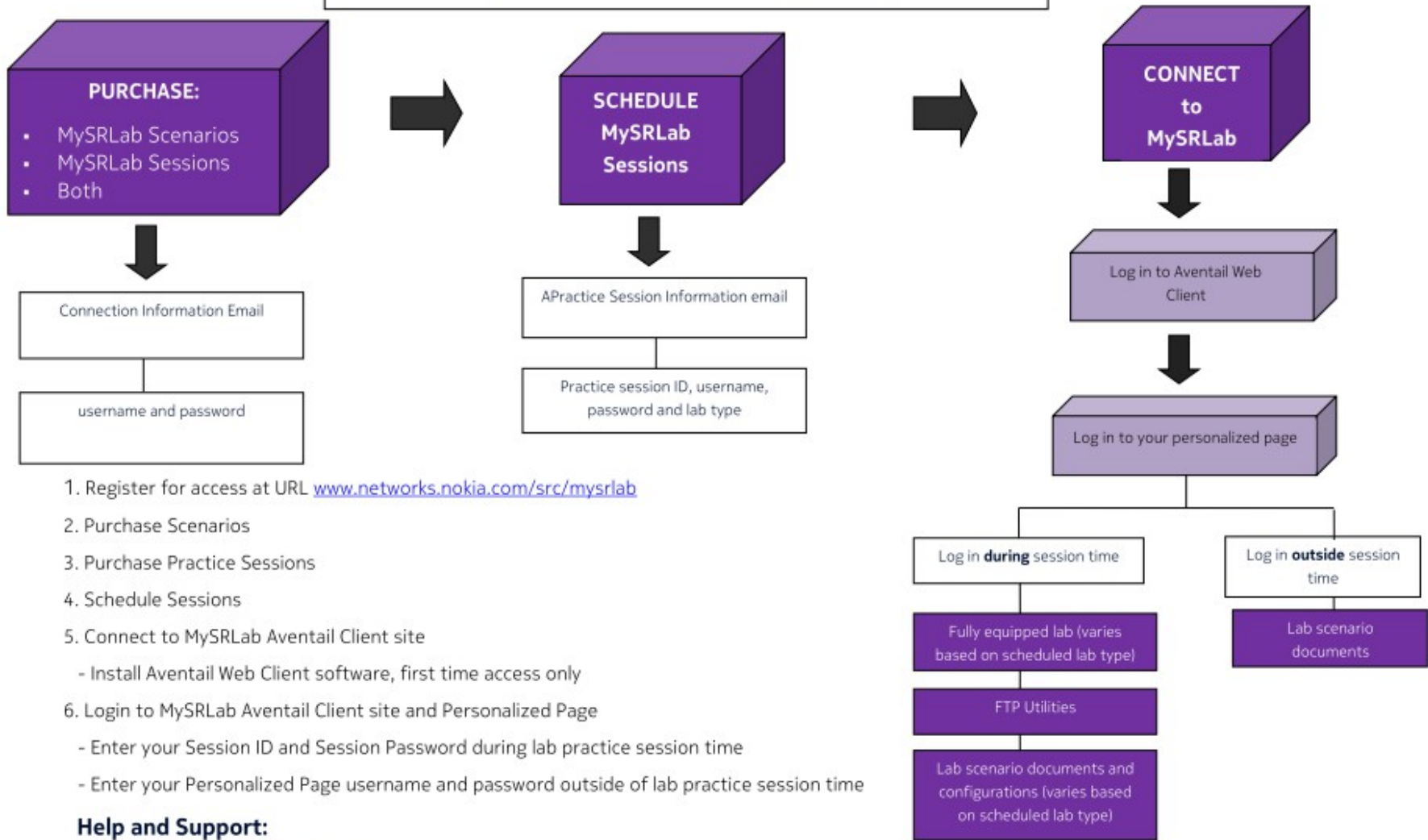


<https://src.alcatel-lucent.com/src/mynetworklab>



Help and Support:
MyNetworkLab.support@Nokia.com
~~MyNetworkLab.support@alcatel-lucent.com~~

Nokia MySRLab Quick Start Guide
<https://networks.nokia.com/src/mysrlab>



1. Register for access at URL www.networks.nokia.com/src/mysrlab
2. Purchase Scenarios
3. Purchase Practice Sessions
4. Schedule Sessions
5. Connect to MySRLab Aventail Client site
 - Install Aventail Web Client software, first time access only
6. Login to MySRLab Aventail Client site and Personalized Page
 - Enter your Session ID and Session Password during lab practice session time
 - Enter your Personalized Page username and password outside of lab practice session time

Help and Support:

mynetworklab.support@nokia.com