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# Data Protection Assessment for Azure Cloud



## Overview

Encryption Consulting's industry-leading expertise helps clients identify and evaluate the security gaps existing in the current "Azure Cloud Security Architecture" through a well researched assessment process across data protection domains. We check for vulnerabilities and exploits as well as check for any regulatory violations by benchmarking against industry data protection standards and regulations such as NIST, ISO, GDPR and Azure best practices. Domains to be covered under the Azure Cloud Data Protection Assessment are:

- Cloud Data Discovery
- Cloud Data Governance
- Data Leakage Prevention

- Encryption and Tokenization
- AWS Certificate Management
- Data Retention & Destruction

# 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 Data Protection

Encryption Consulting's team, performs the data protection assessment in a phases staring with document review along with remote interviews and workshops followed by gap identification. The team prepares tailor made assessment controls and questionnaires and provides data protection assessment recommendations as per the industry best practices.

## Key Benefits

- Enhance Cloud
  Security posture
- Identify security gaps in your Azure Cloud Infra
- Remediate gaps via recommendations developed based on Industry's best practices



## Our Approach

Encryption Consulting's Azure Cloud Data Protection Assessment involves developing an Assessment control document based on industry benchmark standards such as Centre for Internet Security (CIE) standards, NIST, ISO 27001 and GDPR to make sure the Azure cloud landscape is in compliance with regulatory laws. We start off with classification of data to analyse the crown jewels and assess if any data leak prevention mechanism is existing or not such as MFA and end-point security. We make sure that Azure storage, virtual machines, virtual networks, CDNs etc have suitable data protection controls in place.

## Data Protection Assessment Process

Azure Cloud Data Protection Assessment typically consists of four phases – Documentation Review, Remote Workshops, Gap Identification and Reporting. Duration for the Assessment depends on the client engagement requirement. Encryption Consulting's consultants perform the following activities under each phase:



### Phase 1 Documentation Review

- Perform offsite review of Data Protection policies, standards, Azure architecture design and documentation, logging standards, Incident Management policies and standards and other relevant Azure documentation (as per the requirements).
- Design assessment framework based on industry best practices and regulatory requirements.



## Phase 2 Remote Workshops

- Perform a series of remote workshops for each identified core focus domain in collaboration with key client stakeholders.
- Document responses based on workshop outcome for gap identification.



## Phase 3 Gap Identification

- Perform gap identification based on workshop outcomes to ensure cloud data protection practices are in accordance with standard security, and protective guidance.
- Develop recommendations for each identified gap based on best practices followed across the industry.



## Phase 4 Reporting

- Provide a report that details practical technical recommendations to enhance the Azure data protection, visibility and detection landscape.
- Recommendations are prioritized based on order of implementation.

## Deliverables

At the end of the Azure Cloud Data Protection Assessment, Encryption Consulting experts will provide a detailed report that includes:

- 1. A snapshot of the existing Azure Cloud Data Protection landscape along with the gaps identified.
- 2.Azure Data Protection best practices to align with current industry benchmark standards and global regulations.
- 3. Practical and prioritized recommendations for enhancing security and detection landscape.

## Client References

## 1. Multinational Hospitality Company

## Background

A leading hospitality company sought out an GCP Cloud Data Protection Assessment exclusively for Key and Certificate Management. The request was to check for GDPR compliance because the firm operated inside EU domain and stored customer data on Azure SQL server.

#### What we did

- Designed requirements framework for assessing Key and Certificate Management security posture based upon GDPR (primarily) and other industry best practices.
- Identified gaps in the firm current state processes and provided recommendations to enhance compliance and risk rating.
- Provided integrated reporting for Key and Certificate Management to a variety of stakeholders throughout the organization.
- Implemented the provided recommendations as per the agreed up on timeline during Phase-2 of the engagement and achieved compliance with GDPR.

## Outcomes/impact

- GDPR regulatory compliance.
- Enhanced Key and Certificate Management security posture.
- Overall reduction of risk across Azure applications portfolio.

### 2. Global Technology Company

## Background

A global technology corporation decided to perform an overall data protection assessment for Azure Active Directory (AD) data and required a strategic roadmap to enhance the security landscape. They wanted to create training and awareness on data protection among the key stakeholders.

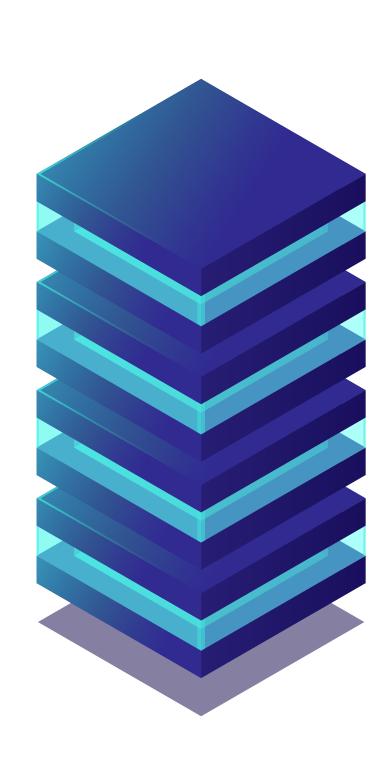
#### What we did

- Performed document review and assessment framework for all six data protection domains.
- Proposed recommendations based on industry best practices and developed strategic roadmap with prioritized recommendations. High priority classified to be implemented in "DoNow". Medium priority in "Do-Next" and low priority recommendations in "Do-Later" phase.
- Provided instructor led Secure Programming training to the stakeholders on cloud data protection best practices and classification.

### **Outcomes/impact**

next 3 years.

- Secure gap assessment framewor.
- Strategic roadmap with implementation plan for
- Training and awareness material.



## 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 securtiy consulting firm providing an array of services in all aspects of data protection.

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encryptionconsulting.com







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