Info Academy

Certificate of Course Completion

CISCO Networking Academy

UNIX/Linux

Administration

Fundamentals



Daniel Gheorghe

Student's Name

Date: May 20, 2008

Instructor: Ionut Cristian Morar

Location: Bucuresti

Academy: InfoAcademy

Instructor's Signature

During the UNIX/Linux course, administered by the undersigned instructor, the student demonstrated the following competencies:

Understood the following concepts:

- partitioning strategies for installing Unix/Linux
- the role of the boot manager/boot loader; multi-boot scenarios
- client-server protocols
- DHCP: functions, types, implementation techniques
- the DNS system: functions, structure, operation
- the DNS server: functions, types, implementation techniques
- the electronic mail system: functions, structure, types, operation
- the e-mail server: functions, types, implementation techniques, specific standards
- the HTTP system: functions, structure, operation
- the web server: functions, types, implementation techniques, operation
- securing the system by building firewalls under Linux; the netfilter architecture and iptables
- NAT – reasons of use, types, operation
- recompiling the Linux kernel
- cryptographic algorithms and digital certificates
- securing client-server communications by using digital certificates

Performed intermediate-level practical tasks:

- installing the Linux and Solaris operating systems
- reconfiguring the boot manager for various multi-boot scenarios
- installing, configuring and troubleshooting the network interfaces
- compiling, installing, configuring and troubleshooting the ISC DHCP server
- compiling, installing, configuring and troubleshooting the BIND DNS server
- compiling, installing, configuring and troubleshooting the Apache web server
- compiling, installing, configuring and troubleshooting the email server (postfix+dovecot)
- building a Linux firewall with iptables
- configuring SNAT and DNAT in Linux
- recompiling a modular Linux kernel and reconfiguring the boot manager accordingly
- using cryptographic algorithms (encryption, hashing, digital signature, digital certificates) from the OpenSSL library and securing a server's communications by using digital certificates