

DATA SHEET

Azure Data Protection Strategy Implementation



Why Choose Encryption Consulting LLC?

Encryption consulting is a leading cyber security firm with a spread of expertise across domains in Cryptography and Cloud Security. Encryption Consulting recruits experienced Azure security specialists capable of analysing, classifying and safeguarding sensitive data hosted on the cloud using various techniques such as cryptography and key management.

Expertise dedicated for your Cloud Management

Encryption Consulting's team will evaluate the existing Azure Cloud environment and produce an assessment report. Based on the recommendations identified during assessment, implementation plan is designed for Azure Cloud Data Protection. Encryption Consulting's expert team will evaluate and implement the Azure Data Protection Strategy with utmost care and perfection.

Key benefits of Azure Data Protection Implementation

- **Secure Deployment**

Achieve high secure deployment of Azure Data Protection domain-wise matching your requirements

- **Deep Analysis**

In-depth understanding of your cloud environment with proper assessment and workshops

- **Risk Elimination**

Eliminates risk with expert deployment of Key Management Infrastructure, certificate management and DLP

- **Regulatory Compliance**

Secure and efficient Data Protection implementation by achieving various regulatory compliance such as PCI DSS, GDPR



Our Approach to secure your Azure Environment

Encryption Consulting's team will implement domain-wise Data Protection Strategy based on risk prioritization and timeline. From classification of data in Azure cloud to protecting Data in various layers across Azure storages such as Azure SQL Database, Azure Cosmos DB, Azure Cache for Redis etc. We leverage Azure native encryption capabilities in providing an efficient security to your data in support with other Data Protection technologies. We also leverage Azure native tools like Azure Key Vault, Azure Monitor logs etc. to take full advantage of the technology.

DATA – AT – REST PROTECTION

Azure Discovery

Data at rest scans will be performed across Azure Cloud environment to identify sensitive data and develop Data Flow Diagrams (DFD), Inventory

TripleDES

Encryption (DB)

Databases are protected through a FIPS 140-2 validated encryption module using TripleDES since Azure Web Apps does not support AES256

Disk – Level

Encryption

Static data residing on Azure storages can be protected through Azure Disk Encryption for virtual machines and virtual machine scale sets

DATA – IN – TRANSIT PROTECTION

Authenticating Endpoints

Data sources and destinations are verified along with validation of human or process pings using Microsoft identity platform and OAuth 2.0 authorization

Cloud DLP)

Data in transit can be protected by implementing CASB solution in cloud and also by protecting endpoint machines with Endpoint DLP. We evaluate and implement appropriate vendor for your environment

Network Traffic

Encryption

Encryption is done in the transport and network layer. Azure VPN gateway and Key Vault can be configured to manage keys and certificates

DATA – IN – USE PROTECTION

Field – Level Encryption

Always Encrypted Wizard column level encryption can be implemented to protect dynamic web sensitive data while meeting compliance requirements

Application Layer Security

Application Layer Security will be taken care by implanting Identity and Access Control, Firewall rules, vulnerability management etc.

Tokenization & Obfuscation

Our experts will implement Tokenization and Obfuscation to protect highly critical sensitive data stored in Azure cloud. This ensures compliance with GDPR

Deliverables

Implementation deliverables vary as per the client requirements and engagement scope. Please find below sample deliverables for high level view:

- Azure Workbook
- Service documentation
- Regulatory requirements and assessments framework
- Training and awareness documentation
- Executive summary report

Client References

1. Business Process Outsourcing Company

Background

A business process outsourcing decided to perform an overall Azure Data Discovery and Data Classification across the organization. They wanted to develop Critical Data Inventory and Data Flow Maps for Azure Cloud data.

What we did

- Performed document review to identify existing storage locations.
- Conducted workshops with critical crown jewel business stakeholders to identify “Critical Data Elements” and data flow process.
- Mapped and developed Data Flow Maps depicting the sensitive data flow and security controls implemented.
- Created a global data inventory with critical data assets and elements.

Outcomes/impact

- Data Flow Maps
- Critical Data Inventory
- Data Lineage Document

2. Agriculture Warehousing Company

Background

A leading agriculture warehousing company sought out Encryption Strategy implementation for Azure. Client requirement was to provide a phase-wise implementation as per risk prioritization plan.

What we did

- Designed requirements framework for assessing Azure Cloud environment and identifying risk appetite.
- Developed implementation plan based on workshop outcomes and risk prioritization.
- Implemented DLP as per the assessment outcomes.
- Developed service documentation with standards for future reference.

Outcomes/impact

- Encryption strategy report.
- Azure Encryption implementation guide.
- Service documentation



Why Encryption Consulting LLC?



Encryption Advisory Services

Encryption is used for securely protecting data from unauthorized access. Data encrypted can only be seen by those that possess the key to change the data back to plain text. Encryption is now one of the oldest yet still most effective technology solutions able to have data security



Public Key Infrastructure

PKI is a security ecosystem that has stood the test of time for achieving secure Internet-based transactions by the use of digital certificates. Digital certificates have provided security to servers and routers from the very early stages of the Internet through Public Key Infrastructure



Hardware Security Module – HSM

Hardware Security Modules provides protection and strong authentication with cryptographic processing by the use of digital keys inside a physical computing device. This device offers an isolated tamperproof environment which can create and secure cryptographic keys, protecting critical cryptographic operations, all while enforcing self-implemented policies over the keys.



Certificate Lifecycle

Certificates typically have a 4-phase lifecycle - Discovery, Enrollment, Provisioning, and End-of-life. To make your PKI mature and reliable, you must have more control over all the phases



Enterprise Encryption Platforms

Does your business have the need to encrypt large amounts of data-at-rest found in structured databases or in unstructured files across physical, cloud, or both types of environments? Do you want to protect data without disruptive changes to applications or business practices?



Cloud Data Protection Services

The transition towards uploading data on the public cloud is now becoming the normal standard. With relying on the cloud for data storage, cloud security must now become the number one priority for organizations

See it in action

Encryption Consulting LLC is a customer-focused cyber security consulting firm providing an array of services in all aspects of data protection.

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