

Microsoft Double Key Encryption and Entrust KeyControl

Integration Guide

Member of Microsoft Intelligent Security Association

Microsoft Security

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Chapter 1. Introduction

This document describes the integration of Microsoft 365 Double Key Encryption (DKE) with the Entrust KeyControl key management solution. KeyControl serves as a key manager for encryption keys by using various protocols, including KMIP.

1.1. Product configuration

Entrust has successfully tested the integration of Entrust KeyControl with Microsoft 365 DKE in the following configurations:

Product	Version
Entrust KeyControl	10.2

1.2. Features tested

Entrust has successfully tested the following features:

- Create DKE key
- Rotate DKE key
- Remove DKE key
- Delete DKE key
- Cancel DKE key deletion

1.3. Requirements

1.3.1. Licensing

DKE is supported with Microsoft 365 Enterprise E5 or above licenses. See System and licensing requirements for DKE.

1.3.2. Microsoft 365 applications

DKE is supported on Microsoft 365 applications on Windows desktop versions. It is not supported for access via the web or Mac versions of Microsoft 365.

1.3.3. Documentation

Before starting the integration process, familiarize yourself with:

- Microsoft Online Documentation.
- Entrust KeyControl Online Documentation Set.
- Entrust KeyControl Cloud Key Management for DKE.

Chapter 2. Deploy Entrust KeyControl

In order to provide uninterrupted access to the keys, in production deploy a cluster of at least 2 KeyControl Vault instances behind a load balancer. Use the load balancer FQDN when specifying the URL of the DKE key in the compliance label, and when registering the Azure application that provides authentication for the service.

If you use a single KeyControl instance you can access it directly, and use its FQDN directly. We will use the term 'Service FQDN' for the address used to access the service whether it is a load balancer or KeyControl instance.

You will need to include the Service FQDN in the SSL certificate on the cluster. In order to register the Azure App, the Service FQDN needs to be in a domain verified with the Azure account, see Add your custom domain name to your tenant.

The following steps summarize the deployment of the Entrust KeyControl.

- 1. Deploy an Entrust KeyControl cluster
- 2. Install certificate authority (CA) certificate
- 3. Create a Cloud Key Management Vault in Entrust KeyControl

2.1. Deploy an Entrust KeyControl cluster

For the purpose of this integration, a single-node Entrust KeyControl cluster was deployed in Azure. This cluster can be reached at the load balancer hostname.

- 1. Deploy the Entrust KeyControl node per Deploying a KeyControl Vault Node in Azure.
- 2. Bookmark the public IP.
- 3. Configure the node per Configuring the First KeyControl Vault Node.
- 4. If deploying two-nodes, configure the second node per Configuring Additional KeyControl Vault Nodes.

Following is an example of the WEB GUI of a two-node Entrust KeyControl cluster deployed on-premises.

ENTRUST	KeyControl Vault Management		CLUSTER		🐣 Securi	ty Administrator 🔻	switcн to: Manage Vaults	?
Actions - Cluster	Servers					Μ	ulti-Select: 🛛 Ref	resh 🗘
Node ~	Status ~	Server Name			~	IP Address	`	′ ≡
Current Node	Online	★ kcv-10-2-node-1.interop.local				1		^
	Online	kcv-10-2-node-2.interop.local				10.000.000		

2.2. Install certificate authority (CA) certificate

The Entrust KeyControl cluster needs a certificate from your private root CA, or a trusted public CA, per your organization policies.

- 1. Create a certificate signing request (CSR) per Creating a Certificate Signing Request.
- 2. Have your private root CA, or a trusted public CA, sign the CSR.
- 3. Install the signed certificate per Installing External Certificates for Internal and External Webservers.

2.3. Create a Cloud Key Management Vault in Entrust KeyControl

The Entrust KeyControl Vault appliance supports different type of vaults that can be used by all type of applications. This section describes how to create a **Cloud Key Management** vault in the Entrust KeyControl vault server.

1. Create a vault per Creating a Vault. The vault Type is Cloud Key Management.



Once the vault is created successfully, the new vault's URL and sign-in credentials will be emailed to the administrator's email address entered above. In closed gap environments where email is not available, the URL and sign-in credentials are displayed at this time.

- 2. Bookmark the Vault URL. Copy the User Name and Temporary Password.
- 3. The newly created Vault is added to the **Vault Management** dashboard.

For example:



4. Sign in to the URL provided above with the temporary password. Change the initial password when prompted. Sign in again to verify.

5. Notice the new vault.

ENTRUST KeyControl Vault for Cloud Key M	lanagement CL			A SETTINGS	azure 💄 admin 👻
		Account Settir	ngs		ζ
Full Name:	admin				
Change Password:	Change Password				
E-mail Address:	arvan pritchardi@entrust.com				
Send Alert Notifications to E-mail:	On				
Two-Factor Authentication:	OFF Set up Two-Factor Authenticat	ion			
General Settings		System Settir	ngs		Group Settings
Authentication	Two-Factor Au	thentication Setting	gs	Group	SNMP Settings

Chapter 3. Deploy a Microsoft 365 client computer

For the purpose of this integration, the Microsoft 365 client computer was deployed as a VM in Azure. You can also use an existing Microsoft 365 client computer.

- Create a Microsoft 365 client computer
- Install the root CA certificate

3.1. Create a Microsoft 365 client computer

- 1. Sign in to the Azure portal https://portal.azure.com/#home with any valid account.
- 2. Navigate to Virtual Machines and create the Microsoft 365 client computer.

≡ Microsoft Azure		$\mathcal P$ Search resources,
Home > Virtual machines >		
Create a virtual machin	ne	
Changing Basic options may reset sel	lections you have made. Review all options prior to creating the virtua	al machine.
Project details		
Select the subscription to manage deploy your resources. Learn more	ved resources and costs. Use resource groups like folders to organi	ze and manage all
Subscription * 🕕	Entrust Corp - DPS	\sim
Resource group * 🕕	ms-dke-keycontrol	\sim
	Create new	
Instance details		
Virtual machine name * 🛈	ms-dke-keycontrol-client	
Region * 🛈	(US) East US	\sim
Availability options ①	Availability zone	\sim
Availability zone * 🕕	Zone 1	\sim
	✓ You can now select multiple zones. Selecting multiple zones v per zone. Learn more ♂	will create one VM
Security type 🕕	Standard	\sim
Image * 🛈	🔄 Windows 10 Pro, version 22H2 - x64 Gen2	\sim
	See all images Configure VM generation	
	This image is compatible with additional security features. <u>Clic</u> the Trusted Jaunch security type.	<u>k here to swap to</u>

VM architecture 🕕	Arm64	
	● x64	
	Arm64 is not supported with the selected image.	
Run with Azure Spot discount 🕕		
Size * 🕕	Standard_D2s_v3 - 2 vcpus, 8 GiB memory (\$70.08/month) See all sizes	\sim
Enable Hibernation (preview) ①		
	i Hibernate is not supported by the size that you have selected. Choose a size that is compatible with Hibernate to enable this feature. <u>Learn more</u> ♂	
Administrator account		
Username * 🛈	AdministratorDKE	~
Password *	•••••	~
Confirm password *	•••••	~
VM architecture 🕕	Arm64	
	● x64	
	I Arm64 is not supported with the selected image.	
Run with Azure Spot discount ①		
Size * 🕕	Standard_D2s_v3 - 2 vcpus, 8 GiB memory (\$70.08/month)	\sim
	See all sizes	
Enable Hibernation (preview) 🕕		
	(i) Hibernate is not supported by the size that you have selected. Choose a size that is compatible with Hibernate to enable this feature. <u>Learn more</u> ♂	
Administrator account		
Username * 🛈	AdministratorDKE	~
-		
Password *	••••••	
Confirm password *	•••••	~

3. Notice the VM created.

≡ Microsoft Azure			5+/)	
Home > CreateVm-Microsof Deployment	tWindowsDesktop.Windows-1	10-win10-20240513134439 C	Verview 🖈 …	
🔎 Search	🗓 Delete 🛇 Cancel 🏦 Redeploy 🞍 Dow	rnload 💍 Refresh		
Overview Inputs	Your deployment is complete	ete		
š≡ Outputs i Template	Deployment name: CreateVm-MicrosoftWin Subscription: Entrust Corp - DPS Resource group: ms-dke-keycontrol	dowsDesktop.Window Start time: 5/13/2024, 2:0 Correlation ID: d690ddd4	5:30 PM -11c5-4205-8994-ea002c0d3e55 🜔	
	∧ Deployment details			
	Resource	Туре	Status	Operation details
	ms-365-dient	Microsoft.Compute/virtualMachines	ОК	Operation details
	ms-365-dient530_z1	Microsoft.Network/networkInterfaces	Created	Operation details
	ms-365-dient-vnet	Microsoft.Network/virtualNetworks	ОК	Operation details
	🔮 ms-365-dient-ip	Microsoft.Network/publiclpAddresses	ОК	Operation details
	ms-365-dient-nsg	Microsoft.Network/networkSecurityGroups	ОК	Operation details
	 Next steps Setup auto-shutdown Recommended Monitor VM health, performance and network Run a script inside the virtual machine Record Go to resource Create another VM 	k dependencies Recommended mmended		

3.2. Install the root CA certificate

Install a certificate from your private root CA, or a trusted public CA. If using a private root CA, use the same used to sign the Entrust KeyControl cluster CSR. Install the certificate in the **Trusted Root Certificate Authorities** folder.

Chapter 4. Create a key for Microsoft 365 DKE

- 1. Create a key set for DKE
- 2. Create a cloud key for Microsoft 365 DKE

4.1. Create a key set for DKE

Create the key set per Creating a Key Set for DKE.

For example, the key set named **microsoft-dke** was created for the purpose of this integration.

	KeyControl Vault for Cloud Key Management	CLOUDKEYS SECURITY AUDIT LOG	ALERTS SETTINGS	azure 💄 admin 🔻
Actions - Key Sets C	loudKeys CSP Accounts			Refresh ${\cal G}$
Key Set Name	✓ Description ✓ A	dmin Group ~	Type ~	Keys ~ =
microsoft-dke	Microsoft Double Key Encryption (C	Cloud Admin Group	AZURE	0 (Key Vault) 0 (Managed HSM) 0
azurehsm	C	Cloud Admin Group	AZURE	0 (Key Vault) 0 (Managed HSM) 2

The number of DKE keys in each Key Set is shown on the **Key Sets** tab, last column in the right.

4.2. Create a cloud key for Microsoft 365 DKE

The Microsoft 365 DKE keys are not replicated to Azure. These are stored in the Entrust KeyControl in a separate area alongside the Azure KeyVaults and managed HSMs.

Create a cloud key per Creating a CloudKey for DKE. For example:

1. In the Actions menu select Key Set and Type as shown.



There are no Cloudkeys to show. Please create one from Actions.

2. In the Details tab of the Create CloudKey window, enter the Name and Description.

		Cr	eale Cloudkey	~
Details	Access	Schedule		
Type Key Set	AZURE microso	ft-dke	-	
Name *				
dke-key-1				
Description				
Microsoft	Double Key E	Encryption (D	KE) integration with Entrust KeyControl.	
				11.
Cancel				Continue

3. In the **Access** tab select which Azure accounts can access the key. Select either **Allow all** or **Specific Tenants**. This selection can be changed later, after the key is created.



If specific tenants are specified, only users who authenticate with those tenants can access the key for DKE encryption and decryption.

		Cre	ate CloudKey ×
Details	Access	Schedule	
Permission Cipher *	S		
RSA-2048	3		~
Azure Acco Allow all	unts * O Specif	ic Tenants	
Cancel			Continue

4. In the **Schedule** tab select the rotation schedule.



Key rotation and tag setting behave the same as any other cloud keys. Key deletion moves the key into a Pending Delete state for a chosen period. The key is fully deleted at the end of that period or can be recovered or manually purged earlier. DKE keys can be disabled, and while disabled cannot be used for DKE encryption or decryption.

5. Select the key just created and scroll down to see the details. Notice the various tabs.

	KeyControl Vault for Cloud Key Management	(CL		AUDIT LOG		SETTINGS	azure 🛛 🐣 adm	nin -
Actions - Details DKE Permission	s Tags Versions							
Name:		dke-key-1						
Key Id:		e07007/us722146-12	0408-70071157					
DKE uri:		htps://www.itemin	who control dates th	01124-0024	-11-1-01	".dke_keys.dkekey1		
Description:		Microsoft Double Ke	y Encryption (DKE)	integration wi	th Entrust H	KeyControl.		
Кеу Туре:		Asymmetric						
Cipher Type:		RSA-2048						
Cloud Status 🚯 :		AVAILABLE						
Key Source:		KEYCONTROL						
Key Set:		microsoft-dke						
Key Vault:		dke_keys						
Rotation Schedule:		Every 1 year Rotate Now						
Last Rotation Date:		05/10/2024						

Chapter 5. Configure Microsoft Azure

For the purpose on this integration, the Azure Microsoft Entra accounts were provided by Microsoft as a Microsoft 365 development environment. The actual users are part of the quick-start environment Microsoft offers. These have Microsoft 365 Enterprise E5 or above licenses. Alternatively, use your own account with provided it has the license listed above.

The Microsoft 365 account is linked to an Azure Active Directory. Users will be authenticated with it in order to be able to decrypt using the DKE keys. The tenant GUID can be specified in the DKE Cloud Key's DKE Permissions list to restrict access to a particular tenant, or list of tenants.

- Create an app registration in Azure
- Add compliance label
- Add label policies

5.1. Create an app registration in Azure

Authentication to access the DKE decryption is performed by an Azure App registration for the FQDN in the URL specified in the compliance label. This requires the FQDN to be in a verified domain for that Azure tenant.

- 1. Sign in to the Azure portal https://portal.azure.com/#home with the Microsoft 365 account.
- 2. Navigate to **Microsoft Entra ID** (old **Azure Active Directory**). Type **Microsoft Entra ID** in the search box and select it from the pull-down menu.
- 3. Select **App registrations** in the left pane, then select the **+ New registration** icon in the right pane.
- 4. Enter the Name, a user-facing or friendly name. Select the radio button for Who can use this application or access this API?. Select the applicable Supported account types and enter the public URL of the Entrust KeyControl in Redirect URI.

Home > MSFT App registrations > Register an application * Name The user-facing display name for this application (this can be changed later). MS-365-DKE-Entrust-KeyControl Supported account types Who can use this application or access this API? Accounts in this organizational directory only (MSFT only - Single tenant) Accounts in any organizational directory (Any Microsoft Entra ID tenant - Multitenant)	
Register an application * Name The user-facing display name for this application (this can be changed later). MS-365-DKE-Entrust-KeyControl Supported account types Who can use this application or access this API? Accounts in this organizational directory only (MSFT only - Single tenant) Accounts in any organizational directory (Any Microsoft Entra ID tenant - Multitenant)	
 * Name The user-facing display name for this application (this can be changed later). MS-365-DKE-Entrust-KeyControl Supported account types Who can use this application or access this API? Accounts in this organizational directory only (MSFT only - Single tenant) Accounts in any organizational directory (Any Microsoft Entra ID tenant - Multitenant) 	
 * Name The user-facing display name for this application (this can be changed later). MS-365-DKE-Entrust-KeyControl Supported account types Who can use this application or access this API? Accounts in this organizational directory only (MSFT only - Single tenant) Accounts in any organizational directory (Any Microsoft Entra ID tenant - Multitenant) 	
The user-facing display name for this application (this can be changed later). MS-365-DKE-Entrust-KeyControl Supported account types Who can use this application or access this API? • Accounts in this organizational directory only (MSFT only - Single tenant) • Accounts in any organizational directory (Any Microsoft Entra ID tenant - Multitenant) • Accounts in environment of form ID tenant - Multitenant)	
MS-365-DKE-Entrust-KeyControl Supported account types Who can use this application or access this API? Accounts in this organizational directory only (MSFT only - Single tenant) Accounts in any organizational directory (Any Microsoft Entra ID tenant - Multitenant)	
Supported account types Who can use this application or access this API? Accounts in this organizational directory only (MSFT only - Single tenant) Accounts in any organizational directory (Any Microsoft Entra ID tenant - Multitenant)	\checkmark
Supported account types Who can use this application or access this API? Accounts in this organizational directory only (MSFT only - Single tenant) Accounts in any organizational directory (Any Microsoft Entra ID tenant - Multitenant)	
Who can use this application or access this API? Accounts in this organizational directory only (MSFT only - Single tenant) Accounts in any organizational directory (Any Microsoft Entra ID tenant - Multitenant) Accounts in any organizational directory (Any Microsoft Entra ID tenant - Multitenant)	
Accounts in this organizational directory only (MSFT only - Single tenant) Accounts in any organizational directory (Any Microsoft Entra ID tenant - Multitenant)	
Accounts in any organizational directory (Any Microsoft Entra ID tenant - Multitenant)	
A second is an experimentation of the Missen of Estate ID to second Missen of the second Missen of the	
 Accounts in any organizational directory (Any Microsoft Entra ID tenant - Multitenant) and personal Microsoft as Xbox) 	ccounts (e.g. Skype,
O Personal Microsoft accounts only	
Help me choose	
Redirect URI (optional)	
We'll return the authentication response to this URI after successfully authenticating the user. Providing this now is or changed later, but a value is required for most authentication scenarios.	ptional and it can be
Web 🗸	
Register an app you're working on here. Integrate gallery apps and other apps from outside your organization by ado	ding from Enterprise applications.
By proceeding, you agree to the Microsoft Platform Policies ⊡?	

5. Select Register.

Register

The newly created registration appears.



6. Select Expose an API in the left pane.

7. Select the + icon next to **Application ID URI**. Enter your information, then select **Save and continue**.

For example:

\equiv Microsoft Azure		, P Search resources, ser						
Home > MSFT App registrations	MS-365-DKE-Entrust-KeyControl							
🚕 MS-365-DKE-En	🙈 MS-365-DKE-Entrust-KeyControl Expose an API 🛛 🖈 🐇							
₽ Search	« 🔊 Got feedback?							
Overview		D Edit						
📣 Quickstart		C						

8. Select the + icon next to **Add a scope** to add a scope defined by this API. Enter your information, then select **Add scope**.

Add a scope

Scope name * 🛈
user_impersonation 🗸
/user_impersonation
Who can consent?
Admins and users Admins only
Admin consent display name * (i)
user_Impersonation
Admin consent description * (i)
Allow the app to act as the logged-in user.
User consent display name
e.g. Read your files
User consent description ①
e.g. Allows the app to read your files.
State ()
(Enabled Disabled
Add scope Cancel

 Select the + icon next to Add a client application to add an authorized client application. Add the following Microsoft predefined IDs. These are same for everybody, and can be found at Set up Double Key Encryption. Check Authorized scopes, then select Add application.

ID	Value
Microsoft Office client ID	d3590ed6-52b3-4102-aeff-aad2292ab01c
Information protection client ID	c00e9d32-3c8d-4a7d-832b-029040e7db99

For example:

 \times

≡ Microsoft Azur	e		services, and docs (G+/)							
Home > MSFT App re	Home > MSFT App registrations > MS-365-DKE-Entrust-KeyControl									
_M S-365-D	KE-Entrust-KeyControl Expose an A	∖PI ☆ …								
🔎 Search	≪ 🖗 Got feedback?									
Overview										
🍊 Quickstart	Got a second to give us some feedback?	\rightarrow								
💉 Integration assistant										
Manage	Application ID URI :	Edit								
🗧 Branding & propertie	s Scopes defined by this API									
Authentication	Define custom scopes to restrict access to data	and functionality protected by the API.	An application that requires a	ccess to parts of this						
📍 Certificates & secrets	API can request that a user or admin consent t	o one or more of these.								
Token configuration	Adding a scope here creates only delegated pe type, Go to App roles,	rmissions. If you are looking to create ap	oplication-only scopes, use 'Ap	p roles' and define app roles assig	nable to application					
API permissions										
🙆 Expose an API	+ Add a scope									
App roles	Scopes	Who can consent	Admin consent display	User consent display n Sta	te					
🐣 Owners	/user_impers	onation 🗋 Admins and users	user_impersonation	Ena	ibled					
🤱 Roles and administrat	ors									
Manifest	Authorized client applications	Authorized client applications								
Support + Troubleshooti	Authorizing a client application indicates that the calls this API.	his API trusts the application and users s	the application and users should not be asked to consent when the client							
🖉 Troubleshooting										
New support request	+ Add a client application									
	Client Id	Scopes								
	differin Site 4100 art and inclusion	1								
	discherte Table Aufre BEDS ADMONIPARM	1								

5.2. Add compliance label

Compliance labels are configured in the Microsoft Compliance portal and distributed to specified users and groups in Active Directory. A DKE label contains a URL which can be used to obtain the public key of the DKE key and a corresponding decryption URL.

- 1. Sign in to the Microsoft Purview Compliance Portal at https://compliance.microsoft.com/homepage with the Microsoft 365 account.
- 2. Select Labels under Information protection.
- 3. Select Information protection in the left pane, then select Labels.
- 4. Select the + icon next to Create a label.
- In the Provide basic details for this label window, enter your information, then select Next.

Provide basic details for this label

The protection settings you choose for this label will be immediately enforced on the items or content containers to which it's applied. Labeled files will be protected wherever they go, whether they're saved in the cloud or downloaded to a computer.

Name * 🕕	
dke-key-1	
Display name * ①	
dke-key-1	
Label priority 🕕	
By default, this label will be assigned the highest priority, but you can change this after it's created.	×
Highest	
Description for users * ①	
Protect Microsoft 365 content with DKE using dke-key-1.	
	,
	///.
Description for admins ①	
Protect Microsoft 365 content with DKE using dke-key-1.	
	///
Label color 🕕	
Next	

6. In the **Define the scope of this label** window, under **Items**, check **Files** and **Emails**. Uncheck **Meetings**, then select **Next**.

Define the scope for this label

Labels can be applied directly to items (such as files, emails, meetings), containers like SharePoint sites and Teams, Fabric and Power BI items, schematized data assets, and more. Let us know where you want this label to be used so you can configure the applicable protection settings. Learn more about label scopes

V Items
Be aware that restricting the scope to only files or emails might impact access control settings and where the label can be applied. Learn more
 Files Protect files created in Word, Excel, PowerPoint, and more.
Emails Protect messages sent from all versions of Outlook.
 Meetings Protect calendar events and meetings scheduled in Outlook and Teams.
① Parent label will automatically inherit meeting scope from sub labels
Groups & sites Configure privacy, access control, and other settings to protect labeled Teams, Microsoft 365 Groups, and SharePoint sites. ① To apply sensitivity labels to Teams, SharePoint sites, and Microsoft 365 Groups, you must first complete these steps to enable the feature.
 Schematized data assets (preview) Apply labels to files and schematized data assets in Microsoft Purview Data Map. Schematized data assets include SQL, Azure SQL, Azure Synapse, Azure Cosmos, AWS RDS, and more. When scoped to schematized data assets, we recommend also scoping to Files so this label can be used in protection polices to control access to items in multicloud data sources. Learn about protection polices
Back Next

7. In the **Choose protections settings for the types of items you selected** window, check **Control access**, then select **Next**.

For example:

Choose protection settings for the types of items you selected

The protection settings you configure will be enforced when the label is applied to items in Microsoft 365.

Control access Control who can access and view labeled items.
Apply content marking Add custom headers, footers, and watermarks to labeled items.
Protect Teams meetings and chats Configure protection settings for Teams meetings and chats.

- 8. In the Access Control window, select the Configure access control settings radio button.
- 9. Select Assign permissions and add your users or groups.
- 10. Check **Use Double Key Encryption** and enter the URL for the cloud key, then select **Next**.

For example - Access Control window:

Assign permissions now			,
The settings you choose will be automatically enfo	orced when the label is applied to email and Of	fice files.	
·····			
User access to content expires U			
Never			
Allow offline access ()			
Always			,
Assign permissions			
Assign permissions			2 iten
Assign permissions	Permissions	Edit	2 iten Delete
Assign permissions Jsers and groups	Permissions Co-Author	Edit	2 iten Delete 11
Assign permissions Jsers and groups	Permissions Co-Author Co-Author	Edit D D	2 iten Delete III III
Assign permissions Users and groups Use Double Key Encryption ①	Permissions Co-Author Co-Author	Edit D D	2 iten Delete ÎI

Back Next



The URL for the cloud key is the **DKE uri** of the cloud key created in Create a cloud key for Microsoft 365 DKE.

For example:

ENTRUST KeyControl Vault for Cloud Key M	tanagement CLOUDKEYS	s SECURITY AUDIT LOC		SETTINGS	azure 🛛 🐣 admin 👻
Actions -					~
Details DKE Permissions Tags Versi	ons				
Name:	dke-key-1				
Key Id:	e0#587wa7334ub19/2059c				
DKE uri:	Impositionato resont aestere	om//Graha-31490113e-d	13a-44o4-8c90	G.dke_keys.dkekey	/1

- 11. In the **Auto-labeling for files and emails**, select per your organizations policies, then select **Next**.
- 12. In the **Define protection settings for groups and sites** windows, check the settings that apply per your organizations policies, then select **Next**.
- 13. In the **Auto-labeling for schematized data assets (preview)**, select per your organizations policies, then select **Next**.
- 14. In the **Review your settings and finish** windows, select and review as needed, then select **Create label**.
- In the Your sensitivity label was created, select the Don't create a policy yet radio button, then select Done.



16. Create any other labels you need following the steps above.

5.3. Add label policies

The following steps describe the process of adding the new labels to an existing policy.

- 1. Sign in to the Azure portal https://portal.azure.com/#home with the Microsoft 365 account.
- 2. Open the Microsoft Purview Compliance Portal at https://compliance.microsoft.com/ homepage.
- 3. Select Labels under Label policies.
- 4. Double-click on the selected label to open the **Global selectivity label policy**, then select **Edit policy**.

For example:

	Microsoft Purview						💽 New Microsoft Purview portal 🖋 🚳 ?
=							$\uparrow \downarrow$
*	Policies		Label policies				Global sensitivity label policy
Q	Roles & scopes	~	If your role group permissions are restricted to a sp	pecific set of users or groups, you'll only be	able to manage policies fo	r those users or groups. Learn m	
咨	Trials						2 Eat poincy
Solu	itions		Create sensitivity label policies to publish one or mo more about sensitivity label policies	ore labels to your users' Office apps (li	ke Outlook and Word), S	harePoint sites, and Office 365	Name Global sensitivity label policy
₽	Catalog		🤤 Publish label 💍 Refresh				Description
R	Audit		Name	Priority	Created by	Last modified	Default sensitivity label policy for all users and groups.
Q	Content search		Global sensitivity label policy	0 - highest		Dec 15, 2023 5:58	Personal
Ģ	Communication compliance						General General (Anvone (unrestricter))
6	Data loss prevention	~					General/All Employees (unrestricted) Confidential
愈	eDiscovery	~					Confidential/Anyone (unrestricted) Confidential/All Employees
⊟	Data lifecycle management	~					Confidential/Trusted People Highly Confidential
G	Information protection	^					Highly Confidential/All Employees Highly Confidential/Specified People
	Overview						DKE Key 1
	Labels						Admin units None
1	Label policies						Published to
	Protection policies (preview)						Exchange email - All accounts
G	Information barriers	~					Policy settings Default label for documents is: General/All Employees (unrestricted) Default label for amails in General/All Employees (unrestricted)
P_{Δ}	Insider risk management						Users must provide justification to remove a label or lower its classification

5. In the Choose sensitivity labels to publish window, select Edit. Check the new labels

created in Add compliance label, then select Add.

For example:

Sensitivity labels to publish

If you select a sublabel, the corresponding parent will also be published automatically.

Search for specific labels						
14 selec	cted					
~	Label	Scope				
	ceneralitar emproyees (amesancea)	rine, Ernan				
	Confidential	File, Email				
	Confidential/Anyone (unrestricted)	File, Email				
	Confidential/All Employees	File, Email				
	Confidential/Trusted People	File, Email				
	Highly Confidential	File, Email				
	Highly Confidential/All Employees	File, Email				
	Highly Confidential/Specified People	File, Email				
	DKE Key 1	File, Email				
	dke-key-1	File, Email, SchematizedData				
Ad	d Cancel					

6. Select Next.

Choose sensitivity labels to publish

When published, the labels you choose here will be available in specified users' Office apps (Word, Excel, PowerPoint, and Outlook), SharePoint and Teams sites, and Microsoft 365 Groups.

Sensitivity labels to publish

Personal Public General/Anyone (unrestricted) General/All Employees (unrestricted) Confidential Confidential/Anyone (unrestricted) Confidential/All Employees Confidential/II Employees Highly Confidential Highly Confidential/All Employees Highly Confidential/Specified People DKE Kev 1 dke-key-1



- 7. In the **Assign admin units** window, add or remove administrative units per your organizations policies, then select **Next**.
- 8. In the **Publish to users and groups** window, add users and groups per your organizations policies, then select **Next**.
- 9. In the Policy settings windows, check applicable policies. Then select Next.
- 10. In the **Default settings for documents** window, select the **Default label** per your organizations policies, then select **Next**.
- In the Default settings for emails window, select the Default label per your organizations policies. Check Email inherits highest priority label from attachments if applicable, then select Next.
- 12. In the **Default settings for meetings and calendar events** window, select the **Default label** per your organizations policies, then select **Next**.
- 13. In the **Default settings for Fabric and Power BI content** window, select the **Default label** per your organizations policies, then select **Next**.
- 14. In the Name your policy window, select Next.
- 15. In the Review and finish, make any edits necessary, then select Submit.

Review and finish

Name

Global sensitivity label policy

Description

Default sensitivity label policy for all users and groups.

<u>Edit</u>

Publish these labels

Personal Public General General/Anyone (unrestricted) General/All Employees (unrestricted) Confidential Confidential/Anyone (unrestricted) Confidential/All Employees Confidential/Trusted People Highly Confidential Highly Confidential/All Employees Highly Confidential/Specified People DKE Key 1 dke-key-1

<u>Edit</u>

Publish to users and groups

Exchange email - All accounts

<u>Edit</u>

Policy settings

Default label for documents is: General/All Employees (unrestricted) Default label for emails is: General/All Employees (unrestricted) Users must provide justification to remove a label or lower its classification

<u>Edit</u>



The labels will be propagated according to the policy. It may take some time to appear to the end users.

16. Select Done.

For example:



Your sensitivity label policy has been updated.

Chapter 6. Test integration

- 1. Test access to the cloud key for DKE
- 2. Install the Microsoft 365 apps in the Microsoft 365 client computer
- 3. Create a test document protected by DKE

6.1. Test access to the cloud key for DKE

These steps test access to the cloud key for DKE created in Create a cloud key for Microsoft 365 DKE.

- 1. Sign in to the Entrust KeyControl Vault URL created in Create a Cloud Key Management Vault in Entrust KeyControl.
- 2. In the Actions menu, select the Key Set and Type as follows.

Dentrust	KeyContro Vault for Clo	/Control lit for Cloud Key Management			CLOUDKEYS	SECURITY		SETTINGS	
Actions - Key Sets	CloudKeys	CSP	Accounts						
Key Set: * microsoft-dke (/	AZURE)	~	Type: *	DKE Keys		~			

There are no Cloudkeys to show. Please create one from Actions.

- 3. Select the key and scroll down to see the **Details** tab.
- 4. Copy the **DKE uri**.
- 5. Sign in to the Microsoft 365 client computer.
- 6. Open a browser and paste the **DKE uri** copied above.

The cloud key for DKE should be accessible.

For example:



6.2. Install the Microsoft 365 apps in the Microsoft 365 client computer

1. Sign in to the Microsoft 365 client computer.

- 2. Open a browser and sign in to https://office.com with the Microsoft 365 account.
- 3. In the **Welcome to Microsoft 365** windows, select **Install and more**. In the pull-down menu select **Install Microsoft 365 apps**.
- 4. In the **Office apps and devices** box, select **Install Office**. The **OfficeSetup** installer will be downloaded to your download folder.
- 5. Execute the OfficeSetup installer.
- 6. After the installations completes, select **Close**.



6.3. Create a test document protected by DKE

A **Word** document is created in this section for testing purposes. You can choose another Microsoft 365 app instead.

- 1. Sign in to the Microsoft 365 client computer.
- 2. Type **Word** in the search box to open Microsoft Word. Notice the Microsoft 365 account shows up on the top of the **Good afternoon** window.
- Choose a Blank document. Enter some text. When saving the document, use the security classification pull-down menu to select the cloud key for DKE created in Create a cloud key for Microsoft 365 DKE.

e	Save As							
Home	L Recent ↑ C OneDrive - MSFT							
🗁 Open	MSFT Word Document (*.docx)							
🖻 Share	OneDrive - MSFT General/All Employees (unrestricted)* V Save							
Get Add-ins	Sites - MSFT O Personal O Public							
Info	Share options General							
Save	Confidential							
Save As	Copy Link Righly Confidential odified odified							
More	Other locations dke-key-1 Image: Control of the second s	ith						

4. After saving the document, notice the protection icon in the top middle of the **Save As** window showing the cloud key for DKE.

	Document1 - Word 🕻 dke-key-1	×
\bigcirc	Save As	
ሰ Home		
🗅 New	L Recent □ 1 DeDrive - MSFT	
🗁 Open	MSFT Word Document (*.docx)	
A Share	OneDrive - MSFT 🗸 🖓 Save	
Get Add-ins	Sites - MSFT Protect Microsoft 365 content with DKE using dke- key-1. Learn More Options	
Info	Share options	
Save	Share	
Save As	Copy Link	
More	Other locations	

5. The document can be opened and edited as desired in the desktop app. An attempt to open the document in the browser will fail with the following message.

Microsoft Word

Sorry, Word can't open this document for editing in a browser because it is protected by Information Rights Management (IRM). To edit this document, please open it in the desktop version of Microsoft Word.

Your feedback helps Microsoft improve Word. <u>Give feedback to</u> <u>Microsoft</u>

Open in Desktop App Open in Reading View

6. An attempt to open the document in another PC will fail with the following message.

Microso	oft Word			×
1	You are not signed in to Office with an account that h request permission from the content owner.	has permission to ope	n this document. Yo	u may sign in a new account into Office that has permission or
		Add Account	Cancel]

Chapter 7. Integrating with an HSM

For guidance on integrating the Entrust KeyControl with a Hardware Security Module (HSM), consult with your HSM vendor. If you are using an Entrust nShield HSM, refer to the Entrust KeyControl nShield HSM Integration Guide available at Entrust documentation library.

Chapter 8. Additional resources and related products

- 8.1. nShield Connect
- 8.2. nShield as a Service
- 8.3. KeyControl
- 8.4. Entrust products
- 8.5. nShield product documentation