

CIW Server Administrator Series – Course 1:

Internet System Management (October 2002)

Internet System Management is a 12-hour class that teaches foundational Internet services. Students learn user management concepts in Windows 2000 and Linux, configure Domain Name System (DNS) services, and Microsoft WINS, Samba, Telnet, and FTP. Students also learn about choosing appropriate Internet system platforms and receive training on how to calculate throughput, choose appropriate Internet connections and configure Windows 2000 Server and Red Hat Linux to use TCP/IP. By the end of this course, students will be able to provide essential TCP/IP services for any business interested in establishing an effective e-commerce presence.

Topics

Systems and Services

- Common IT Tasks and Services
- System Configuration
- User Management
- System Performance
- Maintenance and Backup

Internet System Installation and Configuration Issues

- Administering Internet Services
- System Elements
- Bandwidth
- Calculating Throughput
- Internetworking Operating Systems
- Novell NetWare
- Operating System Issues
- Common System Vendors
- Installing Systems

Configuring the System

- Configuring Servers
- Adapters and Drivers
- Multiple NICs
- Assigning IP Addresses
- Static Addressing
- Additional TCP/IP Issues & Commands
- Dynamic Addressing

User Management Essentials

- Introduction to User Management
- Security Models and Authentication
- Peer-level and User-level Access
- Creating User Accounts
- Login Shell
- Permissions
- Windows NT, UNIX and Novell Permissions
- Additional Logon Account Terms
- Administrative Privilege
- Standard Password Practices
- Network Policies
- Standard Operating Procedures

Managing Users in Windows 2000

- Introduction to User Management
- The Security Accounts Manager
- The Computer Management Snap-in
- Local Security Settings
- Auditing, Ownership, and Rights
- NTFS Permissions and Internet Users
- Editing and Customizing User Accounts
- Windows 2000 Services and User Accounts

Managing Users in Linux

- Adding Accounts in Linux
- Manually Adding Users
- Linux User Accounts
- Puggable Authentication Modules
- Groups
- Linux System Accounts
- Run Levels, ntsysv and chkconfig

Name Resolution in the LAN with DNS

- Domain Name System
- Domain Name Space
- Accessing Hosts by DNS Name
- Zone Files and DNS Name
- Probing DNS with Nslookup
- Configuring DNS in NT Server 2000
- Propagating Changes from the Primary Server to the Secondary Server
- Controlling Zone Transfers in Windows 2000
- Understanding BIND
- Setting Up DNS in Linux
- Troubleshooting DNS
- Troubleshooting Utilities

Name Resolution - WINS and Samba

- Introduction to Name Resolution with WINS and Samba
- NetBIOS over TCP/IP
- The NetBIOS Naming Convention
- Windows Internet Naming Service
- Managing WINS
- Static Mapping
- Replication
- Advanced WINS Options
- Samba, Web Administration Tool
- Samba and WINDS
- Windows Samba Share Clients
- Linux Samba Clients
- Access Levels in Samba
- Interoperability Issues
- The Homes Share
- Creating a New Share in Samba
- Troubleshooting Samba with Testparm

Implementing Internet Services

- File Transfer Protocol Servers
- Anonymous Accounts
- Implementing Microsoft FTP
- Managing FTP in IIS
- Creating Virtual FTP Servers
- Anonymous Access in IIS
- UNIX and FTP
- Anonymous FTP
- Setting FTP Logon Limits
- Telnet
- Telnet in UNIX
- Xinetd
- Trivial IP Services
- TCP Wrappers

Target Audience

LAN/WAN administrators, systems administrators, systems managers, intranet administrators, network engineers, and internetworking engineers.

Job Responsibilities

Manage and tune corporate Internet and intranet infrastructure; monitor Web server systems, FTP, news and mail servers; configure and deploy e-business solutions servers.

Prerequisites

Students must have CIW Foundations certification or equivalent experience, and have a working knowledge of Windows NT/2000 administration, including installation and configuration.

Duration

12 hours