



M8uk Ltd.

## Administrator's Guide:

# Designing a Secure Microsoft Windows 2000 / 2003 Network

**Course Format:** Instructor-led Classroom Learning **Duration:** 5 Days

### Overview

This course provides IT professionals the knowledge and skills necessary to design a security framework for small, medium, and enterprise networks by using Microsoft® Windows® 2000 technologies.

### Prerequisites:

Before attending this course, students must have:

- Working experience of at least 1 year administering Microsoft Operating Systems (9.x/2000/XP)
- A strong familiarity with Microsoft Windows® 2000 core technologies, Windows 2000 Professional and Server, Windows XP Pro
- A strong familiarity with Windows 2000 networking technologies and implementation
- A strong familiarity with Windows 2000 / 2003 Active Directory directory services technologies and implementation

### Outline:

#### Lesson 1: Assessing Security Risks

Identifying Risks to Data  
Identifying Risks to Services  
Identifying Potential Threats  
Introducing Common Security Standards  
Planning Network Security

#### Lesson 2: Introducing Windows 2000 Security

Introducing Security Features in Active Directory  
Authenticating User Accounts  
Securing Access to Resources  
Introducing Encryption Technologies  
Encrypting Stored and Transmitted Data  
Introducing Public Key Infrastructure Technology

**M8UK Ltd.**

Vista Business Centre, Hounslow, Middx TW4 6JQ

Tel: +44 (0) 208 5381376 Fax: +44 (0) 208 5380179 E-Mail: sales@m8uk.com



M8uk Ltd.

### **Lesson 3: Planning Administrative Access**

Determining the Appropriate Administrative Model  
Designing Administrative Group Strategies  
Planning Local Administrative Access  
Planning Remote Administrative Access

### **Lesson 4: Planning User Accounts**

Designing Account Policies and Group Policy  
Planning Account Creation and Location  
Planning Delegation of Authority  
Auditing User Account Actions

### **Lesson 5: Securing Windows 2000–Based Computers**

Planning Physical Security for Windows 2000–based Computers  
Evaluating Security Requirements  
Designing Security Configuration Templates  
Evaluating Security Configuration  
Deploying Security Configuration Templates

### **Lesson 6: Securing File and Print Resources**

Examining Windows 2000 File System Security  
Protecting Resources Using DACLs  
Encrypting Data Using EFS  
Auditing Resource Access  
Securing Backup and Restore Procedures  
Protecting Data from Viruses

### **Lesson 7: Securing Communication Channels**

Assessing Network Data Visibility Risks  
Designing Application-Layer Security  
Designing IP-Layer Security  
Deploying Network Traffic Encryption

**M8UK Ltd.**

Vista Business Centre, Hounslow, Middx TW4 6JQ  
Tel: +44 (0) 208 5381376 Fax: +44 (0) 208 5380179 E-Mail: sales@m8uk.com



M8uk Ltd.

## **Lesson 8:** Providing Secure Access to Non-Microsoft Clients

Providing Secure Network Access to UNIX Clients  
Providing Secure Network Access to NetWare Clients  
Providing Secure Access to Macintosh Clients  
Securing Network Services in a Heterogeneous Network  
Monitoring for Security Breaches

## **Lesson 9:** Providing Secure Access to Remote Users

Identifying the Risks of Providing Remote Access  
Designing Security for Dial-Up Connections  
Designing Security for VPN Connections  
Centralizing Remote Access Security Settings

## **Lesson 10:** Providing Secure Access to Remote Offices

Defining Private and Public Networks  
Securing Connections Using Routers  
Securing VPN Connections between Remote Offices  
Identifying Security Requirements

## **Lesson 11:** Providing Secure Network Access to Internet Users

Identifying Potential Risks from the Internet  
Using Firewalls to Protect Network Resources  
Using Screened Subnets to Protect Network Resources  
Securing Public Access to a Screened Subnet

## **Lesson 12:** Providing Secure Internet Access to Network Users

Protecting Internal Network Resources  
Planning Internet Usage Policies  
Managing Internet Access through Proxy Server Configuration  
Managing Internet Access through Client-Side Configuration

**M8UK Ltd.**

Vista Business Centre, Hounslow, Middx TW4 6JQ

Tel: +44 (0) 208 5381376 Fax: +44 (0) 208 5380179 E-Mail: sales@m8uk.com



M8uk Ltd.

### **Lesson 13: Extending the Network to Partner Organizations**

- Providing Access to Partner Organizations
- Securing Applications Used by Partners
- Securing Connections Used by Remote Partners
- Structuring Active Directory to Manage Partner Accounts
- Authenticating Partners from Trusted Domains

### **Lesson 14: Designing a Public Key Infrastructure**

- Introducing a Public Key Infrastructure
- Using Certificates
- Examining the Certificate Life Cycle
- Choosing a Certification Authority
- Planning a Certification Authority Hierarchy
- Mapping Certificates to User Accounts
- Managing CA Maintenance Strategies

### **Lesson 15: Developing a Security Plan**

- Designing a Security Plan
- Defining Security Requirements
- Maintaining the Security Plan