

# THALES



## Luna Key Broker for Microsoft DKE

Thales Customer Presentation



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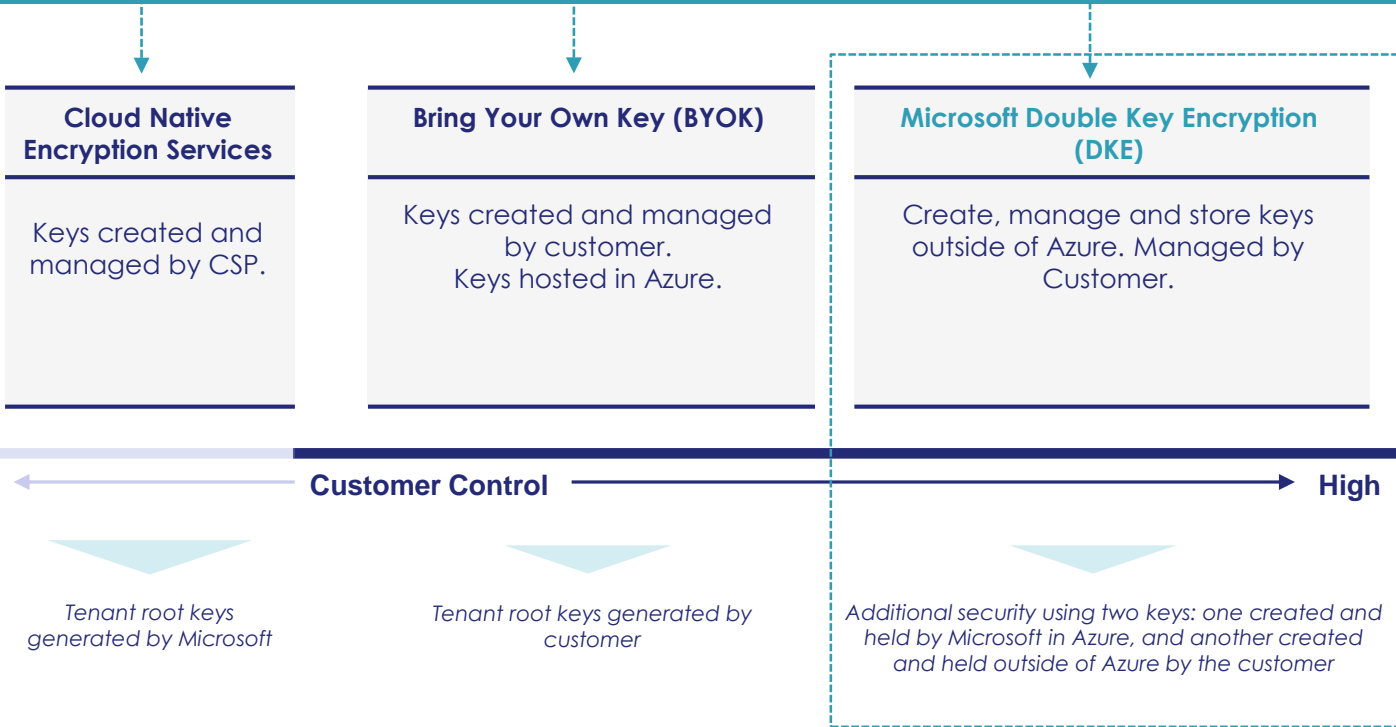


The foundation of digital trust

Luna  HSM

# Protection Strategies for Microsoft Azure with Luna HSMs

Microsoft Azure offers three different encryption key generation and management options:



# Luna HSM Encryption Strategy by Use Case

Use Case	Need	Solution
Sole control over the ability to de-crypt protected data	Control access to encryption keys independent of Azure	DKE
Compliance mandate to hold keys separate from the cloud service provider	With DKE customer held keys are maintained in the customer's environment and remain separate from the cloud provider in a FIPS 140-2 Level 3 certified Luna HSM	
Support for Microsoft 365	Enhanced control over native Microsoft 365 encryption services	
Compliance mandate for secure key generation	Additional control over lifecycle operations with a FIPS 140-2 Level 3 certified Luna HSM	BYOK
Support for Azure native services	Enhanced control over Azure encryption services such as RMS, Microsoft 365, etc.	
Non-critical or low risk data encryption	Basic data protection and policy compliance	Keys generated by Microsoft

# DKE Summary



Microsoft announced End-of-Life of HYOK

Microsoft has new Double Key Encryption feature of Microsoft Information Protection  
- External HSM or KMS for protection of key

Microsoft and Thales partner to support Thales Luna HSM backed DKE Service 2020

Thales officially launches Luna Key Broker for Microsoft DKE solution April 2021

# What is Double Key Encryption (DKE)?

Enhanced protection for highly sensitive data to meet compliance and regulatory requirements



**Protect data with two keys** To access the content you must have both keys: customer-controlled key and customer's key in Microsoft Azure



**No third-party access** Since one key is always in your control, Microsoft never has access to your data



**Consistent user experience** Unified and consistent labeling experience across your data estate for admins and users

# Luna Key Broker for Microsoft DKE

Protect your most sensitive data while maintaining full control and ownership of your encryption keys outside of Azure cloud



## Enhanced Control Over Data and Keys

Generate and manage your encryption keys according to your own security policies while maintaining sole control of your data



## Flexible Deployment

Luna Key Broker for Microsoft DKE can be deployed either in the cloud or on-premises

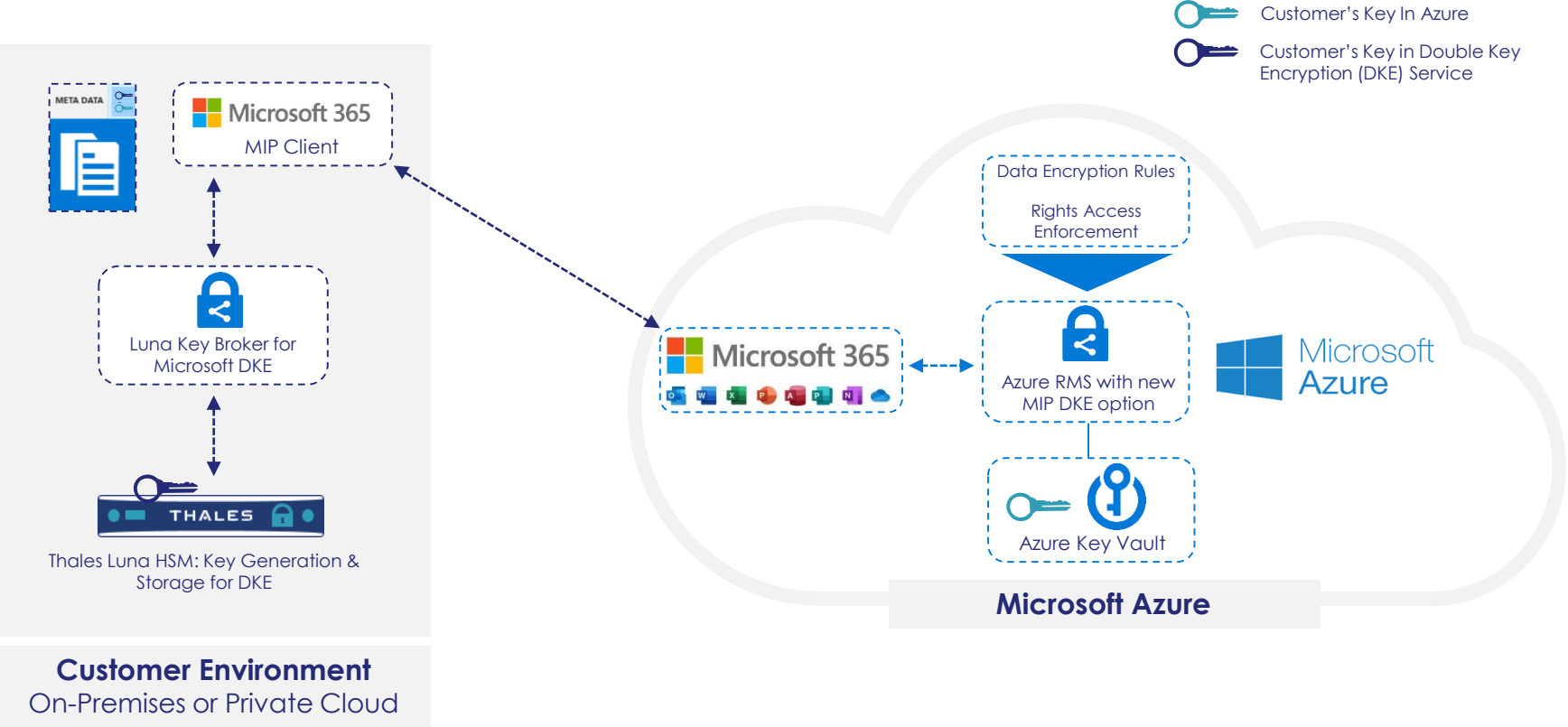


## Security and Compliance

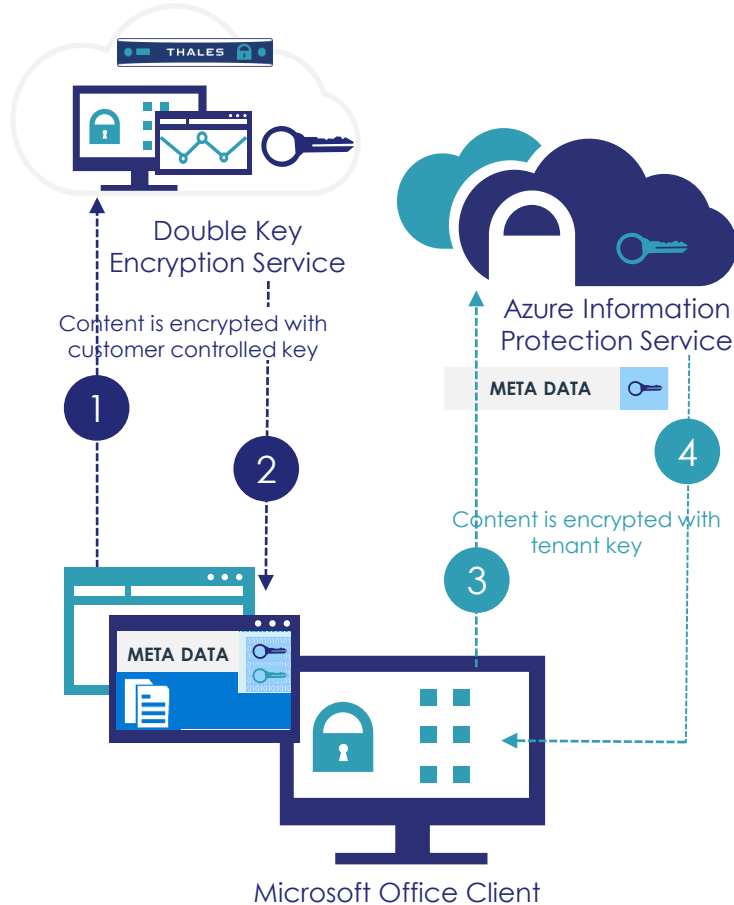
Help meet internal policy and compliance mandates including regulations such as GDPR, HIPAA and Schrems II

Customer held keys are maintained separate from where your sensitive data resides by generating, managing and storing encryption keys in high assurance FIPS 140-2 Level 3 validated Luna HSM

# Microsoft 365 Encryption with Luna Key Broker for Microsoft DKE





# DKE Encryption Workflow



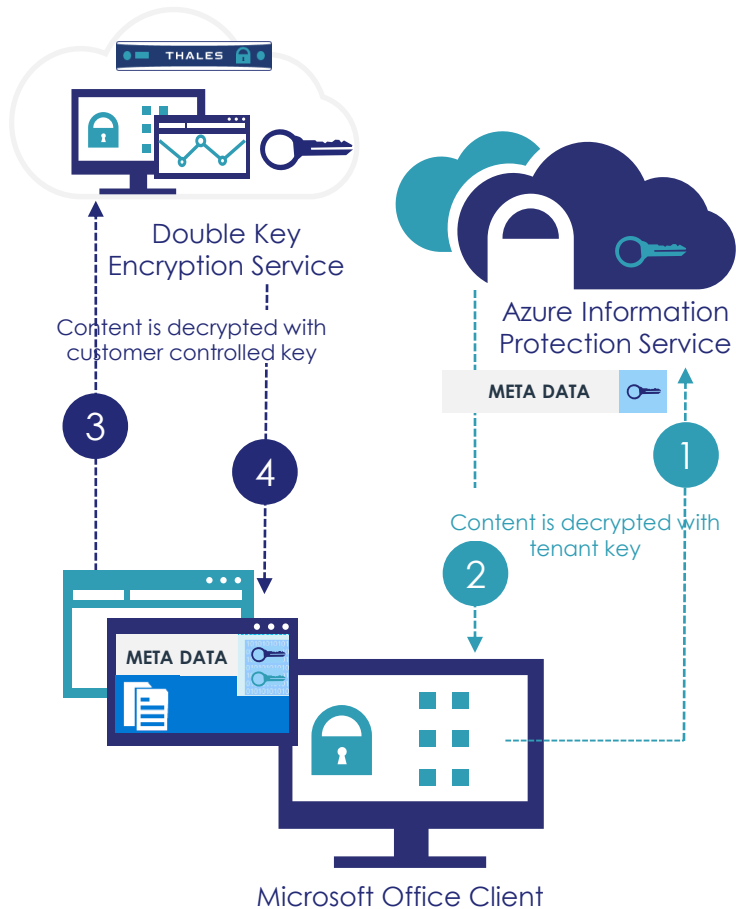
**Maintain control of your data**  
Content is encrypted with customer's key before going to Azure

## Encryption Keys

-  Customer's Key In Azure
-  Customer's Key in Double Key Encryption (DKE) Service




# DKE Decryption Workflow

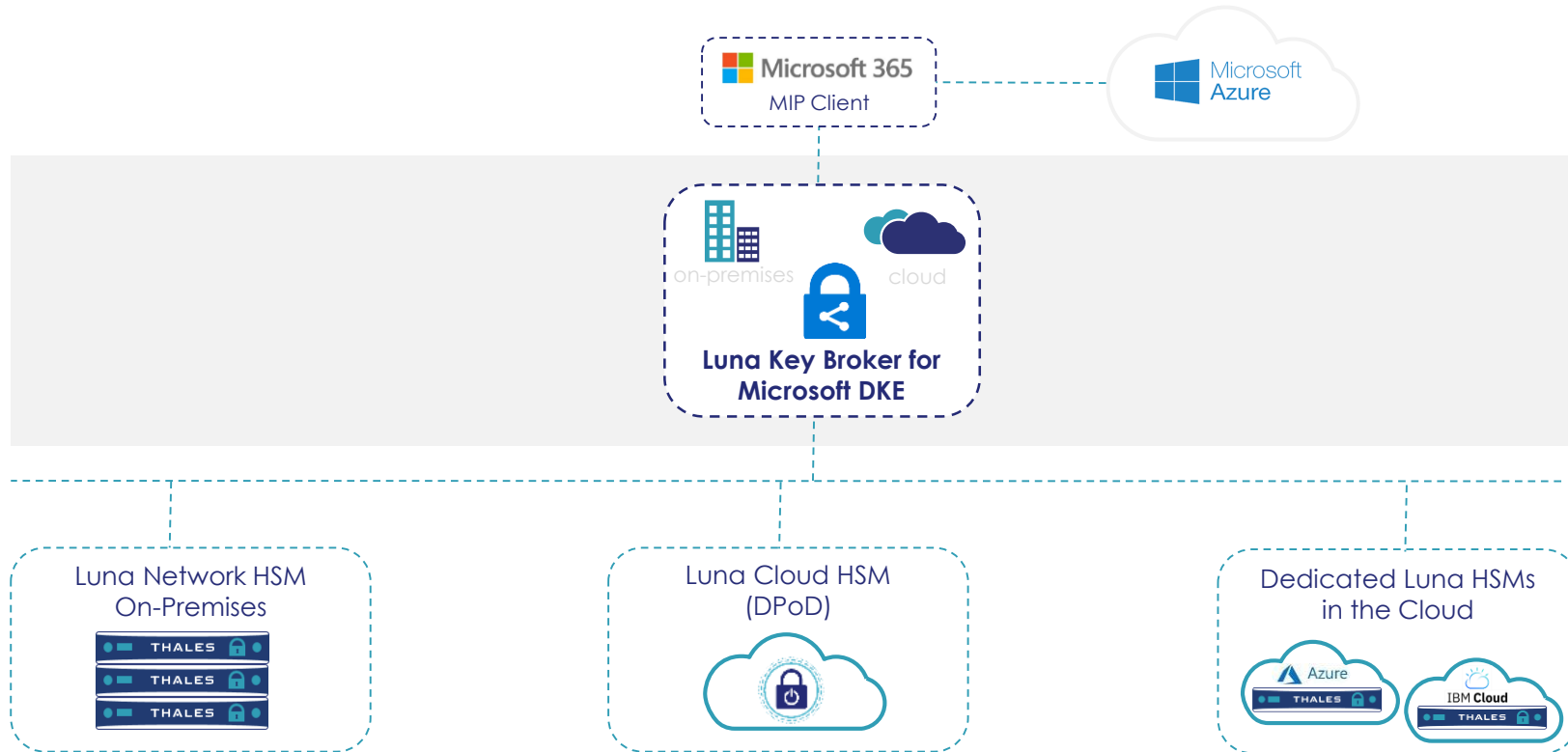


**Maintain control of your data**  
Data is never in the clear in Azure  
ensuring the customer data is  
inaccessible to Microsoft

## Encryption Keys

-  Customer's Key In Azure
-  Customer's Key in Double Key Encryption (DKE) Service

# Luna Key Broker for Microsoft DKE Deployment Options



# Luna Key Broker for Microsoft DKE Capabilities

## Protect your Keys with Luna HSMs

- Single HSM, HA group, Luna Cloud HSM

## Deploy to a Cluster

- Any number of nodes for Availability and Uptime

## Multiple Keys for different User Groups

- Have multiple sensitivity labels each with their own key

## Key Rollover

## Authorization based on Users, Email, Groups

- More granular access control using Open Policy Agent (OPA)
  - Rego declarative policy file



# The Foundation of Digital Trust: Thales Luna HSM



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## Thank You

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Luna  HSM