Virtual Internet and Telecommunications Laboratory of Switzerland

Overview

VITELS provides a modular structured online course covering a variety of topics in the area of telecommunications and computer networks with a special focus on hands-on experience.

VITELS is designed for students that have successfully finished their basic studies in computer science or similar disciplines and would like to strengthen their knowledge.

Didactics

· Constructivist concept
· Uniform course layout

Chapter 1: Introduction
1 Welcome
2 The Goals and how to Reach Them
3 Module Vicinity
4 My Goals
5 Tips
6 FAQ

Chapter 2: Theory
1 Theoretical Basics
2 Readings
3 Personal Synthesis
4 Self Test
5 Quiz

Chapter 3: Knowledge Application/Exploration
1 Introduction
2 Hands-on Session

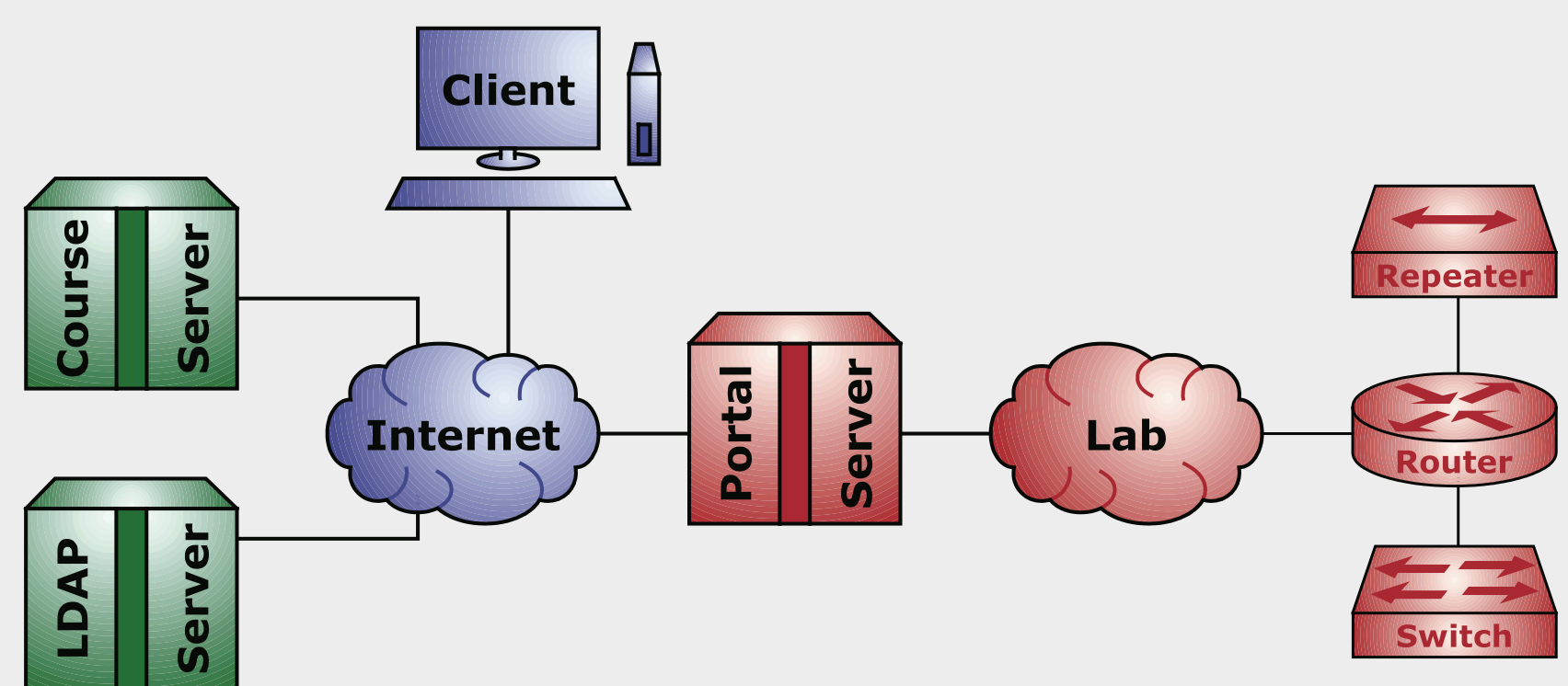### Chapter 4: Prove Your Knowledge and Skills
1 Personal Synthesis
2 Final Quiz
3 Survey

Architecture

· Distributed clients and hands-on session providers
· Central student management, hands-on session reservation system and web learning

Modules

Simulation of IP Network Configuration
· Get familiar with IP routers, routing tables and protocols.

Client/Server Concepts
· Learn about Client/Server concepts and analyze HTTP as an example protocol.

IP Security
· Use real equipment to set up a VPN-tunnel and perform measurements.

Firewall Management
· Configure a real firewall and learn more about practical firewall management.
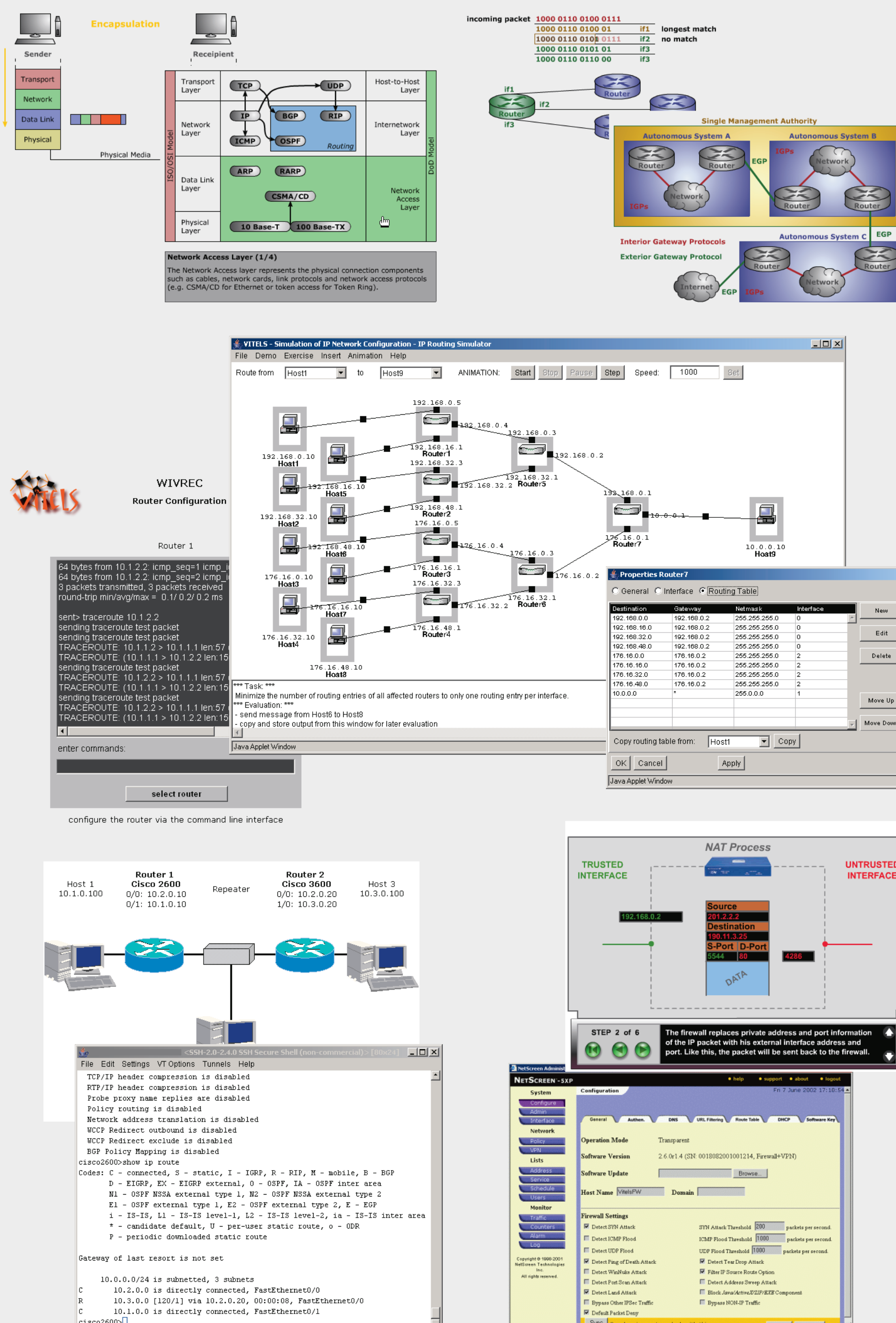
Sockets and Remote Procedure Calls
· Learn about socket programming and remote procedure calls.

Remote Method Invocation
· Get familiar with the RMI programming model for distributed applications.

Application Server
· Understand multi-tier architectures and the J2EE platform.

Partners

Academic Partners
· University of Bern
· University of Fribourg
· University of Geneva
· University of Neuchatel
· University of Applied Sciences of Fribourg
· University of Tübingen

Cooperation
· TECFA, School of Psychology and Education, University of Geneva

Contact

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Demo Course

URI   http://webct.unibe.ch
Login   vitels-showcase
Password   vitels-showcase

www.vitels.ch