Secure Your Emails and Documents by Microsoft Azure Information Protection (AIP)

Information Technology Services Centre
October 2021

Photo by Avel Chuklanov on Unsplash
Agenda

• The Need for Document Protection
• Microsoft Information Protection
• Demo
The Need for Document Protection
The Need for Document Protection

• Maintaining a high level of document security keeps the University from loss of intellectual property, damage in reputation and facing legal consequences.
The Need for Document Protection

- **Data Classification and Data Governance Policy**, published in Aug 2016, proposes a comprehensive framework for protecting University’s digital information, particularly digital-based documents.

<table>
<thead>
<tr>
<th>Level</th>
<th>Data Classification</th>
<th>Definition</th>
<th>Example</th>
</tr>
</thead>
</table>
| 1     | Strictly Confidential| The HIGHEST level of security controls. Unauthorized disclosure of this data would cause **severe adverse effect** to individuals or on operations, assets and reputation of the University. *The STRICTEST security policy should be applied even if this may incur considerable inconvenience to the users.* | • Data deemed highly confidential by the University  
• Data protected by regulations such as the Hong Kong Personal Data (Privacy) Ordinance  
• Health/Patient information may or may not be regulated by Hospital Authority (HA) |
| 2     | Confidential        | Unauthorized disclosure of this data would cause a **moderate level of risk** to individuals or the University. *Strict security policy should be applied even if this may incur some inconvenience to the users.* | • Data deemed confidential by the University  
• Personal data (e.g. Student ID, staff ID) not classified as Level 1. |
Microsoft Information Protection
Microsoft Azure Information Protection (AIP)

• **Comprehensive data protection solution**: AIP helps you to classify, label and protect the documents according to the confidential level of the information.

• **Instant and automatic protection**: Once a document is labelled, corresponding predefined security policy will be applied automatically to protect the document and limit the access against unauthorized person.

• **Centralized access control**: Protected content is only available to those having a valid CUHK staff account.
Convenient and Predefined Classification Labels and Visual Markings

• Corresponds to [Data Classification and Data Governance Policy](#).

<table>
<thead>
<tr>
<th>Classification Labels</th>
<th>Permissions to <strong>all Staff</strong></th>
<th>Visual Markings in Office Documents* / Emails</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strictly Confidential</strong></td>
<td>✓ View ✓ Reply / Reply-all</td>
<td>Header, and Footer Watermark (for Office Documents only)</td>
</tr>
<tr>
<td><strong>Confidential</strong></td>
<td>✓ View ✓ Edit ✓ Save / Save-as / Export / Print ✓ Reply / Reply-all / Forward ✓ Copy-n-paste / screenshot</td>
<td>Header and Footer</td>
</tr>
</tbody>
</table>

* Microsoft Word (.docx), Excel (.xlsx) and PowerPoint (.pptx)
Protection for Word / Excel / PowerPoint
Protect Word / Excel / PowerPoint Documents in **1 click**

1. **Select the classification label**
   - AIP for MS Office

2. **Classification Label applied to the document**
   - Confidential / All Staff

3. **Visual Marking added in document header**
   - Confidential

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**AIP for MS Office**
Open Protected Documents

- Outsiders are unable to open protected documents as they are encrypted.
Protection for PDF
Protect PDF Files using AIP App

1. Right-click the PDF file and click ‘Classify and protect’ from the context menu.

2. Select preferred protection and click ‘Apply’ from AIP app.
Open Protected PDF Files using AIP Viewer

Launch the app from Start Menu ...

... or right-click the PDF file > Open with > Azure Information Protection Viewer
Open Protected PDF Files using AIP Viewer (cont’d)

AIP Viewer

Unsupported PDF Viewer

Standard message will be shown in unsupported PDF viewer.
Custom Permissions
Share Confidential Information to **Specific Addressee** Using Custom Permissions

- Example: Project account passwords.
- Could optionally set an expiry date.
- Flexible permission levels – see table below.

<table>
<thead>
<tr>
<th>Role</th>
<th>View</th>
<th>Edit / Save</th>
<th>Save-as / Export</th>
<th>Copy</th>
<th>Print</th>
<th>Reply / Reply-all</th>
<th>Forward</th>
<th>Full Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viewer</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reviewer</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Co-Author</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Co-Owner</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
Protect Document with Custom Permissions

1. Right-click the file and click ‘Classify and protect’ from the context menu.
Protect Document with Custom Permissions

2. In the AIP app ...

- Check **Protect with custom permissions**
- Select permissions
- Enter email address / Select users (requires Outlook)
- (Optional) Set an expiry date
## Labels vs. Custom Permissions

<table>
<thead>
<tr>
<th>Feature</th>
<th>Labels</th>
<th>Custom Permissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predefined Access Rights</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Headers and Watermark</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Applicable to Email</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Allow Access for Specific Users</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Expire Access</td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>
Protection for Email
Protect Your Email in 1 click

1. Select classification label

Confidential Contents

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Read Protected Email – CUHK Staff

‘Forward’ button is disabled (for Strictly Confidential)

Classification label

Visual marking (for Strictly Confidential)

Confidential Contents

Read Protected Email – Outsider

- Outsider won’t have access to the protected email.
Installing AIP Client
Single Installer for All Features

1. Office add-ins
2. Classify and protect tool
3. PDF viewer
Installing AIP Client at Home – Windows

• Download the installer from ITSC Website
• Install AIP client for full capability.
• If AIP client is not installed, use Office 365 to view and create protected Office documents, but not for PDFs.
Installing AIP Client at Home – MacOS

• Use Office 365 to view and create protected Word / Excel / PowerPoint files.

• Download Azure Information Protection viewer app to view protected PDF files.
Start Protect Your Documents TODAY!
Demo

Create Protected Documents
• Word
• PDF

View Protected Documents
• By CUHK Staff
• By Outsiders

Send Protected Email

View Protected Email
• By CUHK Staff
• By Outsiders
Questions ?
Frequently Asked Questions

1. Can a protected document be created using a Project Account?
   • Yes, AIP service is also enabled for project accounts.
   • When a protected document is sent to project account (via email), users can open the protected document using his/her user identity.
2. My faculty member used to forward all University emails to his/her personal email (e.g., Gmail). Does AIP also work in this scenario?
   • Protected email does NOT work (requires @cuhk.edu.hk mailbox).
   • Protected attachment that included in an unprotected email works. Please be reminded that to view the protected document, users are required to either (1) install latest AIP viewer or, (2) open the protected file using Office 2019/Office365.
Frequently Asked Questions

3. Can I send a message to student / alumni / vendor and don’t allow them to forward it?
   - This is achievable only using Outlook on the web.
   - CAUTION: do not mix up with ‘labels’ which is targeted to CUHK staff

<table>
<thead>
<tr>
<th>Label / Custom Security Level</th>
<th>Target</th>
<th>Read</th>
<th>Copy</th>
<th>Forward</th>
<th>Open by Outsider</th>
</tr>
</thead>
<tbody>
<tr>
<td>Label: Strictly Confidential – All Staff</td>
<td>CUHK Staff (@cuhk.edu.hk)</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Label: Confidential – All Staff</td>
<td>CUHK Staff (@cuhk.edu.hk)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Encrypt</td>
<td>Specific recipient</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (using OTP*)</td>
</tr>
<tr>
<td>Do Not Forward</td>
<td>Specific recipient</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes (using OTP*)</td>
</tr>
</tbody>
</table>

* One-time passcode
3. (Continued)

- Compose a message in Outlook on the web. Click ellipsis (…) button > Encrypt > Do Not Forward.

DON’T choose ‘Sensitivity’ as it doesn’t apply to outsiders.
Frequently Asked Questions

3. (Continued)
   • Recipient will be asked to enter a one-time passcode. The code will be sent to user’s mailbox as soon as ‘Read the message button’ is clicked.
Frequently Asked Questions

3. (Continued)
   • Outsiders will see the message upon successful validation. Note Forward and Print buttons are disabled.
5. Must I keep my computer online in order to open protected documents?

- Offline access is allowed for documents protected using Classification Label

<table>
<thead>
<tr>
<th>Classification Label</th>
<th>Offline Access</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strictly Confidential</td>
<td>1 day</td>
</tr>
<tr>
<td>Confidential</td>
<td>7 days</td>
</tr>
</tbody>
</table>
Appendix 2: Open Office Documents from Mobile Device

• Use official Microsoft Office apps.
Appendix 3: Open Office Documents in Office 365, OneDrive and SharePoint (web)

• Currently not supported. Please open protected files using desktop or mobile device.

• Same for OneDrive and SharePoint unless files are opened in desktop app via a network drive.
Appendix 4: Open PDF Documents using Azure Information Protection Viewer (iOS / Android)

- Install Azure Information Protection Viewer (iOS / Android) prior opening protected PDF files.
- Open protected PDF files in AIP Viewer app.

iOS: ‘Share file via...’ and pick AIP Viewer
Appendix 5: Open PDF Documents using Azure Information Protection Viewer (iOS / Android)

- Install Azure Information Protection Viewer (iOS / Android) prior opening protected PDF files.
- Open protected PDF files in AIP Viewer app.

**Android:** Choose AIP Viewer when prompted
Appendix 6: Send Protected Email (Tips)

• Put #confidential and #strictlyconfidential hashtag in your email subject to achieve the same result.

• It also works when sending email using third-party email clients.

Confidential Contents