Azure Information Protection (AIP) for Data Protection

Secure Work Files & Email

July 2018

Azure Information Protection - AIP

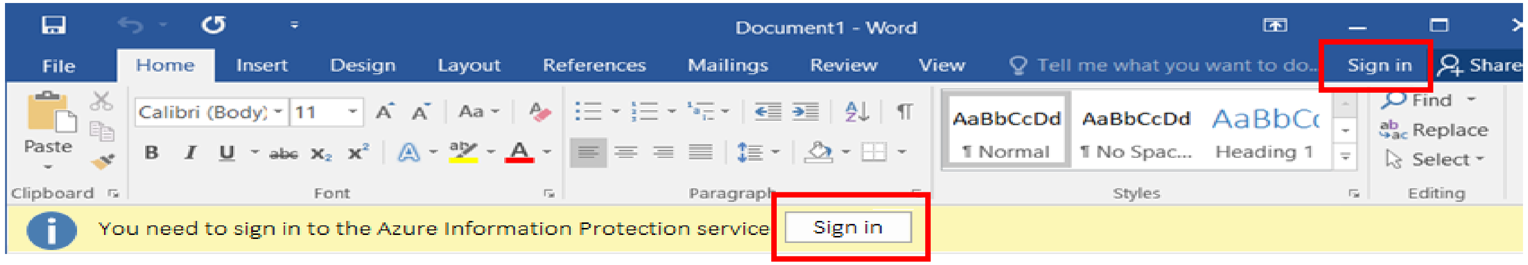
- A data protection solution which helps you to classify, label and protect the documents according to the confidential level of the information.
- Once a document is classified and labelled, corresponding predefined security policy will be applied immediately to protect the document and limit the access against unauthorized person.
- Document owner can also monitor the access of the document and revoke the access of the document anytime if it is found misuse.

Demonstration

- Email Protection in Outlook
  - Create and send a protected email with AIP client
  - Read protected emails through different email clients
- File Protection in Office application (e.g. Word document)
  - Label a document with “Confidential” with AIP client
  - Send or Share the document with authorized recipient
  - Open protected files

Preparation

- Eligibility
  - Protection on files and email can be initiated by CUHK staff (with @cuhk.edu.hk account)
  - Accessing to protected files or emails subject to permission setting. For example, staff can send a protected email or file to students/alumni to access if they are granted with appropriate access right.
- AIP Client Supported Platform
  - Win 7 SP1+, Win 8/8.1, Win 10
  - Microsoft Office
    - Office Professional Plus 2010 sp2, 2013 sp1, 2016
    - Office 365 ProPlus: Office 2016 and Office 2013
- AIP Client Installation and Activation (sign in O365 account)



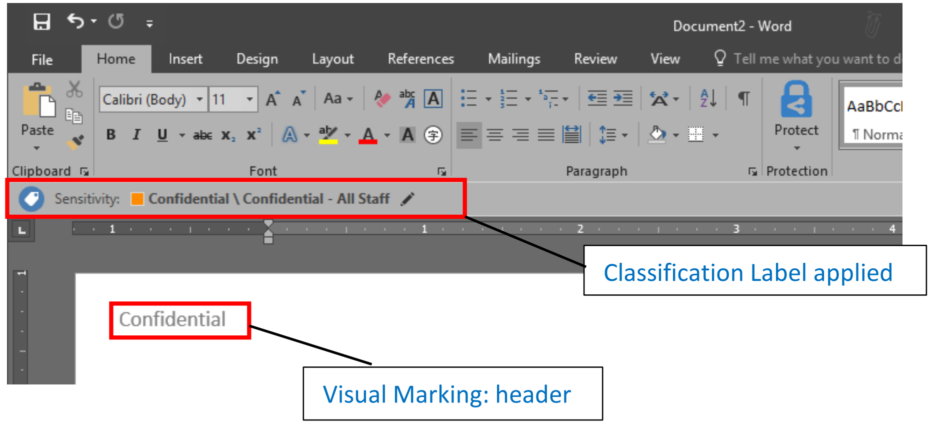
You need to sign in to the Azure Information Protection service

- Office PC/Devices – Contact IT Support (LAN Admin)!
- Email address/ distribution list (in customization setting for recipient)

Predefined Classifications Labels vs Custom Permission

To protect your document, you can either use

1. Pre-defined Classifications Labels:
    - Authorized user groups
    - Permissions
    - Visual Markings
    - Expiry Date
    - etc. are predefined. (See P9)



Sensitivity: Confidential \ Confidential - All Staff

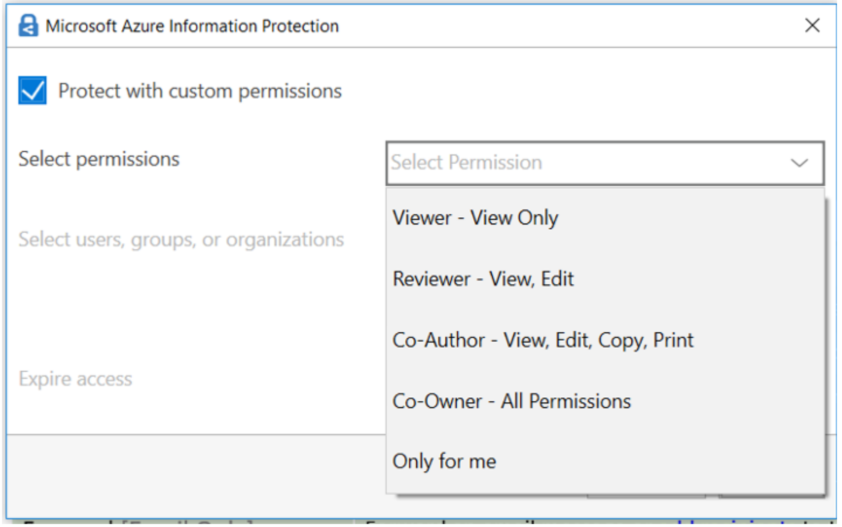
Confidential

Classification Label applied

Visual Marking: header

2. Custom Permission: Document owner can select
    - Permissions
    - Authorized users groups
    - Expiry Date

    More flexibility



Microsoft Azure Information Protection

☑ Protect with custom permissions

Select permissions: Select Permission

- Viewer - View Only
- Reviewer - View, Edit
- Co-Author - View, Edit, Copy, Print
- Co-Owner - All Permissions
- Only for me

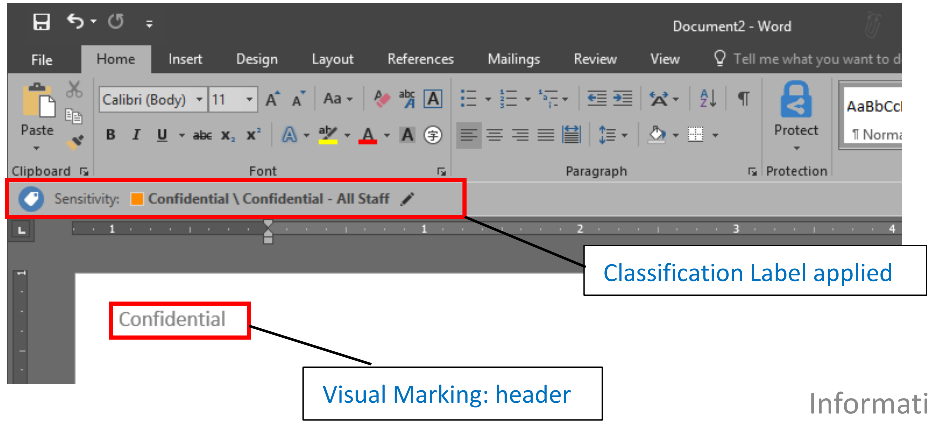
Select users, groups, or organizations

Expire access

Pre-defined Classification Label & Permission Controls

Classification Label		Permissions Granted		Protection with Encryption	Visual Markings*	Offline Access and Expiry Date
Confidential	Confidential – All Staff	Editable by All CUHK Staff	Permission includes: - View, Edit, Save, Save as, Export, Copy, Print, Reply, Reply all, Forward	Yes	• Header & Footer in both MS Office files and emails	• Allows 7 days offline access • No expiry date
Strictly Confidential	Strictly Confidential – All Staff	Viewable by All CUHK Staff	Permission includes: - View, Reply, Reply all	Yes	• Header, Footer & Watermark in MS Office files • Header & Footer in emails	• Allows 1 days offline access • No expiry date

** Visual marking on documents are static text predefined for each label.*



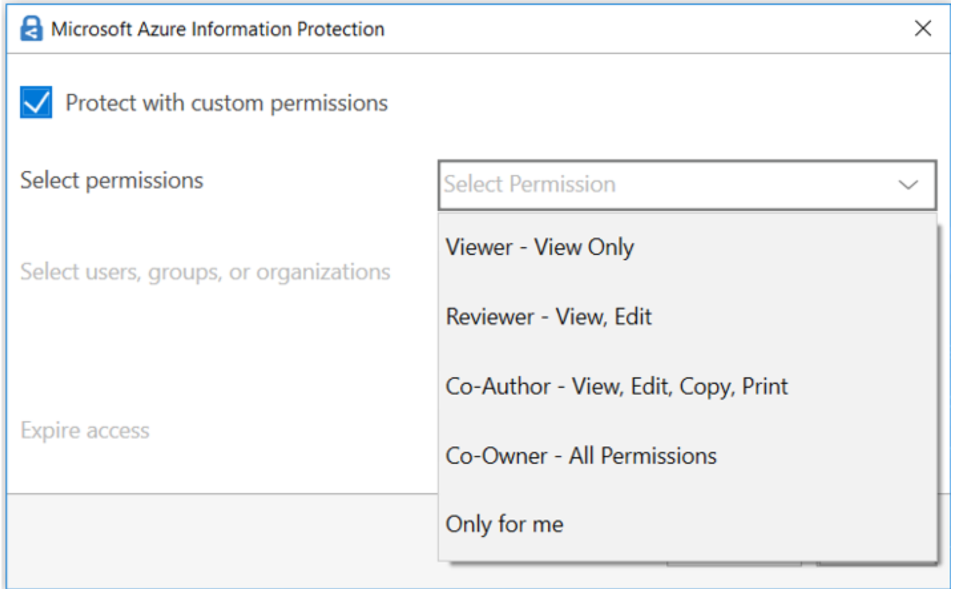
Sensitivity: Confidential \ Confidential - All Staff

Confidential

When to apply what degree of confidential
https://www.itsc.cuhk.edu.hk/en-gb/it-policies/information-security-policies/data-classification-and-data-governance-policy

Custom Permission with AIP Default Rights

Roles	View	Edit, Save	Save As, Export	Copy	Print	Reply, Reply All	Forward	Full Control
Viewer	Y					Y		
Reviewer	Y	Y				Y	Y	
Co-Author	Y	Y	Y	Y	Y	Y	Y	
Co-Owner	Y	Y	Y	Y	Y	Y	Y	Y



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Select users, groups, or organizations

Expire access

Permission Control Definition

Permission	Description
View	Open and see the document
Edit & Save	Modify and save the document in its current location
Save As, Export	Save the file as new document without protection
Copy	Copy or screen capture into the same or another document
Print	Print out the document
Reply, Reply All [Email Only]	Reply or reply all, without adding recipients to the To and Cc lines
Forward [Email Only]	Forward an email message or add recipients to the To and Cc lines
Full Control	All available actions, plus remove/change protection of a document
Content Expiration	Expire permissions on a defined date or number of days after protection applied
Offline Access	Number of days allowing user not to re-authenticate and re-authorize with AIP service.

AIP Policy

Requires all documents/email must have a label?	No
Set default classification label?	No
Requires justification to lower or remove classification and protection?	Yes

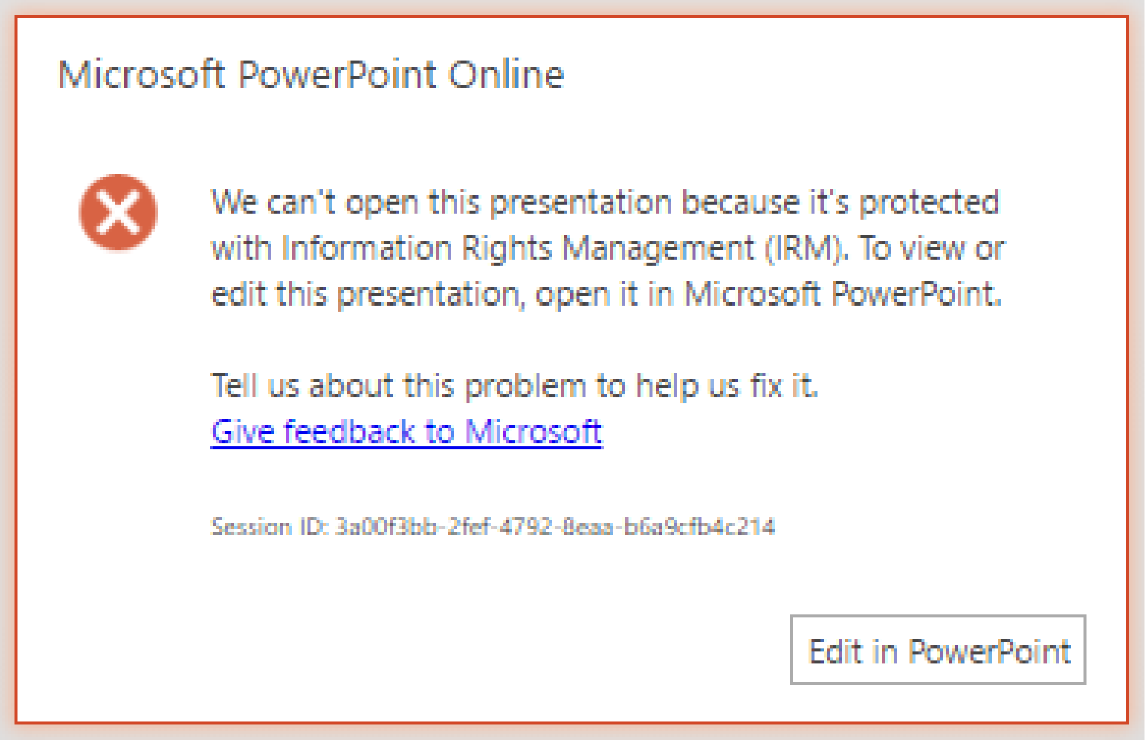
Protection on Files

- Steps for protecting Office files and non-Office files are different.
- Prerequisites to access protected files in different platforms:

Operating Systems	Required applications	MS Office Files	Non-MS office
Windows	• Azure Information Protection client (AIP Client) • Office Professional Plus 2010, 2013, 2016 • Office 365 ProPlus: Office 2016 and Office 2013	• Protect files with AIP toolbar in Office applications • Access all protected files	• Protect files with AIP client • Access all protected files
Mac OS X	• RMS Sharing app (for View only) • Office 2016 for Mac	• Protect files via Review > Restrict Permission • Access all protected files	• Access protected files with RMS Sharing app
iOS Android OS	• Azure Information Protection apps (AIP Viewer) • Microsoft Word, Excel, and PowerPoint apps	• Access protected MS Office files with Word, Excel, and PowerPoint	• Access protected non-MS Office files with AIP Viewer
O365 Web Access	• Web browser	• Access protect files (Required Download)	• Access protect files (Required Download)

Protection on Online Storage (e.g.: SharePoint, OneDrive)

- Protected files can still be uploaded to these platforms. However,
  - Protected documents cannot be opened in Office WebApp; Must first be downloaded on devices in order to open them.
  - Online co-author is not available.



Microsoft PowerPoint Online

We can't open this presentation because it's protected with Information Rights Management (IRM). To view or edit this presentation, open it in Microsoft PowerPoint.

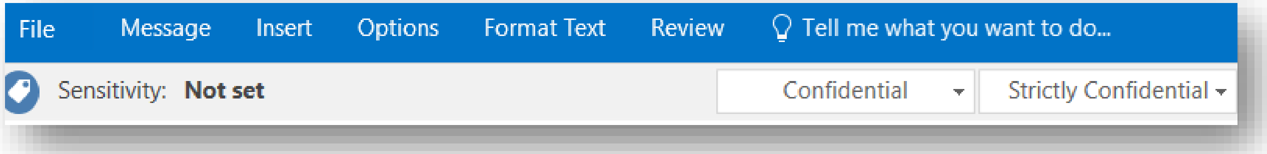
Tell us about this problem to help us fix it.
Give feedback to Microsoft

Session ID: 3a00f3bb-2fef-4792-8eaa-b6a9cfb4c214

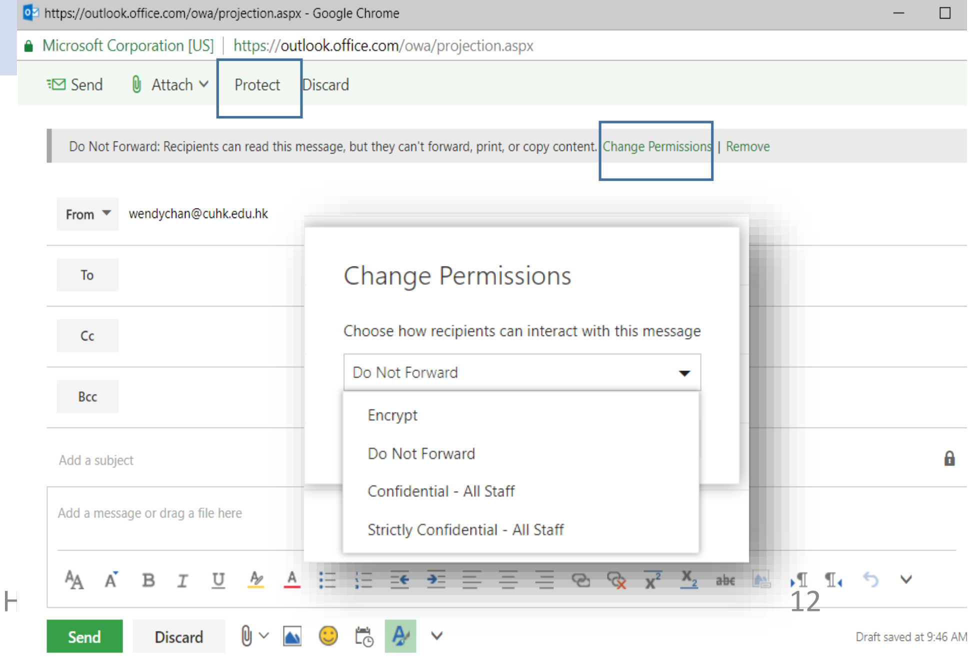
Protection on Emails (II)

- Available classification labels / permissions:

MS Outlook (Classification Labels)	**OWA (Online Web Access) – http://www.cuhk.edu.hk/o365 (Permissions)**
Confidential – All Staff Strictly Confidential – All Staff	Encrypt Do not forward Confidential – All Staff Strictly Confidential – All Staff



Sensitivity: **Not set**


https://outlook.office.com/owa/projection.aspx - Google Chrome
Microsoft Corporation [US]
https://outlook.office.com/owa/projection.aspx
Send
Attach
Protect
Discard
From
To
Cc
Bcc
Add a subject
Add a message or drag a file here
Send
Discard

Do Not Forward: Recipients can read this message, but they can't forward, print, or copy content. Change Permissions | Remove

From: wendychan@cuhk.edu.hk

Change Permissions

Choose how recipients can interact with this message

Do Not Forward

- Encrypt
- Do Not Forward
- Confidential - All Staff
- Strictly Confidential - All Staff

Draft saved at 9:46 AM

Summary of Protection Coverage

	View	Edit	Protect
Windows PC (win7, win10)	Yes	Yes	Yes
Mac OS X	Yes	Yes	Yes [1]
Mobile (Android / iOS)	Yes	Office files	Email with subject keyword
Outlook Online (OWA)	Partial [3]	Partial [3]	Partial [1][2]
SharePoint Online & OneDrive	Partial [4]	Partial [4]	At source, before upload
Windows File Server (Network Share)	Yes	Yes	At source, before upload

Yes	Apply to both MS & Non-MS documents
[1]	No labeling and visual marking; Not applicable for non-MS Office documents
[2]	Protect native MS office files only, not other file formats
[3]	Support protected emails only, cannot open a protected attachment , need to download and use MS Office to open
[4]	Only support view/edit by download and open locally, cannot open by Office WebApp.

Points to Note

- AIP is for CUHK staff (at their personal account - @cuhk.edu.hk) to apply protection on their emails or documents
    - CUHK staff could use “custom permissions” to share a protected documents with other users (such as students/alumni) by specifying the students/alumni email addresses in the designated dialogue box (see Slide 17).

- AIP applies to Email and MS office files (Word, Excel, PPT etc.) . To protect non-MS files, it must be done on a Windows platform (see Slide 10).

- Protection / Classification
    - Could only be applied by staff user. Authorized users (such as students), however, can open and edit the file if they are granted with permissions.
    - Pre-defined Permissions
        - Confidential (All Staff)
        - Strictly Confidential (All Staff)
          Different from confidential: Cannot forward and copy the email if Strictly Confidential has been applied.
    - Custom Permissions

Conclusion

✓What is AIP?

- Azure Information Protection (AIP) is a cloud-based solution that helps to classify, label, and protect the sensitive emails and documents.

✓Why we use AIP?

- AIP is a simple solution, which is easy to install and use for O365.

✓How to use AIP?

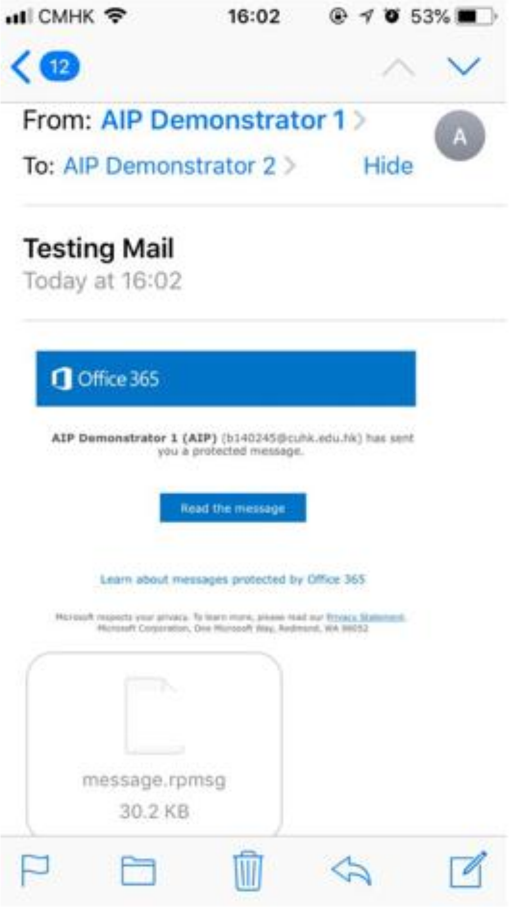
- Step 1: Install AIP Client(Windows)/RMS Sharing app(Mac)/AIP app(iOS/Android).
- Step 2: Apply protection in email/documents.

As a best practice on mobile, please open protected emails using (1) Outlook app or (2) http://www.cuhk.edu.hk/o365

Tips 1: Read Protected Email on mobile

iOS Native app

- A protected email appears as an attachment with extension .rpmsg



CMHK 16:02 53%

12

From: AIP Demonstrator 1

To: AIP Demonstrator 2 Hide

Testing Mail

Today at 16:02

Office 365

AIP Demonstrator 1 (AIP) (b140245@cuhk.edu.hk) has sent you a protected message.

Read the message

Learn about messages protected by Office 365

Microsoft respects your privacy. To learn more, please read our Privacy Statement. Microsoft Corporation, One Microsoft Way, Redmond, WA 98052

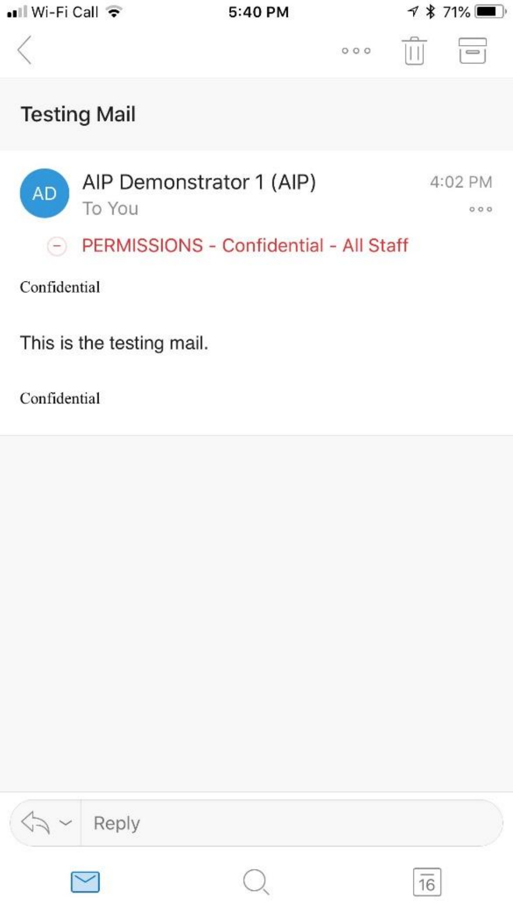
message.rpmsg

30.2 KB

Outlook app

- with mail details shown

app (iOS & Android)



Wi-Fi Call 5:40 PM 71%

Testing Mail

AD AIP Demonstrator 1 (AIP) 4:02 PM

To You

PERMISSIONS - Confidential - All Staff

Confidential

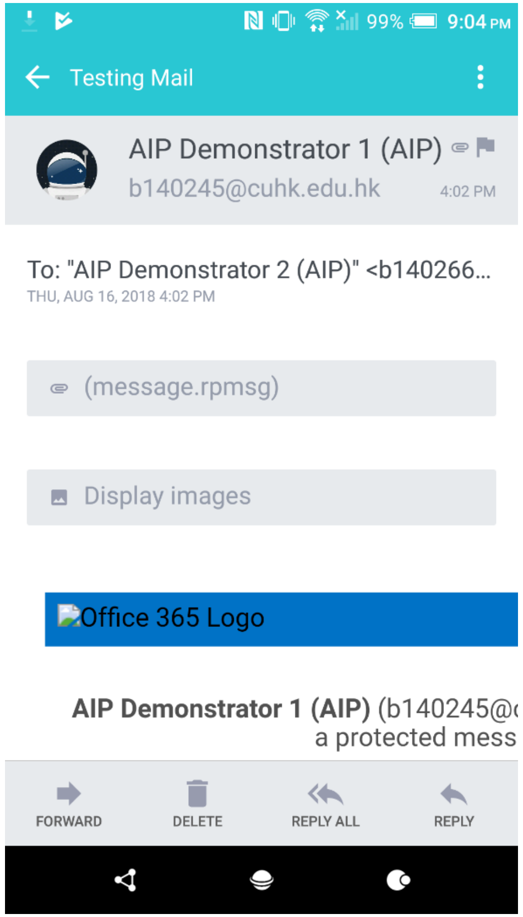
This is the testing mail.

Confidential

Reply

Android Native app

- A protected email appears as an attachment with extension .rpmsg



99% 9:04 PM

Testing Mail

AIP Demonstrator 1 (AIP)

b140245@cuhk.edu.hk 4:02 PM

To: "AIP Demonstrator 2 (AIP)" <b140266...

THU, AUG 16, 2018 4:02 PM

(message.rpmsg)

Display images

Office 365 Logo

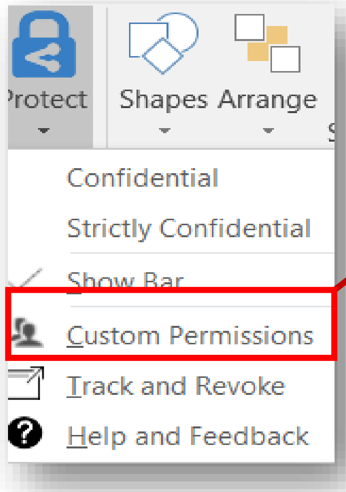
AIP Demonstrator 1 (AIP) (b140245@

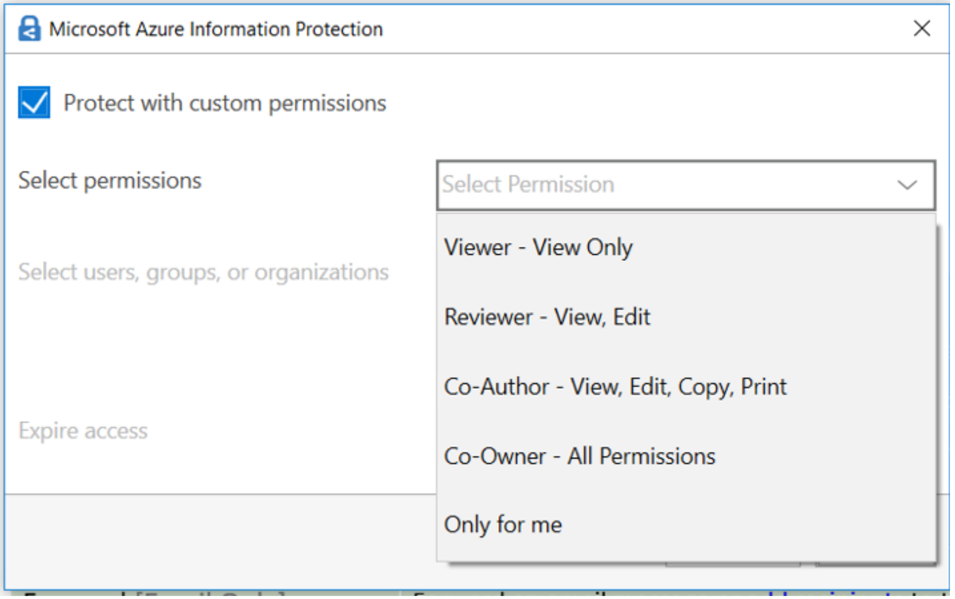
a protected mess

FORWARD DELETE REPLY ALL REPLY

Tips 2: Using Custom Permission

- Customized Protection in Office application (e.g. Word document)
  1. Select the type of permissions.
  2. Selecting / entering the permitted user email address.
     - For example, staff email address name@cuhk.edu.hk or student/alumni email address StudentID@link.cuhk.edu.hk / name@link.cuhk.edu.hk
     - Though students or alumni can't create protected documents using AIP, you can still grant them with access right to read/edit your protected documents, and read/reply your protected emails.





Microsoft Azure Information Protection

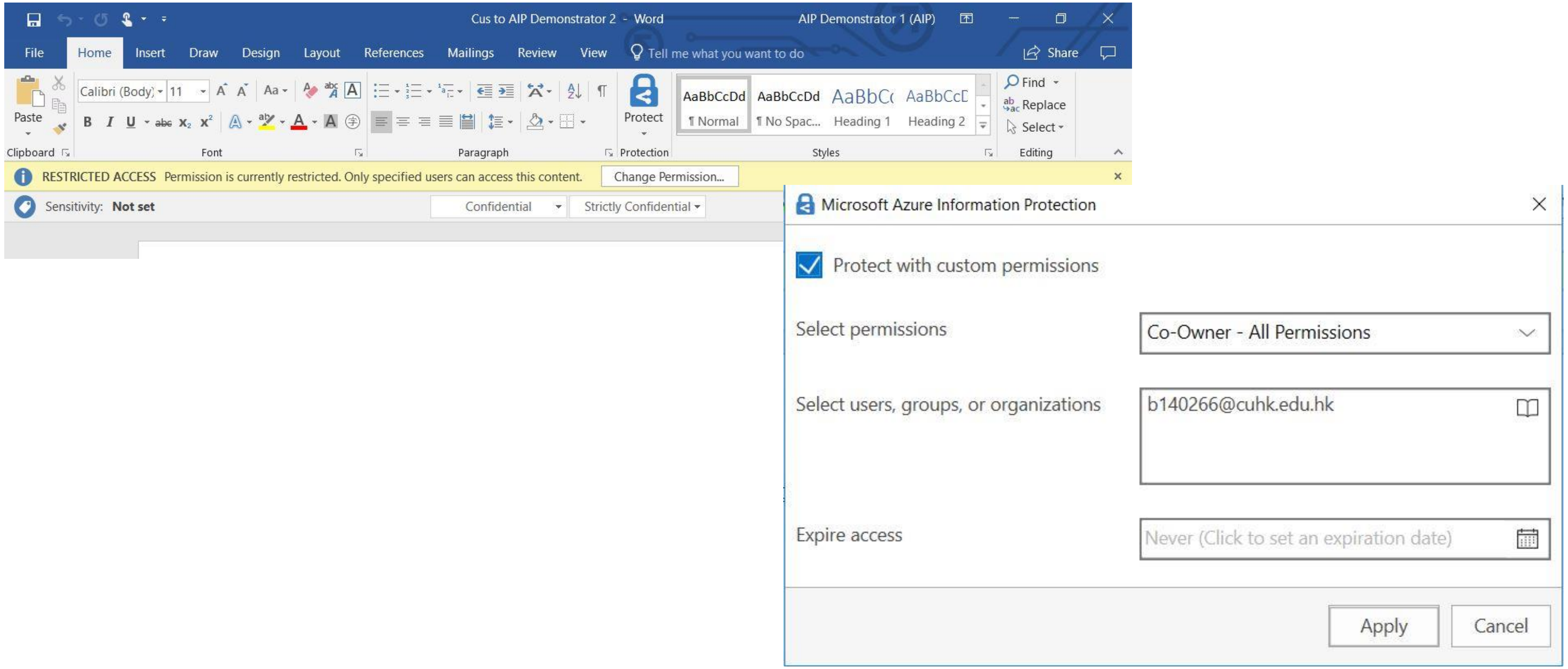
☑ Protect with custom permissions

Select permissions: Select Permission

Viewer - View Only
Reviewer - View, Edit
Co-Author - View, Edit, Copy, Print
Co-Owner - All Permissions
Only for me
Select users, groups, or organizations
Expire access

Custom Permission

- Document Owner's view – select the permission type and grant permission to authorized users



RESTRICTED ACCESS Permission is currently restricted. Only specified users can access this content.

Sensitivity: Not set

Microsoft Azure Information Protection

☑ Protect with custom permissions

Select permissions: Co-Owner - All Permissions

Select users, groups, or organizations: b140266@cuhk.edu.hk

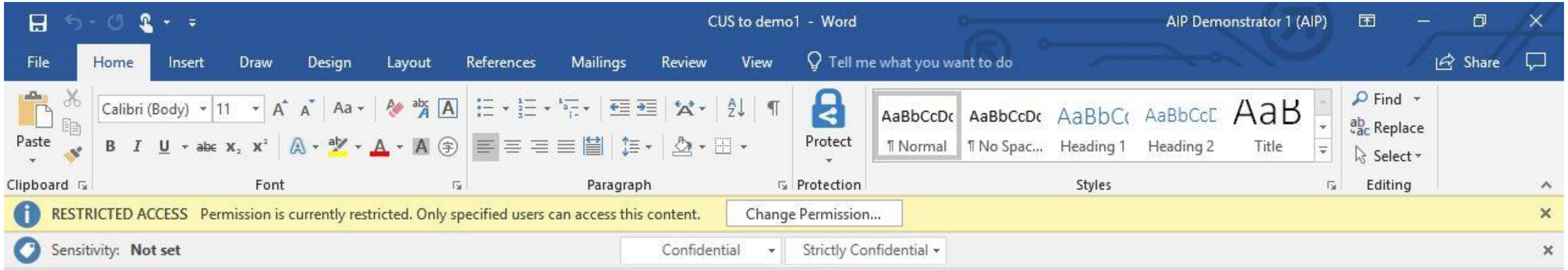
Expire access: Never (Click to set an expiration date)

With Permission

Custom Permission

- Document recipient's view – granted with permission
- Can open the document

As the co-owner:



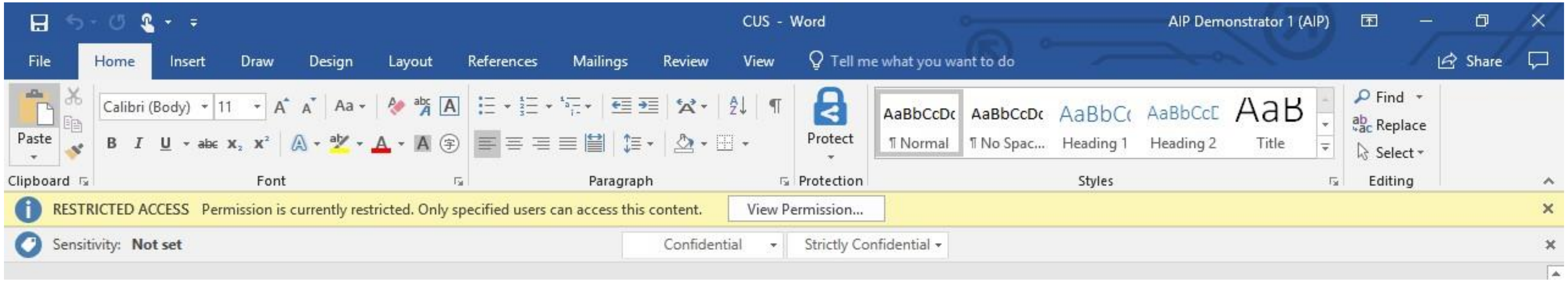
CUS to demo1 - Word

AIP Demonstrator 1 (AIP)

RESTRICTED ACCESS Permission is currently restricted. Only specified users can access this content. Change Permission...

Sensitivity: Not set

As the co-author, reviewer or viewer:



CUS - Word

AIP Demonstrator 1 (AIP)

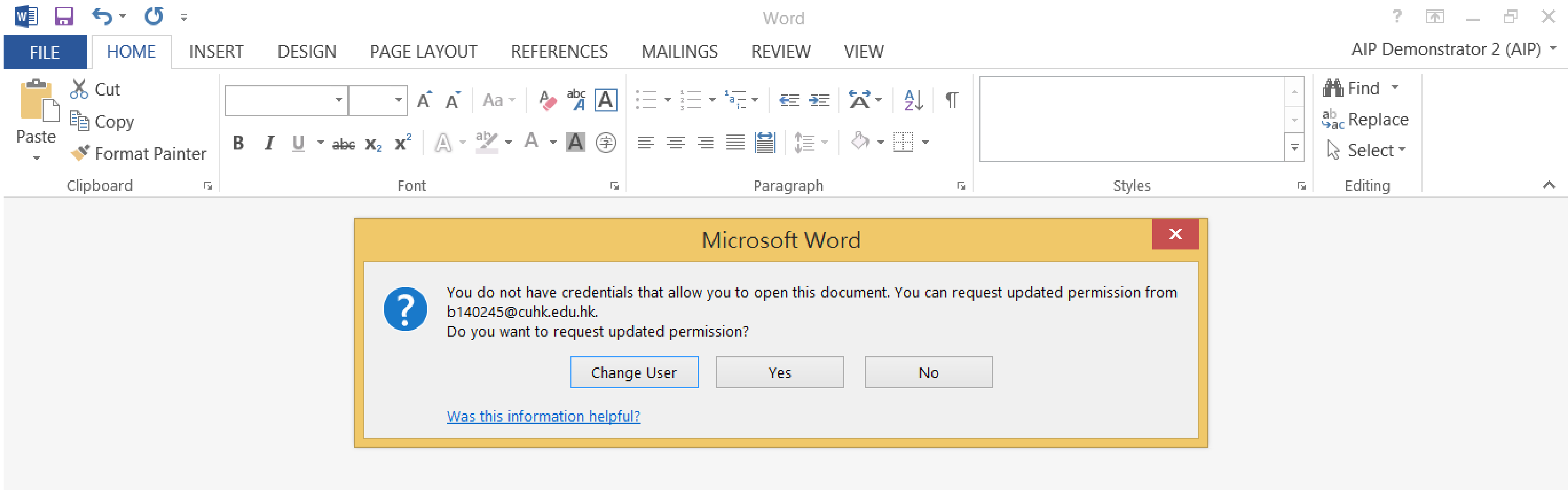
RESTRICTED ACCESS Permission is currently restricted. Only specified users can access this content. View Permission...

Sensitivity: Not set

No Permission

Customized Protection

- Document recipient’s view – NOT granted with permission
- Can’t open the document. One must contact the document owner to grant the access right



You do not have credentials that allow you to open this document. You can request updated permission from b140245@cuhk.edu.hk.
Do you want to request updated permission?

Enquiries

- Service details and more FAQs can be found at

https://www.itsc.cuhk.edu.hk/en-gb/all-it/information-security/data-classification-protection-with-aip

- For enquiries, please contact ITSC Service Desk (http://servicedesk.itsc.cuhk.edu.hk > Get Help)