

Enterprise Case Study

Secure & Scalable Multi-Site

IT Infrastructure Transformation

Databytes Consulting Technologies Pvt. Ltd.



Customer Overview

The customer is a healthcare organization and healthcare device manufacturer operating across two critical Bangalore location—a Head Office and Manufacturing Factory. As its dependence on centralized applications, authentication, data, connectivity, and endpoint systems increased, the organization required a secure, resilient, and scalable IT infrastructure.

Databytes was engaged to modernize and integrate the IT environment across enterprise networking, cybersecurity, virtualization, centralized storage, identity and endpoint management, data protection, and secure inter-site connectivity.

The objective was to establish a future-ready IT foundation that strengthens security, operational continuity, collaboration between locations, and scalability while supporting the organization's healthcare and manufacturing operations.

THE CHALLENGE

The organization required stronger integration between its Head Office and Factory while improving the reliability, security, availability, and manageability of its IT environment.



Infrastructure Reliability

Critical server and storage infrastructure required improved resilience to minimize the impact of hardware failures and reduce infrastructure-level risks.



Secure Multi-Site Connectivity

Both locations required secure communication to enable Active Directory replication, controlled access to internal resources, and seamless collaboration between users and systems.



Centralized Identity & Access Management

The organization needed centralized authentication and controlled access to IT resources across both locations.



Data Protection & Storage

A centralized and resilient storage platform was required to support departmental shared folders, business data, and backup repositories.



Endpoint Visibility & Security

The IT team required centralized capabilities for patch management, asset tracking, software deployment, remote troubleshooting, endpoint monitoring, and threat detection.



Secure Remote Access & Future Scalability

Authorized users needed secure access to internal resources without exposing the organization's internal network directly to the internet. Secure access to internal resources with a scalable infrastructure supporting 300+ users and future wireless expansion without major redesign.

DATABYTES' APPROACH



Security & Connectivity

Enterprise firewall, cybersecurity, IPsec connectivity, SSL VPN, and secure remote access.



Identity & Access Management

Centralized Active Directory with identity-based access and endpoint management.



Server Virtualization

Proxmox-based server virtualization for efficient and flexible infrastructure management.



Centralized Storage & Resilience

NAS storage with RAID-based redundancy for secure and reliable data availability.



Enterprise Wireless & Endpoints

Reliable wireless connectivity with centralized endpoint management and EDR protection.

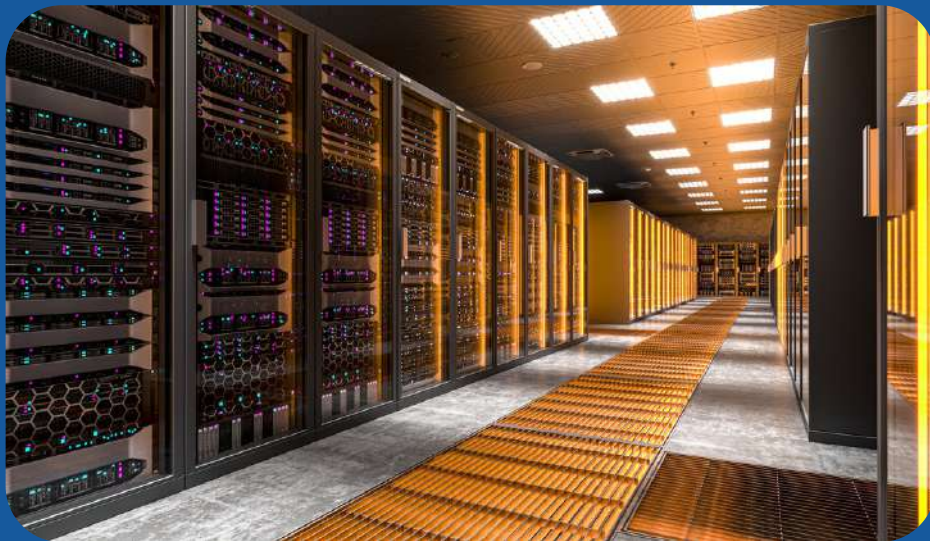


Scalability & Compliance

Integrated infrastructure designed for future growth, manageability, and alignment with ISO 27001 ISMS principles.

Proposed Solution & Deployment

Databytes proposed and implemented a comprehensive multi-site infrastructure architecture designed to improve security, resilience, centralized management, and scalability.



SECURE MULTI-SITE NETWORK

Deployed 2 Sophos XGS 138 firewalls at Head Office and Factory. Configured IPsec Site-to-Site VPN and SSL VPN for secure inter-site and remote access



CENTRALIZED IDENTITY & ACCESS

Implemented Primary and Secondary Active Directory Domain Controllers. Enabled centralized authentication, DNS, access control, user provisioning, and AD replication.



VIRTUALIZED SERVER INFRASTRUCTURE

Deployed HPE ProLiant DL360 servers at both locations with Proxmox virtualization. Implemented Windows Server 2025 workloads with RAID-based storage resilience.



CENTRALIZED STORAGE & BACKUP

Deployed QNAP TS-1232PXU-RP NAS with 4 × 18 TB HDDs in RAID 6. Enabled centralized business data, departmental shared folders, and backup repositories.



ENDPOINT & WIRELESS SECURITY

Implemented ManageEngine Endpoint Central for centralized endpoint management, patching, asset tracking, and software deployment. Deployed Kaspersky Foundation EDR and 15 HPE Networking Instant On AP21 access points across both locations.



POWER PROTECTION & COMPLETE DEPLOYMENT

Deployed an APC 5 KVA Online UPS with battery backup for critical infrastructure. Databytes handled installation, configuration, integration, testing, validation, documentation, and final handover of the complete infrastructure.

Deployment, Configuration & Installation

Network & Security Deployment

- Deployed 2 Sophos XGS 138 Firewalls across Head Office and Factory.
- Configured IPsec Site-to-Site VPN and SSL VPN for secure connectivity and remote access.

Server & Virtualization Infrastructure

- Deployed HPE ProLiant DL360 servers at both locations.
- Configured Proxmox Hypervisor, Windows Server 2025, RAID 1, and enterprise server infrastructure.



databytesconsulting.in



Enterprise Wireless Infrastructure

- Deployed 15 HPE Networking Instant On AP21 Access Points — 3 at Head Office and 12 at Factory.
- Integrated HPE Networking switches to provide reliable and scalable wireless connectivity.

Power Protection & Complete Implementation

- Installed APC 5 KVA Online UPS with battery backup for critical infrastructure.
- Databytes completed installation, configuration, integration, testing, validation, documentation, and final handover.



databytesconsulting.in



Centralized Storage & Backup

- Installed QNAP TS-1232PXU-RP NAS with 4 × 18 TB HDDs in RAID 6.
- Configured centralized file storage, departmental shared folders, and backup repositories.

Identity & Endpoint Management

- Implemented Primary and Secondary Active Directory Domain Controllers with integrated DNS and replication.
- Deployed ManageEngine Endpoint Central and Kaspersky Foundation EDR for centralized endpoint management and security.



databytesconsulting.in



Business

Value Delivered

- | | | | |
|---|---|---|---|
|  | Improved Security & Resilience | ➤ | RAID-protected servers, RAID 6 NAS storage, firewalls, EDR, and UPS backup strengthened infrastructure protection and operational continuity. |
|  | Secure Multi-Site Connectivity | ➤ | IPsec VPN enabled secure communication between the Head Office and Factory, including AD replication and controlled resource access. |
|  | Centralized Identity & Access | ➤ | Active Directory provided centralized authentication, user provisioning, DNS, and access control across both locations. |
|  | Enhanced Data & Endpoint Protection | ➤ | Centralized NAS storage improved data protection, while ManageEngine Endpoint Central and Kaspersky EDR enhanced endpoint visibility, patching, monitoring, and threat detection. |
|  | Secure Remote & Wireless Access | ➤ | SSL VPN enabled secure remote access for authorized users, while enterprise wireless infrastructure provided reliable and scalable connectivity. |
|  | Scalable & ISO 27001-Aligned Foundation | ➤ | The integrated architecture supports future user and infrastructure growth while strengthening controls around access, assets, encryption, and operational security. |

OUTCOME ACHIEVED

Through this engagement, the customer transitioned from a requirement for a more structured multi-site IT environment to an integrated infrastructure ecosystem connecting its Head Office and Factory.



Integrated multi-site infrastructure



Secure encrypted connectivity between locations



Centralized identity and access management



Resilient server and storage infrastructure



Centralized endpoint management



Advanced endpoint threat detection



Secure remote access & A scalable architecture designed for future growth



Enterprise wireless connectivity Improved power protection and operational continuity

