

# Protecting Your Data with Microsoft Purview Information Protection

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<https://prairiedeveloper.com>

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**Microsoft 365  
CONFERENCE**

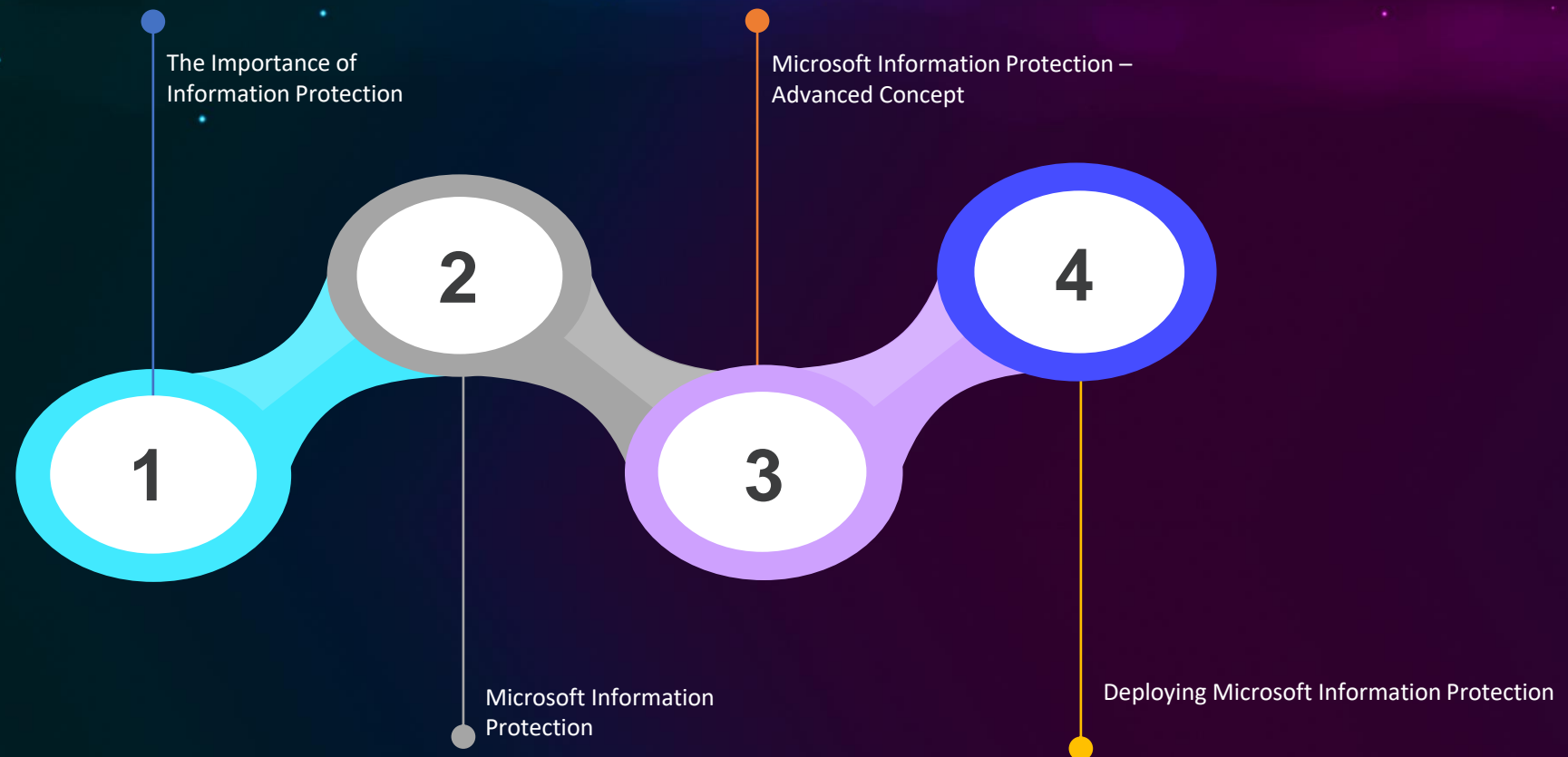
Microsoft Viva  
Microsoft Teams  
Microsoft SharePoint  
Microsoft Power Platform

CO PRODUCED BY MICROSOFT AND M365 CONFERENCE

# Let's Connect



# Agenda



# Importance of Security In the Cloud



## Businesses are moving to the cloud

- 73% of enterprises have at least one component of their business in the cloud
- Some enterprises predict they will invest \$3.5 million in cloud technology (Apps, services, etc)
- Many businesses store PII data digitally, including within cloud technologies
- Less than half of organizations in the cloud have a formal cloud security policy



## Security Breaches... they happen

- Estimation of 79% of large U.S. businesses and 49% of large Canadian businesses experienced a data breach in 2021
- Estimation of 61% of SMB U.S. businesses and 50% of SMB Canadian businesses experienced a data breach in 2021

# Microsoft Information Protection

# Principals of Information Protection



## Identify

- Microsoft Information Protection provides organizations with the ability to locate and identify sensitive information within their infrastructure. It can find information based on established or custom categories developed by the business.



## Classify

- Once identified, information can be classified based on the organization's sensitivity classification policy. The information allows users to understand the sensitivity of the information they are working with.



## Protect

- Once classified, necessary protections can be applied; this can range from automatically adding headers, footers, or watermarks to full encryption of the content.

# Sensitivity Label Overview

To plan and prepare for the implementation of MIP labels, it is best to understand the capabilities and plan accordingly.



## Sensitivity Label Capabilities:

- Content Markup when labels are applied to content:
  - Headers and/or Footers
    - Multiple colors available
    - Left, Center, or Right justified
    - Variable font size
  - Watermark
    - Multiple colors available
    - Variable font size
    - Variable font direction

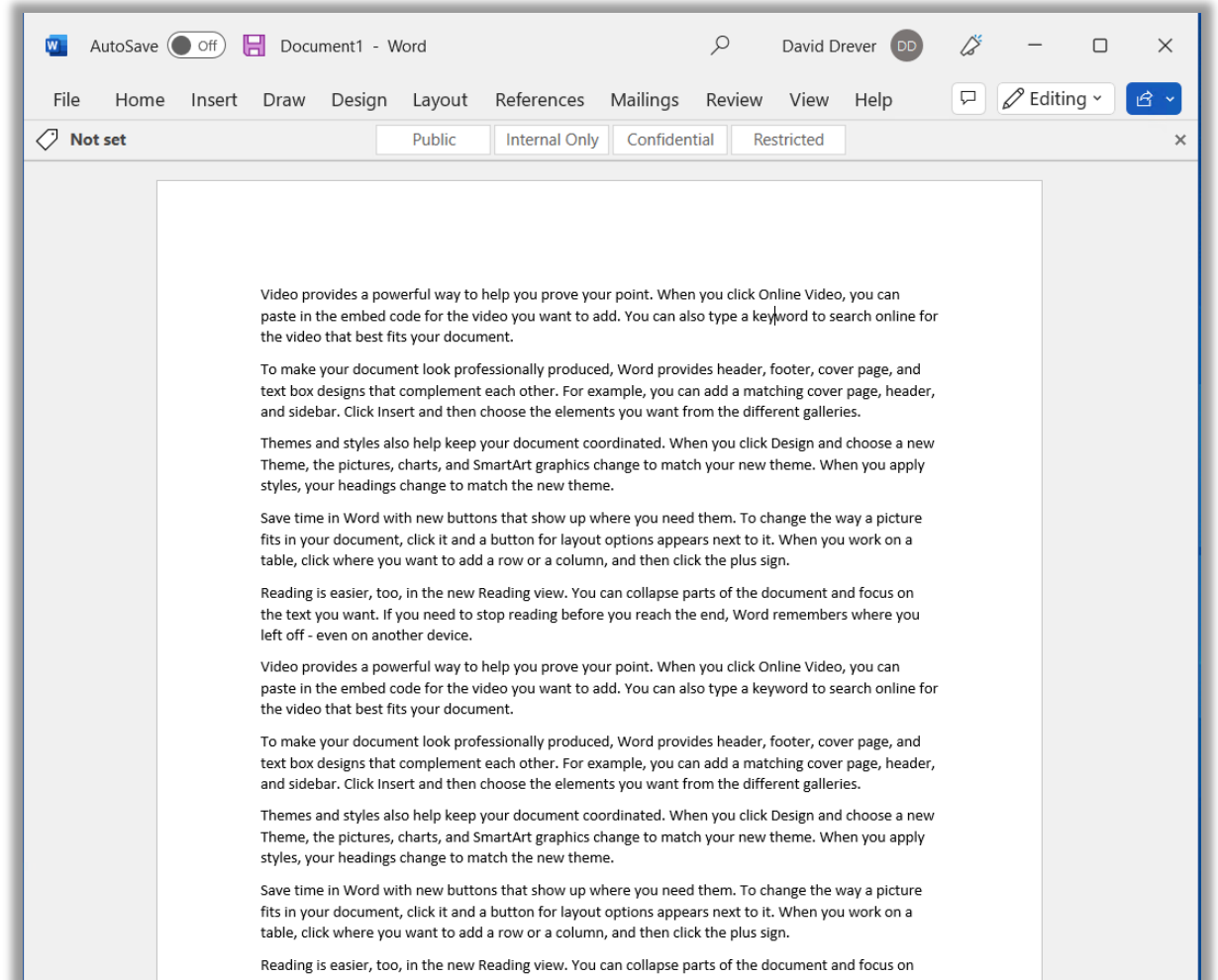
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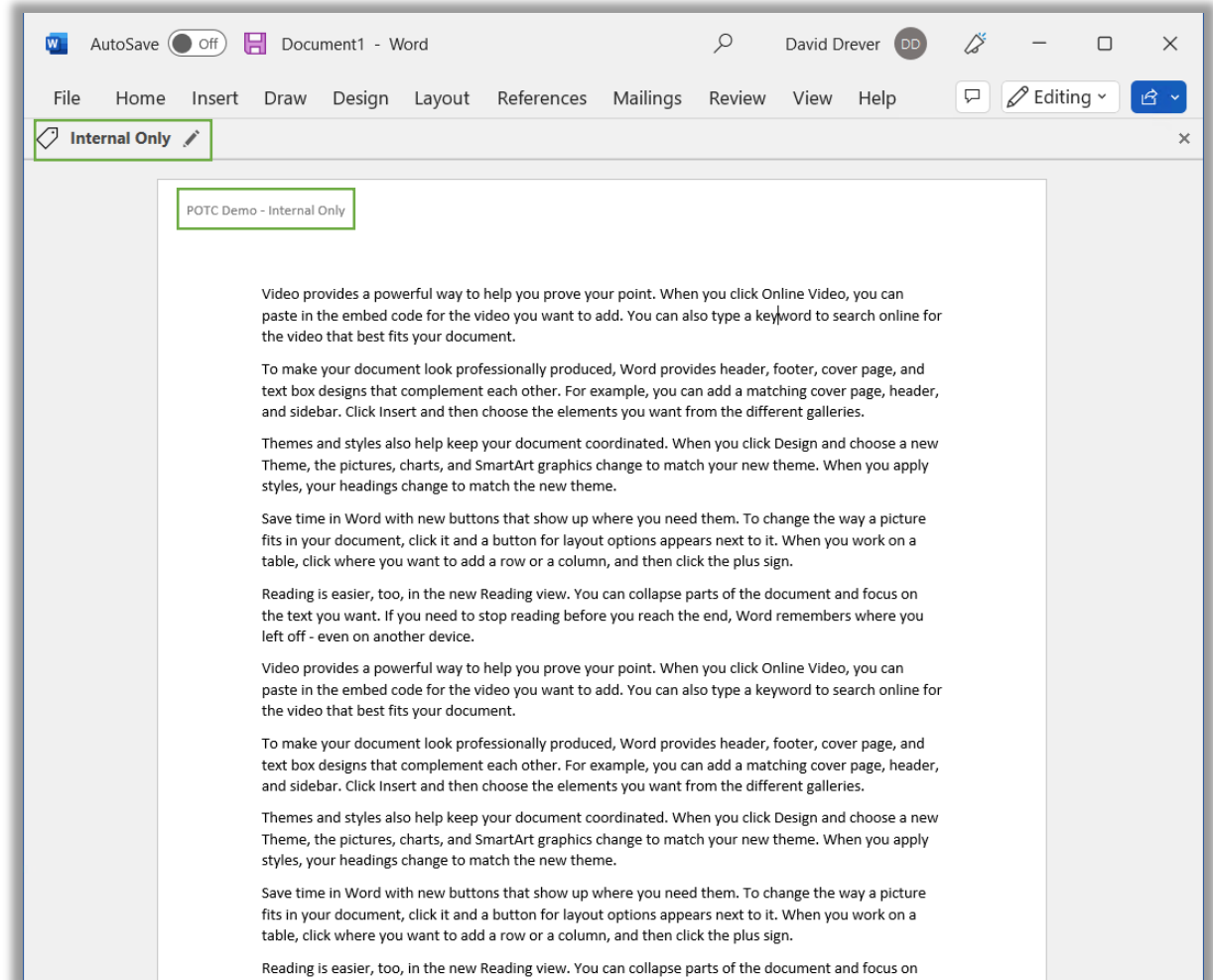
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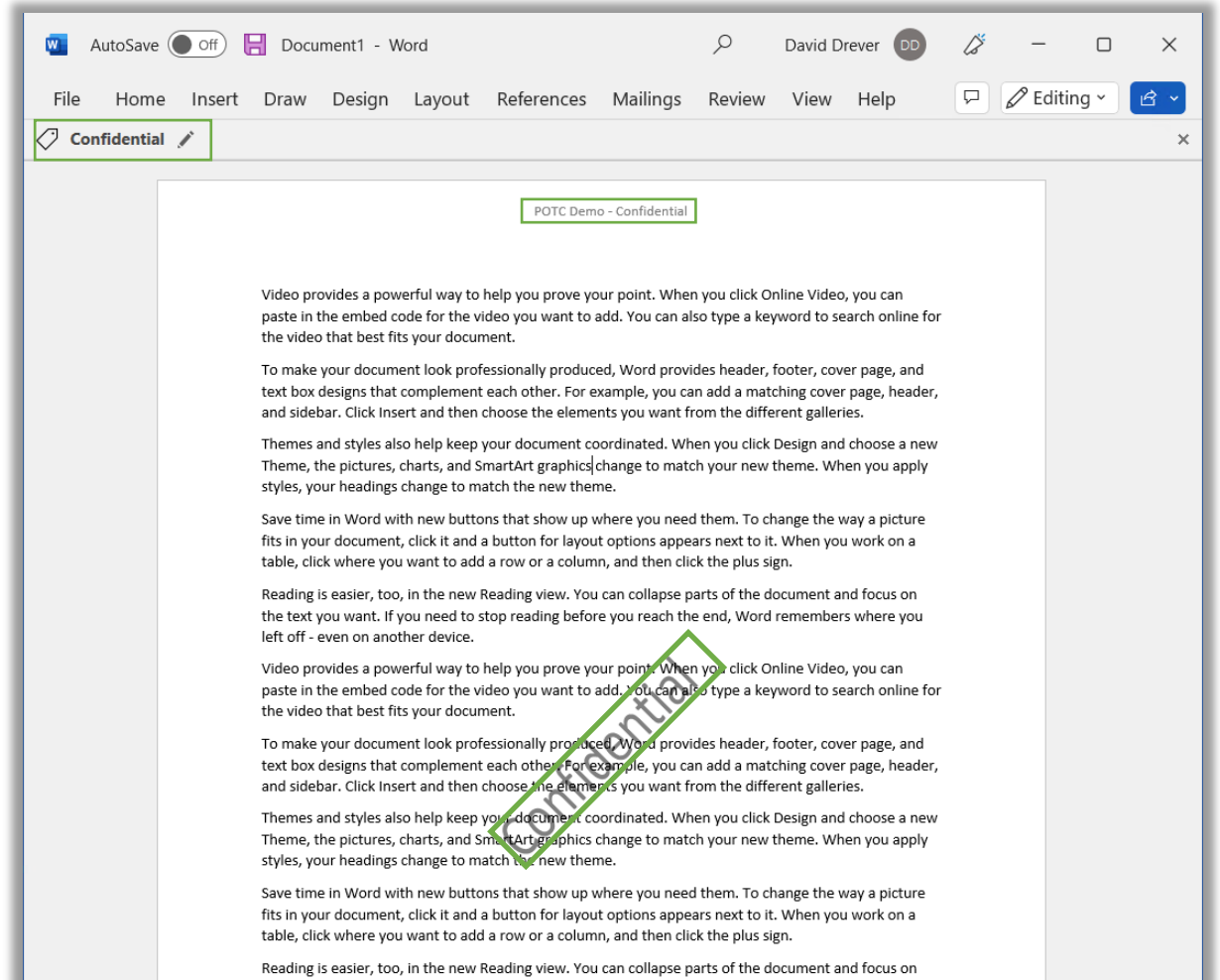
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- Encryption
  - Independent of location security. Dependent on the label configurations
  - Two encryption options:
    - Administrator Defined Permissions
      - Control when access to content expires (default is never)
      - Allow or Reject Offline Access
    - User Defined Permissions
      - User can assign permissions when the label is applied
  - Double-Key Encryption
    - Second encryption appliance run by the organization that encrypts on top of MIP Encryption

# Microsoft Information Protection Advanced Concepts

# Site and Group Sensitivity Labels



## Applies Information Protection Controls to Sites and Groups

- Does NOT apply default sensitivity to content within the site.
- Applies additional controls to sites:
  - Block external users
  - Enforce managed devices
  - Site Owner permission granting controls
- Apply Authentication Contexts to sites for use with Conditional Access
- Automatically notifies users and administrators if highly sensitive content is uploaded to the site.

# Automating Sensitivity Labels



**Why should we consider this? Users will take care of it, right?**

- Complex classification systems make determining the proper sensitivity label difficult
- Users will forget if not forced to by a sensitivity policy
- User's feel they don't have time to "deal" with sensitivity labels
- Sometimes only the default (easiest) solution is selected when a more sensitive solution is required
- Users lack sufficient training to support the organization's sensitivity classification requirements.

# Automating Sensitivity Labels



## Auto-Apply Settings on Sensitivity Label

- Via MIP client (built-in to Microsoft Office or add-on) scans content constantly for changes that fall under any rules applied to the environment through the sensitivity label configuration
- If sensitive information is found two options can occur:
  - Sensitivity label is enforced
  - Sensitivity label is recommended



## Auto-Apply Sensitivity Label Policy

- Applies sensitivity labels to content at rest in SharePoint Online (Teams), OneDrive, and Exchange
- Can apply to on-premises content as well via AIP Scanner
- PDF and Office app scanning supported in Exchange

# Automating Sensitivity Labels – Methods to Apply



## Sensitivity Type

- Auto Application Availability:
  - Label Auto-Apply Configurations
  - Auto-Apply Label Policies
- Locations:
  - Exchange
  - SharePoint
  - OneDrive
- Select from 300 existing sensitive information type templates or create custom sensitivity types
- Customize based on the instance count
  - Number of times the sensitive instance type exists in document before rule fires

### Choose info you want this label applied to

Choose an industry regulation to see the policy templates you can use to classify that info or create a custom policy to start from scratch.

**Check out our new enhanced policy templates.** These enhanced templates extend several of the original templates by also detecting named entities (such as full names and physical addresses). Just look for the templates labeled 'Enhanced' to start protecting even more personal data.

Search for specific templates  All countries or regions

Categories	Templates	Canada Financial Data
<ul style="list-style-type: none"><li>Enhanced</li><li><b>Financial</b></li><li>Medical and health</li><li>Privacy</li><li>Custom</li></ul>	<ul style="list-style-type: none"><li>Australia Financial Data</li><li><b>Canada Financial Data</b></li><li>France Financial Data</li><li>Germany Financial Data</li><li>Israel Financial Data</li></ul>	<p>Helps detect the presence of information commonly considered to be financial data in Canada, including bank account numbers and credit cards.</p> <p><b>Protect this information:</b></p> <ul style="list-style-type: none"><li>• Credit Card Number</li><li>• Canada Bank Account Number</li></ul>



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# Automating Sensitivity Labels – Methods to Apply



## Email Properties

- Available for:
  - Auto-Apply Label Policies
- Locations:
  - Exchange only

Sender IP address is

Recipient domain is

Recipient is

Attachment's file extension is

Attachment is password protected

Any email attachment's content could not be scanned

Any email attachment's content didn't complete scanning

Header matches patterns

Subject matches patterns

Recipient address contains words

Recipient address matches patterns

Sender address contains words

Sender address matches patterns

Sender domain is

Recipient is a member of

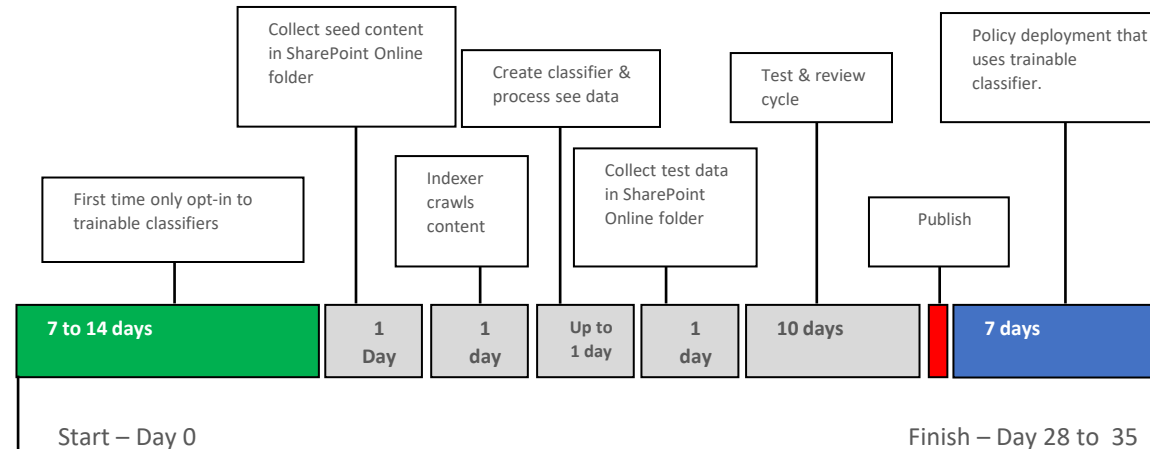
Sender is

# Automating Sensitivity Labels – Methods to Apply

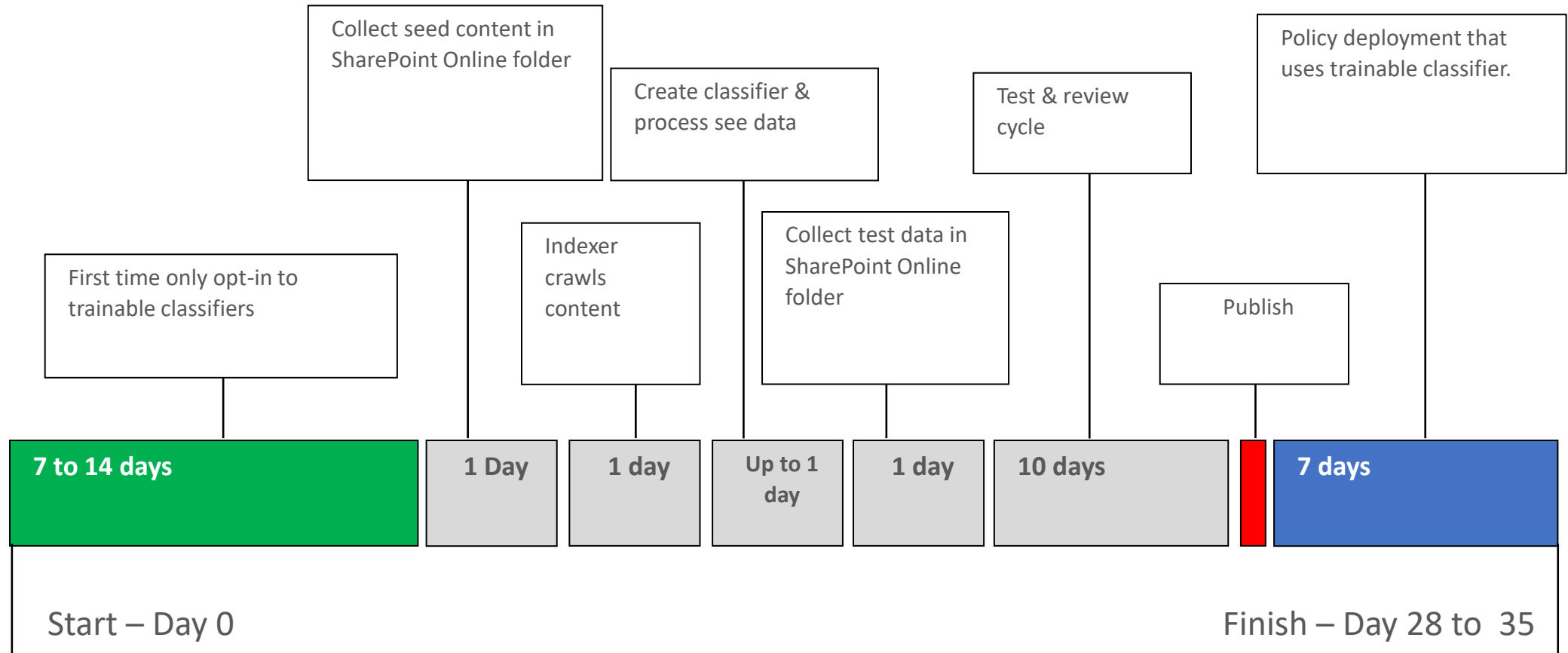


## Trainable Classifier

- Machine Learning/AI
  - Capable of recognizing types of content
  - Instruct system on the types of documents within the organization
- Available for:
  - Label Auto-Apply Configurations
- Organizations can create their own trainable classifiers



# Automating Sensitivity Labels – Methods to Apply



# Deploying Microsoft Information Protection

# Controlled Implementation

A key consideration of the strategy is the implementation approach. To avoid pitfalls often encountered in rapid rollouts, it is recommended a phased approach known as Crawl, Walk, and Run



- **Crawl**

- Define Sensitivity within the organization.
- Immediate changes that focus on being non-intrusive to end-users.
- Prepares organization for future phases



- **Walk**

- Intermediate, but still near-time changes that allow for further control of processes.
- More user-impacting than Crawl



- **Run**

- Long-term changes that require more planning and preparation, such as automation of tasks or implementation of strategic goals.
- Complex processes

# Tools Required for MIP



Microsoft Information Protection stand-alone client is required to support files that are not natively supported within MS Office

- Stand-alone tool for encrypting all file types within Windows, MacOS, iOS, and Android operating systems
- Provides ability to encrypt content for systems lacking necessary Office build and files not supported by the native client within MS Office



MIP Add-On for Acrobat Reader

- Allows Acrobat Reader to decrypt content encrypted by Microsoft Information Protection
- Built-in to Adobe Acrobat since June 2022



# What to consider before deployment



While planning a phased implementation is important, there are some activities that must first be considered and planned before implementation begins.



## Organizational Change Management

- Needs to start at Day 1 of the project
- Users need to understand:
  - Why this is being implemented
  - How it will affect them
  - What is expected of them
  - The benefit to them and the organization
- Training for end-users should be designed and training sessions planned
- Planning and design of notifications and alerts



# What to consider before deployment



While planning a phased implementation is important, there are some activities that must first be considered and planned before implementation begins.



## Governance

- Creation or review of sensitivity classification policies (non-technical)
- Information protection and the tools and processes supporting it are dynamic and change often. Additionally, changes or exceptions may be required. A committee should be created with the authority to review changes, requests, suggestions, etc. and provide direction and decisions on them.
- Committee should be made up of IT, Security\Privacy, and business representatives
- Create and ratify a framework from which information protection is based upon.

# What to consider before deployment



While planning a phased implementation is important, there are some activities that must first be considered and planned before implementation begins.



## Super User Role

- Highly specialized role to decrypt all data that has been encrypted within the M365 tenant.
  - Limited to files the user has access to
- If possible deploy using Privileged Access Groups (PAG) with full approval enabled.
- If PIM not yet enabled, deploy to as few users as possible

# Crawl Phase



The crawl phase focuses on the pilot and initial rollout of MIP labels and label policies to small, but meaningful “pilot group” within the organization. Notifications and training should begin



## MIP Label Use Preparation and Distribution

- Ensure all workstations and devices meet the minimum office build required to support the options desired with MIP
  - Install the MIP client to all desktops lacking the required office build
  - Consider installing to all devices to support not natively-supported filetypes
  - Deploy Adobe Acrobat MIP Add-On to all workstations that do not have the required June 2022 or later build
- Manually applied labels only should be deployed to the pilot group.
- Allow time for the pilot group to test the usage of the labels.
  - Review results and update implementation plan as required
- Begin to deploy to remaining users as they receive the necessary training
- Deploy Site and Group sensitivity labels to identified administrators

# Walk Phase



The walk phase should not begin until all users have been implemented under the crawl phase. In this phase more advanced processes and features are introduced to the organization.



## Automation of Sensitivity Labels

- Begin deployment of automation controls within the MIP labels.
  - Focus on OOTB sensitivity types
- Create auto-apply label policies to update content stored within Microsoft 365 storage locations
  - Ensure simulation is enabled first before fully activating
- Design and implement a charter for the governance committee to follow
- Identifying content to be used for trainable classifiers (feeds into Run Phase)

# Run Phase



The run phase is considered the final stage of an implementation project. In this stage the more complex automation processes are focused on. All Walk Phase components should be implemented before moving to Run.



## Complex Configurations

- Begin building trainable classifiers within Purview
- Implement and monitor sensitivity based on the classifiers
- If User Defined Permission labels have been deployed, enable co-authoring of encrypted labels within the tenant
- If auto-apply configurations created in the walk phase meet the needs of the organization, consider enforcing the application of sensitivity labels as opposed to recommending they be applied.
- If required, use Authentication Context to integrate sensitivity as a signal to Conditional Access within the environment

*Face the Future with Confidence*