Configuring usage rights for Azure Information Protection

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Applies to: Azure Information Protection, Office 365

When you configure sensitivity labels or protection templates for encryption, you select the usage rights that will then be automatically applied when the label or template is selected by users, administrators, or configured services. For example, in the Azure portal you can select roles that configure a logical grouping of usage rights, or you can configure the individual rights. Alternatively users might select and apply the usage rights themselves.

Use this article to help you configure the usage rights you want for the application you're using and understand how these rights are designed to be interpreted by applications. However, applications might vary in how they implement the rights so always consult their documentation and do your own testing with the applications that users use to check the behavior before you deploy in production.

Note

For completeness, this article includes values from the Azure classic portal, which was retired January 08, 2018.

Usage rights and descriptions

The following table lists and describes the usage rights that Rights Management supports, and how they are used and interpreted. They are listed by their **common name**, which is typically how you might see the usage right displayed or referenced, as a more friendly version of the single-word value that is used in the code (the **Encoding in policy** value).

In this table:

- The **API Constant or Value** is the SDK name for an MSIPC API call, used when you write an application that checks for a usage right, or adds a usage right to a policy.
- The labeling admin center refers to where you configure sensitivity labels and can be either the Microsoft 365 compliance center, the Microsoft 365 security center, or the Office 365 Security & Compliance Center.

Usage right	Description	Implementation	
Common name: Edit	Allows the user to modify, rearrange,	Office custom rights: As	
Content, Edit Encoding in policy:	format, or sort the content inside the application. It does not grant the right to save the edited copy.	part of the Change and Full Control options.	
DOCEDIT	In Word, unless you have Office 365 ProPlus with a minimum version of	Name in the Azure classic portal: Edit Content	
	1807, this right isn't sufficient to turn on or turn off Track Changes , or to use all the track changes features as a reviewer. Instead, to use all the track changes options requires the following	Name in the labeling admin center and Azure portal: Edit Content, Edit (DOCEDIT)	
	right: Full Control .	Name in AD RMS templates: Edit	
		API constant or value: Not applicable.	
Common name: Save	Allows the user to save the document to the current location.	Office custom rights: As part of the Change and Full Control options.	
Encoding in policy: EDIT	·		
	protection. The file format restriction ensures that the original protection cannot be removed from the file.	admin center and Azure portal: Save (EDIT)	
		Name in AD RMS templates: Save	
		API constant or value: IPC_GENERIC_WRITE L"EDIT"	
Common name: Comment	Enables the option to add annotations or comments to the content.	Office custom rights: Not implemented.	

Usage right	Description	Implementation
Encoding in policy: COMMENT	This right is available in the SDK, is available as an ad-hoc policy in the AzureInformationProtection and RMS	Name in the Azure classic portal: Not implemented.
	Protection module for Windows	Name in the labeling
	PowerShell, and has been implemented in some software vendor applications. However, it is not widely used and is	admin center and Azure portal: Not implemented.
	not supported by Office applications.	Name in AD RMS
		templates: Not
		implemented.
		API constant or value: IPC_GENERIC_COMMENT L"COMMENT
Common name:	Enables the option to save the content	Office custom rights: As
Save As, Export	to a different file name (Save As).	part of the Full Control option.
Encoding in policy: EXPORT	For the Azure Information Protection client, the file can be saved without protection, and also reprotected with new settings and permissions. These permitted actions mean that a user who	Name in the Azure classic portal: Export Content (Save As)
	has this right can change or remove an	Name in the labeling
	Azure Information Protection label from	
	a protected document or email.	portal: Save As, Export (EXPORT)
	This right also allows the user to	
	perform other export options in	Name in AD RMS
	applications, such as Send to OneNote .	templates: Export (Save
	OneNote.	As)
		API constant or value: IPC_GENERIC_EXPORT L"EXPORT"
Common name:	Enables the option to forward an email	Office custom rights:
Forward	message and to add recipients to the	Denied when using the Do
	To and Cc lines. This right does not	Not Forward standard

Usage right	Description	Implementation
Encoding in policy:	apply to documents; only email	policy.
FORWARD	messages.	
		Name in the Azure classic
	Does not allow the forwarder to grant	portal: Forward
	rights to other users as part of the forward action.	Name in the labeling
	iorward action.	admin center and Azure
	When you grant this right, also grant	portal: Forward
	, , ,	(FORWARD)
	name), and additionally grant the Save	
	right (common name) to ensure that	Name in AD RMS
	the protected email message is not	templates: Forward
	delivered as an attachment. Also specify	
	these rights when you send an email to	
	another organization that uses the	IPC_EMAIL_FORWARD L"FORWARD"
	Outlook client or Outlook web app. Or, for users in your organization that are	
	exempt from using Rights Management	
	protection because you have	
	implemented onboarding controls.	
Common name: Full	Grants all rights to the document and	Office custom rights: As
Control	all available actions can be performed.	the Full Control custom
		option.
	Includes the ability to remove	
OWNER	protection and reprotect a document.	Name in the Azure classic
	Nigto that this usage right is not the	portal: Full Control
	Note that this usage right is not the same as the Rights Management	Name in the labeling
	owner.	admin center and Azure
	ewner.	portal: Full Control
		(OWNER)
		Name in AD RMS
		templates: Full Control
		completes. Full Colletol
		API constant or value:
		IPC_GENERIC_ALL

TABLE 1

Usage right	Description	Implementation
Osage right	Description	L"OWNER"
	- 11 11 11 11 11	
Common name:	Enables the options to print the	Office custom rights: As
Print	content.	the Print Content option
		in custom permissions. Not
Encoding in policy: PRINT		a per-recipient setting.
		Name in the Azure classic portal: Print
		Name in the labeling
		admin center and Azure
		portal: Print (PRINT)
		Name in AD RMS
		templates: Print
		API constant or value: IPC_GENERIC_PRINT L"PRINT"
C	Fundamental Banks antique in an annuil	
Common name: Reply	Enables the Reply option in an email client, without allowing changes in the	Office custom rights: Not applicable.
	To or Cc lines.	
Encoding in policy:		Name in the Azure classic
REPLY	When you grant this right, also grant the Edit Content, Edit right (common	portal: Reply
		Name in the Azure classic
	right (common name) to ensure that	portal: Reply (REPLY)
	the protected email message is not	
	delivered as an attachment. Also specify	Name in AD RMS
	these rights when you send an email to	templates: Reply
	another organization that uses the	
	• •	API constant or value:
	for users in your organization that are	IPC_EMAIL_REPLY
	exempt from using Rights Management	
	protection because you have	
	implemented onboarding controls.	
Common name:	Enables the Reply All option in an	Office custom rights: Not

Usage right	Description	Implementation
Reply All	email client, but doesn't allow the user	applicable.
Encoding in policy:	to add recipients to the To or Cc lines.	Name in the Azure classic
REPLYALL	When you grant this right, also grant the Edit Content, Edit right (common name), and additionally grant the Save right (common name) to ensure that the protected email message is not delivered as an attachment. Also specify these rights when you send an email to another organization that uses the Outlook client or Outlook web app. Or, for users in your organization that are exempt from using Rights Management protection because you have	Name in AD RMS templates: Reply All
	implemented onboarding controls.	L"REPLYALL"
Common name: View, Open, Read	Allows the user to open the document and see the content.	Office custom rights: As the Read custom policy, View option.
Encoding in policy: VIEW	In Excel, this right isn't sufficient to sort data, which requires the following right: Edit Content, Edit . To filter data in Excel, you need the following two	Name in the Azure classic portal: View
	rights: Edit Content, Edit and Copy .	Name in the labeling admin center and Azure portal: View, Open, Read (VIEW)
		Name in AD RMS templates: Read
		API constant or value: IPC_GENERIC_READ L"VIEW"
Common name:	Enables options to copy data (including	
Сору	screen captures) from the document into the same or another document.	the Allow users with Read access to copy content

Usage right	Description	Implementation
Encoding in policy: EXTRACT	In some applications, it also allows the	custom policy option.
	whole document to be saved in	Name in the Azure classic
	unprotected form.	portal: Copy and Extract
	'	content
	In Skype for Business and similar	
	screen-sharing applications, the	Name in the labeling
	presenter must have this right to	admin center and Azure
	successfully present a protected	portal: Copy (EXTRACT)
	document. If the presenter does not	
	have this right, the attendees cannot	Name in AD RMS
	view the document and it displays as blacked out to them.	templates: Extract
		API constant or value:
		IPC_GENERIC_EXTRACT
		L"EXTRACT"
Common name: View Rights	Allows the user to see the policy that is applied to the document.	Office custom rights: Not implemented.
	Not supported by Office apps or Azure Information Protection clients.	Name in the Azure classic portal: View Assigned Rights
		Name in the labeling
		admin center and Azure
		portal: View Rights
		(VIEWRIGHTSDATA).
		Name in AD RMS
		templates: View Rights
		API constant or value:
		IPC_READ_RIGHTS L"VIEWRIGHTSDATA"
Common name:	Allows the user to change the policy	Office custom rights: Not
Change Rights	that is applied to the document.	implemented.
	Includes including removing protection.	· .

Usage right	Description	Implementation
Encoding in policy: EDITRIGHTSDATA	Not supported by Office apps or Azure Information Protection clients.	Name in the Azure classic portal: Change Rights Name in the labeling admin center and Azure portal: Edit Rights (EDITRIGHTSDATA).
		Name in AD RMS templates: Edit Rights
		API constant or value: PC_WRITE_RIGHTS L"EDITRIGHTSDATA"
Common name: Allow Macros	Enables the option to run macros or perform other programmatic or remote	_
Encoding in policy: OBJMODEL	access to the content in a document.	Access custom policy option. Not a per-recipient setting.
		Name in the Azure classic portal: Allow Macros
		Name in the labeling admin center and Azure
		portal: Allow Macros (OBJMODEL)
		Name in AD RMS templates: Allow Macros
		API constant or value: Not implemented.

Rights included in permissions levels

Some applications group usage rights together into permissions levels, to make it easier to select usage rights that are typically used together. These permissions levels help to abstract a level of complexity from users, so they can choose options that are role-based. For example, **Reviewer** and **Co-Author**. Although these options often show users a summary of the rights, they might not include every right that is listed in the previous table.

Use the following table for a list of these permissions levels and a complete list of the usage rights that they contain. The usage rights are listed by their common name.

TABLE 2

Permissions level	Applications	Usage rights included
Viewer	Azure classic	View, Open, Read; View Rights; Reply [1]; Reply All [1]; Allow Macros [2]
	Azure Information	Note: For emails, use Reviewer rather than this permission level to ensure that an email reply is received as an email message rather than an attachment. Reviewer is also required when you send an email to another organization that uses the Outlook client or Outlook web app. Or, for users in your organization that are exempt from using the Azure Rights Management service because you have implemented onboarding controls.
	Azure portal Azure Information	View, Open, Read; Save; Edit Content, Edit; View Rights; Reply: Reply All [3]; Forward [3]; Allow Macros [2]
	Protection client for Windows	
Co-Author	Azure classic	View, Open, Read; Save; Edit Content, Edit; Copy; View

Permissions		
level	Applications	Usage rights included
	i e	Rights; Allow Macros; Save As, Export [4]; Print; Reply [3]; Reply All [3]; Forward [3]
	Azure portal	
	Azure Information	
	Protection client	
	for Windows	
	portal	View, Open, Read; Save; Edit Content, Edit; Copy; View Rights; Change Rights; Allow Macros; Save As, Export; Print; Reply [3]; Reply All [3]; Forward [3]; Full Control
	Azure portal	
	Azure Information	
	Protection client	
	for Windows	

Footnote 1

Not included in the labeling admin center or Azure portal.

Footnote 2

For the Azure Information Protection client for Windows, this right is required for the Information Protection bar in Office apps.

Footnote 3

Not applicable to the Azure Information Protection client for Windows.

Footnote 4

Not included in the labeling admin center, the Azure portal, or the Azure Information Protection client for Windows.

Rights included in the default templates

The following table lists the usage rights that are included when the default templates are created. The usage rights are listed by their common name.

These default templates are created when your subscription was purchased, and the names and usage rights can be changed in the Azure portal and with PowerShell.

TABLE 3

Display name of template	Usage rights October 6, 2017 to current date	Usage rights before October 6, 2017	
name> -	View, Open, Read; Copy; View Rights; Allow Macros; Print; Forward; Reply; Reply All; Save; Edit Content, Edit	View, Open, Read	
Highly Confidential \ All Employees			
name>- Confidential	Copy; View Rights; Change Rights; Allow Macros; Print; Forward; Reply;	View, Open, Read; Save As, Export; Edit Content, Edit; View Rights; Allow Macros;	
or Confidential \ All Employees	Reply All; Save; Edit Content, Edit; Full Control	Forward; Reply; Reply All	

Do Not Forward option for emails

Exchange clients and services (for example, the Outlook client, Outlook on the web, Exchange mail flow rules, and DLP actions for Exchange) have an additional information rights protection option for emails: **Do Not Forward**.

Although this option appears to users (and Exchange administrators) as if it's a default Rights Management template that they can select, **Do Not Forward** is not a template. That explains why you cannot see it in the Azure portal when you view and manage protection templates. Instead, the **Do Not Forward** option is a set of usage rights that is dynamically applied by users to their email recipients.

When the **Do Not Forward** option is applied to an email, the email is encrypted and recipients must be authenticated. Then, the recipients cannot forward it, print it, or copy from it. For example, in the Outlook client, the Forward button is not available, the **Save As** and **Print** menu options are not available, and you cannot add or change recipients in the **To**, **Cc**, or **Bcc** boxes.

Unprotected Office documents that are attached to the email automatically inherit the same restrictions. The usage rights applied to these documents are **Edit Content**, **Edit**; **Save**; **View**, **Open**, **Read**; and **Allow Macros**. If you want different usage rights for an attachment, or your attachment is not an Office document that supports this inherited protection, protect the file before you attach it to the email. You can then assign the specific usage rights that you need for the file.

Difference between Do Not Forward and not granting the Forward usage right

There's an important distinction between applying the **Do Not Forward** option and applying a template that doesn't grant the **Forward** usage right to an email: The **Do Not Forward** option uses a dynamic list of authorized users that is based on the user's

chosen recipients of the original email; whereas the rights in the template have a static list of authorized users that the administrator has previously specified. What's the difference? Let's take an example:

A user wants to email some information to specific people in the Marketing department that shouldn't be shared with anybody else. Should she protect the email with a template that restricts rights (viewing, replying, and saving) to the Marketing department? Or should she choose the **Do Not Forward** option? Both choices would result in the recipients not able to forward the email.

- If she applied the template, the recipients could still share the information with others in the marketing department. For example, a recipient could use Explorer to drag and drop the email to a shared location or a USB drive. Now, anybody from the marketing department (and the email owner) who has access to this location can view the information in the email.
- If she applied the **Do Not Forward** option, the recipients will not be able to share the information with anybody else in the marketing department by moving the email to another location. In this scenario, only the original recipients (and the email owner) will be able to view the information in the email.

Note

Use **Do Not Forward** when it's important that only the recipients that the sender chooses should see the information in the email. Use a template for emails to restrict rights to a group of people that the administrator specifies in advance, independently from the sender's chosen recipients.

Encrypt-Only option for emails

When Exchange Online uses the new capabilities for Office 365 Message Encryption, a new email option becomes available: **Encrypt-Only**.

This option is available to tenants who use Exchange Online and can be selected in Outlook on the web, as another rights protection option for a mail flow rule, as an Office 365 DLP action, and from Outlook (minimum version of 1804 for Office 365 ProPlus, and minimum version of 1805 when you have Office 365 apps that support Azure RMS. For more information about the Encrypt-Only option, see the following blog post announcement from the Office team: Encrypt only rolling out in Office 365 Message Encryption.

When this option is selected, the email is encrypted and recipients must be authenticated. Then, the recipients have all usage rights except **Save As, Export** and **Full Control**. This combination of usage rights means that the recipients have no restrictions except that they cannot remove the protection. For example, a recipient can copy from the email, print it, and forward it.

Similarly, by default, unprotected Office documents that are attached to the email inherit the same permissions. These documents are automatically protected and when they are downloaded, they can be saved, edited, copied, and printed from Office applications by the recipients. When the document is saved by a recipient, it can be saved to a new name and even a different format. However, only file formats that support protection are available so that the document cannot be saved without the original protection. If you want different usage rights for an attachment, or your attachment is not an Office document that supports this inherited protection, protect the file before you attach it to the email. You can then assign the specific usage rights that you need for the file.

Alternatively, you can change this protection inheritance of documents by specifying Set-IRMConfiguration -DecryptAttachmentForEncryptOnly \$true with Exchange Online PowerShell. Use this configuration when you don't need to retain the original protection for the document after the user is authenticated. When recipients open the email message, the document is not protected.

If you do need an attached document to retain the original protection, see Secure document collaboration by using Azure Information Protection.

Note: If you see references to **DecryptAttachmentFromPortal**, this parameter is now deprecated for Set-IRMConfiguration. Unless you have previously set this parameter, it is not available.

Automatically encrypt PDF documents with Exchange Online

When Exchange Online uses the new capabilities for Office 365 Message Encryption, you can automatically encrypt unprotected PDF documents when they are attached to an encrypted email. The document inherits the same permissions as those for the email message. To enable this configuration, set **EnablePdfEncryption \$True** with Set-IRMConfiguration.

Recipients who don't already have a reader installed that supports the ISO standard for PDF encryption can install one of the readers listed in PDF readers that support Microsoft Information Protection. Alternatively, recipients can read the protected PDF document in the OME portal.

Rights Management issuer and Rights Management owner

When a document or email is protected by using the Azure Rights Management service, the account that protects that content automatically becomes the Rights Management issuer for that content. This account is logged as the **issuer** field in the usage logs.

The Rights Management issuer is always granted the Full Control usage right for the document or email, and in addition:

- If the protection settings include an expiry date, the Rights Management issuer can still open and edit the document or email after that date.
- The Rights Management issuer can always access the document or email offline.
- The Rights Management issuer can still open a document after it is revoked.

By default, this account is also the **Rights Management owner** for that content, which is the case when a user who created the document or email initiates the protection. But there are some scenarios where an administrator or service can protect content on behalf of users. For example:

- An administrator bulk-protects files on a file share: The administrator account in Azure AD protects the documents for the users.
- The Rights Management connector protects Office documents on a Windows Server folder: The service principal account in Azure AD that is created for the RMS connector protects the documents for the users.

In these scenarios, the Rights Management issuer can assign the Rights Management owner to another account by using the Azure Information Protection SDKs or PowerShell. For example, when you use the Protect-RMSFile PowerShell cmdlet with the Azure Information Protection client, you can specify the **OwnerEmail** parameter to assign the Rights Management owner to another account.

When the Rights Management issuer protects on behalf of users, assigning the Rights Management owner ensures that the original document or email owner has the same level of control for their protected content as if they initiated the protection themselves.

For example, the user who created the document can print it, even though it's now protected with a template that doesn't include the Print usage right. The same user can always access their document, regardless of the offline access setting or expiry date that might have been configured in that template. In addition, because the Rights Management owner has the Full Control usage right, this user can also reprotect the document to grant additional users access (at which point the user then becomes the Rights Management issuer as well as the Rights Management owner), and this user can even remove the protection. However, only the Rights Management issuer can track and revoke a document.

The Rights Management owner for a document or email is logged as the **owner-email** field in the usage logs.

Note that the Rights Management owner is independent from the Windows file system Owner. They are often the same but can be different, even if you don't use the SDKs or PowerShell.

Rights Management use license

When a user opens a document or email that has been protected by Azure Rights

Management, a Rights Management use license for that content is granted to the user.

This use license is a certificate that contains the user's usage rights for the document or

email message, and the encryption key that was used to encrypt the content. The use

license also contains an expiry date if this has been set, and how long the use license is valid.

A user must have a valid use license to open the content in addition to their rights account certificate (RAC), which is a certificate that's granted when the user environment is initialized and then renewed every 31 days.

For the duration of the use license, the user is not reauthenticated or reauthorized for the content. This lets the user continue to open the protected document or email without an internet connection. When the use license validity period expires, the next time the user accesses the protected document or email, the user must be reauthenticated and reauthorized.

When documents and email messages are protected by using a label or a template that defines the protection settings, you can change these settings in your label or template without having to reprotect the content. If the user has already accessed the content, the changes take effect after their use license has expired. However, when users apply custom permissions (also known as an ad-hoc rights policy) and these permissions need to change after the document or email is protected, that content must be protected again with the new permissions. Custom permissions for an email message are implemented with the Do Not Forward option.

The default use license validity period for a tenant is 30 days and you can configure this value by using the PowerShell cmdlet, Set-AipServiceMaxUseLicenseValidityTime. You can configure a more restrictive setting for when protection is applied by using a label or template:

- When you configure a label or template in the Azure portal, the use license validity period takes its value from the Allow offline access setting.
 - For more information and guidance to configure this setting in the Azure portal, see the Information about the protection settings table from the instructions how to configure a label for Rights Management protection.
- When you configure a template by using PowerShell, the use license validity
 period takes its value from the *LicenseValidityDuration* parameter in the SetAipServiceTemplateProperty and Add-AipServiceTemplate cmdlets.