

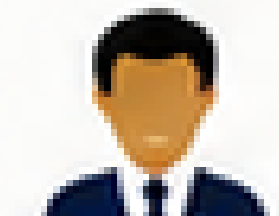
1 THE CHALLENGE



- Small businesses often outgrow informal technology setups.
- User accounts, files, and devices become hard to manage.
- Weak security and missing backups increase business risk.
- Troubleshooting takes longer when systems are not centralized.
- The business needs an affordable solution that can grow.

2 STAKEHOLDERS & REQUIREMENTS

STAKEHOLDERS

-  Business Owner / Management
-  IT Administrator
-  Employees
-  Customers

REQUIREMENTS

- ✓ Secure logins and user access control
- ✓ Centralized device and account management
- ✓ Shared file storage and collaboration
- ✓ Reliable connectivity and easy maintenance
- ✓ Backup, recovery, and room for future growth

3 OUR SOLUTION

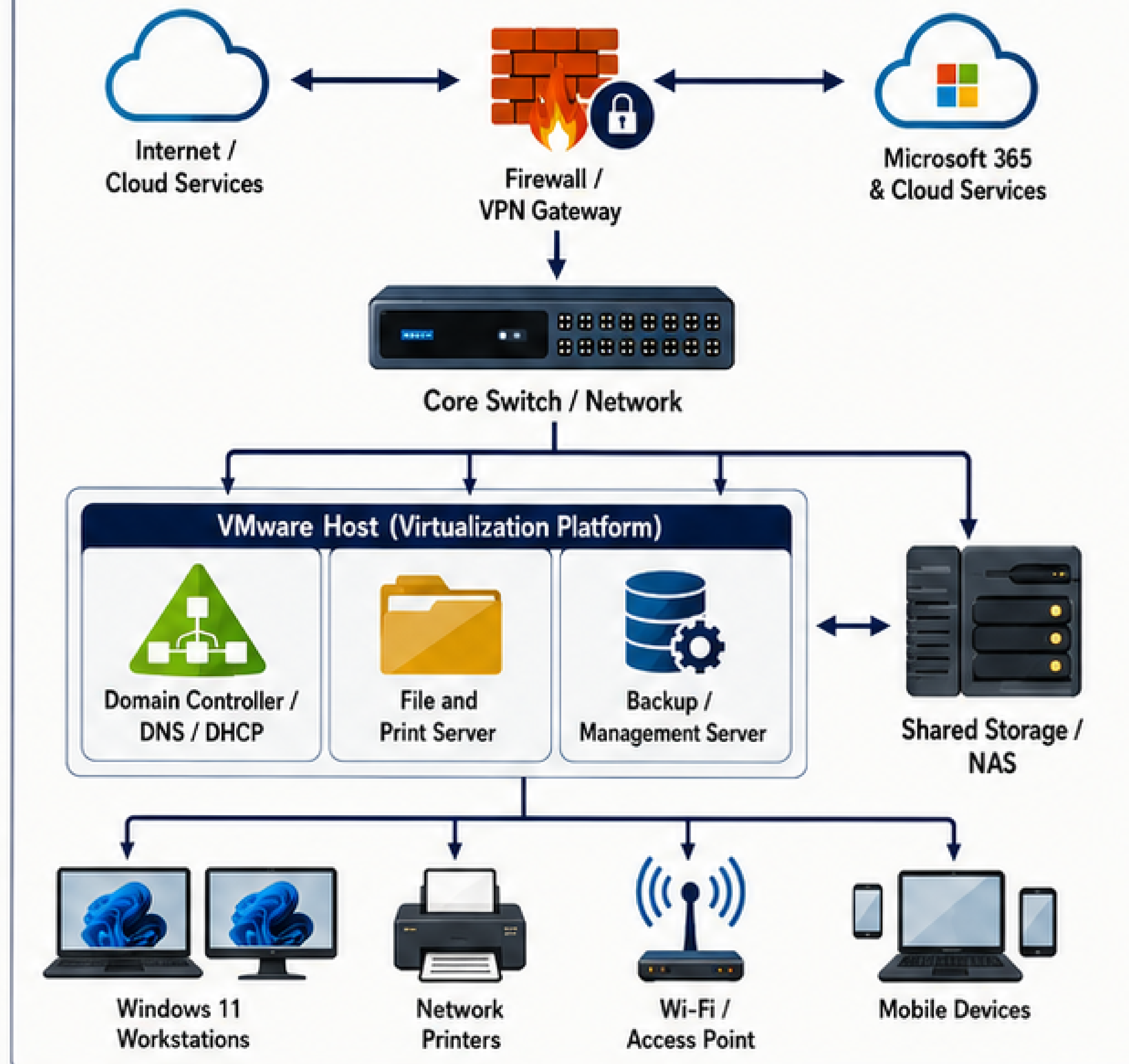
We designed a layered small-business IT environment using Windows Server, Windows 11 Pro, VMware virtualization, Active Directory, Group Policy, shared storage, firewall protection, BitLocker, and cloud services. The goal is to make daily operations easier, safer, and more scalable.

-  Virtualized core services to reduce hardware cost
-  Centralized identity and policy management with Active Directory and Group Policy
-  Security-first operations with role-based access, BitLocker, backups, and least privilege

8 WHAT'S NEXT

-  Add multi-factor authentication
-  Expand automated cloud backup
-  Implement asset inventory and ticketing
-  Add remote monitoring dashboard

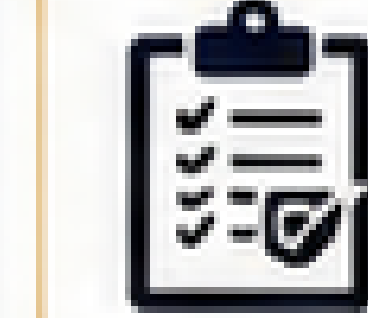
4 ARCHITECTURE



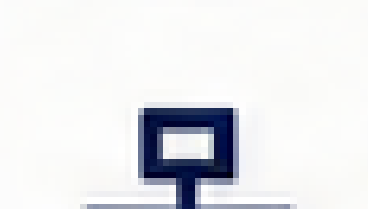
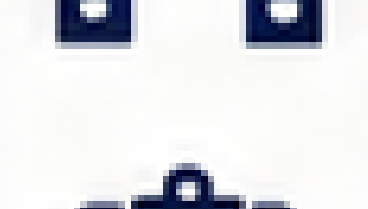
6 RESULTS & BENEFITS

-  **50–100** Users Supported
-  **3** Core Virtual Servers
-  Centralized Account & Policy Management
-  Daily Backup Strategy
- ✓ Faster onboarding and offboarding
- ✓ Easier maintenance and troubleshooting
- ✓ Better data protection and business continuity
- ✓ Scalable design for future expansion

5 KEY TECHNOLOGIES

-  **Active Directory**
Centralizes users, groups, and devices.
-  **Group Policy**
Enforces settings and improves security.
-  **VMware**
Runs multiple servers on one physical machine.
-  **BitLocker**
Encrypts drives and protects data.
-  **Shared Storage**
Central place for files and shared data.
-  **Backup & Recovery**
Protects data and enables quick recovery.

7 SYSTEMS & OPERATIONS (SO6)

-  Defined team roles for setup, administration, and maintenance
-  Developed a deployment design for servers, services, and network connections
-  Planned routine patching, monitoring, backup checks, and recovery tasks
-  Created user and administrator guidance for ongoing system use