Azure Best Practices Assessment

All Covered – IT Services from Konica Minolta

Azure Marketplace Offer Overview

Azure Best Practices Assessment

Objective

The objective of the assessment is to review and describe the architecture in Azure, current state of the infrastructure, as well as to offer recommendations to improve the security and performance. The recommendations in the assessment are in the context of Microsoft best practices pertaining to infrastructure design. Any findings range from suboptimal to critical, and these should be reviewed, and resolved, starting with the critical issues.

Process

Azure Subject Matter Experts on our engineering team will take a deep dive into your Azure environment to ensure that the design and configuration is following Microsoft best practices. Components that are covered in the assessment include the following:

- General Azure management, resource organization, and governance
- Identity (ADDS, Azure AD, users and groups, directory synchronization, MFA, security)
- Backup protection for Azure resources and disaster recovery review
- Network design and configuration
- Cost and performance optimization

All findings are captured in detail in a comprehensive assessment document, which includes recommendations for any findings needing attention, and rationale behind each recommendation. The assessment will be shared with any appropriate roles and reviewed with the engineer(s) that had completed the assessment to cover any questions or concerns with any of the findings or recommendations. As a follow up, any or all recommendations agreed to be remediated will be added to a scope of work and scheduled with our Professional Services team in a timely manner.

Example Format:

Summarized Recommendations

The table below contains a summarized list of recommendations that should be prioritized based on the level of risk and effort indicated.

- Risk level indicates the level of risk to the environment if left unchanged.
- Effort level indicates time/complexity to complete the recommended change.

Section	Recommendation	Risk	Effort
Backups and Disaster Recovery	Enable backup alerts	Critical	Low
Identity / Active Directory	Remediate ADDS configuration	Critical	Low
Networking	Determine if SMB access to Azure File Share can be more restricted	Critical	Low
Identity / Active Directory	Review Current MFA Configuration to confirm all settings are current	High	Low
Identity / Active Directory	Remove single user assignments in Conditional Access polices and use user groups instead	High	Low
Identity / Active Directory	Ensure current AAD licensing is compliant for use of Conditional Access to apply to all users	High	Low
Networking	Remove assigned public IPs from severs that do not need direct internet access	High	Low
Network	Create a detailed functional application diagram for the Azure environment	High	High
Identity / Active Directory	Create a logical OU hierarchy	Med	Low
Identity / Active Directory	Resolve Data Mismatch AAD synchronization error	Med	Low
Azure Management	Remove unused resources to avoid unnecessary costs	Med	Low

Cost Optimization

Overview

The Azure environment was reviewed to determine if any cost saving measures were being leveraged with the existing workloads.

Reserved Instances

Overview

The Azure VM and SQL Server was checked to determine if an Azure Reserved Instance was being utilized for cost savings.

Findings

- No reservations are currently in use

Recommendation

- If the use of the Azure VM is going to be considered a mid to long term solution (1-3 years), an Azure Reservation with a 1 or 3-year term can be purchased to reduce the monthly virtual machine compute costs
- The Azure SQL Database can also utilize a 1 or 3-year term reservation

Rationale

Reserved Instances are an easy way to take advantage of discounts pertaining many different Azure resource types.

VM Right-Sizing

Overview

The current VM was reviewed to check performance metrics for the last 30 days to determine the status of resource utilization (CPU/RAM).