

Azure Automation Suite - Enterprise Ready Services

Azure Cloud Automation Deployment Guide

1. Select an Azure Service.

- In X-ops, navigate to **CloudOps** → **Azure Automation**.
- Click on the desired service (e.g., Virtual Network, Storage Account, Virtual Machine).

2. Review Prerequisites.

- Check the **Overview** for service capabilities.
- Confirm **Terraform** (≥ 1.0) and **Azure Provider** versions.
- Ensure your Azure service principal has necessary RBAC roles.

3. Configure Inputs.

- Open the **Inputs** section.
- Complete required fields (e.g., `resource_group_name`, `location`).
- Use default values for optional parameters or tailor them.

4. Copy and Customize Terraform.

- Scroll to **Usage** and click **Copy Code**.
- Paste into `main.tf` and replace placeholders with your specifics.
- Adjust subnets, VM sizes, and tags to fit your environment.

5. Initialize and Deploy.

- Run `terraform init` to initialize providers.
- Run `terraform fmt` and `terraform validate`.
- Run `terraform plan` to review planned changes.
- Run `terraform apply` to provision resources.

6. Verify Outputs.

- Check the **Outputs** section for resource IDs and endpoints.
- Log in to the Azure Portal to confirm resource creation.
- Validate network connectivity and role assignments.

Virtual Network

Securely connects Azure resources and on-premises environments within an isolated, private network.

- **What it does:** Creates secure network infrastructure with subnets, security groups, and routing.
- **Why you'll love it:** Enterprise-grade networking with hybrid connectivity options.
- **Perfect for:** Multi-tier applications and secure communication.

Storage Account

Scalable, durable cloud storage for unstructured data, supporting blobs, files, queues, and tables.

- **What it does:** Provisions secure storage with lifecycle management and redundancy options.
- **Why you'll love it:** Multiple storage tiers for cost optimization.
- **Perfect for:** Data archiving, application storage, and backup solutions.

Virtual Machine

Scalable, customizable Azure compute resource for on-demand virtual server deployment and management.

- **What it does:** Deploys configured VMs with networking, storage, and security settings.
- **Why you'll love it:** Full control over your computing environment.
- **Perfect for:** Legacy applications and specialized workloads.

Key Vault

Cloud service for secure management of secrets, encryption keys, and certificates, ensuring data protection and compliance.

- **What it does:** Centralized secret management with access policies and audit logging.
- **Why you'll love it:** Hardware security module (HSM) backed encryption.
- **Perfect for:** Securing application secrets and encryption keys.

Load Balancer

Cloud service for secure management of secrets, encryption keys, and certificates, ensuring data protection and compliance.

- **What it does:** Distributes traffic across healthy instances with automatic failover.
- **Why you'll love it:** High availability with health monitoring.
- **Perfect for:** Applications requiring consistent performance and uptime.

Cosmos DB

Cloud service for secure management of secrets, encryption keys, and certificates, ensuring data protection and compliance.

- **What it does:** Deploys globally distributed, multi-model database with automatic scaling.
- **Why you'll love it:** Single-digit millisecond latency worldwide.
- **Perfect for:** Global applications requiring fast data access.

MySQL Database

Cloud service for secure management of secrets, encryption keys, and certificates, ensuring data protection and compliance.

- **What it does:** Sets up managed MySQL instances with automated maintenance.
- **Why you'll love it:** Focus on your applications while we handle database operations.
- **Perfect for:** Web applications and content management systems.

Azure Kubernetes Service (AKS)

Cloud Service for Secure Management of deploying, configuring and managing Kubernetes on the Azure platform.

- **What it does:** Provisions managed Kubernetes clusters with integrated monitoring.
- **Why you'll love it:** Container orchestration with Azure integration.
- **Perfect for:** Cloud-native applications and DevOps workflows.

App Service

Azure App Service is a fully managed platform for building, deploying, and scaling web apps.

- **What it does:** Deploys web applications with automatic scaling and SSL certificates.
- **Why you'll love it:** Deploy from code to production in minutes.
- **Perfect for:** Web applications and APIs requiring rapid deployment.

The screenshot displays the Xops Azure Automation dashboard. The interface includes a top navigation bar with the Xops logo and 'Automate Infrastructure with Custom Terraform Modules'. A left sidebar contains navigation options: Home, Cloud FinOps, CloudOps (with sub-items for AWS and Azure), Cloud Security, Cyber Security, Workload Security, Reports, and Integrations. A 'Need Help!' button and a 'Logout' button are also present in the sidebar. The main content area is titled 'Azure Automation' and features a 3x3 grid of service tiles, each with an icon, title, and brief description:

- Virtual Network:** Securely connects Azure resources and on-premises environments within an isolated, private network.
- Storage Account:** Scalable, durable cloud storage for unstructured data, supporting blobs, files, queues, and tables.
- Virtual Machine:** Scalable, customizable Azure compute resource for on-demand virtual server deployment and management.
- Key Vault:** Cloud service for secure management of secrets, encryption keys, and certificates, ensuring data protection and compliance.
- Load Balancer:** Cloud service for secure management of secrets, encryption keys, and certificates, ensuring data protection and compliance.
- Cosmos DB:** Cloud service for secure management of secrets, encryption keys, and certificates, ensuring data protection and compliance.
- MySQL Database:** Cloud service for secure management of secrets, encryption keys, and certificates, ensuring data protection and compliance.
- Azure Kubernetes Service:** Cloud Service for Secure Management of deploying, configuring and managing kubernetes on the Azure platform.
- App Service:** Azure App Service is a fully managed platform for building, deploying, and scaling web apps.

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