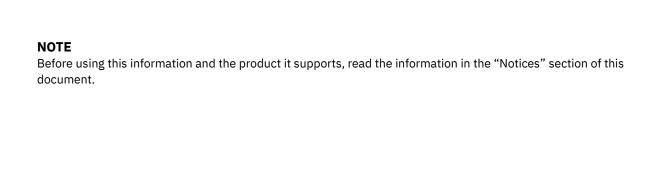
IBM OpenPages Version 9.0.x

Policy Management Solution Document





Product Information

This document applies to IBM OpenPages 9.0.x and may also apply to subsequent releases.

Licensed Materials – Property of IBM

© Copyright IBM Corporation 2003, 2023. All rights reserved.

 ${\tt US~Government~Users~Restricted~Rights-Use,~duplication~or~disclosure~restricted~by~GSA~ADP~Schedule~Contract~with~IBM~Corp.}$

Documentation Release Information

Last Modified: October 3, 2023

Contents

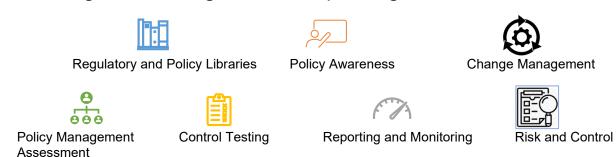
Solution Overview	4
Users	2
Objects Available in the Policy Management Solution	
Object Types Enabled by Default	
Object Model	
Policy Management Overview	
Policy Creation	
Policy Review and Approval	
Datacentric Approach	
Docucentric Approach	
Hybrid Approach	
Publishing a Policy	14
Policy Campaign and Awareness	17
Technical Inventory	23
Triggers and Helpers	23
Policy Viewers	
Views	
Profiles	29
Dashboards	
Calculations	
Role Templates	
Workflows	
Reports	
Appendix A – Object Details	
Appendix B – Hybrid Template Configuration	41
Appendix B1 – Hybrid Template Example	60
Appendix C - Reports Shared with Other Solutions	62
Risk Assessment Reports	62
Risk Reports	
Control Reports	
Testing Reports	
Indicator Reports	
Appendix D - Implementation Notes	64
Appendix E – Troubleshooting Notes	67
Overview	67
Policy Publication Report – Unscheduled or Ad Hoc Process	
Attestation Creation Report - Unscheduled or Ad Hoc Process	68
Notices	70
Conveight	70

Solution Overview

IBM OpenPages® Policy Management (PCM) is an enterprise compliance management software solution that:

- Drives a consistent approach to policy lifecycle management while reducing the cost and complexity of compliance with multiple regulatory requirements and corporate policies
- Provides the user with the capability to automate the policy management process and deliver confidence that policies remain up to date with regulatory change, drive employee awareness, and maintain contextual associations with related procedures, controls, risks, and regulatory requirements
- Provides a single repository to manage policies and eliminate the need to maintain multiple policy systems
- Reduces the risk of "unofficial" and conflicting policies by maintaining one recognized source of policies

The Policy Management solution enables organizations to manage and monitor compliance activities through a full set of integrated functionality including:



Note: The Policy Management solution was formerly known as Policy Compliance Management. The short name of the solution remains PCM. All references to PCM in this document (and in the PCM solution refer to the Policy Management solution.

Users

The configuration provides functionality across the first and second lines of defense. Access, processes, and configurations are available for the following types of users:

- Policy Owners, Policy Managers
- Policy Authors, Editors
- Policy Reviewers
- Policy Approvers (including stakeholders)
- End Users

Objects Available in the Policy Management Solution

Object Types Enabled by Default

The following object types are available in the PCM solution and are enabled by default.

See <u>Appendix A: Object Details</u> for a complete list of objects available in the Policy Management solution.

You can view object models and their available object types in **2 > Solution Configuration > Solutions > PCM**.

Object Type Label	Description	
	The Attestation object is part of the Policy Awareness capability and is used to capture an employee's response that they read and understood a policy. An Attestation's primary parent is the Employee record, and the secondary parent is the associated Campaign.	
Attestation	Users are expected to interact with Attestations through the Policy Awareness View. Employee ID, First Name, Last Name, Policy, and Version Number are automatically populated on the Attestation record at the time of creation by the Attestation Creation Batch Notification.	
	When an Employee responds 'N/A – Request Exception', Employee Comments are required. In addition, the Exception and Exception Justification fields are visible to facilitate the exception management process.	
	The Campaign object is part of the Policy Awareness capability and is used to manage the project management aspects of an awareness campaign. It is also used to define the requirements and criteria that identify which employees need to read and attest to each Policy. Campaigns are typically created in the Published Policy Hierarchy.	
	Some of the features of the Campaign process in PCM include:	
Commission	 Start Date: Automatically set by the Attestation Creation Batch Notification. In addition, the Notification sets the Status field to 'In Progress'. 	
Campaign	Due Date: Included in the Subject Line of the email notification that is created by the Attestation Creation Batch Notification.	
	The Department and Region are located on the Campaign object as well as the Employee object. These fields are used by the Attestation Creation Batch Notification to match which Employees need to attest to a policy for that given Campaign.	
	 Attestation Clause: Leverages a pre-determined attestation statement for all employee attestations. 	
Employee	The Employee object is part of the Policy Awareness Capability. It is used to capture information about individual employees such as the name, title, email, region, department, status, etc. Information (Department and Region) from the employee profile is matched against the Attestation Requirements defined on a Campaign to determine which Employees need to attest to each Policy. This process is managed by the Attestation Creation Batch Notification.	
Obligation	The Obligation object type represents the normalized and/or harmonized "things you need to accomplish" to comply with the associated Mandate, Sub-Mandate, and Requirement objects.	

Object Type Label	Description
	The Obligation object accomplish two primary purposes: translates the often difficult and wordy legal jargon of Mandates/Sub-Mandates/Requirement into plain English, and use the commonality across multiple Mandates/Sub-Mandates/Requirements. For example, you might have many Sub-Mandates and Requirements across numerous Mandates that require the use of strong passwords. A single Obligation object can document the details for strong passwords. By complying with this single Obligation, IT can satisfy many Mandates, Sub-Mandates, and Requirements.
	Policies represent internal guidelines that are adopted by the Board of Directors or a senior governance body within an organization. The text of a Policy can either be stored in standardized fields on the object or as an attachment to the object. Policies typically have a distinct lifecycle from Draft to Published to Expired, as well as a review and approval process. Draft policies typically reside in the Organizational Business Hierarchy, while Published and Expired Policies typically reside in reference Library entities. Policies are also often mapped to applicable Mandates or Requirements in the Library to which they relate.
Policy	The Policy object supports metadata about the Policy, as well as the Policy content. Fields such as Version, Version Date, Approved by, etc. are considered metadata and are exposed in the detail view page of the Policy Object.
	The Modify Policy link is only available to users based on certain field values (i.e. Status = 'Draft'.) In addition, several Policy fields are automatically updated at various stages in a policy lifecycle by the Policy helpers.
	OpenPages supports three approaches for managing policies: Datacentric, Docucentric and Hybrid.
	Each policy type is described in more detail in the <u>Functional Descriptions</u> section.
Policy Review Comment (PRC)	PRCs support and facilitate the review and approval process of Policies and Procedures by Subject Matter Experts and Compliance staff. PRCs can be the following types: SME Review, Executive Review, or Final Approval. The Review Status field is visible for SME Reviews and Executive Reviews, and the Approval Status field is visible for Final Approvals.
Procedure	Procedures represent the What, Where, When, and How policies are implemented in an organization. The text of Procedures is typically stored in the fields on the object. Typically, Procedures are represented as children of a Policy and reside in the same entity structure as its parent Policy.
	Users are expected to interact with Procedures solely through the Policy Helpers. Therefore, the detail page of the Procedure object is minimal.
Requirement	The Requirement object details specific requirements, found in the related Mandate or Sub-Mandate object, that the organization needs to adhere to in order to be in compliance. The Requirement object is typically used to establish and demonstrate compliance with multiple laws, regulations, industry standards and policies by mapping or associating the requirement or obligation to related objects such as processes, controls, and policies.
Waiver	The Waiver object supports the ability to document, process and manage the lifecycle of exceptions to Policies or regulatory compliance requirements. Waivers can be associated to Business Entities, Policies, Procedures, Requirements, Risks, Controls and Resources.

Object Model

The following diagram provides a high-level overview of the core objects in the Policy Management solution and the associations between them.

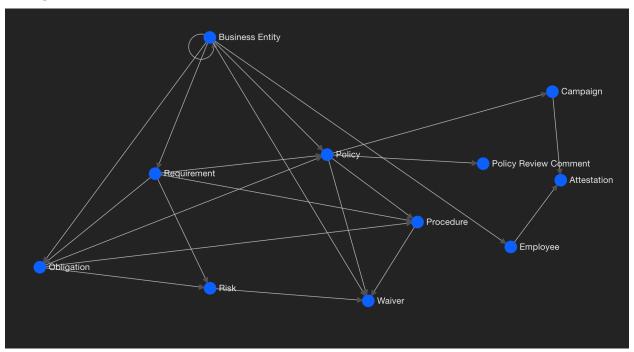


Figure 1: PCM High Level Object Model

For a complete object model diagram, available object types, and relationships, click **9-> Solution Configuration->Solutions->PCM**.

See Appendix A: Object Details for a complete list of object types and descriptions.

Policy Management Overview

The Policy Management Solution supports the following Policy Lifecycle Processes:

- Policy Creation
- Review and Approval
- Policy Publication
- Policy Campaign and Awareness
- Waiver and Exception Tracking



Figure 2: Overview of the Policy Lifecycle Process

OpenPages PCM supports the Policy Lifecycle Process with several of out-of-the box features that are designed to assist the user throughout the process. These features include:

- Triggers and Helpers
- Viewers
- Workflows
- Task Views
- Dashboards

See the <u>Technical Inventory</u> section of this document for a full list and description of these features.

Policy Creation Policy Review and Approval

Overview

PCM supports capturing metadata about the policy, as well as the policy content. Fields such as version, version date, approved by, etc. are considered metadata and are displayed in the Task View of the Policy object.

The PCM solution supports three options for managing policy content:

- Datacentric
- Hybrid
- Docucentric

Figures 3 through 6 provide a high-level overview and description of each approach.



Figure 3: Approaches to Managing Policies in PCM

Approach Considerations

The organization must consider several factors in determining which approach to use for loading policy data. Considerations include:

- What format is used for the policy (word, pdf, etc.)?
- How mature is the organization's policy management process?
- Where does the policy data live (in OpenPages or another repository)?
- How are the policies published?
- How is the campaign and attestation process managed?
- How complex is the policy content (does the policy contain special characters, charts, graphs, etc.)?
- What users will have access to OpenPages (i.e., employees)?

Datacentric Approach

Policy attributes are stored as metadata in the Policy object. Policy and Procedure content is created, stored, edited, and reviewed in OpenPages by using Policy Viewers. Red-lined track changes within draft iterations are not supported.

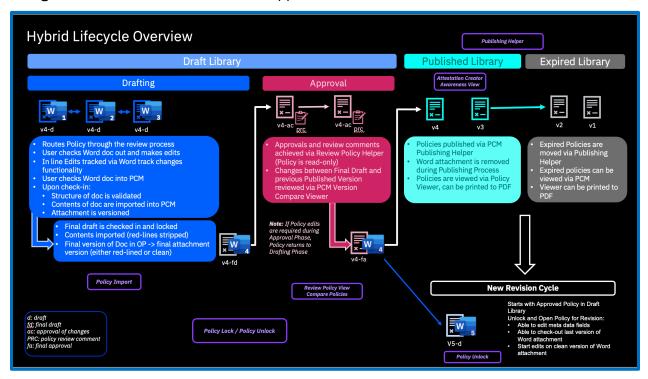


Figure 4: Datacentric Lifecycle Overview. Policy Triggers, Helpers and Viewers are identified in purple.

See the <u>Technical Inventory</u> section of this document for more details including features to support the user.

Docucentric Approach

Policy attributes are stored as metadata in the Policy object. Policy and Procedure content is created outside of OpenPages and the entire document is attached to the Policy object. Policy and Procedure content is never imported or stored in OpenPages.

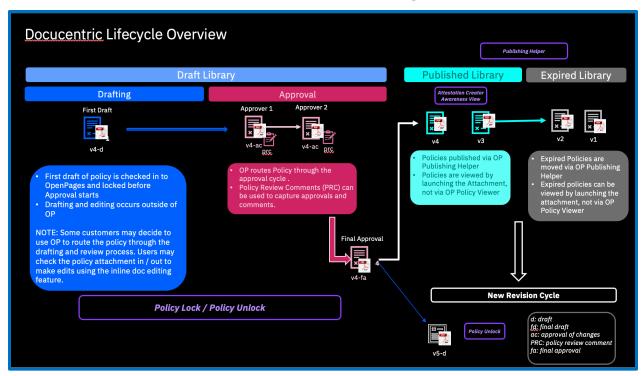


Figure 5: Docucentric Lifecycle Overview. Policy Triggers, Helpers and Viewers are identified in purple.

See the <u>Technical Inventory</u> section of this document for more details including features to support the user.

Hybrid Approach

Policy attributes are stored as metadata in the Policy object. Policy and Procedure content is created and edited in Microsoft™ Word documents, then imported and stored in OpenPages. The Microsoft Word Track Changes feature is used to track red-line changes within draft iterations.

Users can open and edit Microsoft Office files directly from OpenPages (similar to in-line editing). See the following topic in the OpenPages documentation for more details: OpenIng Microsoft Office files directly from OpenPages.

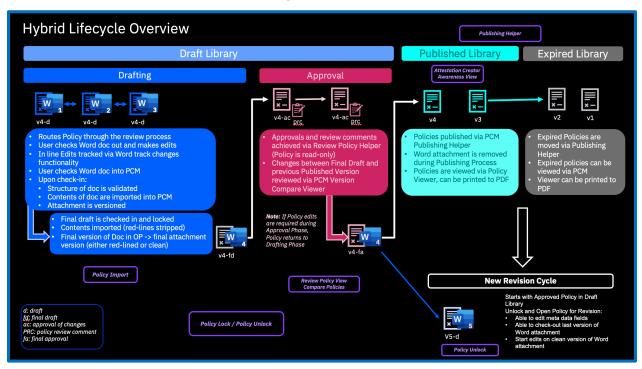
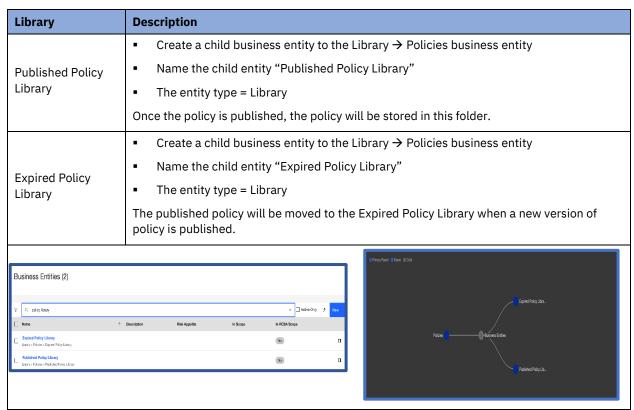


Figure 6: Hybrid Lifecycle Overview. Policy Triggers, Helpers and Viewers are identified in purple.

See the <u>Technical Inventory</u> section of this document for more details including features to support the user.

Setting Up the Policy Libraries

After the policy approach has been determined and before a policy is created, ensure the following Business Entities exist in the Library / Policies folder. Follow the steps below to create the Library entities if they are missing. These libraries will be used to store the published and expired policy versions.



Registry Settings

Review the following setting to ensure the value is completed: /Solutions/PCM/Global Settings/Draft Policy Library.



Publishing a Policy

After a policy has completed the review and approval process, the policy is ready to be published as the "official" policy.

The Publishing Batch Notification Helper facilitates the process of promoting an approved policy draft to the published library and moving the current published version (if applicable) to the expired library. The Helper also retires a policy by moving the published policy to the expired library and deleting the draft. See Implementation Notes for considerations when retiring policies.

The Publishing Batch Notification Helper can be used with the Datacentric, Docucentric, and Hybrid policy approaches.



Figure 7: Publishing Batch Notification Functionality by Phase and Library

The Publishing Batch Notification helper runs on a <u>scheduled basis</u>, since policies are typically published in batches. The helper performs the following tasks:

- Identifies policies with the following field values for publication:
 - o Status = Draft
 - Approval Status = Approved
 - Publishing Status = Ready to Publish
- Updates Draft Policy:
 - Sets fields on draft policy such as Approval Status, Published Date, and Publishing Status
 - o Updates a version number according to the significance of a policy change
- Promotes a draft Policy object to the published library:
 - Sets the Policy location to Published
 - o Maintains approvals and associations with objects
 - Maintains existing object associations on a published Policy object
- Sends emails upon successful publishing

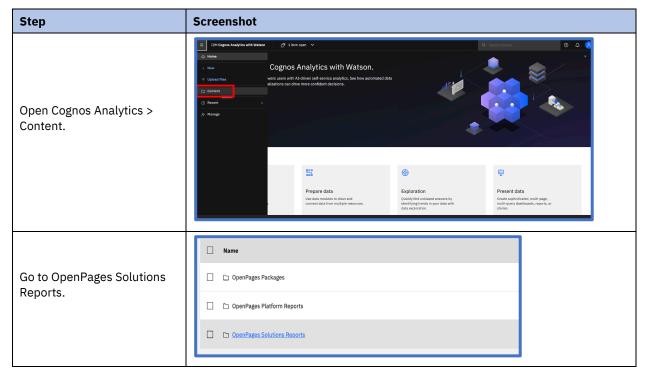
- Promotes a published Policy object to the expired library (this includes retired policies):
 - Renames the Policy object (appends Expired V#)
 - o Sets Policy location to Expired and specifies the expiration date
 - o Maintains approvals and associations with objects
 - o Removes hybrid policy attachments.

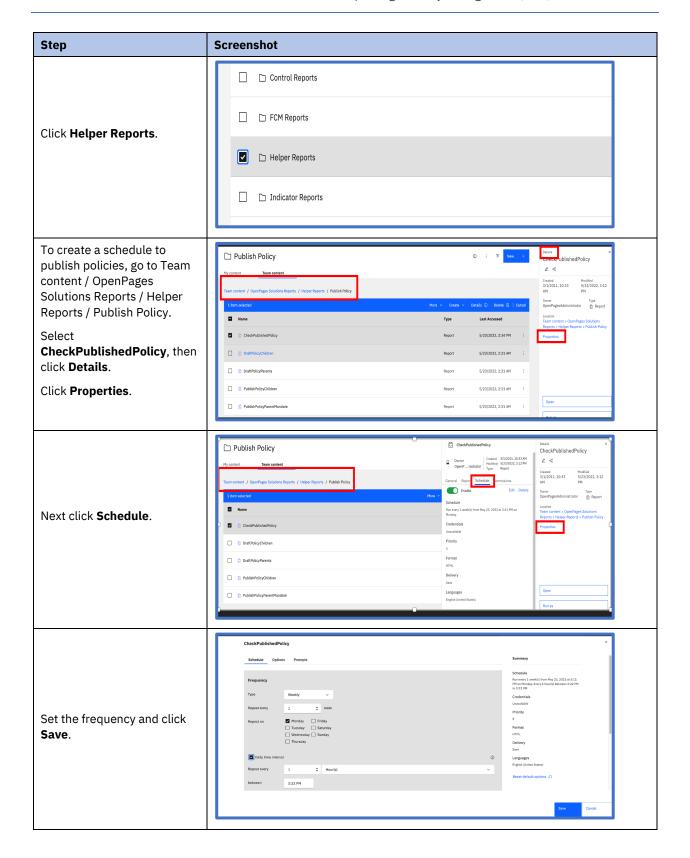
Review the following settings:

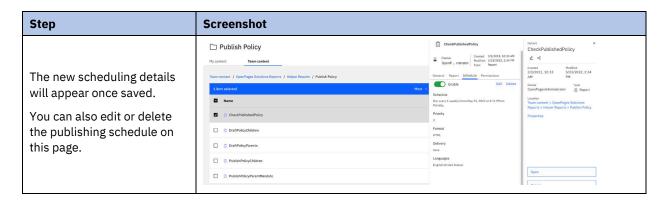
Step	Description	
Draft Library	Review the following setting to ensure the value is defined:	
Setting	Solutions/PCM/Global Settings/Draft Policy Library	
	Settings define the Published Library Entity structure, email sender name and address. Application text settings define the email subject and body.	
Email	Applications/Common/Email/Mail From Name	
Notification Settings	Applications/Common/Email/Mail From Address	
	Applications/Platform	
	Applications/Common/Email > Mail Server	

Scheduling the Publication of Policies

To create a schedule for publishing policies, do the following steps:







Note: If you need to run the Policy Publication Report on a one-time or unscheduled basis (e.g., for debugging or testing needs), see <u>Appendix D: Troubleshooting Notes</u>.

Policy Campaign and Awareness

Overview

- After the policy is published, the organization can start a Campaign. A Campaign is the
 process of distributing the published policy to its employees and/or third parties (e.g.,
 consultants) to provide awareness of a new policy or revisions to an existing policy.
- This distribution can be to a targeted audience, such as a specific line of business or geography, or to the general population of all employees and / or consultants (depending on the policy topic and impact).
- As part of the Campaign, the targeted audience will be asked to "attest" or acknowledge that they have read and understood the policy. The attestation requirement has a due date by which the attestation is to be completed.
- Attestation responses are tracked to ensure compliance with the Campaign process due dates.
- A waiver can be requested when the Policy that is the subject of the Campaign is out of scope for the targeted audience or a subset of that audience.



Figure 8: Campaign and Awareness Process

Policy Campaign

The Attestation Creation Report Helper is a scheduled notification utility that supports the organization to drive the Campaign and Awareness process by:

- Identifying all active employees
- Determining the target employee audience for the Campaign this is done by matching the same department and region field values for the Employee and Campaign objects (see figure below)

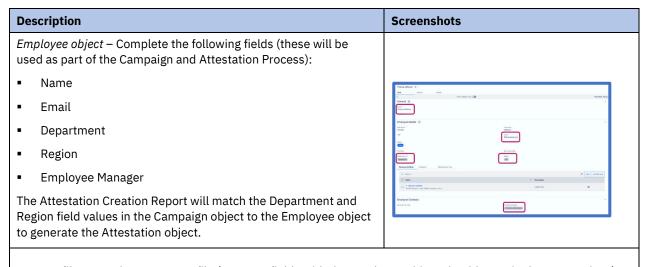


Figure 9: Campaign and Employee Object Common Fields

- Finding all Campaigns with a Status field value of "Ready to Start"
- Creating an Attestation record for each matching Employee for the Policy Campaign
- Populating the following fields on the Attestation object: Employee ID, First Name, Last Name, Policy, Version and Response = 'Incomplete' for each matching employee.

Getting Started

Before the Campaign and Policy Awareness process is started, confirm that the Employee object, user profile and Attestation Creation Report are set up, since these will be required to complete the process.



User Profile - Complete a user profile (common fields with the Employee object should contain the same values).

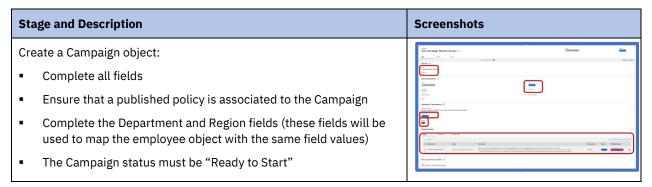
Description Screenshots

Email Settings – Ensure that the following email settings have been completed:

- /Applications/Common/Email/Mail From Address
- /Applications/Common/Email/Mail From Name

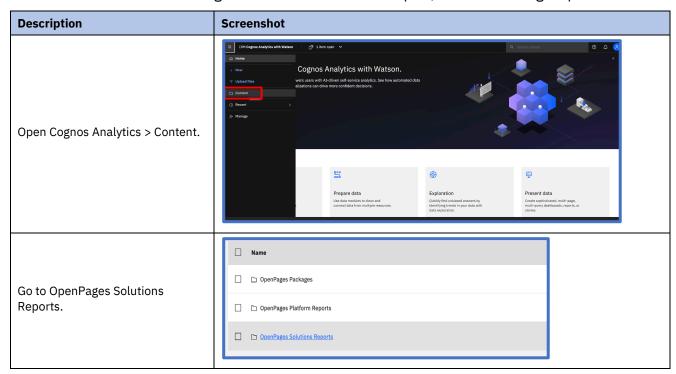
Start the Campaign

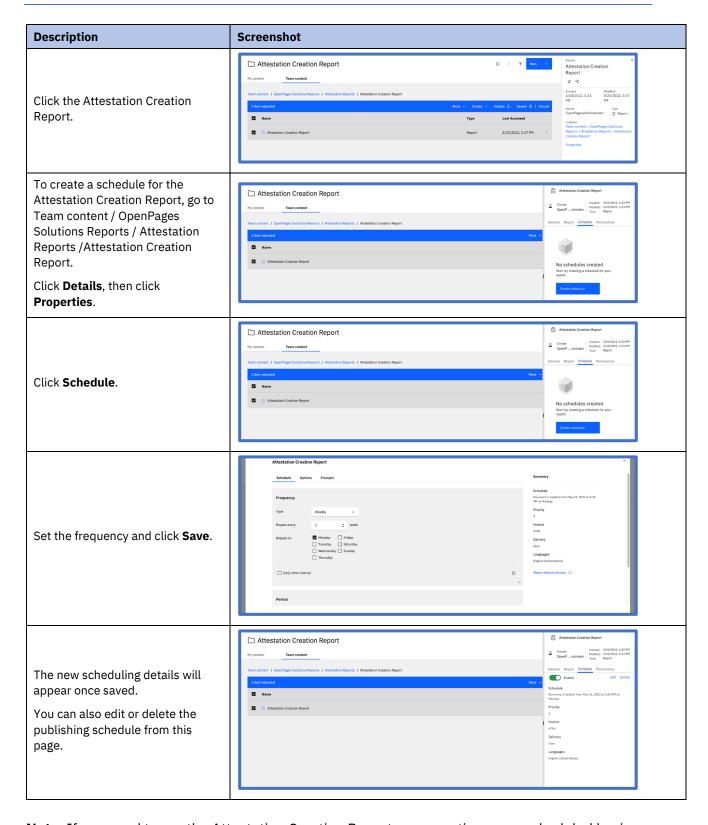
To create or run a Campaign, do the following steps:



Scheduling an Attestation Creation Report

To create a schedule for running the Attestation Creation Report, do the following steps:





Note: If you need to run the Attestation Creation Report on a one-time or unscheduled basis (e.g., debugging or testing needs), see <u>Appendix D: Troubleshooting Notes</u>.

Policy Awareness

The Policy Awareness View is an intuitive view that allows employees (high volume, low touch users) to easily read a Policy and its associated Procedures in a narrative format and then attest to having read and understood the policy.

The Viewer:

- Displays the Policy and its Procedures in a single read-only, narrative form
- Enables employees to attest to the Policy with a single click and no navigation
- Enables employees to request an exception to the Policy Attestation requirement

See the <u>Technical Inventory</u> section of this document for more details on the Policy Awareness Viewer.

To start the Policy Awareness process, do the following steps:

Employee Actions

Step	Stage and Description	Screenshots
1	An email will be generated by the Attestation Creation Report Helper and sent to each impacted Employee as part of the Campaign. This email alerts the employee that a policy is ready for review and that an Attestation is due. A link is provided in the email.	Systematics (BM Introd Systematics) (Confidence come of concentracy) (Information come of concentracy) (Information come of concentracy) (Information come of concentracy) Southern content (Confidence come of concentracy) Note that content content (Confidence come of concentracy) Southern content (Confidence come of confidence come of concentracy) Southern confidence content (Confidence come of confidence content content content (Confidence content
2	The Employee clicks the link in the email to view the Attestation object Task View.	Todays the Billion and Francisco Associations be collecting "I Agree" from the drop down more us the bottom of the padry Attentions Due for Connection
3	When the employee opens the Attestation Task View, the employee clicks the Policy Attestation Awareness Viewer to review the policy and respond to the attestation request.	Attestation Sharon_Attest_000021
4	The employee can also see the Attestation Task on their Dashboard.	Porce

Step	Stage and Description	Screenshots
5	The employee selects a response to the Attestation.	Total State of the Control of the Co
6	If the employee selects "N/A – Request Exception", the Employee Comments field is required and the exception will require a review to determine if a waiver is appropriate.	

Additional details for the Policy Awareness View include:

- Formatting of the read-only portion of the Awareness View is consistent with the View Policy described earlier in this document.
- Administrative settings control whether the Attestation record is automatically locked when a user attests to a policy by clicking 'Agree' and submitting the form.
- If the user selects 'N/A Request Exception', the user is required to enter Employee Comments before submitting the form.
- The Policy Awareness Viewer can be configured to behave as appropriate for the customer's methodology

See > System Configuration > Settings > Solutions > PCM > Policy Awareness View.

Retiring a Policy

The Publication Helper also retires a policy (and its associated objects – e.g., Procedures, PRC) by moving the published policy to the expired policy library, deleting the policy draft, and populating Policy field values with related retiring field values.

The field values of the Policy record to be retired must be set to the following:

- Policy Publishing Status = Ready to Retire,
- Approval Status = Approved

The Publishing Status and Publishing Details fields will be populated by the Publication Helper.

See the Workflows section for details about the out-of-the-box workflow for retiring a policy.

See the <u>Implementation Notes</u> for considerations when retiring a policy and its associated objects.

Technical Inventory

The PCM solution provides the user with several out-of-the-box features that support the user's role and the policy lifecycle including:

- Triggers and Helpers
- Viewers
- Views (e.g., Task Views)
- Dashboards
- Calculations
- Profiles
- Role Templates
- Workflows

Triggers and Helpers

This section details the Policy Triggers and Helpers that are available in the PCM Solution to aid the user with the Policy Lifecycle Process.

Name	Description	
Policy Import	The Policy Import Trigger imports Policy and Procedure content from a structured Microsoft Word document (.doc or .docx) into the Policy and Procedure fields in OpenPages by parsing the different sections of the document. The process is triggered by checking in an attachment to the Policy object.	
Policy Import Trigger The trigger is designed to support the Hybrid approach to Policy Manage but also supports updating version numbers in the Docucentric approach when a new policy document is checked in. As part of the import process trigger also performs extensive validation to ensure that the structure of Microsoft Word document adheres to the defined Policy.		Policy Authoring
	The Policy Import Trigger can be configured to behave as appropriate for the customer's methodology by using the Application Text settings.	
	See <u>Appendix B: Hybrid Template Configuration</u> for technical details.	
Policy Lock Trigger	I Paviaw and Annroval process. This trigger supports all three annroaches to	
	The Lock trigger supports two use cases:	
	 Locking Policy Attachments in support of a policy being put into a review and approval cycle to ensure that the policy content cannot be changed during approvals. (Applicable for Hybrid and Docucentric approaches.) 	Approval
	 Locking the entire Draft Policy hierarchy (Policy, Procedures, Attachments, and Policy Review Comments) after the Policy has been 	

Name	Description		
	given final approval and is ready for publishing. (Applicable for all three policy approaches.)		
	You can configure this component to behave as appropriate for your methodology by using registry and application text settings.		
	Note: You can choose to leverage the "read-only" feature in the task views or in the task view overrides for workflow stages in lieu of the Policy Lock Trigger. This approach provides greater flexibility to allow field editing for authorized users and object association. For the Policy Lock Helper registry settings, see: System Configuration > Settings > Solutions > PCM > Policy Lock Trigger.		
	The Policy Unlock helper is opened from the Policy object after the policy moves into the review and approval phase. The Policy Unlock helper unlocks the Policy object and its components (Procedures, Attachments, Policy Review Comments) for revision. The Policy Unlock helper supports the three policy approaches: Datacentric,		
	Docucentric, and Hybrid.		
	The Policy Unlock helper supports two use cases:		
	 Reopening a Policy object for changes within a review cycle: 		
	 Sets the Approval Status to In Revision. 		
	 Unlocks any locked objects or attachments that are needed during the revision process. 		
Policy Unlock	 Updates the version number. 	Review and	
Helper	Opening a Policy for a new revision cycle:	Approval	
	 Sets the Approval Status to In Revision. 		
	 Unlocks the Policy object and its components (such as Procedures, Attachments). 		
	 Resets and clears fields such as Publishing Date, Publishing Status, Next Review Date. 		
	 Updates the version number. 		
	o Deletes or clears Policy Review Comment objects.		
	 Sets a flag on the corresponding published policy to signify that the draft is In Revision. 		
	For the Policy Unlock Helper registry settings, see > System Configuration > Settings > Solutions > PCM > Policy Unlock Helper.		
Publishing	The Publishing Batch Notification helper facilitates the process of promoting an approved draft policy to the published library and moving the current published version to the expired library.	Policy Publication	
Batch Notification Helper	Retiring Policies - The Helper also retires a policy by moving the published policy to the published library and deleting the draft. You can use the Publishing Batch Notification Helper with the Datacentric, Docucentric, and Hybrid policy approaches.	Retire Policy	

Name	Description	
	To retire a policy, the <i>draft</i> version of the Policy must have the following field values:	
	 Policy Publishing Status = Ready to Retire 	
	Approval Status = Approved	
	The helper populates the following fields when the policy is retired:	
	Publishing Status = Retired Successfully	
	 Publishing Details = Retired Successfully w/Date and Time 	
	Retired Date = Date	
	Move the published policy to the Expire Policy Library	
	Delete draft copy of the policy	
	The Attestation Creation Report helper is a scheduled notification. It can also be run from the Reports panel on the Dashboard (under Attestation Reports).	
	This notification report supports the Policy Awareness capability. The report is intended to run on a scheduled basis. It completes the following tasks:	
Attestation	 Finds all Campaign objects with a status of Ready to Start associated to published policies. 	Policy
Creation Report Helper	 Finds all active employees that match the same attestation requirements criteria defined on the Campaign object. 	Campaign and Attestation
	 Creates an Attestation record for each matching employee for that policy campaign. 	,
	 Drives the Attestation record to the employee's home page by using the configured Dashboard. 	
	 Sends each employee an email notification and alerts them that an attestation is due. 	

Policy Viewers

A series of Policy Viewers facilitate the process of creating, editing, reviewing, and approving Policies and Procedures. The Policy Viewers aggregate multiple sections of a Policy and associated Procedures into a single narrative view for editing, reviewing and approving, and attestation while allowing organizations to maintain standardization on a Policy template.

Note: Ensure that users disable their browser's pop-up blocker.

Name / Object	Description	Screenshot
Modify Policy Policy Object	An editable view that allows a Policy Author and Owner to create and edit a Policy and its associated Procedures. This view is used only as part of the datacentric approach to Policy Management. The Modify Policy link is available to users based on certain field values (e.g., Status = 'Draft'). In addition, several of the fields on the Policy object are automatically updated at different stages in a policy lifecycle via the Policy helpers. Note: If you're using the datacentric approach, you can choose to leverage the data fields rather than the Create / Edit (Modify) policy viewer.	Policy outlining attendance expectations and requirements. See Note & Francisco Const C
View Policy Policy Object	A read-only view that allows users to see a Policy and its Procedures in a formatted, narrative view (Datacentric and Hybrid) or via a link to the Policy Attachment (Docucentric).	Policy settlining attendance expectations and requirements. Policy settlining attendance expectations and requirements.

Name / Object	Description	Screenshot
Review Policy Policy Review Comment Object	Launched from a Policy Review Comment object, Review Policy is a role-based view that facilitates the review and approval process. In addition to displaying the Policy and Procedures, or the Policy Attachment, it includes Policy Review Comments, allowing Reviewers and Approvers to submit feedback by either editing the Policy directly or by using the Comment form. Reviewers are presented with either an editable or read-only view and Approvers are presented with a read-only view of the Policy.	Personal Control Contr
Policy Awareness View Attestation Object	The Policy Awareness View helper is an intuitive view that allows employees (high volume, low touch users) to read a policy and its procedures in a narrative format. The employee attests to reading and understanding the policy. The Policy Awareness View helper completes the following tasks: Displays the Policy and its Procedure objects in a single read-only, narrative form with the look and feel of a corporate policy. Enables employees to attest to the policy with a single click and no navigation. Enables employees to request an exception to the policy attestation requirement.	Former Score Policy Service Score Policy Former Score Former Score Policy Former Score F
Policy Compare View	The Compare Policy View enables users to view red-lined differences from one version of a policy to another. For example, a user can visually see the differences between a current draft of a policy and the published policy, or past expired versions. The Compare Policy View is used with the Datacentric and Hybrid approaches. It is not supported for Docucentric policies. When launched from a draft policy, the viewer displays the differences between the current Draft policy and the current Published policy. When launched from a published or expired policy, all versions of the policy are available for comparison (current and past). The user can select two versions of the policy to compare at a time. Text is displayed according to the following rules: Newly added content - underlined red Deleted content - red strike-through	which changes of described with the process of a conception of all savings. As one couple of the forest is the control of the

Name / Object	Description	Screenshot
	 Moved from - green strikethrough 	
	 Move to - green underline 	
	You can configure this component to behave as appropriate for your methodology by using registry settings and application text settings.	
	For the Policy Compare Viewer application text settings, see System Configuration > Application Text > pcm.compare.	

Views

All PCM-specific object types have an admin view, a creation view, a grid view, and one or more task views.

The out-of-the box views leverage read-only data fields, field dependency rules, viewers, user guidance, and related object associations.

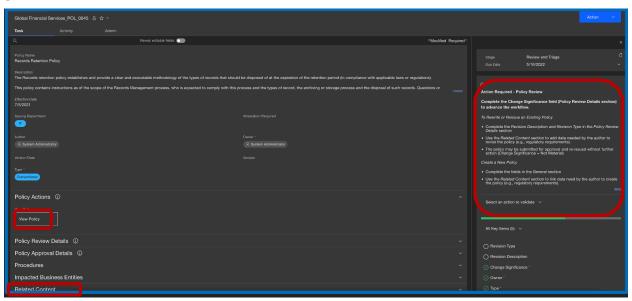


Figure 10: Policy Task View supporting the Policy Review and Approval Workflow

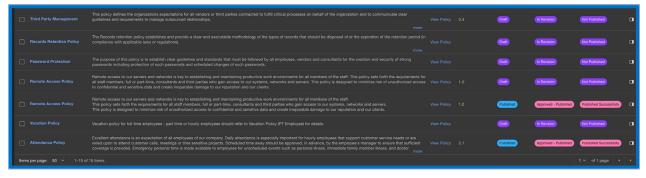


Figure 11: Policy Grid View

Profiles

The following user profiles are provided with the PCM solution:

- OpenPages PCM Master
- PCM End User

The OpenPages PCM Master profile includes the fields and configuration required for the Policy Management solution.

The OpenPages PCM End User profile has read-only access and is intended for employees who have limited access and need to view policies and procedures.

The profiles include:

- Filters
- Dashboards
- Dependent fields and dependent pick lists
- Creation, Grid, Task, and Admin Views

Dashboards

The PCM solution includes three dashboards:

- OpenPages PCM Master Dashboard
- OpenPages PCM Owner Dashboard
- OpenPages PCM End User Dashboard

PCM Master Dashboard

Provides a high-level overview of the various policy management activities in your organization.

- A policy manager or oversight role can use the dashboard to visualize relevant data such as the status of policies, track tasks, mark specific documents as favorites, and create a Gantt chart to aid in policy planning.
- Configurable to allow users to visualize data, prioritize tasks and role-specific planning activities.

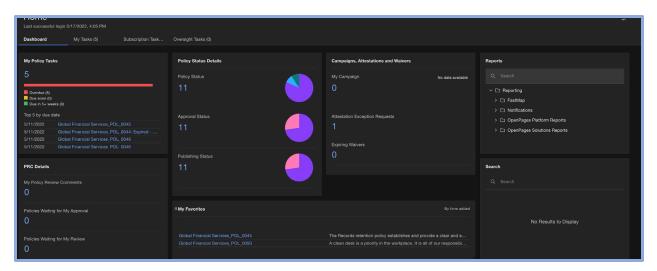


Figure 12: PCM Master Dashboard

PCM Owner Dashboard

Provides an overview of the policy tasks and relevant data points for the policy owner or policy manager.

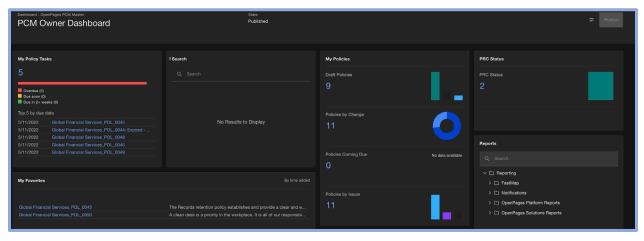


Figure 13: PCM Owner Dashboard

PCM End User

- Intended for light-touch users (e.g., employees) who need to view policies and procedures that are relevant to their roles.
- The user can search for applicable documents and identify favorites.
- Policy Attestations can be tracked and managed easily.

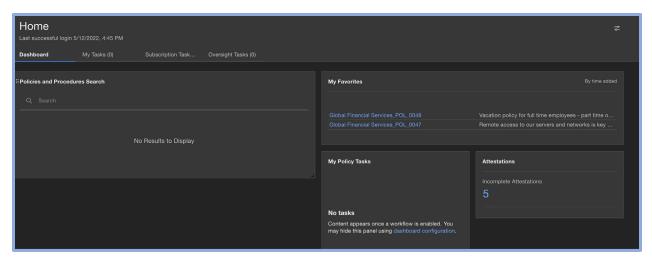


Figure 14: End User Dashboard

Calculations

Use the GRC Calculations feature to set values automatically on fields when an object is created, calculation input fields are updated, object associations are made, or to run a calculation when a workflow action starts.

The <u>Policy Review and Approval</u> workflow leverages a calculation to set fields on the related Policy Review Comment (PRC) when the object is generated by the workflow. This calculation sets PRC object fields and adds the Policy Name to the PRC description to provide context for the user.

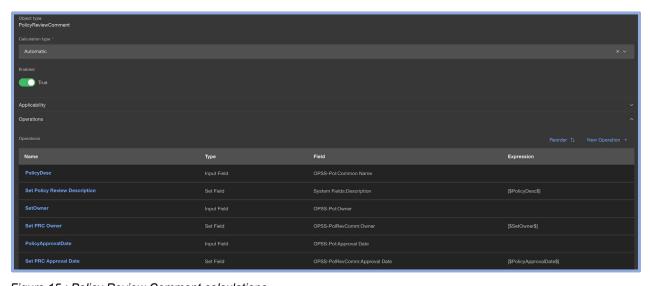


Figure 15 : Policy Review Comment calculations

Role Templates

The PCM solution includes three sample role templates by default. Note that the triggers, dashboards, views, and workflows are dependent upon key elements of the role templates.

Role Template	Description
PCM – All Permissions	Intended for use by PCM Business Users who perform administrative functions. It provides Read, Write, Delete and Associate access to all relevant PCM object types and grants all application permissions.
PCM – All Data – Limited Admin	Intended for use by PCM Business Users who administer PCM instance data but do not perform other administrative functions. It provides Read, Write, Delete and Associate access to all relevant PCM object types but most admin application permissions are not granted.
PCM – End User	Intended for use by End Users with limited access for first-line users. Admin application permissions are not granted. Read-only access is granted to PCM object types. Write access and Associate access are not granted to PCM object types.

See > Users and Security > Role Template for details about PCM role template including Role Access Controls.

Workflows

Workflows are designed to automate a series of repeatable activities into stages to complete a process or sequences of tasks, frequently involving multiple users or assignees. The workflows can be configured to perform task view overrides so that the object view for each user task is for the applicable role and activity.

Workflow features can be leveraged to replace some helper or trigger functionality - examples are listed in the following table:

PCM Trigger / Helper	Workflow Feature
	Create Read-only fields – enabled through:
Policy Lock Trigger	Task View Designer
	Workflow Views
Policy Unlock Helper	Use the workflow to set the policy status to "In Revision"
	Resets and clears fields such as Publishing Date, Publishing Status, Next Review Date

The following table outlines the key workflows that are available in the Policy Management solution. The Policy-focused workflows leverage workflow capabilities (rather than triggers and helpers).

Workflow	Description	Primary Object	
	This workflow is triggered when the Publishing Status = Ready to Retire.		
Retire Policy Workflow	The workflow takes the user through a review and approval process for retiring the policy. At each of these stages, a Policy Review Comment (PRC) object is generated to document the review and the executive approver.	Policy	
	The Publishing helper needs to be triggered at the end of the process to complete the retiring of the policy.		
Policy Review Workflow	This is a baseline workflow that takes the user through the policy review process and generates a Policy Review Comment (PRC) object as part of the review and approval process.	Policy	
	This workflow addresses three (3) use cases:		
Policy Review and Publication Workflow	Annual policy review, approval, and publication	Policy	
	Ad hoc policy review, approval, and publication		
	New policy creation, approval, and publication		
see Figure 16 below	Policy Review Comment (PRC) objects are generated for policy approvals (2 levels). Supports three approaches to policy loading.		
Issue Review Workflow	This workflow shared with all OpenPages solutions.	Issue	
Action Item Approval Workflow	This workflow shared with all OpenPages solutions.	Action Item	

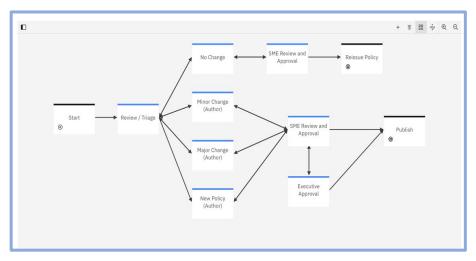


Figure 16: Policy Review and Approval Workflow

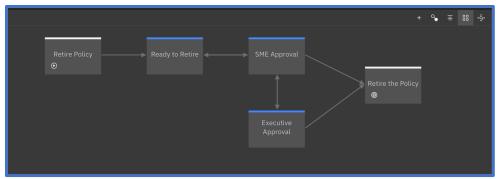


Figure 17: Retire Policy

Design Considerations

- Workflow features can be leveraged to replace triggers in many instances (e.g., readonly, set fields, lock objects).
- Workflow emails do not aggregate notifications; each notification is a separate email.
- Workflows are configured so that only the participants can take workflow actions.
- Users who are not participants will not see the Action button.
- Settings should be reviewed to comply with desired results (e.g., policy lock / unlock, PRC associations with published / expired policy documents, etc.).
- Locking objects in the workflow might impact the Policy Publication Helper.

The following is an example of the default settings for the Policy Review and Approval Workflow using the Conventional Approach – the settings can be adjusted to achieve the desired result for the Hybrid and Datacentric approach, or PRC behavior:

Policy Review and Approval Workflow			
Setting	Description	OOB Value	Workflow Value
/Solutions/PCM/Publishing Policy/Clear PRCs-Conventional	Conventional Approach: Defines if PRCs should be Deleted or Cleared when a Policy is Opened for a New Review Cycle. Setting options are DELETE, CLEAR, NONE	CLEAR	DELETE
/Solutions/PCM/Publishing Policy/Clear PRCs-Docucentric	Docucentric Approach: Defines if PRCs should be Deleted or Cleared when a Policy is Opened for a New Review Cycle. Setting options are DELETE, CLEAR, NONE	CLEAR	DELETE
/Solutions/PCM/Publishing Policy/Clear PRCs-Hybrid	Hybrid Approach: Defines if PRCs should be Deleted or Cleared when a Policy is Opened for a New Review Cycle. Setting options are DELETE, CLEAR, NONE	CLEAR	DELETE
/Solutions/PCM/Policy Lock Trigger/Conventional/Objects to be Locked Upon Approval	Conventional Approach: Bar separated list of objects in the Policy hierarchy that are locked once the Policy is Approved.	Policy Procedure PolicyReviewComment SOXDocument	
/Solutions/PCM/Policy Lock Trigger/Docucentric/Objects to be Locked Upon Approval	Docucentric Approach: Bar separated list of objects in the Policy hierarchy that are locked once the Policy is Approved.	Policy Procedure PolicyReviewComment SOXDocument	
/Solutions/PCM/Policy Lock Trigger/Hybrid/Objects to be Locked Upon Approval	Hybrid Approach: Bar separated list of objects in the Policy hierarchy that are locked once the Policy is Approved.	Policy Procedure PolicyReviewComment SOXDocument	
/Solutions/PCM/Policy Unlock Helper/Conventional/Clear PRCs	Conventional Approach: Defines if PRCs should be Deleted or Cleared when a Policy is Opened for a New Review Cycle. Setting options are DELETE, CLEAR, NONE	CLEAR	DELETE
/Solutions/PCM/Policy Unlock Helper/Docucentric/Clear PRCs	Docucentric Approach: Defines if PRCs should be Deleted or Cleared when a Policy is Opened for a New Review Cycle. Setting options are DELETE, CLEAR, NONE	CLEAR	DELETE
/Solutions/PCM/Policy Unlock Helper/Hybrid/Clear PRCs	Hybrid Approach: Defines if PRCs should be Deleted or Cleared when a Policy is Opened for a New Review Cycle. Setting options are DELETE, CLEAR, NONE	CLEAR	DELETE

For PCM workflows, see **2** > **Solution Configuration** > **Workflows**.

Reports

This section describes the reports that are available for Policy Management. Additional reports are installed with the OpenPages Platform and are available to all solutions.

See Appendix C: Reports Shared with Other Solutions for more details.

Report Name	Report Description
Process Control Effectiveness by Mandate	For a selected Business Entity, the report shows associated Mandates with the % of Effective Controls associated to Processes. The report provides the ability to drill-through to a sub-report for detail information.
Regulatory Applicability Matrix	This report displays a Matrix View of the Mandates and the Business Entities for which they apply.

Appendix A – Object Details

Note: Only enabled relationships are listed in this section. Other objects are available and are currently disabled.

Refer to the OpenPages Solution Guide for a complete list of object types and descriptions.

Object Type Label	Description
Attestation	The Attestation object is part of the Policy Awareness capability and is used to capture an employee's affirmation that they have read and understood a policy. An attestation's primary parent is the Employee record; the secondary parent is the associated Campaign.
Business Entity	Business entities are abstract representations of your business structure. A business entity can contain sub-entities (such as departments, business units, or geographic locations). The entity structure that you create depends on your business needs. For example, you could create a parent entity for your business headquarters then a sub-entity for each location or department. You might also want to represent both a legal entity structure and a business entity structure.
	Business entities are also used to organize library data such as risk and control libraries, or regulatory content (for example, laws, regulations, and standards).
	When setting up your business entity hierarchy, you should work with your OpenPages consultant because the structure of your business entities will greatly impact the type and quality of the information that can be extracted from the application.
Campaign	The Campaign object is part of the Policy Awareness capability and is used to manage the project management aspects of an awareness campaign. It is also used to define the requirements/criteria that identifies which employees need to read and attest to each Policy. This is done through a series of fields. Campaigns are typically created in the Published Policy Hierarchy.
Control	Controls are policies and procedures that make sure that risk mitigation responses are performed. After you identify the risks that occur in your practices, establish controls, such as approvals, authorizations, and verifications. These controls remove, limit, or transfer these risks. Controls provide either prevention or detection of risks. Controls are associated with tests that ensure that a control is effective.
Employee	The Employee object is part of the Policy Awareness Capability. It is used to capture information about individual employees such as the name, title, email, region, department, status, etc. Information from the employee profile is then matched against the Attestation Requirements defined on a Campaign to determine which employees need to attest to each Policy. Employee data is typically derived from an HR system export, loaded via FastMap, and resides in the reference Employee Business Entity. It is a best practice that the Employee Name field match the user's username.
File	The File object type is used to embed a reference to a file (such as a document, flow chart, or spreadsheet) in the OpenPages system and associate it to one or more relevant objects.
Issue, Action Item	Although issues are generated in areas where internal controls are not properly implemented, use the Issue object to document a concern that is associated with any object type. For example, a Test is associated with a Control, but the Test failed the last time that it completed. This potential problem can be highlighted by capturing it in an Issue object.
	An Issue is resolved through Action Items. You can use an Action Item or a series of related Action Items to form an Action Plan. Each Action Item is assigned to a user for resolution, and tracks progress. After all Action Items for an Issue are complete (when an assignee sets the value to 100%), close the Issue.
	In OpenPages Internal Audit Management, Issues and Action Items can be used instead of, or with, Findings.

Object Type Label	Description		
KPI, KPI Value	KPIs (Key Performance Indicators) are components of the risk monitoring process and are used to provide leading or lagging indicators for potential risk conditions. Each instance of a KPI within the organization can have unique target and threshold limits.		
	The KPI Value object type records the value of a KPI object at a specific point. Create a KPI object, and then periodically (daily, weekly, monthly) create a KPI Value object so you can detect trends.		
Incident	An incident is an occurrence that has a potentially adverse effect on your enterprise. Create an Incident object to record information such as the person responsible for investigating the incident and other related data.		
	The Incident object is used with lifecycles to facilitate incident analysis. Categories that apply to incidents include Regulatory Compliance, Legal Compliance, Information Security, and IT. Incidents are stored under the Business Entity or IT Resource where the event occurred and associated secondarily to an impacted Mandate or Policy.		
Link	The Link object type is used to embed a reference to a URL in the OpenPages system and associate the link to one or more relevant objects.		
Mandate	Mandates represent external items with which organizations need to comply, such as laws, regulations, and standards. Content can be pulled from third-party providers, such as UCF, Ascent Reg Tech, or Wolters Kluwer.		
	Mandates are represented in a Library Business Entity structure and are not replicated throughout the system. For example, an insurance company might have a Mandate object for HIPAA and another Mandate object for GLBA. You can associate the same mandate with different groups within your organization. Privacy mandates, for example, might apply to payroll, insurance services, legal, and IT departments. The Mandate object also supports content for regulatory compliance.		
Obligation	The Obligation object type represents the normalized and/or harmonized "things you need to accomplish" to comply with the associated Mandate, Sub-Mandate, and Requirement objects.		
	The Obligation object accomplishes two primary purposes: it translates the often difficult and wordy legal jargon of Mandates/Sub-Mandates/Requirement into plain English and uses the commonality across multiple Mandates/Sub-Mandates/Requirements. For example, you might have many Sub-Mandates and Requirements across numerous Mandates that require the use of strong passwords. A single Obligation object can document the details for strong passwords. By complying with this single Obligation, IT can satisfy many Mandates, Sub-Mandates, and Requirements.		
Policy	Policies represent internal guidelines generally adopted by the Board of Directors or a senior governance body within an organization.		
	The text of a Policy can either be stored in standardized fields on the object or as an attachment to the object. Policies typically have a distinct lifecycle from Draft to Published to Expired, as well as a review and approval process. Draft policies typically reside in the Organizational Business Hierarchy, while Published and Expired Policies typically reside in reference Library entities. Policies are also often mapped to applicable Mandates in the Library to which they relate.		
Policy Review Comment	Policy Review Comments support and facilitate the review and approval process of Policies and Procedures by subject matter experts and compliance personnel.		
Procedure	Procedures represent the 'what', 'where', 'when', and 'how' of how policies are implemented in an organization. The text of Procedures is typically stored in the fields on the object. Typically, Procedures are represented as children of a Policy and reside in the same entity structure as their parent Policy.		

Object Type Label	Description		
Process	Processes represent the major end-to-end business activities within a business entity that are subject to risk. The processes typically reside in areas such as financial reporting, compliance, information security, and so forth.		
Regulation Applicability	The Regulation Applicability object is the child of Business Entity and a parent of Mandate. It typically resides in the Organizational Business Hierarchy and is used to assess and track the Regulatory Impact of a Mandate in the Library on a Business Entity.		
Regulator	The Regulator object is part of the Regulator Interaction Management capability and provides the ability for organizations to create a single inventory of all Regulators with which they interact. Regulators are typically created in a reference Library Business Entity. The object is a child of Business Entity and can be associated to Mandates and Regulator Interactions.		
Regulatory Change	The Regulatory Change object is part of the Regulatory Change Management capability. It supports the ability to track regulatory changes, assess the impact of a change on the organization, communicate the change internally to the appropriate people, and drive internal processes in response to the change.		
	Regulatory Changes typically reside in the Library Business Entity, and can be associated directly to the Mandate, Sub-Mandate, or Requirement that changed. The triaging of the Regulatory Change is performed through the assignment of child Regulatory Task objects. For organizations that receive a Thomson Reuters or Wolters Kluwer feed of Regulatory Events, users can create multiple Regulatory Change objects and initiate workflows from the ingestion of a Regulatory Event based on rules that are created within the Rules Engine.		
Regulator Interaction	The Regulator Interaction object is part of the Regulator Interaction Management capability. The Regulator Interaction object provides the ability to manage the interactions, communication, internal work, review, and approvals that are associated with external regulators such as inquiries, submissions, filings, exams, and meetings.		
	For complex interactions such as exams, you can use the RI Component and RI Sub-Component objects to break the interaction into smaller components or track follow-up inquiries from the regulator.		
	Regulator Interaction can be mapped to the following parent objects: Regulator, Mandate, Sub-Mandate, Requirement, Policy, Procedure, and Control. These parent associations enable a user to link objects that might be at issue in the Regulator Interaction and to identify users who are relevant to those objects and who might need to be consulted when responding to the regulator. Individual tasks that are related to the management of and response to the regulator interaction can be assigned to users through Regulatory Task child objects.		
Regulatory Task	The Regulatory Task object is used to assign tasks to OpenPages users when the task is related to one of the following parent objects: Project, Policy, Regulatory Change, Regulator Interaction, RI Component, or RI Sub-Component. A Regulatory Task can also be associated to a Business Entity.		
Requirement	The Requirement object details specific requirements, found in the related Mandate or Sub-Mandate object, that the organization needs to adhere to in order to be in compliance.		
	Content can be pulled from UCF, Ascent Reg Tech, or other third-party providers. Typically, Requirements are represented in a Library Business Entity structure and are not replicated throughout the system. For Ascent Reg Tech, a Requirement is created for each incoming Task.		
RI Component	The RI Component object (formerly labeled RI Category) is part of the Regulator Interaction Management capability and is used as the middle tier of the three-tier object model (Regulator Interaction, RI Component, and RI Sub-Component). The object is used to break down a complex Regulator Interaction into smaller, more manageable records or to link a follow-up inquiry from a regulator to the parent Regulator Interaction object.		

Object Type Label	Description		
	Additionally, RI Component can be mapped to the following parent objects: Mandate, Sub-Mandate, Requirement, Policy, Procedure, and Control. These associations enable a user to link objects that might be at issue and to identify users relevant to those objects and who might need to be consulted when responding to the regulator. Individual tasks related to the management of and response to the regulator interaction can be assigned to users through Regulatory Task child object.		
RI Sub- Component	The RI Sub-Component object (formerly labeled RI Request) is part of the Regulator Interaction Management capability and is used as the last tier of the three-tier object model (Regulator Interaction, RI Component, and RI Sub-Component). The object is used to break down a Regulator Interaction and RI Component into smaller, more manageable records. Additionally, RI Sub-Component can be mapped to the following parent objects: Mandate, Sub-Mandate, Requirement, Policy, Procedure, and Control. These associations enable a user to link objects that might be at issue and to identify users relevant to those objects and who might need to be consulted when responding to the regulator. Individual tasks related to the management of and response to the regulator interaction can be assigned to users through Regulatory Task child objects.		
Risk	Risks are potential liabilities. Risks can be associated with business processes, business entities, or a compliance with a mandate. Each risk has controls that provide safeguards against the risk. The controls help lessen consequences that result from the risk. Use the Risk object to categorize risks; capture the frequency, rating, and severity of observed and computed risk data; and view reports to identify top risk items.		
Risk Assessment	Risk assessments provide the ability to evaluate and report potential liabilities for a set of business entities or processes. A Risk Assessment object contains the names of the assessor and reviewer, the assessment time frames, and the status of the assessment. Use a Risk Assessment to manage the risk self-assessment process. Associate Risk objects with a Risk Assessment to create a link between the business entity and the Risks.		
Signature	A Signature generally indicates agreement that the object meets your approval. It has no enforcement powers and does not prevent the item from being modified after approval has been given.		
	Signatures (with or without associated locks) are applied to an object from the task view or admin view of an object.		
	If Signature locks are configured on your system, when you sign off on an object, the object and all its associated child objects are locked and cannot be modified until you either revoke your Signature or an administrator unlocks the object.		
Sub-Mandate	Sub-Mandates represent external (or internal) sub-items with which the organization needs to comply. Content can be pulled from third-party providers, including UCF, Ascent Reg Tech, Thomson Reuters, and Wolters Kluwer. Typically, Sub-Mandates are represented in a Library Business Entity structure and are not replicated throughout the system. Sub-Mandate is recursive, but Deloitte, UCF, Ascent Reg Tech, Thomson Reuters, and Wolters Kluwer content use exactly one level of Sub-Mandate. Sub-Mandates also support content for regulatory compliance. Sub-Mandates can be used to represent paragraphs that are derived from regulatory papers.		
Sub-Process	A sub-process is a component of a Process. It is used to decompose processes into smaller granularity units for assessment purposes.		
Test Plan	A Test Plan is a container for tests and can be associated with parent Control objects and child objects, such as Test Results and Issues. Determine the operating effectiveness of a Control by conducting detailed tests and then documenting the results. Test Plans describe the mechanisms that determine if a Control is effective.		
Test Result	A test result is the information obtained from running a test plan.		

Object Type Label	Description
Waiver	Waivers give you the ability to document, process, and manage the lifecycle of exceptions to Corporate Policies, InfoSec Policies, IT Policies, or Regulatory Compliance Requirements. Waivers can be associated to Business Entities, Policies, Procedures, Requirements, Risks, Controls, Baselines, and Resources.

Appendix B – Hybrid Template Configuration

Prerequisites: To use these instructions, you must have OpenPages 9.0 or later and you must have the out-of-the-box OpenPages Policy Management solution.

Additionally, the following information is required:

- Password for the super administrator (OpenPagesAdministrator).
- Standard PCM policy template (Microsoft Word document). An example of the Hybrid Template is available in Appendix B1. You can paste the template into a new Microsoft Word .docx file.

Note: The screenshots and instructions for Microsoft Word are based on Microsoft Word 365. For other versions of Microsoft Word, the steps might be different.

An example of the Hybrid Template is available in Appendix B1.

Configuration Instructions

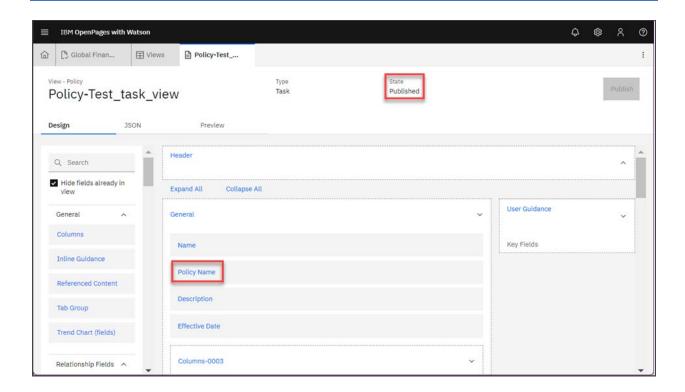
To configure the standard PCM Import Trigger to import field values to the Policy object via the Policy template, perform the following steps.

Note: The steps in this section use the Policy Name field for the import. If you want to follow along with the example, do the following set-up:

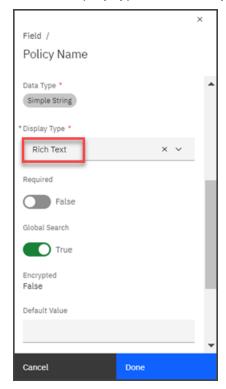
1. Verify that Policy Name is in the default task view for the Policy object type. (Go to **Solution Configuration > Views**. Filter on Policy to locate the default task view. You might need to click **Include system views** to find it)

If Policy Name is not in the task view, do the following steps:

- o Create a task view based on the default task view for the Policy object.
- Set the view as the default task view for Policy objects.
- Add Policy Name to the General section.
- Publish the view.



2. Set the display type of the Policy Name field to **Rich Text**.



Step 1: Determine the field on the Policy object that you want to populate

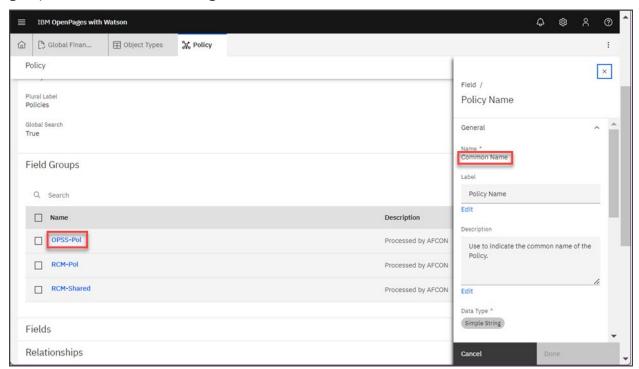
Determine the field on the Policy object that you want to populate by using the Policy template (or create a custom field).

Note: Possible field types for import include Simple String (which must be displayed as Rich Text) or Long String. Other field types are not supported.

Construct a string in the following format (use the field name, not the field label):

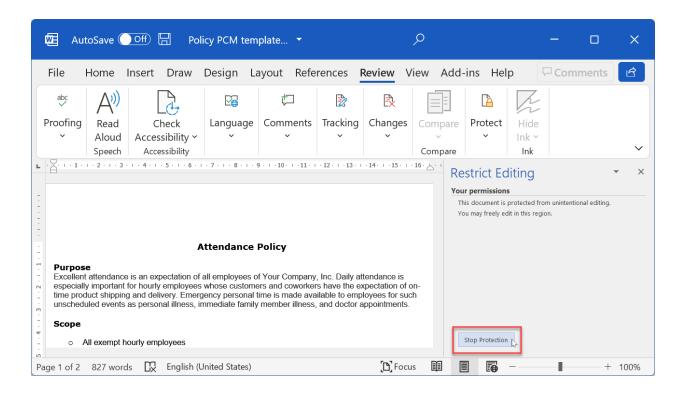
[field group name].[field name]

For example, for the Policy Name field, which is part of the OPSS-Pol field group, the [field group name]. [field name] string is OPSS-Pol: Common Name.

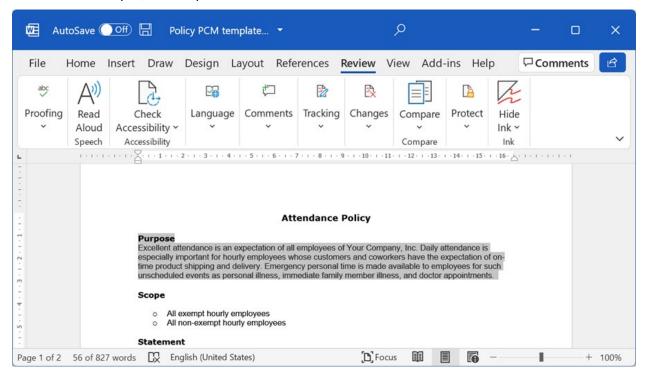


Step 2: Update the Policy import template

- Open the policy import template. If it's protected, enter the password openpages.
 Next, unprotect the document. (Click Review > Protect > Restrict Editing, then click Stop Protecting.)
- 2. If it's enabled, turn off Track Changes.



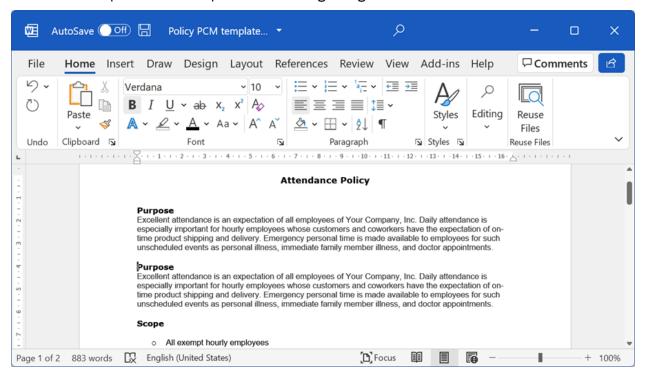
- 3. Add a new section.
 - a. Select an existing section (including the heading and body). In the following example, the Purpose section is selected:



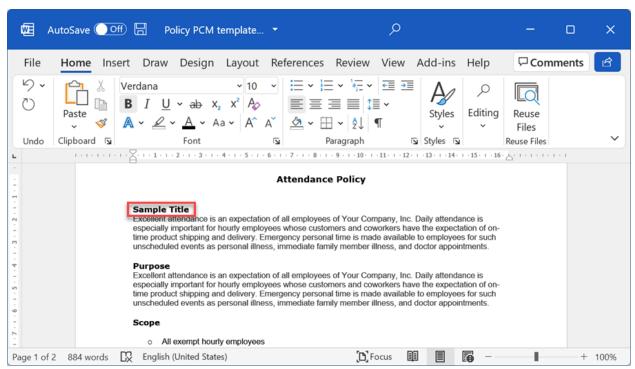
b. Copy the section, put the cursor where you want to insert the new section, then paste it.

In the following example, we want the new section to be the first section of the document. Put the cursor before the P in Purpose, and then paste.

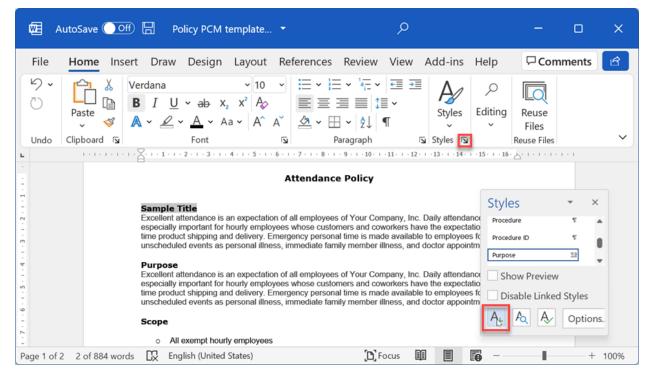
The Purpose section is pasted at the beginning of the document:



4. Change the section heading that you pasted to give the new section a name, for example, Sample Title.



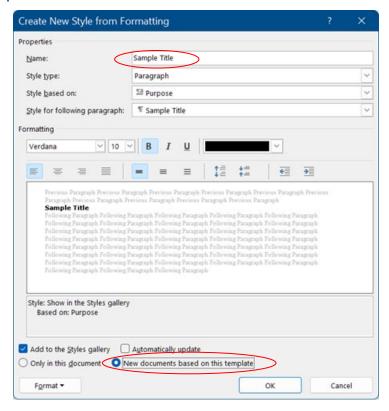
5. Highlight the new section heading. In the Styles group, click $\boxed{4}$, and then click $\boxed{A_+}$.



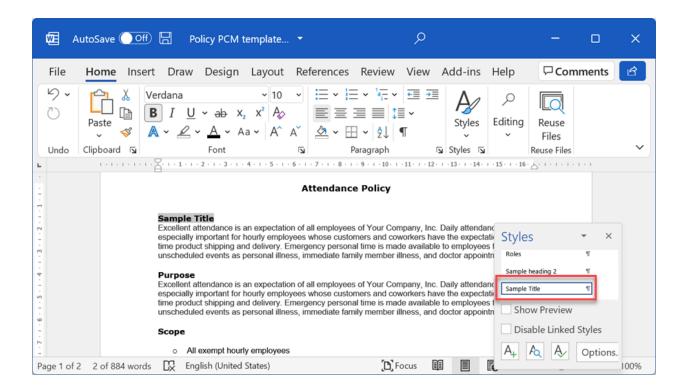
6. In the **Name** box, type the section heading. Select **New documents based on this template**.

Note: The section heading and the name of the style need to match.

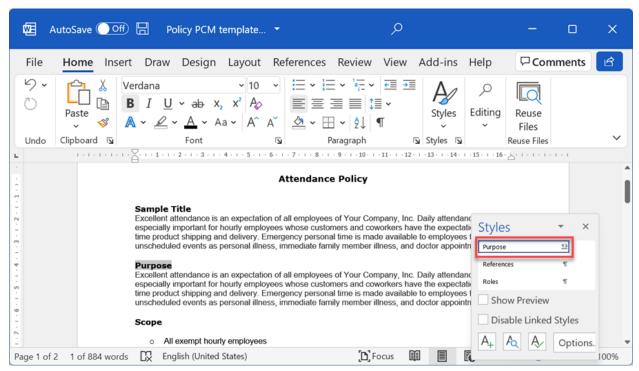
In this example, the new section heading is Sample Title, so the name for the new style is also Sample Title.



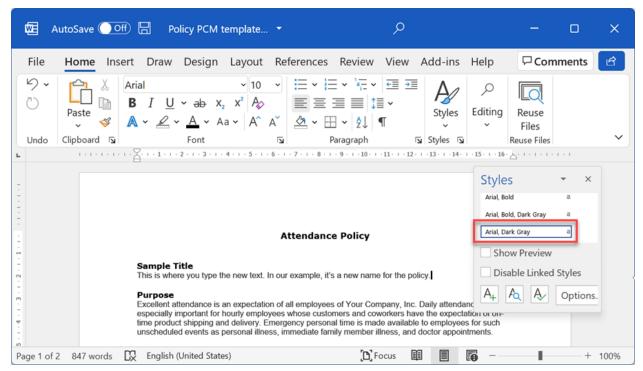
7. Highlight the new section heading again. Verify that the new style is applied to the heading. In this example, the new section heading, Sample Title, has the new style, Sample Title applied.



When you click an older section heading, you should see the corresponding style name indicated. For example, when you click the Purpose heading, the style should be Purpose:



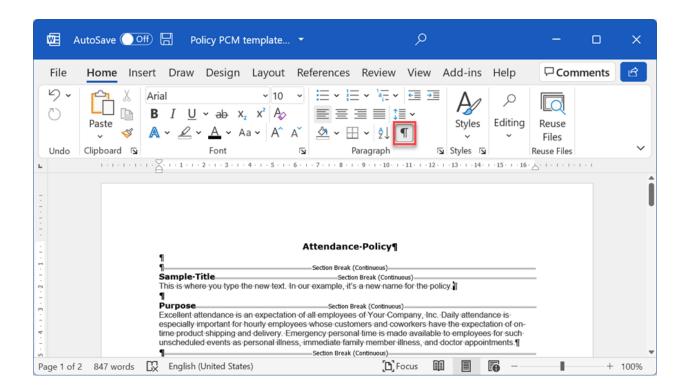
8. Update the text under the new section. When you click the text under the new section heading, it should indicate a font format, not a section heading style name:



Note: The centered heading at the top of the document ("Attendance Policy" in the screenshots) is not imported. You can delete it or move it to the text under a new section.

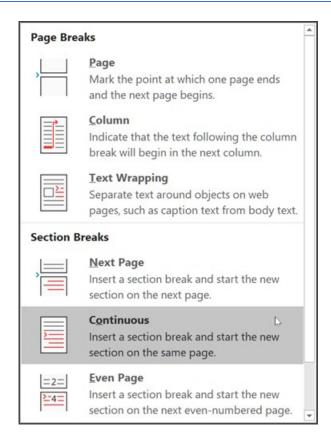
9. Check the section breaks in the document.

When you copied the section in step 3, it included the section breaks. Click \P to see the section breaks:

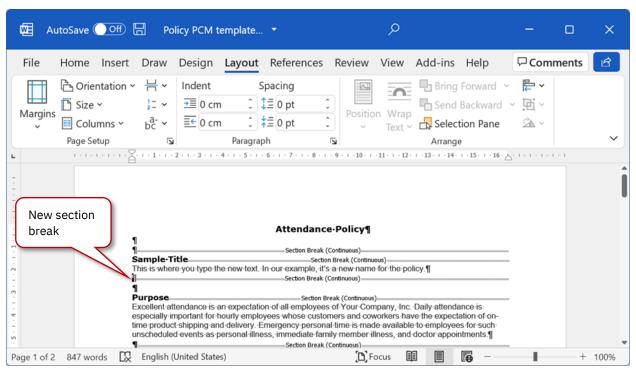


Each section must have a section break before and after it. If necessary, insert another section break after your new section (the text you added), to separate it from the next section heading in the document.

In our example, we're missing a section break between the text we added and the Purpose section heading. Put the cursor after the sample text and press Enter. Then, click \dashv in the **Layout** group and select **Section break > Continuous**:



Notice that a new section break separates the sample text from the next section, Purpose:

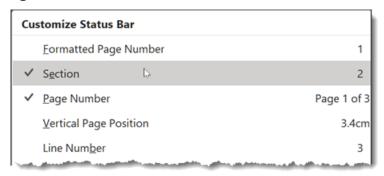


Next, we need to protect the content in the document. When content is protected, it's read-only.

10. Click to Review > Protect > Restrict Editing.

We need to make sure only the sections containing the section headings are selected for protection. The sections containing the text should not be protected.

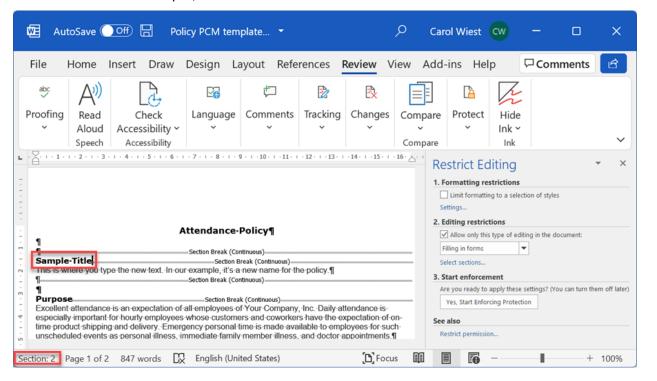
To find out which sections need to be protected, we need to know the section numbers. Right-click the status bar. Click **Section** to select it.

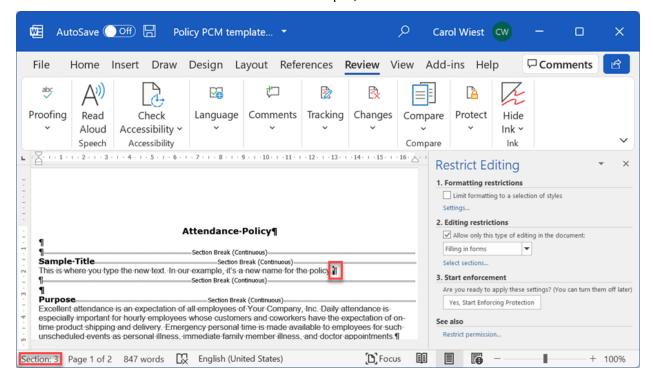


The status bar now shows which section the cursor is in.



Click the section heading that you added and check the section number in the status bar. In this example, it's Section 2:





Click the new section's text. In this example, it's Section 3:

So, we need to make sure Section 2 is protected, and Section 3 is not protected.

Under **Editing restrictions** click **Select sections**. Make sure Section 2 is selected and Section 3 is unselected. The protection settings for the existing sections should still be in place, but you can double-check them.



When you have ensured that the correct sections are protected, click **Yes, Start Enforcing Protection**. Type the openpages password that you used to unprotect the document earlier. Or choose a new password. Click **OK**.



- 11. Save your changes.
- 12. Verify that you cannot edit the new section heading and that you can edit the text under the heading.

Step 3: Update the Policy Import settings

- 1. Go to 2 > System Configuration > Settings > Solutions > PCM > Policy Import.
- 2. Click the Policy Section Mappings setting.



Edit the value to include your new section and the field that it maps to (the string constructed in Step 1).

- Separate the section name and field reference with a pipe character | (no spaces) and add it to the existing value.
- The syntax is <section_name>|<field_group>.<field>,
- The order must match the order of the sections in the template.
- The entries in the Value box are comma-separated, with no spaces before or after the trailing and leading commas.

For our example, we need to add the new mapping and a trailing comma (Sample Title|OPSS-Pol.Common Name,) to the beginning of the existing setting value, matching the order in the updated template.

Sample Title|OPSS-Pol.Common Name,Purpose|OPSS-Pol.Purpose LT,Scope|OPSS-Pol.Scope LT,Statement|OPSS-Pol.Statement LT,Roles|OPSS-Pol.Roles LT,Definitions|OPSS-Pol.Definitions LT,References|OPSS-Pol.References LT

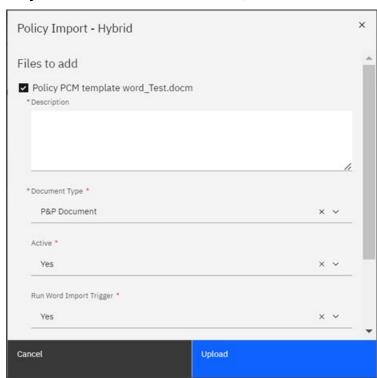
Step 4: Import the new template

1. Create a new Hybrid policy.

Or go to an existing) policy object that is in Draft status and In Revision approval status. (These criteria are based on the standard PCM configuration. You can change the criteria by using the following registry setting: **Solutions > PCM > Policy Import > Hybrid > Parent Field Criteria**).

- 2. Go to the Task View of the policy object. Go to the Policy Import Hybrid section and click **New/Update**.
- 3. Select the template, then click **Open**.
- 4. Set the following options:
 - Set Document Type to **P&P Document**.
 - Set Word Import Trigger to Yes.

(Again, these criteria are based on the standard PCM configuration. You can change the criteria by using the following registry setting: **Solutions> PCM > Policy Import > Hybrid > Document Field Criteria**).

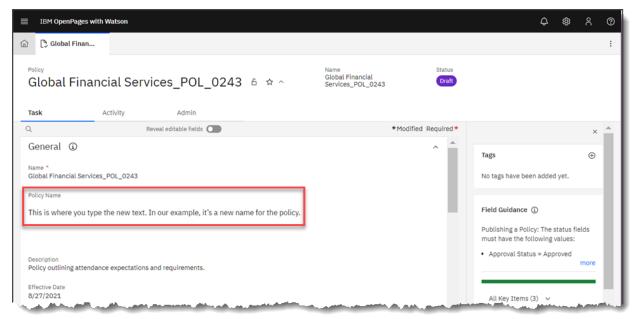


5. Click Upload.

Wait for the import to complete.

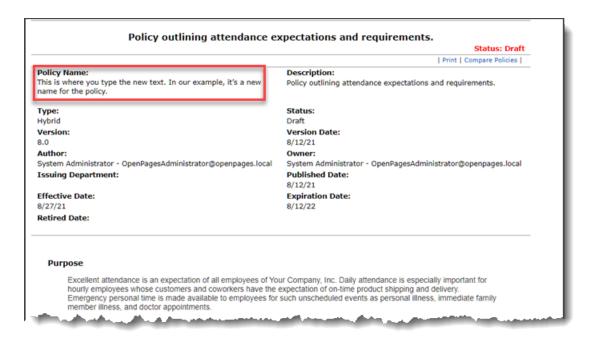


Refresh the page to see the changes. In this example, the Policy Name field displays the text that you typed in the Sample Title section of the template. Recall that you mapped the Sample Title section to <code>OPSS-Pol.Common Name</code>.



6. Click View Policy to confirm your changes.

In this example, the Policy Name now shows the text that you added to the template.



If you followed the example, set the display type of the Policy Name field back to **Text** when you are done testing. The Policy Name field needs to be a Text field for the Policy Compare viewer to work correctly. The example used the Policy Name field so that you didn't need to create a new field to try out the Policy Import template.

Word Import Known Issues

(As of 8.3.0.2)

The PCM Policy Import Trigger has the following known issues:

- Bulleted lists support only the disc and circle bullet formats.
- Numbered lists support only decimal (0-9), upper-alpha (A-Z), lower-alpha (a-z), upper-roman (I, II, III etc.), and lower-roman (i, ii, iii, etc.).
- Symbol fonts are not supported. Workaround: Use **Insert > Symbol** and select a symbol.
- Ordered lists always use a period as the separator. For example, if a list item in the Word document looks like 1), then it will be 1. after the import.
- Images, SmartArt, and diagrams are not supported.
- Tables of Content are not supported.
- All underline styles show as a single solid line.
- Tabs default to four spaces, which is not guaranteed to match the spacing in the document since tabs are based on positioning in the document. For better results, use Increase Indent and Decrease Indent when aligning content.
- Hanging indents (i.e., First Line Indents) for lists are not guaranteed to line up perfectly due to the varying widths of the list item markers.
- Within lists, mixing techniques for creating bullets, lists, and indentations will often result in items not being aligned correctly and incorrect numbering of items.
- Entering several hard returns to create spacing does not render as extra spacing.
- Unsupported features:
 - Changes in Text Direction
 - Double Strikethrough
 - Emboss, Engrave, Shadow text
 - Text Effects
 - Emphasis Marks
 - Custom Text Spacing
 - Shadowed borders
 - Ascending diagonal cell borders

Additional issues that apply to .doc files only:

• Cannot set Shading by using Format Borders and Shading. Workaround: Use text highlighting to achieve a similar affect.

- The value of a FORMDROPDOWN is not displayed.
- The style of the list item marker is inferred from the text content of the list. The marker's font family and font size will match the first piece of text in the list item. The marker will be bold, italic, and/or colored if all the text in the list item has that same styling.
- Superscripts and subscripts that are defined by a style are not supported. Workaround:
 Apply subscripts and superscripts by using the Subscript and Superscript options in the
 Font group instead.
- Formatting overrides that conflict with custom styles are not displayed. For example, if a custom style includes a 'Strong' text format and the user manually un-bolds the text within the document, the text shows in bold because 'Strong' is set by the style.

Appendix B1 – Hybrid Template Example

Attendance Policy

Purpose

New opening sentence entered here. Additional Information Entered

Excellent attendance is an expectation of all employees of Your Company, Inc. Daily attendance is especially important for hourly employees whose customers and coworkers have the expectation of on-time product shipping and delivery. More new sentences. Emergency personal time is made available to employees for such unscheduled events as personal illness, immediate family member illness, and doctor appointments

Add more words and sentences.

Scope

- o All non-exempt hourly employees
- o New bullet added
- o Another additional bullet added here
- Updated bullets
- Any employee who has a badge

Statement

Basic Policy:

Excellent attendance is an expectation of all employees of Your Company, Inc. Emergency person time is made available to employees for such unscheduled events as personal illness, immediate family member illness, and discontinuous appointments. Enter text here. Daily attendance is especially important for hourly employees whose customs and coworkers to be the expectation of on-time product shipping and delivery.

Emergency Personal Time:

Employees accrue 2.15 hours of emergency person lime in ay pinit. O can amual basis, this equates to the equivalent of 56 hours. If an employee leaves employment at the right of mpan in the accrual balance, hours used, yet not accrued, will be subtracted from an employee's final cayon ck. En avees lay to emergency personal time up to 56 hours. Emergency personal time that is accrued at the time an employ en aves York Company will not be paid out.

The number of minutes and / or hours imployee misses or is tardy for work, from lunch, or from breaks, will be subtracted from personal time accrued. A tardy occurs when an employee is not at his or her work station, working, on time as scheduled.

Employees who are using emergency personal time must call and talk with their supervisor as soon as possible, but no later than sixty minutes after the start of their shift. If the supervisor is unavailable, employees may leave a message for the supervisor with a phone number where they can be reached. The supervisor will then return their call. Failure to call in on consecutive days is considered to be a voluntary resignation from employment at Your Company.

When an employee misses a punch, the employee should see his or her supervisor immediately. His or her time worked will be dealt with as if the employee has just arrived at work from the moment they report to the supervisor. Time missed will also count as a tardy. Whenever possible, and as long as the time missed does not affect fellow employees or customers adversely, hourly employees may schedule time off in advance for such needs as to attend a doctor's appointment, classes, household repair appointments, parent-teacher meetings, and religious events and services.

When possible, within the normal plant schedule, the employee may make up the time missed during the week in which the time was missed. Employees must have the permission of their supervisor to make up time. Otherwise, vacation time must be scheduled in advance to cover these events.

Consequences of Overuse of Emergency Personal Time:

The accumulation of twelve tardies in a "rolling" year (any consecutive twelve months) is grounds for <u>employment termination</u>. Disciplinary action, that may lead up to and include employment termination, may start when the sixth tardy in a three month time period is recorded.

Disciplinary action, up to and including employment termination, will commence, for the overuse of emergency personal time, when 56 hours of absences have been accumulated. The disciplinary action will consist of a written warning for the next eight hours missed, then

a three-day suspension without pay for the next eight hours missed, followed by employment termination when an employee has used up any hours over 72.

Roles

N/A

Definitions

FMLA - Family and Medical Leave Act

Additional Definitions

References

Family and Medical Leave Act (FMLA)

If you or an immediate family member has a recurring medical condition that results in frequent absences, you may qualify for unpaid leave under the FMLA. Be advised that FMLA time off must be arranged for in advance and does not necessarily relieve an employee from their responsibilities as set forth in this policy

Procedure One Name Procedure 001

Sed est tortor, lobortis pharetra eleifend ut, faucibus et risus. Phasellus la macam, failisis ec verica, ac, eleifend vel sem. In a ornare enim. Suspendisse ullamcorper mattis iaculis. Sed congue est ada, ling a for param correctur. Proin sit amet sem tellus. Duis pretium dictum elit sed dignissim. Mauris vitae eleifend libero. Tus na parametra eleifend libero. Vivamus pulvinar neque quis sem varius quis tincidunt ipsum condimentum. Nulla non erat in justo blan. Evulpate

Procedure Two Name Procedure 002

Sed est tortor, lobortis pharetra el and ut, faucibus et risus. Phasellus lorem diam, facilisis nec vehicula ac, eleifend vel sem. In a ornare enim. Suspendisse ullamcorper mattis iaculis. Sed congue est adipiscing tortor pretium consectetur. Proin sit amet sem tellus. Duis pretium dictum elit sed dignissim. Mauris vitae eleifend libero. Phasellus non pellentesque nisi. Vivamus pulvinar neque quis sem varius quis tincidunt ipsum condimentum. Nulla non erat in justo blandit vulputate.

Procedure Three Name Procedure 003

Sed est tortor, lobortis pharetra eleifend ut, faucibus et risus. Phasellus lorem diam, facilisis nec vehicula ac, eleifend vel sem. In a ornare enim. Suspendisse ullamcorper mattis iaculis. Sed congue est adipiscing tortor pretium consectetur. Proin sit amet sem tellus. Duis pretium dictum elit sed dignissim. Mauris vitae eleifend libero. Phasellus non pellentesque nisi. Vivamus pulvinar neque quis sem varius quis tincidunt ipsum condimentum. Nulla non erat in justo blandit vulputate.

Procedure Four Name Procedure 004

New Procedure and some new text as of today.

Procedure Five Name Procedure 005

Another new procedure

Appendix C - Reports Shared with Other Solutions

Risk Assessment Reports

Risk Reports

Name	Drill-Through	Description
Risk Analysis		Shows Risks grouped by Process for a specified Business Entity.
Risk Heat Map	Risk Detail	Displays a table that aggregates Risks by Residual Impact and Likelihood for a specified Business Entity.
Risk Rating by Entity	Risk Rating by Entity Detail	Displays Residual Risk Rating summary information for the selected Business Entity and its descendants, with the ability to drill through to risk details.
Risk Rating by Category	Risk Rating by Category Detail	Displays Risk Category and Residual Risk Rating summary information for the selected Business Entity, with the ability to drill through to Risk details.
Top Risks		Summary of the top Risks ranked by Residual Risk Exposure. Also shows the Inherent Risk Exposure. By default, Risk quantitative assessment fields are not included in PCM, so this report might not be appropriate for PCM users.

Control Reports

Name	Drill-Through	Description
Risk and Control Matrix		Shows Risk and Control data for the specified Business Entity and Process(es).
Control Effectiveness Map	Control Effectiveness Detail	Control map shows counts of Controls grouped by Process(es) and Operating Effectiveness, with the ability to drill through to a sub-report for detail information.

Testing Reports

Name	Drill-Through	Description
Testing Dashboard	Testing Details	Displays summary Test Result information for the selected Business Entity, with the ability to drill through to detail and trend information.

Indicator Reports

Name	Drill-Through	Description
KRI Dashboard	KRI Details	Displays summary KRI information for the selected Business Entity and its descendants, with the ability to drill through to detail and trend information.

Name	Drill-Through	Description
KPI Dashboard	KPI Details	Displays summary KPI information for the selected Business Entity and its descendants, with the ability to drill through to detail and trend information.

Appendix D - Implementation Notes

Below is a list of implementation notes, best practices, and tips:

Topic	Notes		
Object Relationships	Base assumption for all PCM deliverables is that Policy is directly associated to a Business Entity; Entity is the primary parent.		
Policy Libraries	The Published Policy Library and Expired Policy Library Business Entities need to be set up (as described in this document) before a policy is created.		
	Settings define the Published Library Entity structure, email sender name and address. Application text settings define the email subject and body.		
Email Settings	System Configuration > Settings > Applications > Common > Email > Mail From Name		
	System Configuration > Settings > Applications > Common > Email > Mail From Address		
	System Configuration > Settings > Applications > Platform		
	The Policy Type field is a required field. The field should be an enumerated string field with the correct value as the default and hidden from the view.		
	If the Policy Type or Policy Location fields are included in the metadata section of the viewers, they should be set to read-only		
Required Fields /	For the Change Significance field, the policy needs to have a default value; the suggested default setting is "Minor".		
Field Data	Implement the following dependencies:		
	 When Policy Status = Published, don't show 'Publishing Status' or 'Publishing Details' fields 		
	When Policy Status = Retired, show 'Publishing Status' and 'Publishing Details'		
	The default value for policy versions needs to be 0.0 rather than 0 for the publishing helper to work correctly.		
	The behavior for the URL links that launch the helpers is included in the expression within the URL field definition.		
	 The "Re-open Policy for Revision" helper link should display only if the Policy Status = Draft and Policy Approval Status = Under Review. 		
URL Links / Field Definition	The "Open Policy for New Review Cycle" helper link should display only if the Policy Status = Draft and Policy Approval Status = Approved or Approved – Published.		
	The size that the policy viewers open with can be modified in the expression in the URL field definition.		
	The URL field for Create/Modify Policy should be visible only for data- centric/conventional policy types.		
	Draft Policy Library - Review the following setting to ensure the value is completed: /Solutions/PCM/Global Settings/Draft Policy Library.		
Registry Settings	In most cases, if a registry setting is left blank, nothing will happen (i.e., triggering review lock, required for approval lock, attachment fields required to be locked, objects to be locked, etc.)		

Topic	Notes		
	Include the Policy-related objects (Policy, Procedure, Policy Review Comment and Attestation) in the /Application/GRCM/Locks/Display Lock Button setting.		
	<policy approval="" be="" fields="" set="" to=""> - The date needs to be OPSS-Pol.Approval Date= Date= Value of the Set is a set of</policy>		
	Policy Viewers - The Approval Date and PRC Approval Date Field settings need to be set to the same value.		
	The Policy lock trigger condition cannot be set to lock on Approved – Published. When the publishing helper runs, it sets the status to Published – Approved and would therefore lock the policy again (having just unlocked it).		
Locking Objects	Use registry settings to lock the policy or associated object records. Manually locking objects or using the workflow to lock objects may create an error when running the Policy Publication helper. Leveraging the features in the task view designer (read-only) or task view overrides for stages of the workflow (read only, hidden) can be a workaround for locking.		
	If using Policy Attestation functionality, users need lock privileges on the Attestation object.		
Printing Policies	When printing policies to PDF from the viewers, users can alter settings in their Print Setup to remove the URL, date, and title.		
Search	If customers want to use filtered search on the policy sections that are long-text fields, system administrators should refer to the <i>Administrators Guide</i> for information about how to enable long text field search at the platform level.		
	The Publishing Batch Notification helper facilitates the process of promoting an approved draft policy to the published library and moving the current published version to the expired library.		
	Retiring Policies - The Helper also retires a policy by moving the published policy to the published library and deleting the draft. You can use the Publishing Batch Notification helper with the Datacentric, Docucentric, and Hybrid policy approaches.		
	To retire a policy, the <i>draft</i> version of the Policy must have the following field values:		
Retiring	 Policy Publishing Status = Ready to Retire 		
Policies	 Approval Status = Approved 		
	The helper will populate the following fields when the policy is retired:		
	Publishing Status = Retired Successfully		
	 Publishing Details = Retired Successfully w/Date and Time 		
	■ Retired Date = Date		
	Move the published policy to the Expired Policy Library		
	Delete draft copy of the policy		
Policy / Procedure Naming	For hybrid policies, users cannot import the name from the template. It must be defined in the Policy Common Name field. The field cannot be rich text because it negatively impacts the compare policy view which also uses the Common Name and the policy name.		
	When naming Word-based policies that will be imported into OpenPages, do not use any spaces in the document's file name. Underscores are recommended.		

Topic	Notes	
	If a user creates a procedure by using the Procedures section of the Policy task view and enters a Procedure Common Name, the editable procedure name in the viewer will show the HTML tags because it is a rich text field.	
	A suggestion is to make Procedure Common Name a rich text field only if you are using the Hybrid approach. If you are using Docucentric/Conventional, the Procedure Common Name should be a regular text field.	
	Policy and Procedure auto-naming need to be turned on. Set both settings to TRUE and to be set by default. Do not allow users to rename. These are critical for the policy helpers to function as designed.	
	Procedure auto-naming should be set up to keep the name short and to not include spaces, otherwise the names might wrap incorrectly in the viewer. For example: %P;_PROC_%N4.	
Publication and Attestation Helpers	Neither Publish Policy Report nor Attestation Creation Report should be published to end-users.	
	The Publishing helper does not support self-contained folders.	
Single User Fields	The out of the box PCM user fields support single users only (e.g., author / owner fields). Changes will need to be made to the PCM triggers, helpers, and JSP to support multiuser and multi-group types.	

Appendix E - Troubleshooting Notes

Overview

On occasion, you might need to run the Publishing Policy Report or Attestation Creation Report on an unscheduled basis. The following sections describe how this process can be achieved.

Policy Publication Report – Unscheduled or Ad Hoc Process

In certain situations, you might need to publish a policy that is not scheduled or publish a policy on an ad hoc basis (e.g., event driven need or for testing / debugging).

Use the following process to publish a policy on an unscheduled basis. Do this task from the Reports panel on the Dashboard:

The Publishing Policy Report can be found on the Reports panel of the Dashboard (under OpenPages Solutions Reports / PCM Policy). > 🗀 IT Asset Reports > 🗀 IT Compliance Reports > 🗀 Indicator Reports > \(\subseteq \) Loss Event Reports >

ORM Issue Reports PCM Policy Publishing Policy Report >

Regulatory Compliance Reports If the Publishing Policy Report is not in the Reports panel on the Dashboard, go to 🔯 > System Configuration > Pages and Templates > Hidden Reports > PCM Policy. > FastMap > ORM Custom Reports PCM Policy Publishing Policy Report Template Publishing Policy Report Copy PCM Policy to the OpenPages Solutions Reports folder. When complete, refresh the page and review the Reports panel on the Dashboard. The PCM Policy Report should be available on the Reports panel.

Note: If you upgraded or migrated, your existing reports are available in the OpenPages Solutions Reports V6 folder.

Return to the Dashboard / Reports panel. The PCM Policy / Publishing Policy Report should now appear.

Note: The page might need to be refreshed first.



Click **Publishing Policy Report** to start the Publishing Policy Report – the utility will display the number of policies published.



The Publishing Policy Report:

Moves the newly published policy document to the Published Policy Library folder.



- Sets the status of the published document = published.
- Creates an unpublished draft copy of each published policy. This will be the new working copy for future edits.
- Moves the previously published policy to the Expired Policy Library folder.



Attestation Creation Report – Unscheduled or Ad Hoc Process

The same approach can be used for the Attestation Creation Report by following these steps:

Confirm that the Attestation Creation Report is on the Dashboard in the Reports panel.

If it's not, go to **3** > System Configuration > Pages and Templates > Hidden Reports > Attestation Reports).

Copy the Attestation Reports to OpenPages Solutions Reports (> System Configuration > Pages and Templates > Hidden Reports > Attestation Reports). When complete, refresh the page and review the Reports panel on the Dashboard. The Attestation Reports should be available on the Dashboard in the Reports panel.

Reports

> □ OpenPages Platform Reports

□ OpenPages Solutions Reports

> □ Administrative Utilities

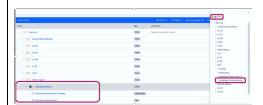
□ Attestation Reports

□ Attestation Creation Report

> □ Audit Management Reports

> □ Control Reports

> \(\Gamma\) FCM Reports



Run the Attestation Report – the Report should display "Processing Complete."

The Campaign object status will be changed from "Ready to Start" to "In Progress."



Notices

This information was developed for products and services offered worldwide.

This material may be available from IBM® in other languages. However, you may be required to own a copy of the product or product version in that language in order to access it.

IBM may not offer the products, services, or features discussed in this document in other countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service. This document may describe products, services, or features that are not included in the Program or license entitlement that you have purchased.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not grant you any license to these patents. You can send license inquiries, in writing, to:

IBM Director of Licensing IBM Corporation North Castle Drive Armonk, NY 10504-1785 U.S.A.

For license inquiries regarding double-byte (DBCS) information, contact the IBM Intellectual Property Department in your country or send inquiries, in writing, to:

Intellectual Property Licensing Legal and Intellectual Property Law IBM Japan Ltd. 19-21, Nihonbashi-Hakozakicho, Chuo-ku Tokyo 103-8510, Japan

The following paragraph does not apply to the United Kingdom or any other country where such provisions are inconsistent with local law: INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

Any references in this information to non-IBM Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this IBM product and use of those Web sites is at your own risk.

IBM may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Licensees of this program who wish to have information about it for the purpose of enabling: (i) the exchange of information between independently created programs and other programs (including this one) and (ii) the mutual use of the information which has been exchanged, should contact:

IBM Corporation Location Code FTO 550 King Street Littleton, MA 01460-1250 U.S.A. Such information may be available, subject to appropriate terms and conditions, including in some cases, payment of a fee.

The licensed program described in this document and all licensed material available for it are provided by IBM under terms of the IBM Customer Agreement, IBM International Program License Agreement or any equivalent agreement between us.

Any performance data contained herein was determined in a controlled environment. Therefore, the results obtained in other operating environments may vary significantly. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurements may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not tested those products and cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

All statements regarding IBM's future direction or intent are subject to change or withdrawal without notice, and represent goals and objectives only.

This information contains examples of data and reports used in daily business operations. To illustrate them as completely as possible, the examples include the names of individuals, companies, brands, and products. All of these names are fictitious and any similarity to the names and addresses used by an actual business enterprise is entirely coincidental.

If you are viewing this information softcopy, the photographs and color illustrations may not appear.

This Software Offering does not use cookies or other technologies to collect personally identifiable information.

Copyright

Licensed Materials - Property of IBM Corporation.

© Copyright IBM Corporation, 2003, 2023.

This information contains sample application programs in source language, which illustrate programming techniques on various operating platforms. You may copy, modify, and distribute these sample programs in any form without payment to IBM, for the purposes of developing, using, marketing or distributing application programs conforming to the application programming interface for the operating platform for which the sample programs are written.

These examples have not been thoroughly tested under all conditions. IBM, therefore, cannot guarantee or imply reliability, serviceability, or function of these programs. You may copy, modify, and distribute these sample programs in any form without payment to IBM for the purposes of developing, using, marketing, or distributing application programs conforming to IBM's application programming interfaces.

IBM, the IBM logo and ibm.com are trademarks or registered trademarks of International Business Machines Corp., registered in many jurisdictions worldwide.

The following terms are trademarks or registered trademarks of other companies:

- Adobe, the Adobe logo, PostScript, and the PostScript logo are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States, and/or other countries.
- Microsoft, Windows, and the Windows logo are trademarks of Microsoft Corporation in the United States, other countries, or both.
- Java and all Java-based trademarks and logos are trademarks or registered trademarks of Oracle and/or its affiliates.

Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the Web at "Copyright and trademark information" at www.ibm.com/legal/copytrade.shtml.

