

Custom Training Institute

9085 Coyote Springs Road
Prescott Valley, AZ 86314
(928) 772-3811
FAX (928) 441-6444

SAMBA 3.0 (CTI 207)

SAMBA allows UNIX, Linux, and other TCP/IP-based platforms to provide file and print services to Microsoft Windows clients. Samba's transparent interoperability smoothly integrates Windows clients and non-Windows machines. This course covers version 3.0 of Samba, which adds Active Directory integration and migration from Windows NT4 domains to its set of capabilities, furthering the integration of Windows clients into heterogeneous TCP/IP environments. Students will learn how to install, configure and troubleshoot a SAMBA 3.0 installation. Exercises and lab sessions reinforce the learning objectives and provide participants the opportunity to gain practical hands-on experience.

Minimum hardware requirements: One UNIX or LINUX server machine; one Windows XP or 2000 server machine; one Windows NT 4 server machine. CLIENTS: one Windows XP or 2000 client per student, plus one for the instructor. All machines must be networks and have Internet access. Overhead projection system hooked up to instructor's machine.

Software requirements: UNIX or LINUX; Windows XP; Windows 2000; Windows NT4.

Microsoft PowerPoint and Internet access on Instructor's workstation for presentation purposes.

Module 1: Introduction and Overview

- What is CIFS?
- What is SMB?
- What is SAMBA?
- Integration Capabilities
- Networking Capabilities
- Security Capabilities

Module 2: Basic Installation and Server Configuration

- Preparing SAMBA for Configuration
- Obtaining and Installing SAMBA
- Setting Up `smb.conf`
- Connecting with a UNIX Client
- Connecting with a Remote SMB Client
- Troubleshooting Common Errors
- EXERCISES

Module 3: Server Types and Security Modes

- Features and Benefits
- Server Types
- SAMBA Security Modes (user level; share level; domain-level; Active Directory Services)
- Password Management
- EXERCISES

Module 4: SAMBA and Primary Domain Control

- Features and Benefits
- Domain Controller Types
- Preparing for Domain Control
- SAMBA and Active Directory Services Domain Control
- Domain and Network Logon Configuration
- Troubleshooting Common Errors
- EXERCISES

Module 5: SAMBA and Backup Domain Control

- Features and Benefits
- Windows NT4-style Domain Control
- Active Directory Services Domain Control
- Workstations, Domain Controllers, and NetBIOS-TCP/IP
- Backup Domain Controller Configuration
- Troubleshooting Common Errors
- EXERCISES

SAMBA 3.0 (CTI 207)
- continued

Module 6: SAMBA and Domain Membership

Features and Benefits
Trust Accounts
Domain Member Servers
Samba and Active Directory Services (ADS)
Sharing User ID Mappings
Troubleshooting Common Errors
EXERCISES

Module 7: SAMBA and Stand-Alone Servers

Features and Benefits
Background
Configuring a Stand-Alone Server
Troubleshooting Common Errors
EXERCISES

Module 8: SAMBA and Windows network Configuration

Features and Benefits
TCP/IP Configurations (Windows Millennium Edition; Windows 2000; Windows XP Professional)
Joining a Domain (Windows 2000 / Windows XP Professional)
Domain Logon Configuration (Windows 9x / Millennium Edition)
EXERCISES

Module 9: SAMBA and Network Browsing

Features and Benefits
Browsing using NetBIOS over TCP/IP
Browsing using TCP Only
Browsing using DNS and Active Directory
WINS Server Configuration and Replication
Troubleshooting Common Errors
EXERCISES

Module 10: SAMBA and Account Information Databases

Features and Benefits
User Identifiers, Windows and UNIX
Working with Common User and Group IDs
Account Management Tools
Password "Backends" (plain text; encrypted; SQL databases)
Troubleshooting Common Errors
EXERCISES

Module 11: File, Directory and Share Access Controls

Features and Benefits
File System Access Controls (NTFS vs. UNIX)
Share Definition Access Controls
Share Permissions Management
Bridging Windows ACLs and UNIX Permissions
Troubleshooting Common Errors
EXERCISES

Module 12: Securing SAMBA

Features and Benefits
Host-based Protection
User-based Protection
Interface Protection
Firewall Protection
Share-based Denials
NTLMv2 Security
EXERCISES

Module 13: Domain Trust Relationships

Features and Benefits
Trust Relationship Background
Native NT4 Domain Trusts
SAMBA NT-style Domain Trusts
Troubleshooting Common Errors
EXERCISES

Module 14: SAMBA and Integration with Windows Networks

Features and Benefits
Name Resolution in a UNIX/Linux World
Name Resolution within Windows Networking
Troubleshooting Common Errors
EXERCISES

Module 15: SAMBA and Printing Support

Features and Benefits
Simple Printing Configuration
Extended Printing Configuration
Installing Printer Drivers
Client Driver Installations
Adding Network Printers
Publishing Printer Information to Active Directory
Troubleshooting Common Errors
EXERCISES

Module 16: Review and Summary