Business Computer Networking and Infrastructure Training Course

6 – 10 December 2026
Johannesburg

AGILE LEADERS
Training Center

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Ref: 1656_222359 **Date:** 6 – 10 December 2026 **Location:** Johannesburg **Fees:** 4500 Euro

Overview

Business Computer Networking and Infrastructure Training Course is a one-week foundation-to-practitioner programme for IT support personnel and junior network administrators, who leave with a Business Network Design and Support Pack. It covers LAN and WAN architecture, Ethernet switching, VLANs, IPv4 and IPv6, routing, DHCP, DNS, Wi-Fi, internet connectivity, VPNs, security, monitoring and fault isolation. Participants build a resilient small-to-medium business design. Agile Leaders Training Center develops practical business computer networking capability.

Who Should Attend

- IT support personnel responsible for user and network connectivity
- Junior network administrators responsible for daily network operation
- Systems technicians responsible for infrastructure services
- Business technology teams responsible for small-office networks
- Service-desk personnel responsible for first-line fault diagnosis
- Infrastructure coordinators responsible for suppliers and documentation

The course assumes participants can use operating-system network settings and basic command-line tools, and it leaves out advanced carrier routing, penetration testing and vendor certification.

Departments and Industries

The course supports organisations that require secure and supportable computer networks for business operations.

- Information technology, infrastructure and service management
- Retail, hospitality, professional services and logistics
- Healthcare, education, government and charities
- Manufacturing, construction and property operations
- Small and medium enterprises and managed service providers

Learning Objectives

By the end of this course, participants will be able to:

- Build a logical and physical business network design
- Apply Ethernet switching, VLAN and trunking concepts
- Design IPv4 and IPv6 addressing plans
- Configure DHCP, DNS, routing and internet-service requirements
- Evaluate Wi-Fi, VPN and network-security controls
- Diagnose connectivity and performance faults

Course Agenda

Day 1: Business Network Architecture

- Business Service and Device Inventory
- LAN, WAN and Internet Edge Map
- Physical and Logical Topology Diagram
- Bandwidth, Availability and Growth Requirements
- Network Documentation Baseline

Day 2: Ethernet, VLANs and IP Addressing

- Ethernet Switching and MAC Address Table
- VLAN Segmentation and Access-Port Plan
- 802.1Q Trunk and Inter-VLAN Routing Map
- IPv4 Subnetting and Address Allocation Plan
- IPv6 Prefix and Dual-Stack Deployment Plan

Day 3: Network Services and Connectivity

- Static and Dynamic Routing Decision Map
- DHCP and DHCPv6 Scope Design
- DNS Resolution and Record Management
- Internet Gateway, NAT and Provider Handover
- Site-to-Site and Remote-Access VPN Requirements

Day 4: Wireless, Security and Operations

- Wi-Fi Coverage, Capacity and Channel Plan
- Guest, Staff and Device Network Segmentation
- Firewall Policy and Secure Management Checklist
- NIST CSF 2.0 Small-Business Control Review
- Monitoring, Logs, Configuration and Backup Plan

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Day 5: Troubleshooting and Capstone

- Exercise: Trace a Layered Connectivity Fault
- Exercise: Diagnose DHCP and DNS Failure
- Exercise: Resolve VLAN and Routing Misconfiguration
- Exercise: Review Wi-Fi and VPN Performance
- Capstone: Business Network Design and Support Pack

Practical Exercises

Suggested activities use a simulated business topology and operational evidence.

- Suggested activity: create VLAN and dual-stack addressing plans
- Suggested activity: map DHCP, DNS, routing and internet dependencies
- Suggested activity: diagnose a multi-layer connectivity incident
- Suggested activity: produce a resilient network support pack

FAQs

Who should take business computer networking training, and what does it assume?

It suits IT support personnel, junior administrators and systems technicians and assumes familiarity with operating-system network settings and basic diagnostic commands.

How does business computer networking differ from an advanced enterprise networking course?

Business networking concentrates on supportable LAN, Wi-Fi, internet, VPN and core services for smaller environments, while advanced courses address complex routing, automation, scale and specialist architectures.

Why do business networks use VLANs?

VLANs separate broadcast domains and support policy boundaries for users, guests, devices and services when switching, routing, addressing and security controls are designed consistently.

How do DHCP and DNS support a business network?

DHCP supplies approved addressing and configuration, while DNS maps service names to addresses. Both require planned scopes, records, availability, security and monitoring.

Does business networking training cover IPv6?

Yes. Participants plan IPv6 prefixes, /64 LAN segments, DHCPv6 or SLAAC choices, DNS records and dual-stack dependencies without treating IPv6 as an isolated add-on.

Conclusion

Participants take back a Business Network Design and Support Pack containing topology, VLAN, addressing, service, Wi-Fi, VPN, security and troubleshooting artefacts. It makes dependencies and responsibilities visible. It helps IT teams deploy consistent connectivity, isolate faults, protect business services and plan network growth.