IBM OpenPages with Watson
Version 8.2.0

New Features Guide

IBM

Note

Before using this information and the product it supports, read the information in “Notices” on page 259.

Product Information

This document applies to IBM OpenPages with Watson Version 8.2.0 and may also apply to subsequent releases.

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Contents

Chapter 1. Introduction

You can view a list of the new features of IBM OpenPages® with Watson™.

Audience

The *IBM OpenPages with Watson New Features Guide* is intended for users who want to learn about the new features in the latest version of IBM OpenPages with Watson. For more information about new and changed features, see the specific product documentation, such as installation guides and user guides.

Please read the following important information regarding IBM OpenPages with Watson documentation

IBM® maintains one set of documentation serving both cloud and on-premises IBM OpenPages with Watson deployments. The IBM OpenPages with Watson documentation describes certain features and functions which may not be available on the cloud.

If you have any questions about the functionality available in the product version that you are using, contact IBM OpenPages Support by using the IBM Support portal.

Finding information

To find product documentation on the web, including all translated documentation, access IBM Documentation.

To find videos about how to use IBM OpenPages with Watson, see the IBM OpenPages playlist on YouTube.

Accessibility features

Accessibility features help users who have a physical disability, such as restricted mobility or limited vision, to use information technology products. IBM OpenPages with Watson documentation has accessibility features. PDF documents are supplemental and include no added accessibility features.

Forward-looking statements

This documentation describes the current functionality of the product. References to items that are not currently available may be included. No implication of any future availability should be inferred. Any such references are not a commitment, promise, or legal obligation to deliver any material, code, or functionality. The development, release, and timing of features or functionality remain at the sole discretion of IBM.

Chapter 2. New features

You can learn about new features and enhancements to IBM OpenPages for IBM Cloud Pak for Data IBM OpenPages with Watson, and IBM OpenPages with Watson on Cloud .

Use these links to learn about what's new in the current release and in past releases. These topics cover major releases and fix packs that included new features. Interim fixes and fix packs that did not include new features are not covered.

For a list of fixes in each release, see the Fix List for that release. You can access the fix lists from the IBM Support portal.

Related concepts

“New features in version 8.2.0.4” on page 5
The new features in IBM OpenPages with Watson 8.2.0.4 include the following enhancements.

“New features in version 8.2.0.3” on page 7
The new features in IBM OpenPages with Watson 8.2.0.3 include the following enhancements.

“New features in version 8.2.0.2” on page 15
The new features in IBM OpenPages with Watson 8.2.0.2 include the following enhancements.

“New features in version 8.2.0.1” on page 33
The new features in IBM OpenPages with Watson 8.2.0.1 include the following enhancements.

“New features in version 8.2.0” on page 49
The new features in IBM OpenPages with Watson 8.2.0 include the following enhancements.

“New features in version 8.1.0.1” on page 77
The new features in IBM OpenPages with Watson 8.1.0.1 include the following enhancements.

“New features in version 8.1.0” on page 93
The new features in IBM OpenPages with Watson 8.1.0 include the following enhancements.

“New features in version 8.0.0.3” on page 127
The new features in IBM OpenPages with Watson 8.0.0.3 include the following enhancements.

“New features in version 8.0.0.2” on page 131
The new features in IBM OpenPages with Watson 8.0.0.2 include the following enhancements.

“New features in version 8.0.0.1” on page 167
The new features in IBM OpenPages with Watson 8.0.0.1 include the following enhancements.

“New features in version 7.4” on page 191
The new features in IBM OpenPages with Watson 7.4 include the following enhancements.

“New features in version 7.3.0.2” on page 213
The new features in IBM OpenPages with Watson 7.3.0.2 include the following enhancements.

“New features in version 7.3.0.1” on page 223
The new features in IBM OpenPages with Watson 7.3.0.1 include the following enhancements.

“New features in version 7.3” on page 233
The new features in IBM OpenPages GRC Platform 7.3 include the following enhancements.

Chapter 3. New features in version 8.2.0.4

The new features in IBM OpenPages with Watson 8.2.0.4 include the following enhancements.

Integration with IBM Watson Natural Language Understanding

You can now integrate an IBM Watson® Natural Language Understanding classifier into OpenPages.

IBM Watson Natural Language Understanding is a language processing service in IBM Cloud. You can train and deploy text classifier models and then integrate them with OpenPages. IBM Watson Natural Language Understanding learns from your data and can predict classifications for texts that it is not trained on. IBM Watson Natural Language Understanding is similar to the IBM Watson Natural Language Classifier, but unlike the IBM Watson Natural Language Classifier, IBM Watson Natural Language Understanding is a multi-label, multi-class classifier. It assumes that text likely belongs to more than one class and can better predict texts with multiple classifications.

The training structure is also different between IBM Watson Natural Language Classifier and IBM Watson Natural Language Understanding.

Table 1. Training structure

	IBM Watson Natural Language Classifier	**IBM Watson Natural Language Understanding**
Character limit	1024	2000
Training data file format	.csv	.csv, .json Requires at least 5 training examples per class.
Training method	Watson Studio UI	Must be done through code: Java, Python, cURL, Ruby

For more information about integrating a natural language classifier, such as IBM Watson Natural Language Understanding or IBM Watson Discovery , see Natural language processing services.

Upgrade from Apache Log4j 1 to Apache Log4j 2

To address security vulnerability issues, IBM OpenPages fix pack 8.2.0.4 upgrades from Apache Log4j 1 to Apache Log4j 2.

For information about logging, see OpenPages with Watson standard log files (8.2.0.4 and later).

This upgrade changes logging, and affects logging properties files, JSP loggers, and other custom code.

Chapter 4. New features in version 8.2.0.3

The new features in IBM OpenPages with Watson 8.2.0.3 include the following enhancements.

Platform enhancements

Enhancements to functionality are included in this version of IBM OpenPages with Watson.

Enhancements to the Task Focused UI

The Task Focused UI includes numerous new capabilities and features.

IBM Watson Discovery

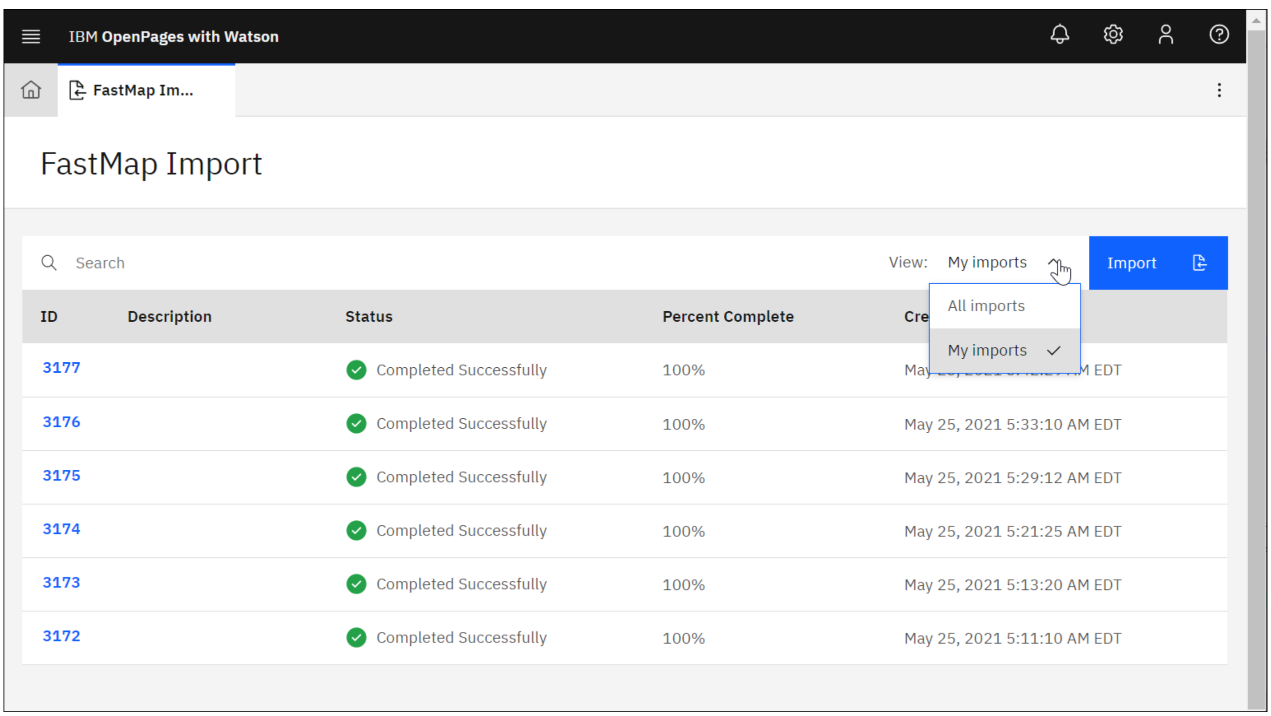
IBM Watson Discovery was added as a natural language processing service. It can be used instead of the Natural Language Classifier.

Improvements to the FastMap import user interface

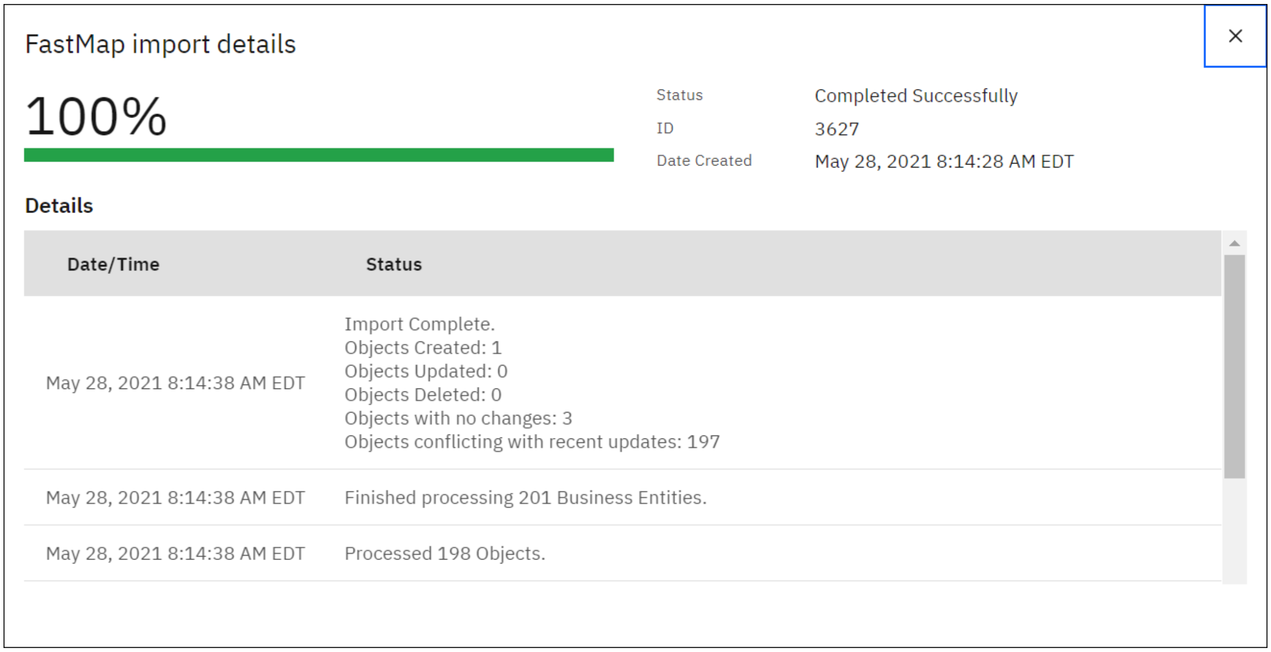
Importing object data using Fast Map is a two-step process consisting of validation and importing.

To begin importing, click > **FastMap Import**.

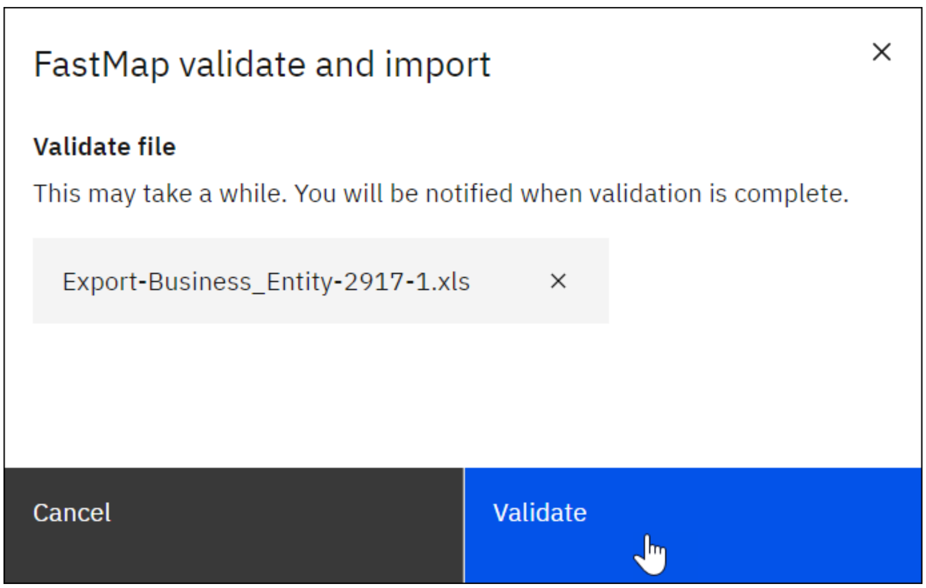
The **FastMap Import** tab displays a list of your imports. If you have the application permission to see imports performed by other users, you can click the **View** dropdown and select **All imports**. The **Created By** column is added to the grid if you select this view.



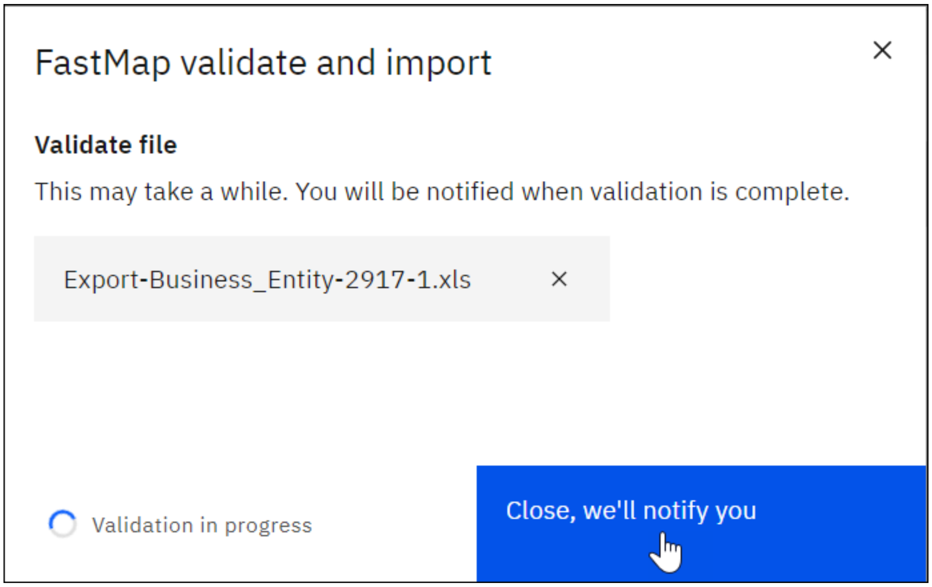
To see more information about a particular import, click the row for that import.



On the **FastMap Import** tab, after you click **Import** and choose a file to import, validation begins.

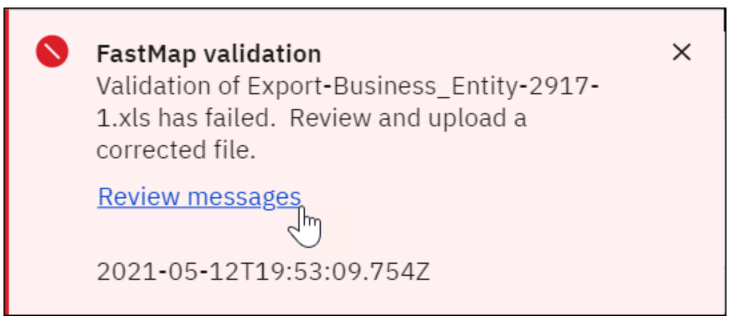


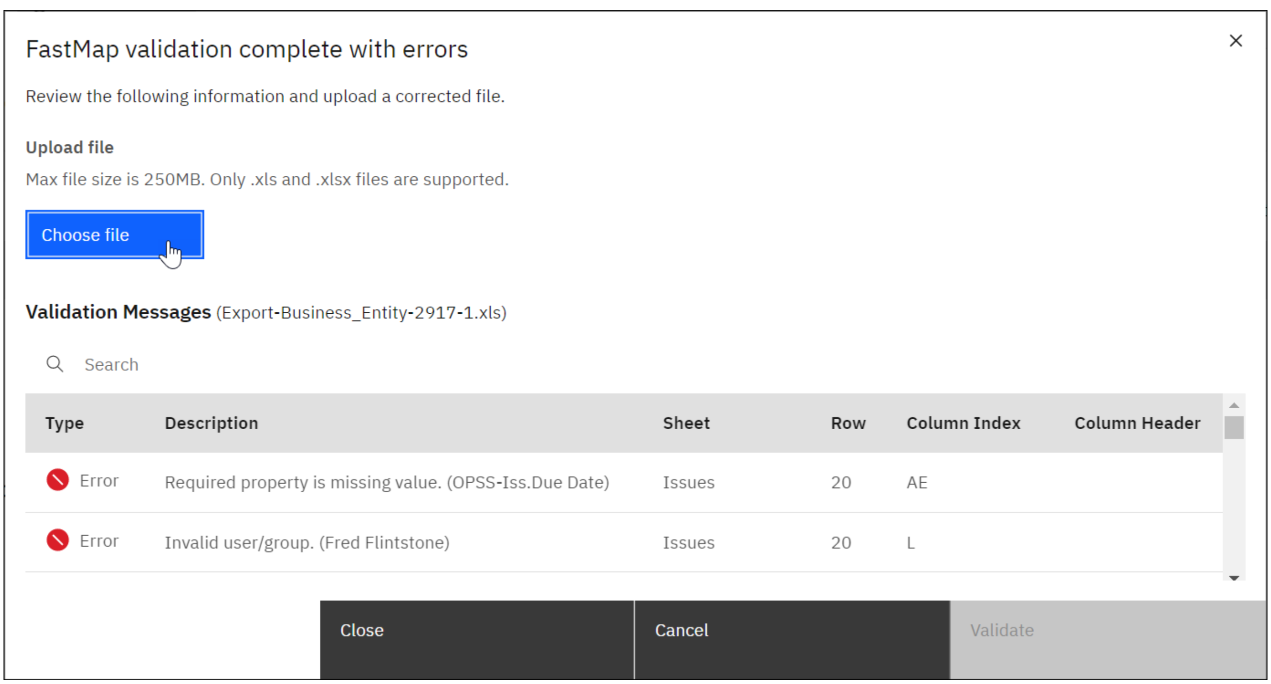
You can choose whether to wait or be notified when the validation is complete.



The notification contains a link to review the validation status messages. If you miss a notification message, you can click **View notification** to see the message.

If the validation fails, you are prompted to upload a corrected file.

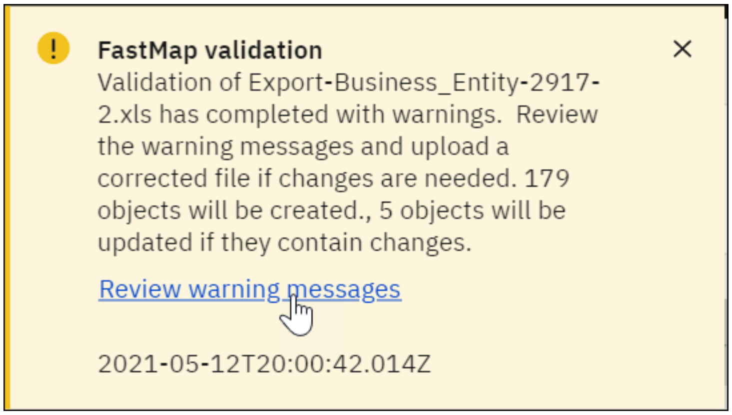


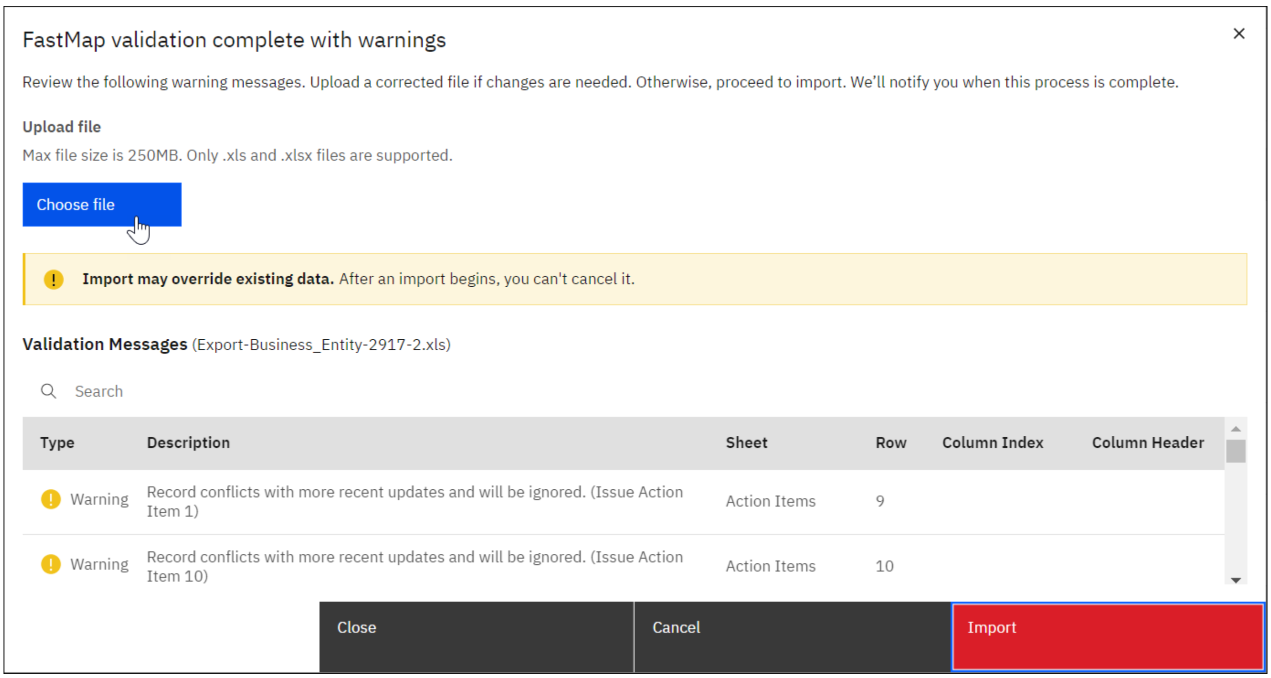


If the validation completes with warnings, you have the following choices:

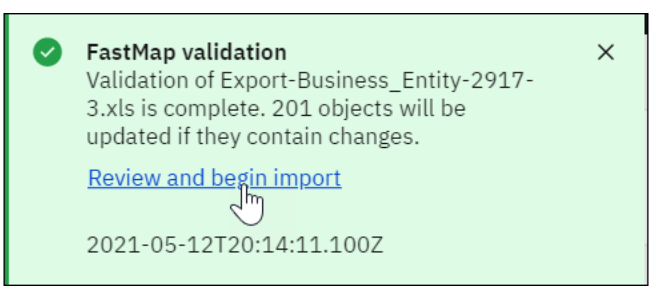
- You can upload a corrected file.

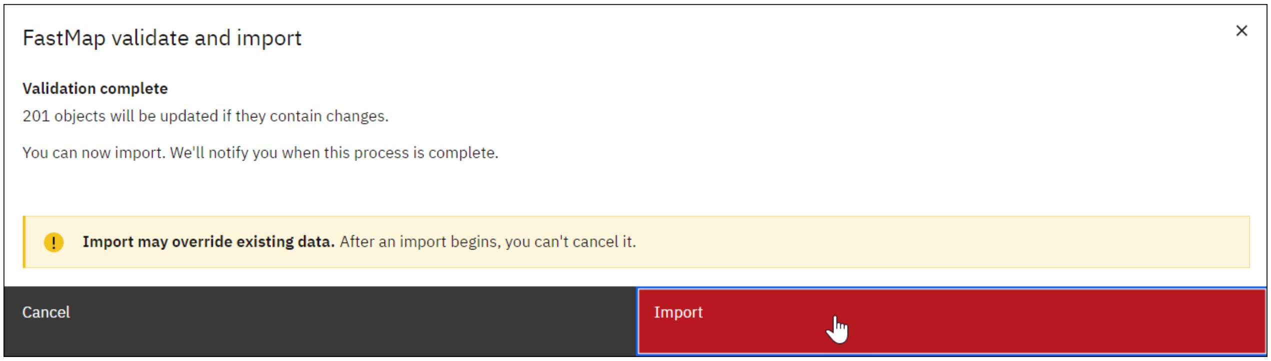
- If the warnings don't matter, you can import the object data.
- You can cancel and start the process from the beginning.
- You can close the dialog box. Later in the current session, you can view the notifications to see the list of warnings or return to the **FastMap Import** tab to import the file.



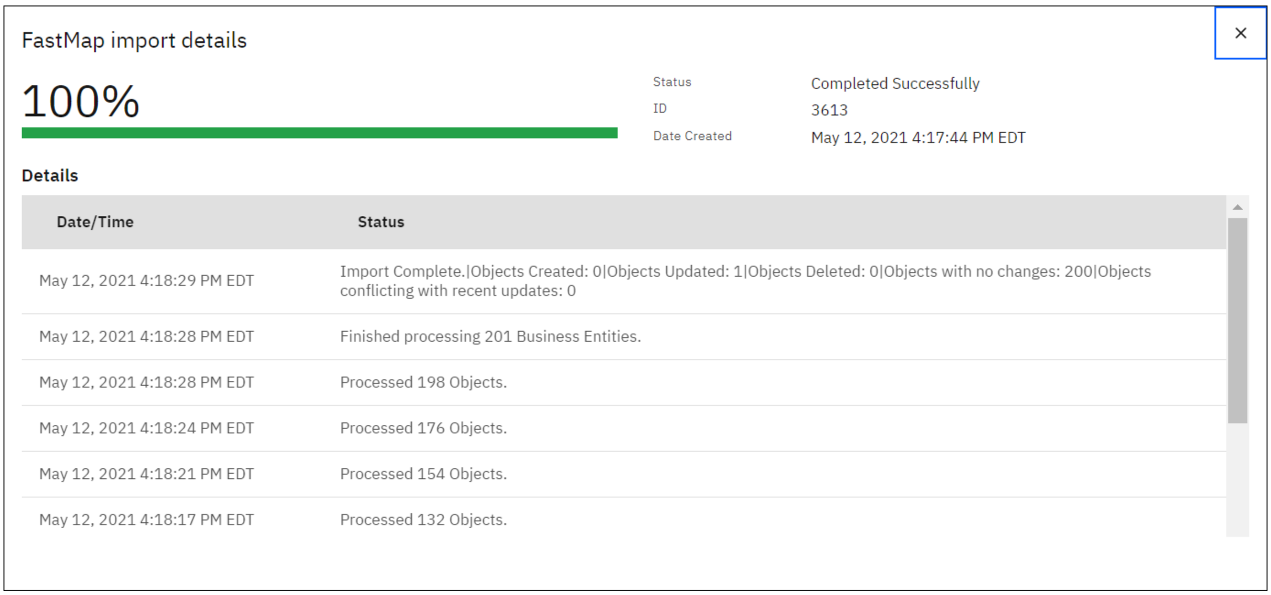


When validation completes successfully, you can choose to import or cancel.





When you choose to import, the progress indicator updates automatically. You can close the **FastMap import details** dialog box at any time and you will be notified when the import is complete.



Searching for fields in a view

In Creation Views, Task Views, and Quick Views, users can now search for fields within the view.

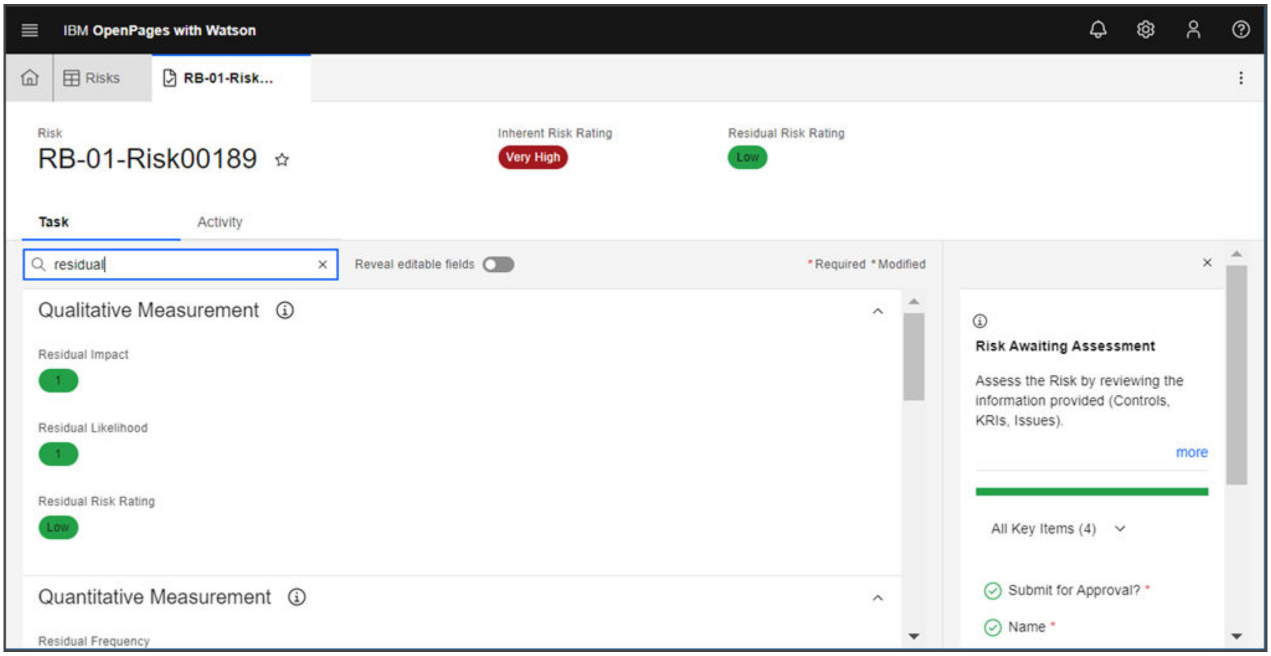


Figure 1. Searching for fields in a task view

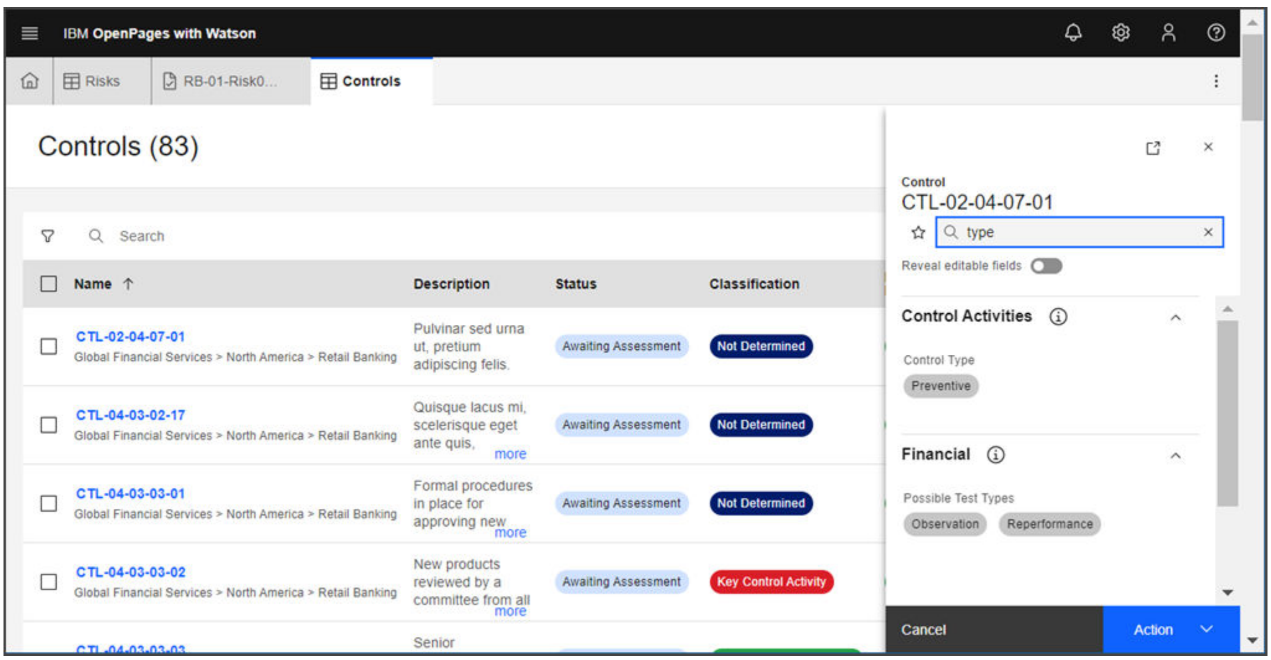


Figure 2. Searching for fields in a quick view

Configuring fields for bulk update in Grid Views

Administrators can now configure the fields that can be updated when users click **Bulk Update** (Bulk Update) in Grid Views. Use the following new components on Grid Views in the View Designer:

- Set the **Bulk update** toggle to controls whether a field is allowed to be updated by bulk update
- Add fields to the **Fields enabled for bulk update but not in grid view** section to allow users to update the fields even though they are not displayed in the Grid View.

Additionally, administrators with the new **Bulk Update All Fields** application permission can bypass the field restrictions and update all fields.

Running calculations from a workflow

Calculations can now be started directly from a workflow action.

- Added **Calculation Type** to calculation definitions. Valid values are Automatic or Manual. Manual calculations are started only by a **run a calculation** action in a workflow.
- Added the new **run a calculation** action to workflow stages.

Solutions enhancements

IBM OpenPages solutions have been enhanced to make them more complete and easier to use.

Enhancements to OpenPages Third Party Risk Management

OpenPages Third Party Risk Management (TPRM) now includes a connector for Supply Wisdom.

Supply Wisdom connector

The Supply Wisdom connector enables you to import vendor details and ratings from Supply Wisdom into Vendor objects in OpenPages. You can then view the ratings in OpenPages.

For information about how to configure the Supply Wisdom connector, see the *IBM OpenPages with Watson Administrator's Guide*.

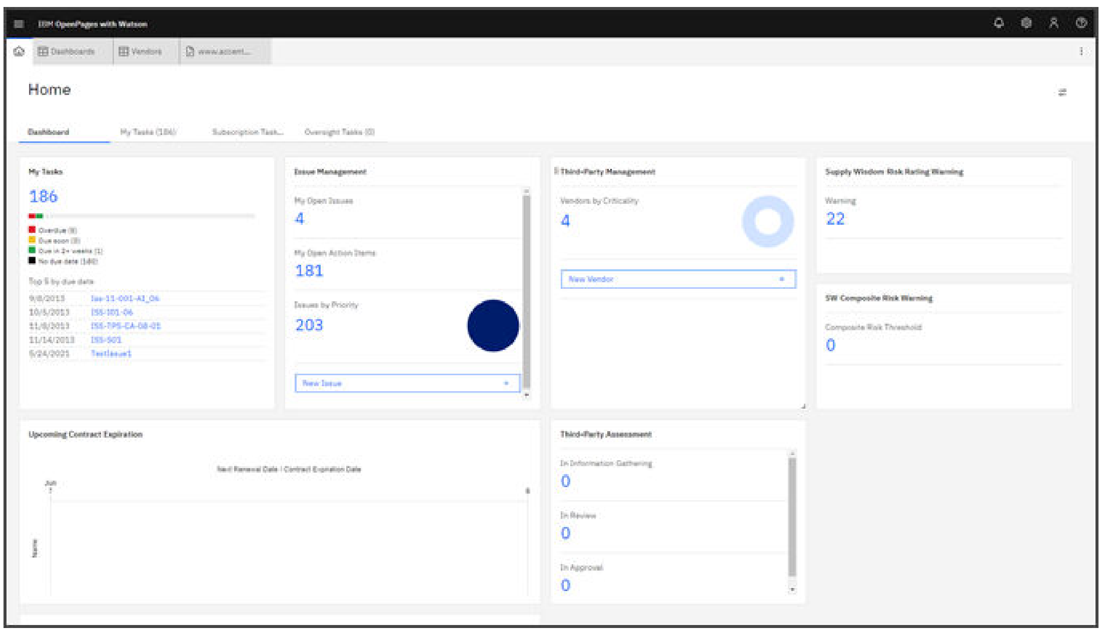


Figure 3. TPRM with Supply Wisdom dashboard

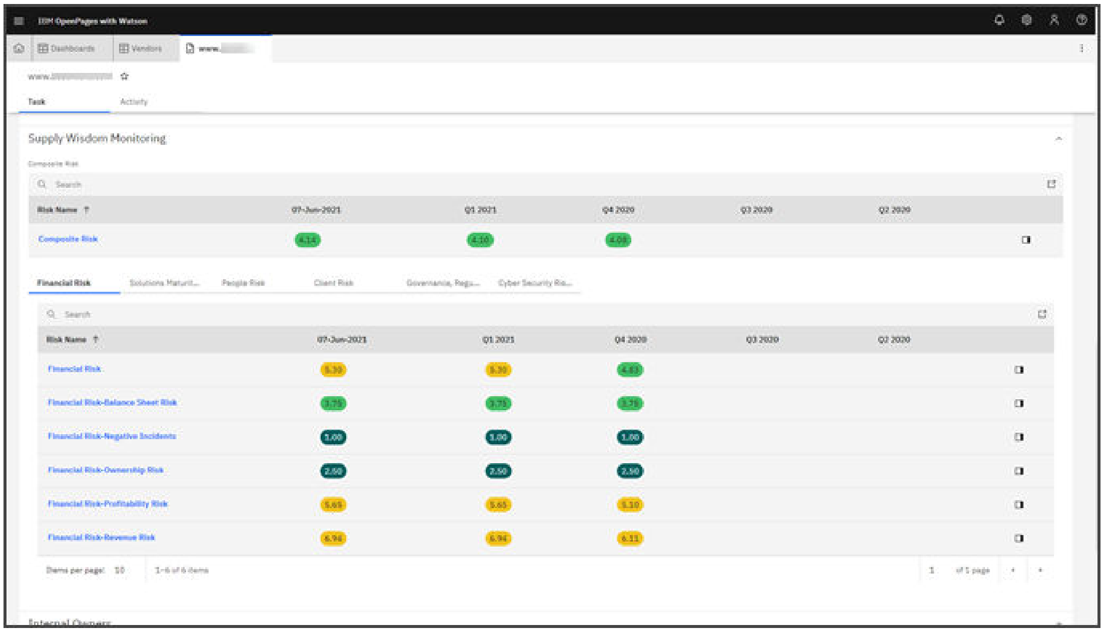


Figure 4. TPRM Vendor details with data from Supply Wisdom

Scheduler job

Administrators configure and schedule the Supply Wisdom feed by using the new SupplyWisdom administrative job in the Scheduler.

Requests for Enhancements (RFEs) delivered

This release delivers on several RFEs.

For more information, see: Requests for Enhancement (RFEs) Delivered by Release.

Note: RFEs that request user interface enhancements are considered to be delivered if available in the Task Focused UI.

Chapter 5. New features in version 8.2.0.2

The new features in IBM OpenPages with Watson 8.2.0.2 include the following enhancements.

The product documentation for all IBM products has been redesigned and updated. The Knowledge Center has been renamed to IBM Documentation. The website link has changed to IBM Documentation. Bookmarks to your favorite topics automatically redirect to the new website.

Platform enhancements

Enhancements to functionality are included in this version of IBM OpenPages with Watson.

Enhancements to the Task Focused UI

The Task Focused UI includes numerous new capabilities and features.

Themes

Users can apply a theme by using the > **Change Theme** task. Administrators can create their own themes, called custom themes, by using the > **System Configuration** > **Themes**. Colors are now based on two Carbon color palettes, Categorical and Monochromatic.

The following example shows one of the dark system themes.

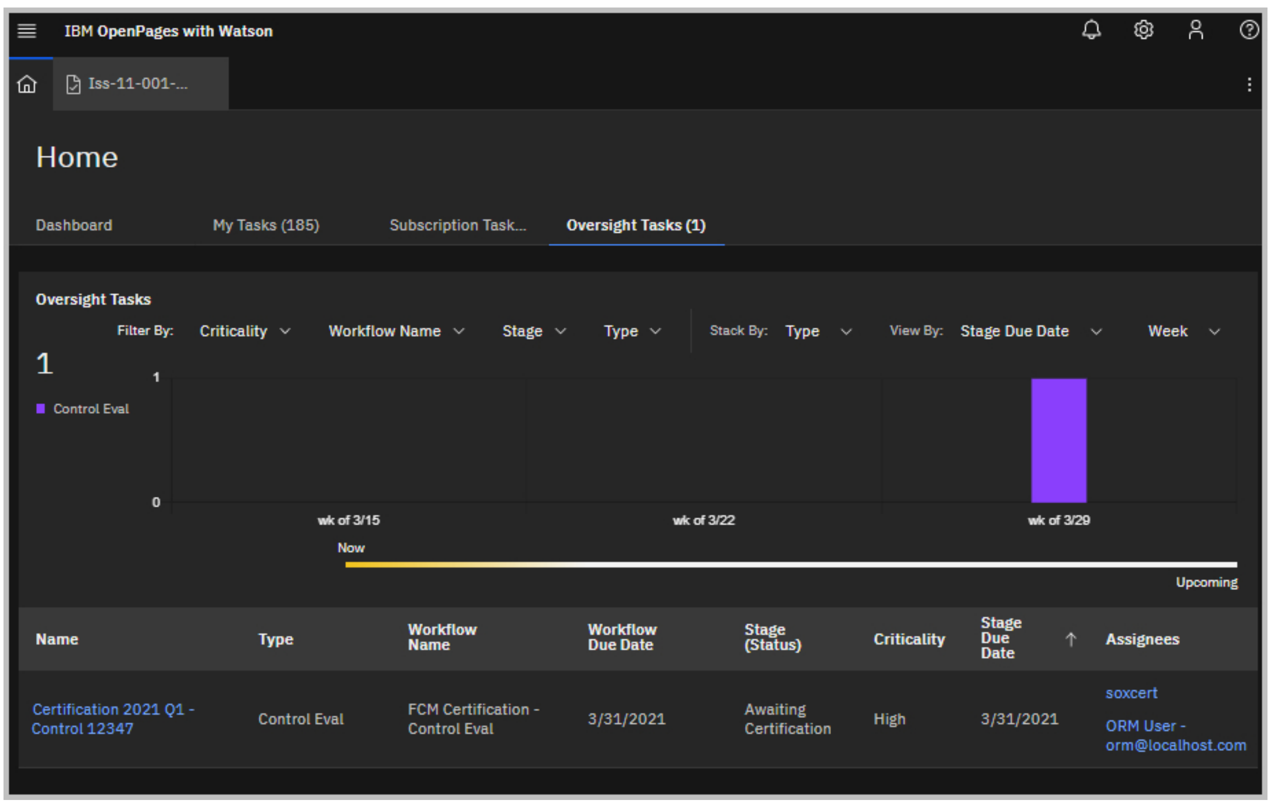


Figure 5. Dark theme

Tab groups for relationship fields

Relationship fields can be organized in tab groups in the View Designer.

GRC Workflow

Email reminders can now be configured on standard stages in GRC Workflow.

Users can now complete their workflow tasks in bulk.

- Added **Bulk Workflow Action** to standard stages.
- Added functionality to Grid Views to support bulk workflow actions.
- Added **Complete tasks with bulk workflow actions** window to My Tasks tab and panel, Subscription Tasks tab and panel, and Oversight Tasks tab and panel.

Added **Override workflow action text** to workflow actions. Use it to customize the text on the confirmation window that is displayed when users select a workflow action.

Bulk move

Objects can be moved from one folder to another using the new **Move** button in Grid Views.

In the following example a Process object is selected and ready to be moved to a different Business Entity.

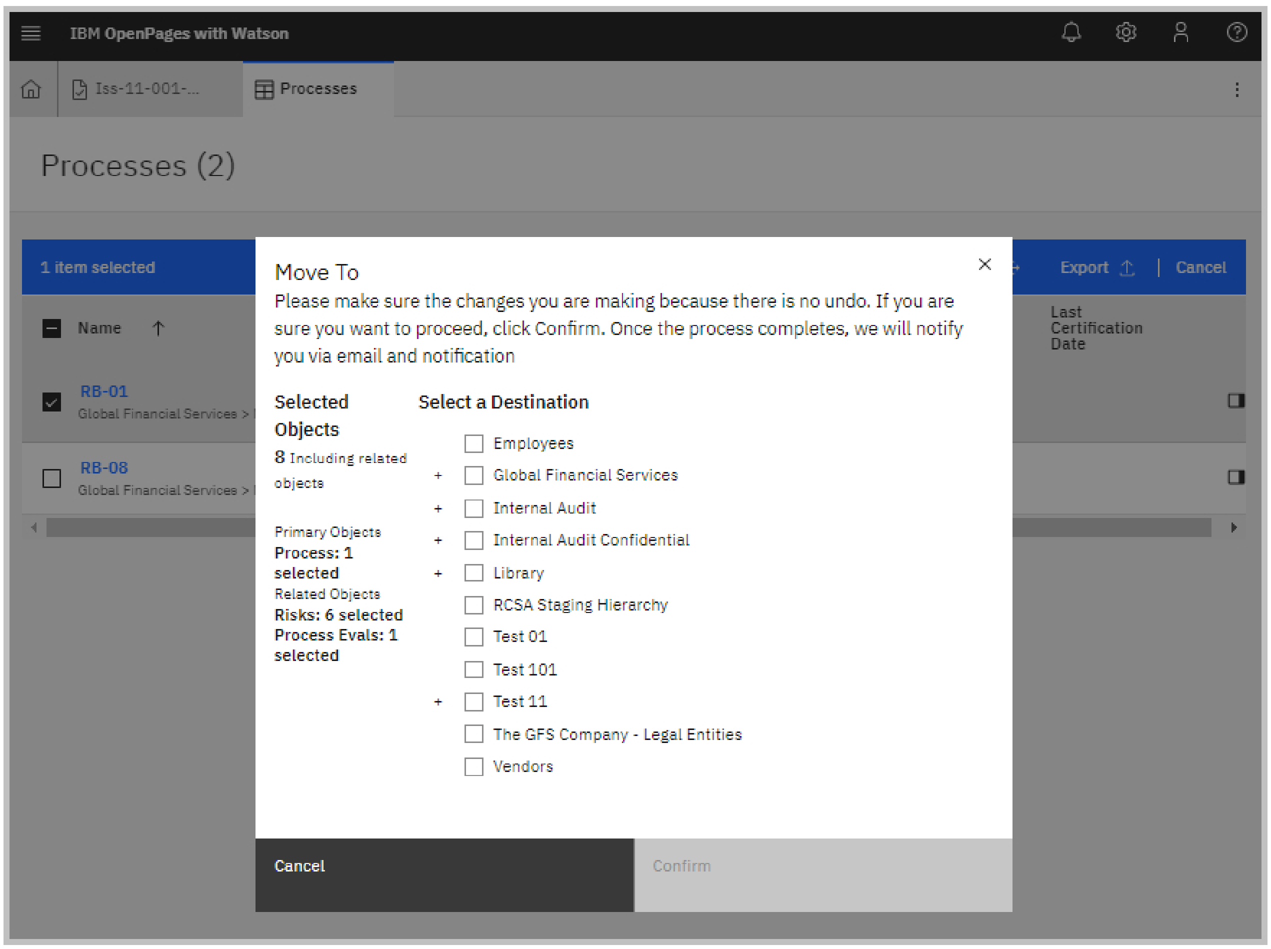


Figure 6. Bulk move options

Whether child objects are moved when their parent objects are moved is controlled by the new **Applications** > **GRCM** > **Object Move** > **Allow Hierarchical Moves** setting.

Administrator tasks migrated from the Standard UI

The following tasks can now be accessed on the Administration menu in the Task Focused UI:

- The environment migration tools are now available. Click > **System Migration** > **Export Configuration** and > **System Migration** > **Import Configuration**.
- The **Field Groups** section was added to the > **Solution Configuration** > **Objects** task.
- The **Field Dependencies** section was added to the > **Solution Configuration** > **Objects** task.
- The **Dependent Picklists** section was added to the > **Solution Configuration** > **Objects** task.

These tasks are still available in the Standard UI.

Solutions enhancements

IBM OpenPages solutions have been enhanced to make them more complete and easier to use.

IBM OpenPages Data Privacy Management

The new IBM OpenPages Data Privacy Management (DPM) solution is used by an organization to aid in complying with data privacy regulations.

Using DPM, organizations can have clear visibility of all their private or sensitive data and ensure that the data is being handled correctly. DPM assists CPOs, CDOs, CCOs, and other privacy and compliance professionals by providing visibility and enabling them to demonstrate compliance.

DPM helps organizations to:

- Support compliance with data privacy regulations
- Maintain an inventory of all private data across the organization within OpenPages by using an integration with Watson Knowledge Catalog
- Have a holistic view of all private data across their organization
- Demonstrate privacy compliance through questionnaire assessments and reporting
- Automatically kick off privacy assessments for newly loaded data assets

DPM Master profile

DPM includes the DPM Master profile.

The profile includes:

- My Work tab, Dashboard tab, and all home page tabs
- Dependent views and dependent pick lists
- Grid Views and Tasks Views
- Detail, Context, Folder, Overview, Filtered List, and List Views

Dashboard

DPM includes the DPM Master dashboard.

The DPM Master dashboard provides privacy professionals a high-level overview of the different data assets in their organization, any tasks assigned to them, and the status of privacy assessments that are being conducted in the organization.

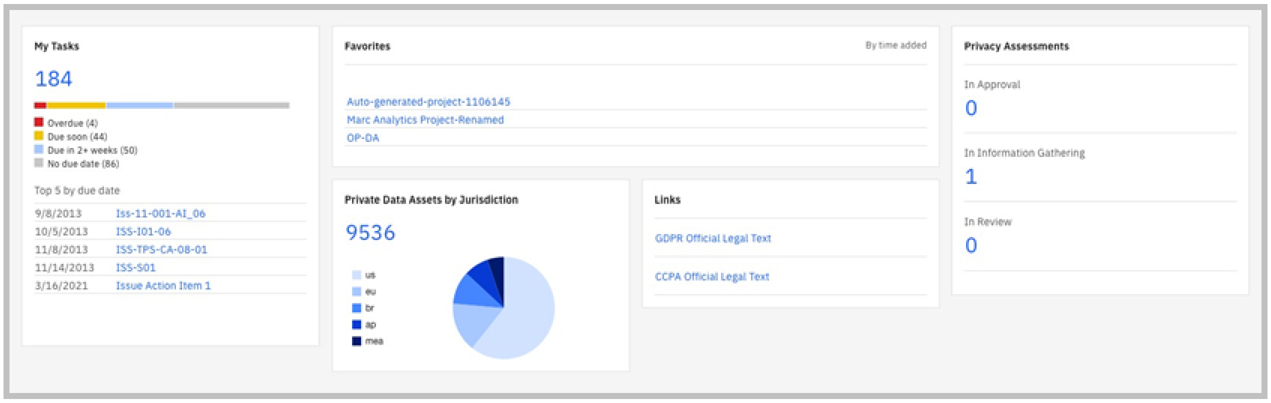


Figure 7. DPM Master dashboard

Sample workflows

DPM includes the Data Privacy Assessment sample workflow.

When a new data asset (resource) is imported into OpenPages from Watson Knowledge Catalog, the Data Privacy Assessment workflow starts automatically. The first stage is Data Asset Review, where a reviewer must determine if a privacy assessment is needed or not. If they need more information, they can request more information from the data asset owner by selecting **Actions** > **Request Additional Information**. The data asset owner would now need to provide the requested information and select **Actions** > **Submit for Data Asset Review**.

If the privacy officer determined that a privacy assessment is not needed, they would select **Actions** > **Privacy Assessment Not Needed**. This sets the PIA Status field on the resource to Not Needed and the workflow ends.

If the privacy officer determines that a privacy assessment is needed, they would select **Actions** > **Privacy Assessment Needed**. This sets the PIA Status field on the resource to Needed and creates a Questionnaire Assessment assigned to the primary owner of the resource.

The privacy officer now selects a questionnaire template for the assessment, and the asset owner would complete the questionnaire. Once the questionnaire is completed, the asset owner would select **Actions** > **Submit for Approval**.

The privacy officer now reviews the privacy assessment and can either **Approve** or **Reject** it. If rejected, it will be returned to the Asset owner for remediation, and if Approved, then the workflow ends.

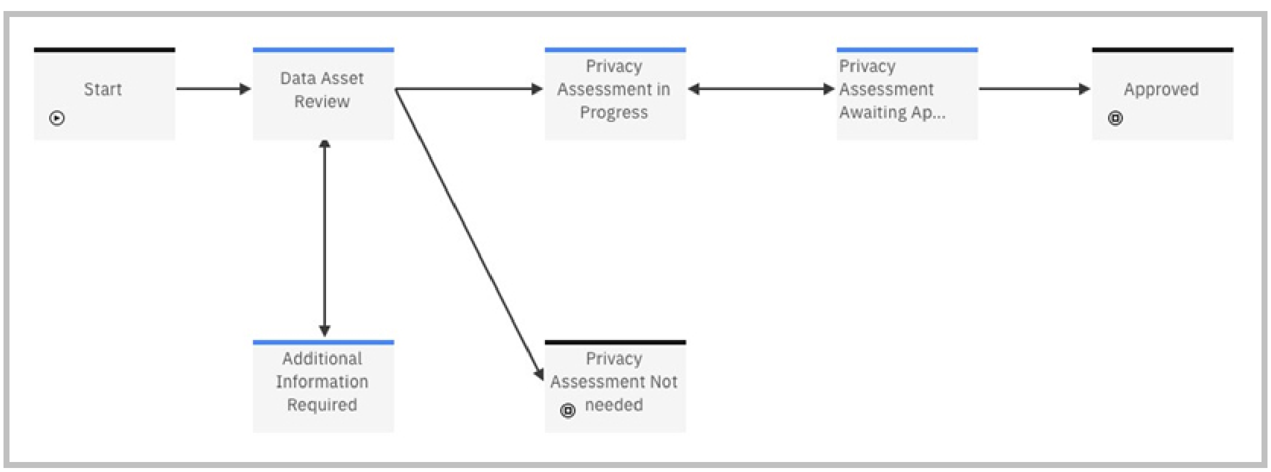


Figure 8. Data Privacy Assessment sample workflow

Questionnaire templates

Questionnaire templates for some major privacy laws will soon be available in the GRC community. The templates can be used as a starting point for building your own privacy assessments.

Views

New system Task and Grid Views for Resource and Control Plan have been added.

Resource Task View

The new SysView-Task-Resource-WKC Task View contains three sections.

The Privacy Information section contains fields related to various privacy assessments. It contains the following new fields:

- PIA Status: Status of the Privacy Impact Assessment on the Resource.
- PIA Completion Date: Completion date of the Privacy Impact Assessment.
- DPIA Status: Status of the Data Protection Impact Assessment on the Resource (only visible for Resources with a criticality of High).
- DPIA Completion Date: Completion date of the Data Protection Impact Assessment (only visible for Resources with a criticality of High).

The Integration Information section contains information about the service being integrated with, in this case, Watson Knowledge Catalog. It contains the following new fields:

- Application: The name of the external service being integrated with.
- External ID: Resource ID from the external service being integrated with.
- Third Party Link: A link to the external resource being integrated with.
- Last Update: The date and time of the last sync with the external service.
- Additional Information: A text field that can be used to store any additional information that might be relevant.

The Watson Knowledge Catalog Information section contains more specific metadata about the data asset (Resource) that is loaded from Watson Knowledge Catalog.

- WKC Classification: The classification of the data asset in Watson Knowledge Catalog. The classification is used as a filter to determine which data assets are loaded from Watson Knowledge Catalog into OpenPages.
- WKC Status: Status of the object in Watson Knowledge Catalog (Active, Deleted, No Longer Private).
- Catalog Name: The name of the catalog that the data asset (resource) belongs to in Watson Knowledge Catalog.
- Tags: Watson Knowledge Catalog Data Asset Tags.
- Business Terms: Watson Knowledge Catalog Business Terms.
- Jurisdiction: The jurisdiction of the Data Asset.

Resource Grid View

The new SysView-Grid-Resource-WKC Grid View contains the following fields:

- WKC Name
- Name
- Description
- Resource Type
- WKC Status
- Criticality
- Primary Owner

Control Plan Task View

The new SysView-Task-RiskEntity-WKC Task View contains two sections.

The Integration Information section contains information about the service being integrated with, in this case, Watson Knowledge Catalog. It contains the following new fields:

- Application: The name of the external service being integrated with.
- External ID: Resource ID from the external service being integrated with.
- Third Party Link: A link to the external resource being integrated with.
- Last Update: The date and time of the last sync with the external service.
- Additional Information: A text field that can be used to store any additional information that might be relevant.

The Watson Knowledge Catalog Information section contains more specific metadata about the data asset (resource) that is loaded from Watson Knowledge Catalog.

- WKC Classification: The classification of the data asset in Watson Knowledge Catalog. The classification is used as a filter to determine which data assets are loaded from Watson Knowledge Catalog into OpenPages.
- WKC Status: Status of the object in Watson Knowledge Catalog (Active, Deleted, No Longer Private).

Control Plan Grid View

The new SysView-Risk-RiskEntity-WKC Grid View contains the following fields:

- WKC Name
- Name
- Description
- Data Classification Level
- Data Type
- Risk Perception
- Residual Risk

Enhancements to IBM OpenPages Financial Controls Management

IBM OpenPages Financial Controls Management (FCM) includes numerous enhancements.

FCM supports users who are responsible for the internal “sub-certification” process for financial controls reporting, including SOX. Users can review in-scope processes and key controls on a scheduled timeline and leverage pre-configured workflows, dashboards, and reports to provide additional insight.

Uses can now:

- Support the organization’s sub-certification process with a framework that is automated, repeatable, and consistent.
- Provide oversight functions with greater visibility into the health of the internal control and process framework with on-demand, actionable reports.
- Manage prerequisite tasks without reaching out to business owners, so that process owners, control owners, and oversight functions can confidently contribute to the organization’s certification process at the executive level.
- Utilize the internal sub-certification process to monitor the overall testing program of the internal controls framework and increase awareness of overall risks, issues, and gaps.

User profiles

FCM includes the following profiles:

- FCM Certification V2

This profile is designed for users actively involved in the review and sub-certification process.

- FCM Master V2

  This profile is designed for users that may be involved in the sub-certification or have an oversight role in the sub-certification process.

The profiles include:

- My Work tab, Dashboard tab with reports, and all home page tabs
- Dependent views, fields, and dependent pick lists

Role Template

FCM includes the new FCM - Certifications role template.

Field group

The new OPSS-FCM-cert field group and fields support the internal sub-certification process for financial controls reporting and are used in the new certification workflows, dashboards, and views.

Filters

FCM includes filters for the following object types:

- Control
- Process
- Control Eval
- Process Eval

The filters support the new FCM dashboards that are utilized in the financial controls reporting process.

Dashboards

FCM includes the following dashboards:

- FCM Master
- FCM Certification

The FCM Master dashboard provides a high level overview for the oversight user with visibility into the process and control sub-certification progress and access to FCM specific reports.

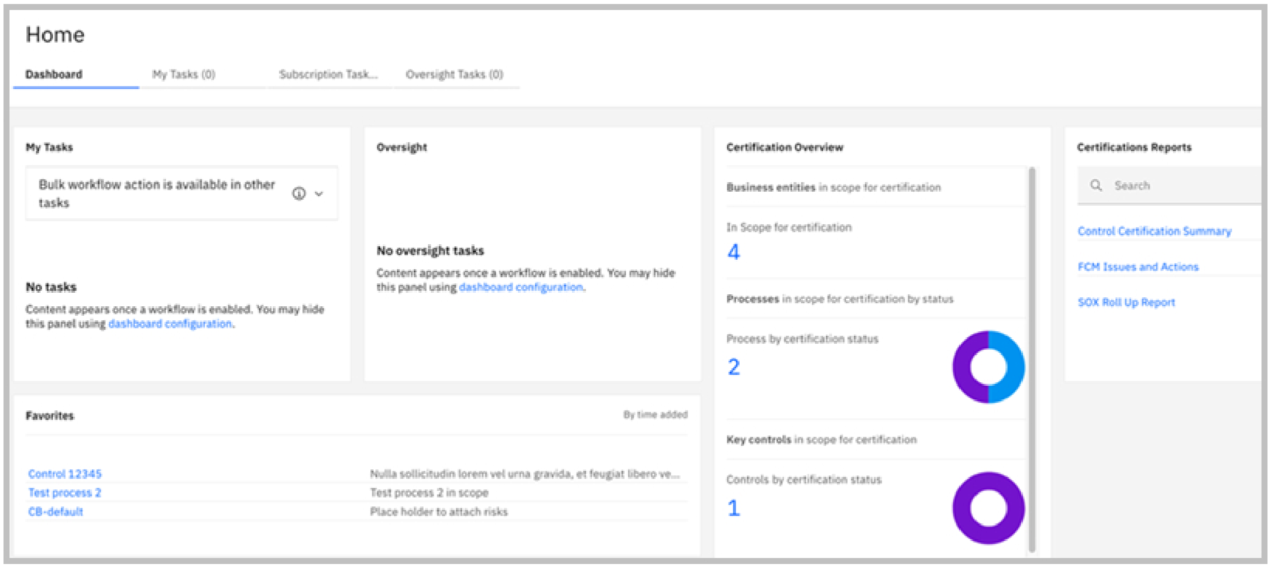


Figure 9. FCM Master dashboard

The FCM Certification dashboard provides a high level overview of assigned tasks, the status of the control and process sub-certification activities and access to FCM specific reports to aid in decisioning assigned tasks.

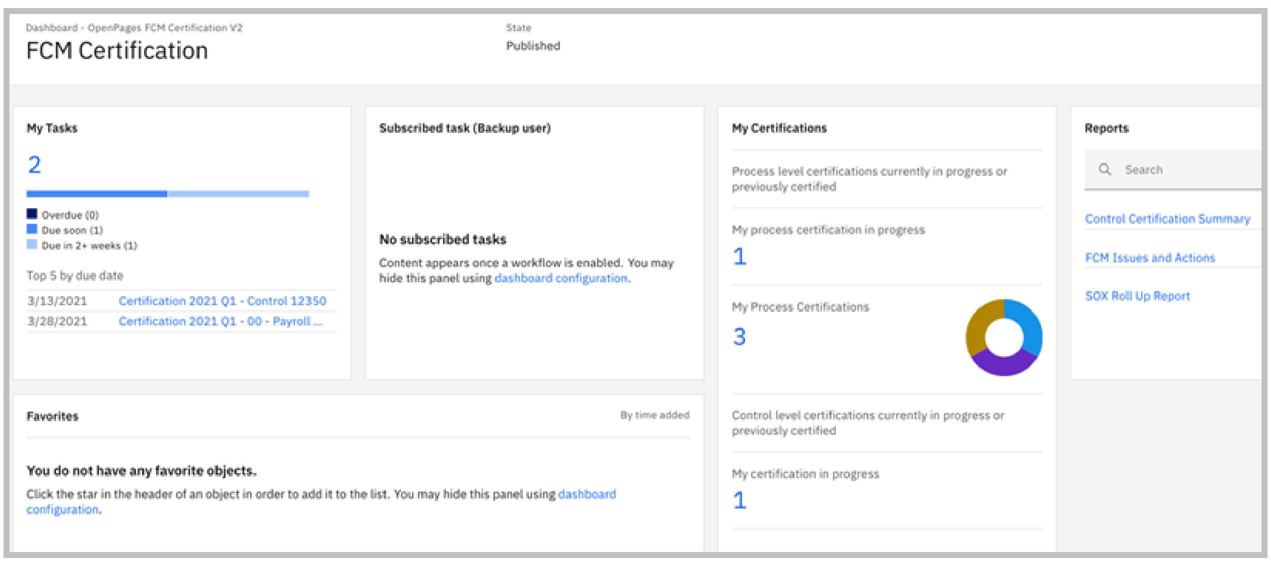


Figure 10. FCM Certification dashboard

Sample workflows

FCM includes the following sample workflows:

- FCM Certification – Business Level
- FCM Certification – Control Eval
- FCM Certification – Process Eval
- FCM Certification – Control
- FCM Certification – Process

The workflows support the internal sub-certification framework at the Control and Process levels. Two distinct workflow paths, Control sub-certification and Process sub-certification, facilitate this and run simultaneously starting at the Business Entity Level.

Depending on the organization's internal sub-certification framework, you can choose to:

- Enable only one of these workflow paths.

  For example, the Control workflow may be disabled if the sub-certification at the Process level is all that is needed to meet your organization's requirements.
- Disable the FCM Certification – Business Level workflow if the business entity is not categorized as in-scope for SOX.

  If the FCM Certification – Business Level workflow is disabled, operations performed in this workflow must be reviewed, such as re-setting the Certification Status field to "Not Reviewed" to determine the impacts to the overall sub-certification process and remaining workflows.

FCM Certification – Business Level workflow

- The sub-certification process begins at the Business Entity level.
- The workflow is activated for all business entities that are in scope for SOX.
- The Business Level workflow has two stages, start and end.
- The out-of-the-box workflow is started by using the Scheduler, which is set to start each calendar quarter and may be adjusted to the organization's needs.
- This workflow triggers the start of the following workflows:
  - FCM Certification - Control (field "classification" = key controls, workflow applicability = key controls), and
  - FCM Certification - Process (field "in scope" = SOX, workflow applicability = in scope for SOX)

Workflow Path at the Control level

The objectives of the FCM Certification – Control Workflow are to:

- Start automatically from the Business Level workflow for all Controls that are classified as "key" controls.
- Create a new Control Eval object for each key Control.
- Automatically start the FCM Certification – Control Eval workflow.

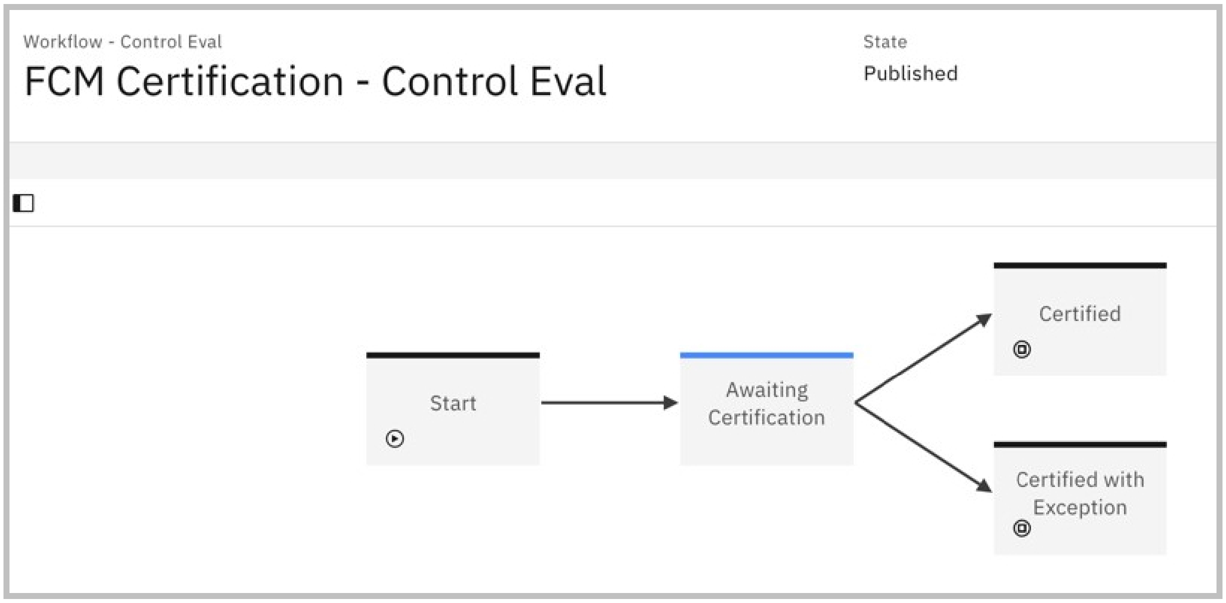
The objectives of the FCM Certification – Control Eval Workflow are to:

- Provide a mechanism for the user to certify the control data for each key Control on a quarterly basis.
- Create a read only record of the certification (the Control Eval object) with the relevant data points mapped from the Control object on a specific date

The user has the option to complete the workflow with the following action: certify or certify with exception.

Note: The user can perform the following actions:

- Certify – the Exception Description field must be blank
- Certify with Exception - the Exception Description field must be populated with the exception description.
- After certification is complete, the Control Eval object is locked to maintain the integrity of the data.



Workflow Path at the Process level

The objectives of the FCM Certification – Process Workflow are to:

- Start automatically from the Business Level workflow for all Processes that are "in scope for SOX".
- Create a new Process Eval object for each in-scope process.
- Automatically start the FCM Certification – Process Eval workflow.

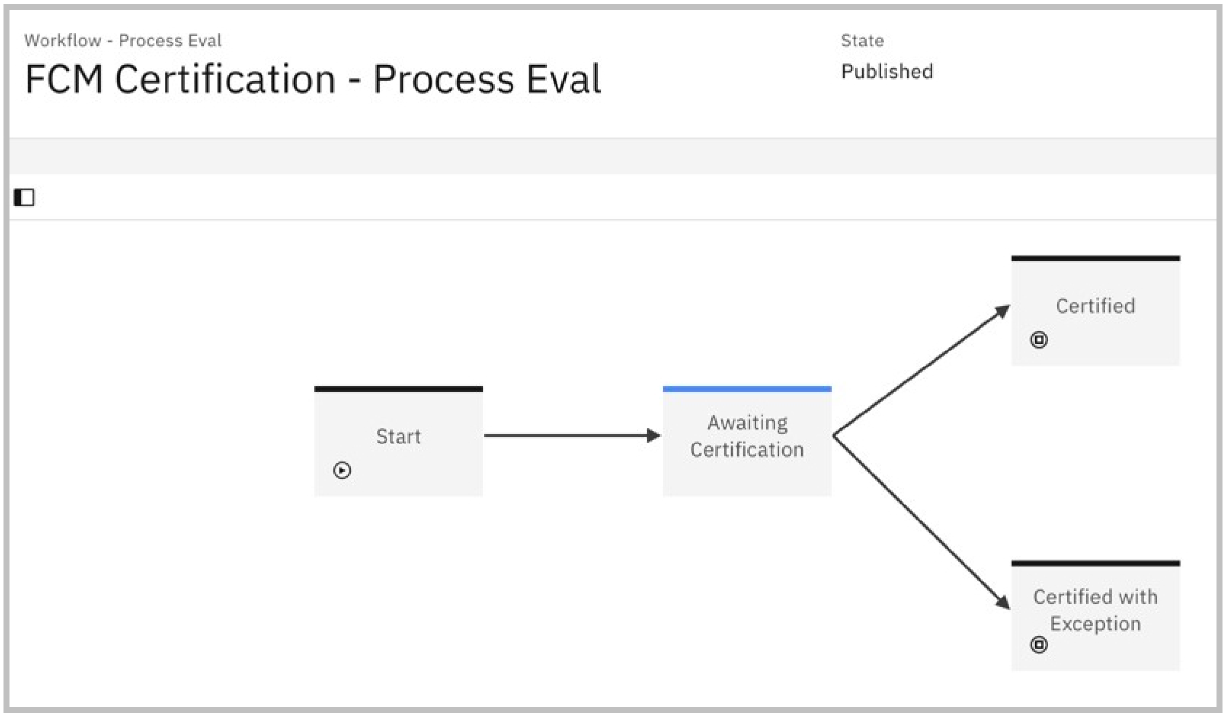
The objectives of the FCM Certification – Process Eval Workflow are to:

- Provide a mechanism for the user to certify the process data for each "in scope" process on a quarterly basis.
- Create a read only record of the certification (the Process Eval object) with the relevant data points mapped from the Process object on a specific date

The user has the option to complete the workflow with the following actions: certify or certify with exception.

Note: The user can perform the following actions:

- Certify – the Exception Description field must be blank
- Certify with Exception - the Exception Description field must be populated with the exception description.
- After the sub-certification is complete, the Process Eval object is locked to maintain the integrity of the data.



Calculations

FCM includes the following calculations:

- Control Eval Certification
- Process Eval Certification

The purpose of the calculations is to:

- Provide an auto-naming convention for the Control Eval and Process Eval objects with the quarter and year information in the name.
- Pre-populate the Quarter and Year fields on the Control Eval and Process Eval objects to align with the sub-certification date.

Note: Since the GRC Calculations feature auto names the Control Eval and Process Eval objects, these objects cannot be named if they are manually created. Ensure that the Control Eval and Process Eval object “add new” buttons are disabled from the Grid View while the GRC Calculations feature is enabled.

Views

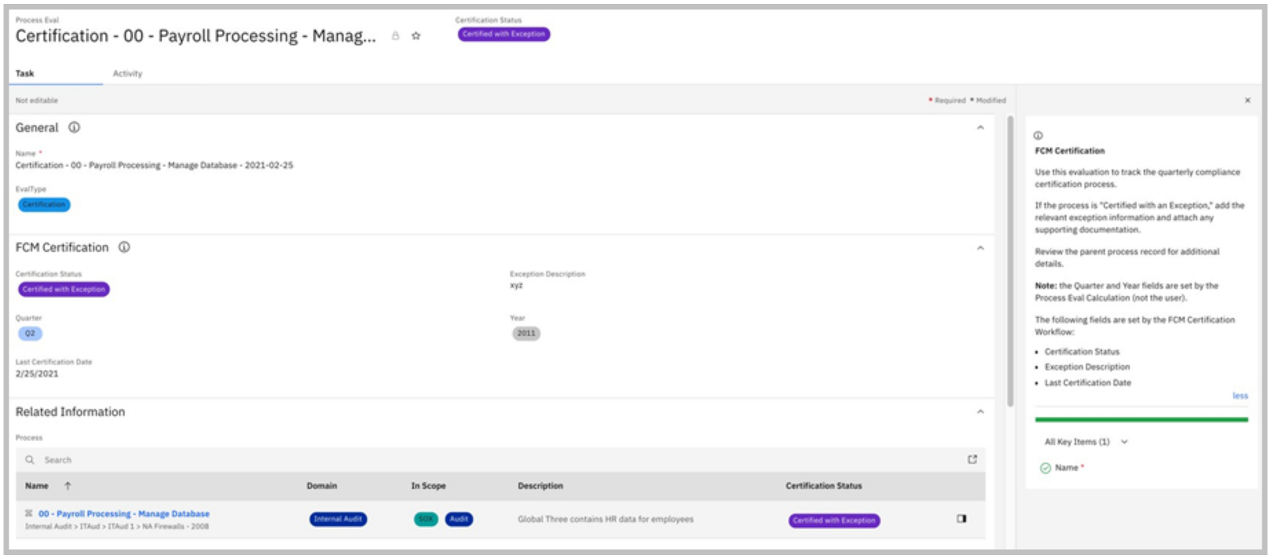
FCM includes the following views:

- SysView-Grid-SOXProcessCert
- SysView-Grid-SOXProcessEval
- SysView-Task-SOXControlCert
- SysView-Task-SOXControlEvalCert
- SysView-Task-SOXProcessCert
- SysView-Grid-SOXControlEvalCert
- SysView-Grid-SOXControlCert
- SysView-Grid-SOXProcessEval

Views were created specifically to aid the user in the sub-certification process. Below is an example of a customized view developed to support this process.

The Process Eval View has been designed to aid the user in the sub-certification process. Data points from the parent process object and the workflow are mapped and pre-populated to the Process Eval object record. The Process and Control Summary Report is available from the parent Process object to provide additional insight for the approver and oversight functions in the sub-certification process.

Guidance has been provided to assist the user in the sub-certification process.



Reports

FCM includes the following reports:

- Control Certification Status Summary Report
  - Control Certification Drill Through
- FCM Issues & Actions Report
- SOX Roll-up Report
- Process Summary Report

The Control Certification Status Summary Report (with drill through) can be accessed from the FCM Dashboard and provides an overview of the Control certification status.

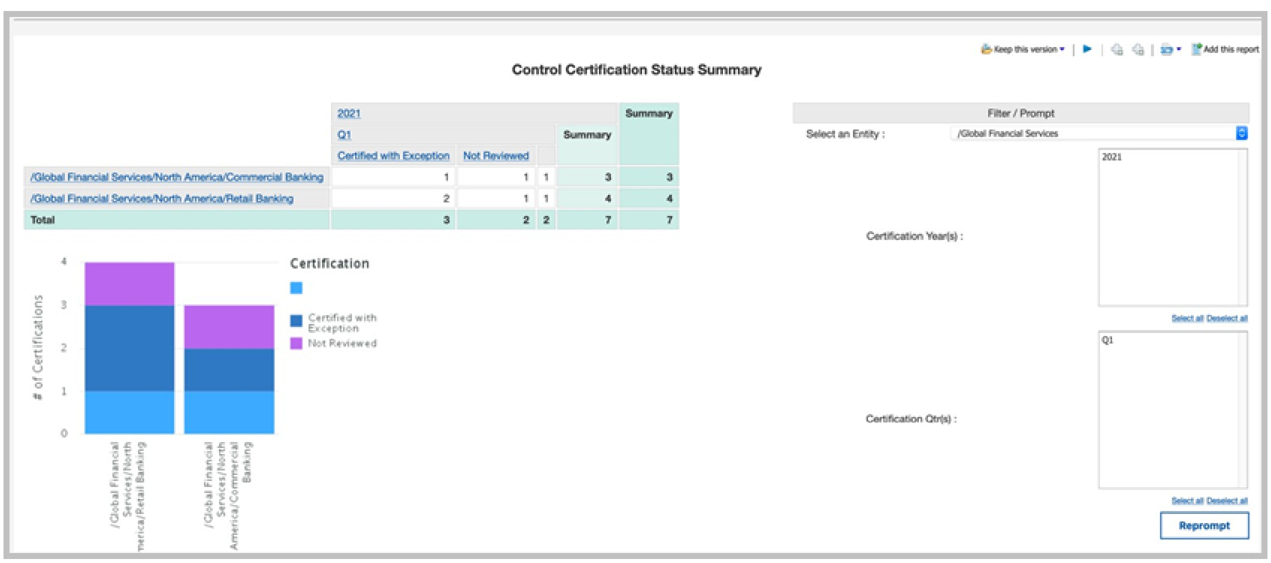


Figure 11. Control Certification Status Summary Report

The FCM Issues & Actions Report can be accessed from the FCM Dashboard and provides a list of issues and corresponding actions for the FCM user to aid in the certification process.

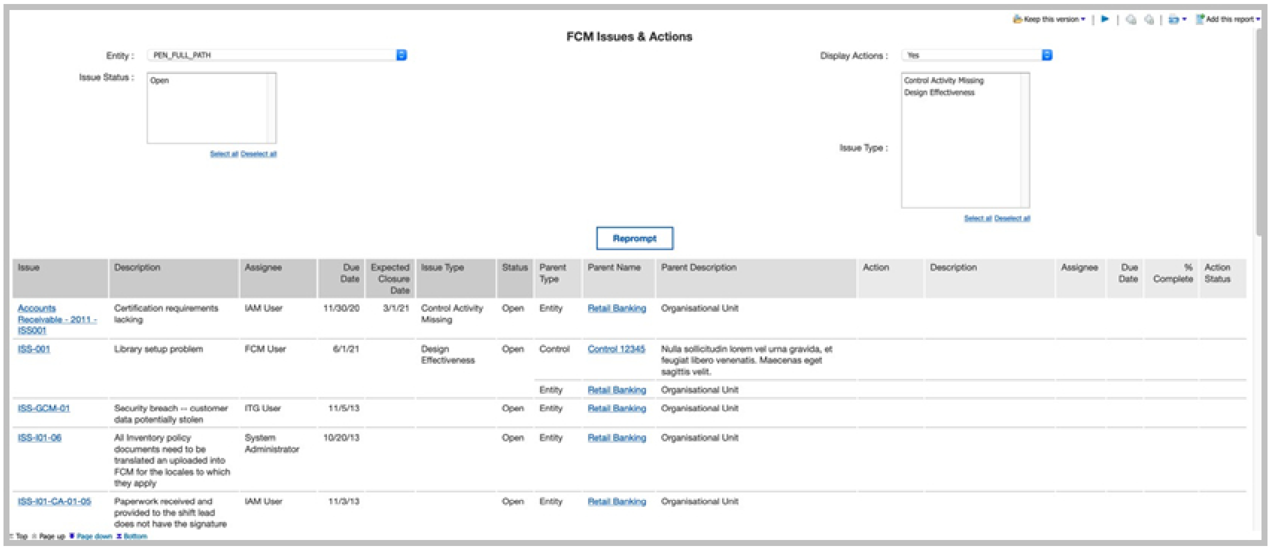


Figure 12. FCM Issues & Actions Report

The SOX Roll-up Report (FCM – Process Control Certification Report) can be accessed from the FCM Dashboard and is a summary of the control and process certification status by quarter.

The report can be filtered by Business Entity, number of quarters to be viewed (max 5), and key control status (yes / no).

The report is separated into three sections:

- Process Certification Status
- Control within each Process Certification Status
- Prior Certifications by Quarter

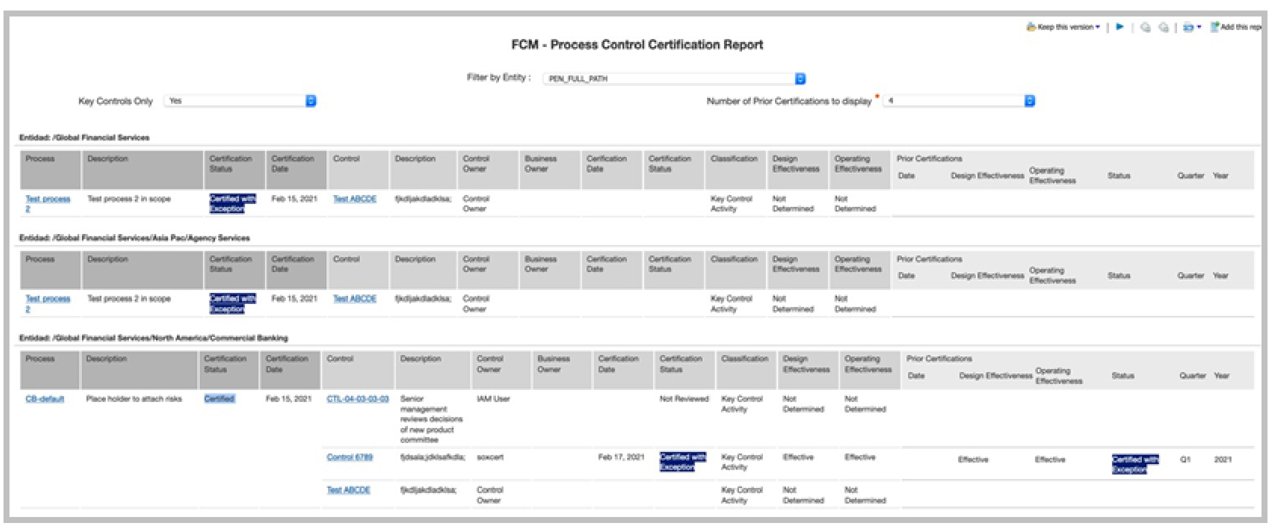
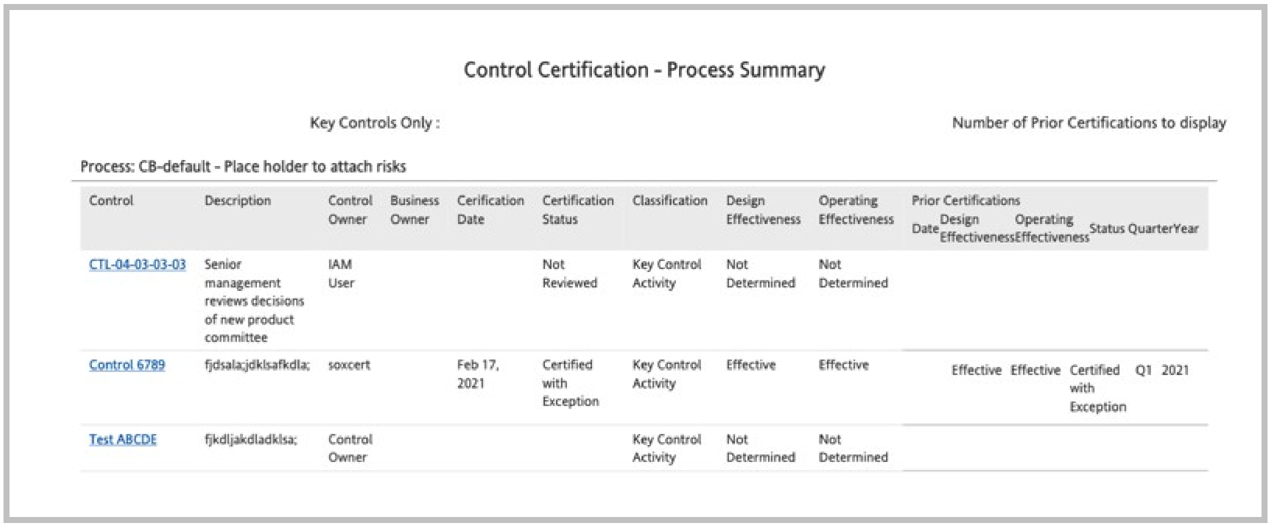


Figure 13. SOX Roll-up Report (FCM – Process Control Certification Report)

The Control Certification by Process Summary Report is accessed from a field on the Process Task View. This report provides the user additional insight of the status of the key controls supporting the process.

This report allows the user to “click through” to the specific control object record.



Control Certification - Process Summary

Key Controls Only :

Number of Prior Certifications to display

Process: CB-default - Place holder to attach risks

Control	Description	Control Owner	Business Owner	Cerification Date	Certification Status	Classification	Design Effectiveness	Operating Effectiveness	Prior Certifications Date	Design Effectiveness	Operating Effectiveness	Status	Quarter	Year
CTL-04-03-03-03	Senior management reviews decisions of new product committee	IAM User			Not Reviewed	Key Control Activity	Not Determined	Not Determined						
Control 6789	fjdsala;jdklsafkdla;	soxcert		Feb 17, 2021	Certified with Exception	Key Control Activity	Effective	Effective		Effective	Effective	Certified with Exception	Q1	2021
Test ABCDE	fjkdljakdladklsa;	Control Owner				Key Control Activity	Not Determined	Not Determined						

Figure 14. Control Certification by Process Summary Report

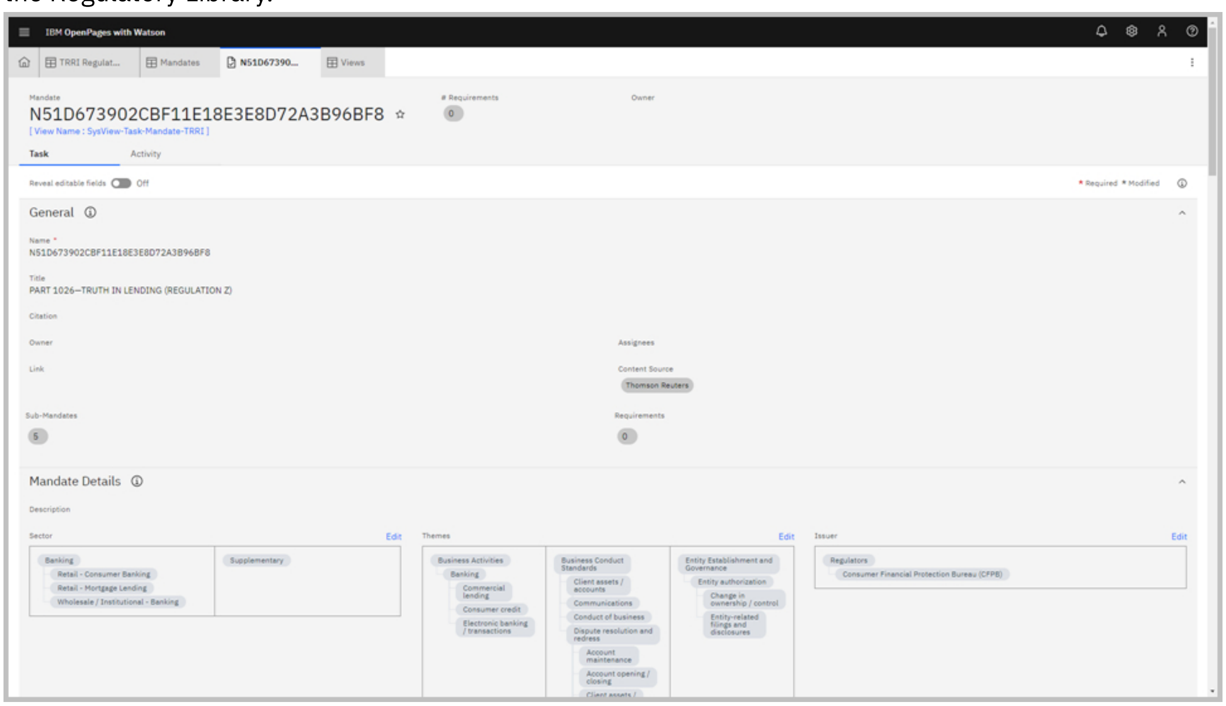
Enhancements to IBM OpenPages Regulatory Compliance Management

IBM OpenPages Regulatory Compliance Management (RCM) includes numerous enhancements that continue to build on the strategy and direction that was introduced in 8.2.0.

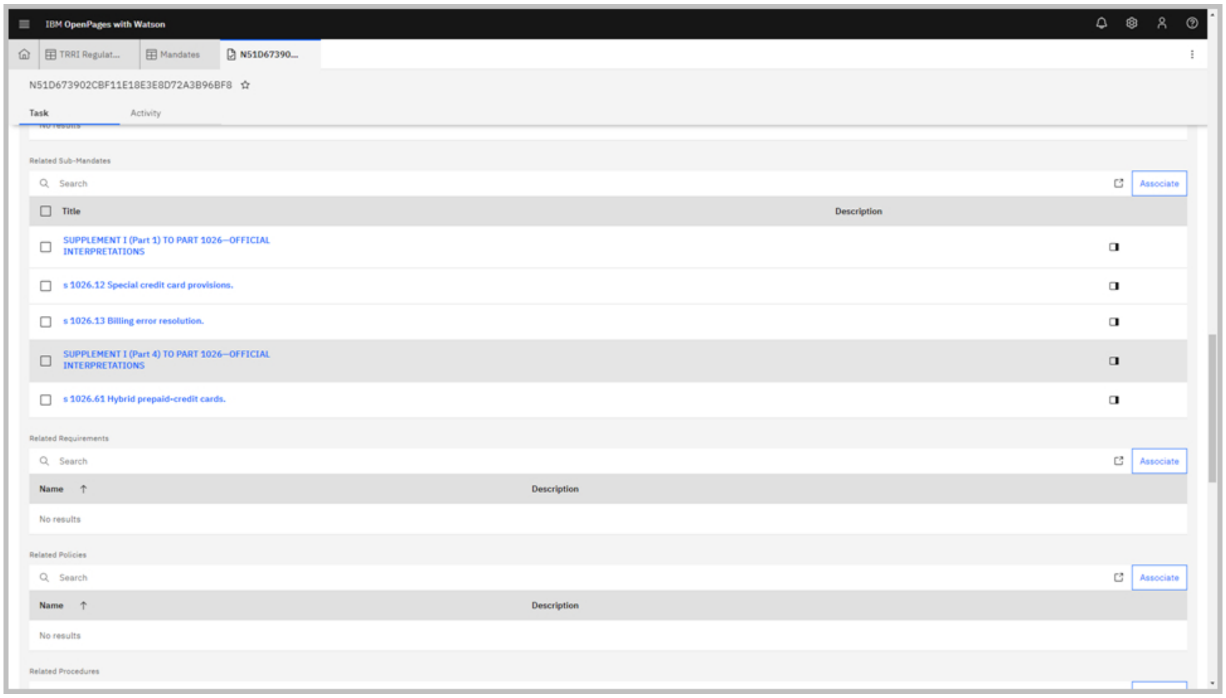
Enhancements to the Thomson Reuters feed

Mandate creation

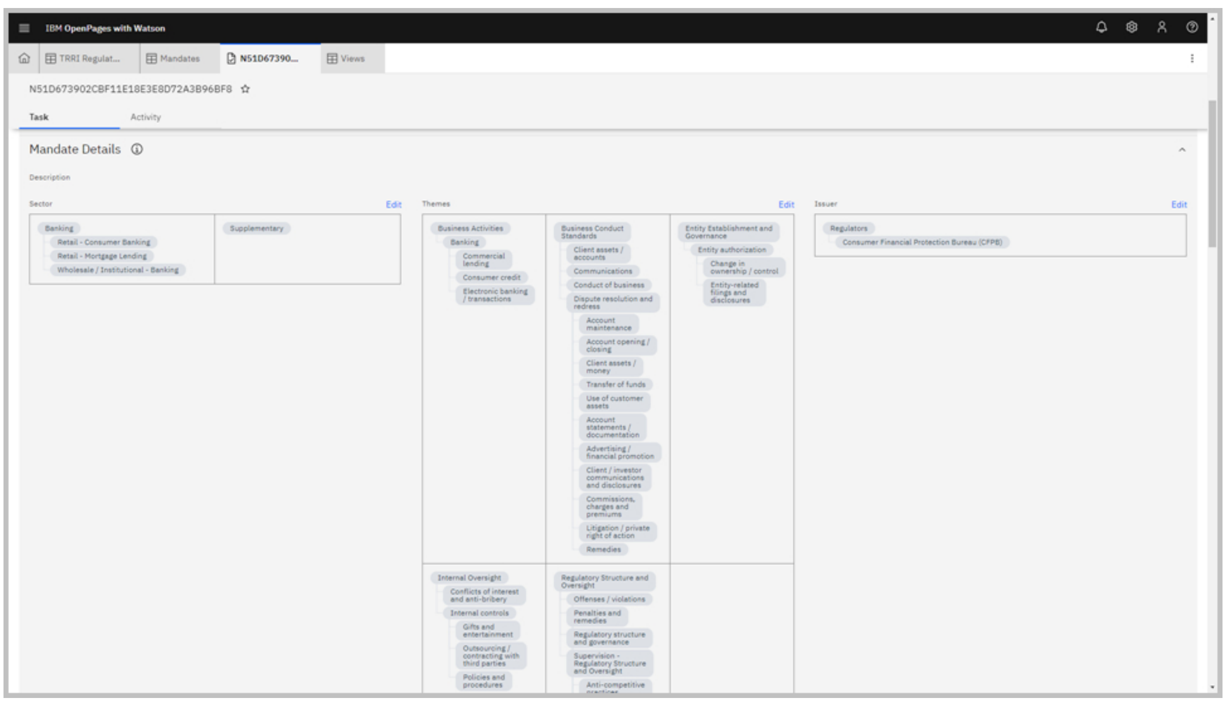
When data from Thomson Reuters Regulatory Intelligence is imported, mandates are now created in the Regulatory Library.



The Thomson Reuters Mandate associates the Thomson Reuters Sub-Mandates that have a child relationship to the mandate.



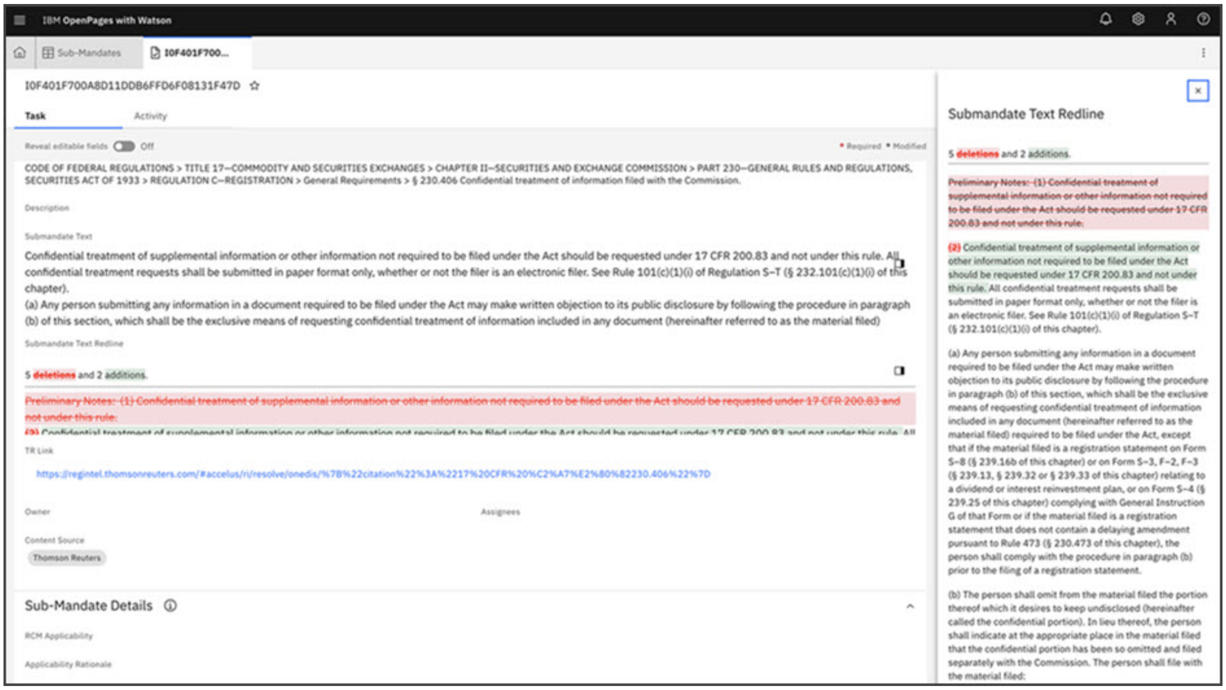
OpenPages then extracts the Categorizations from the Sub-mandates and rolls those Categorizations up to the Mandate details. The Categorizations include: Sector, Themes, Issuer, Geography, and Content Type.



Redlining

Sub-mandates now display the redline version of the last regulatory change to the Submandate Text.

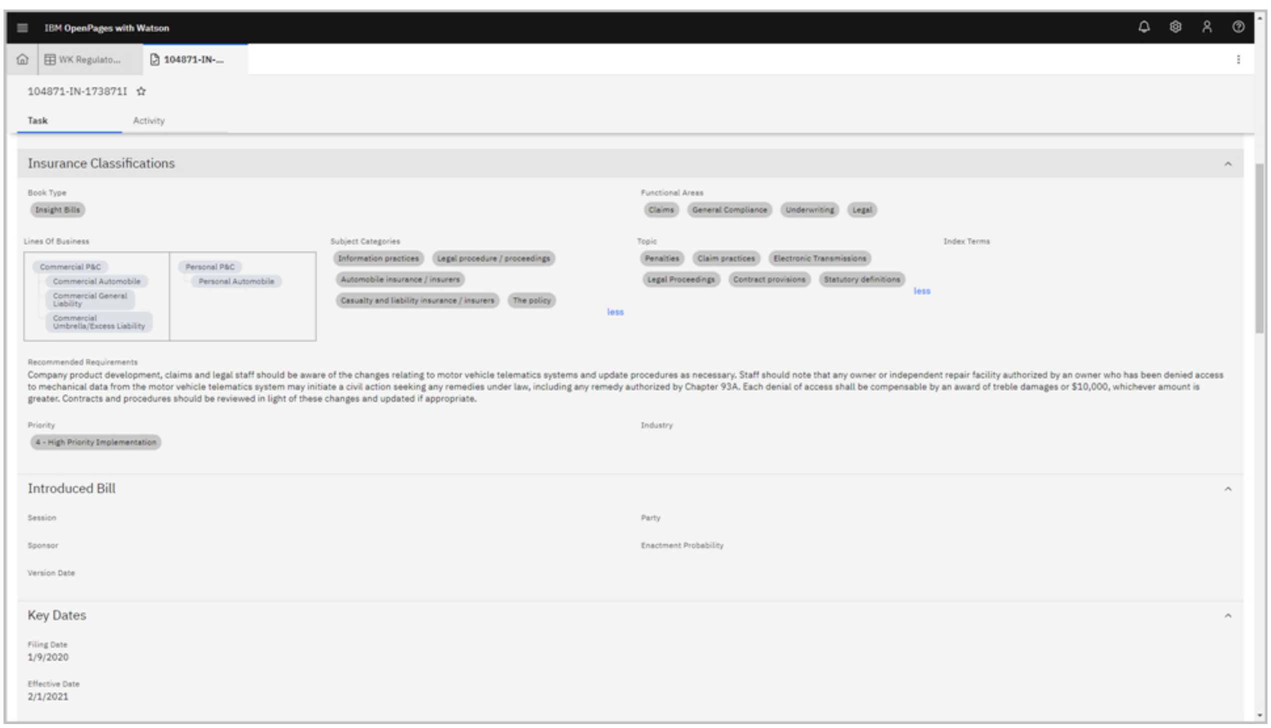
The redlining is displayed in the Submandate Text Redline field. You can use a flyover to review the changes.



Enhancements to the Wolters Kluwer feed

New data fields enhance the Wolters Kluwer NILs (Insurance content) Regulatory Events.

The new fields are specific to the NILs feed and do not appear on the Banking and Securities Regulatory Events feeds. The NILs feed is determined by the `Regulator = InSource`. The NILs content is automatically displayed in an insurance-specific view upon ingestion.



Supported software

IBM OpenPages with Watson 8.2.0.2 supports new versions of some software:

- Microsoft Windows Server 2019 Standard Edition is now supported.

If you use Microsoft Windows Server 2019 you also need to upgrade software that is used by IBM OpenPages with Watson, such as Db2®, Oracle, and IBM Installation Manager (IIM). Review the Supported Environments website.

- Red Hat® Enterprise Linux® (RHEL) Server 8.x is now supported.

  If you use Linux 8.x, you also need to upgrade software that is used by IBM OpenPages with Watson, such as Db2, Oracle, and IBM Installation Manager (IIM). Review the Supported Environments website.

- Oracle Instant Client is now supported for Oracle 19c.

For more information, see the Supported Environments website.

Requests for Enhancements (RFEs) delivered

This release delivers on several RFEs.

For more information, see: Requests for Enhancement (RFEs) Delivered by Release.

Note: RFEs that request user interface enhancements are considered to be delivered if available in the Task Focused UI.

Chapter 6. New features in version 8.2.0.1

The new features in IBM OpenPages with Watson 8.2.0.1 include the following enhancements.

Platform enhancements

Enhancements to functionality are included in this version of IBM OpenPages with Watson.

IBM OpenPages for IBM Cloud Pak for Data

IBM OpenPages for IBM Cloud Pak for Data 8.2 is an integrated governance, risk, and compliance platform that companies can use as a tool to assist in managing risk and regulatory challenges across the enterprise.

It provides a set of core services and functional components that span risk and compliance domains, which include operational risk, policy management, financial controls management, IT governance, internal audit, model risk governance, regulatory compliance management, third-party risk management, and business continuity management.

IBM OpenPages for IBM Cloud Pak for Data provides a powerful, highly scalable, and dynamic tool set that helps empower managers with information transparency and the capability to identify, manage, monitor, and report on risk and compliance initiatives on an enterprise-wide scale.

IBM Watson Language Translator

Use IBM Watson Language Translator to translate values in text fields to other languages.

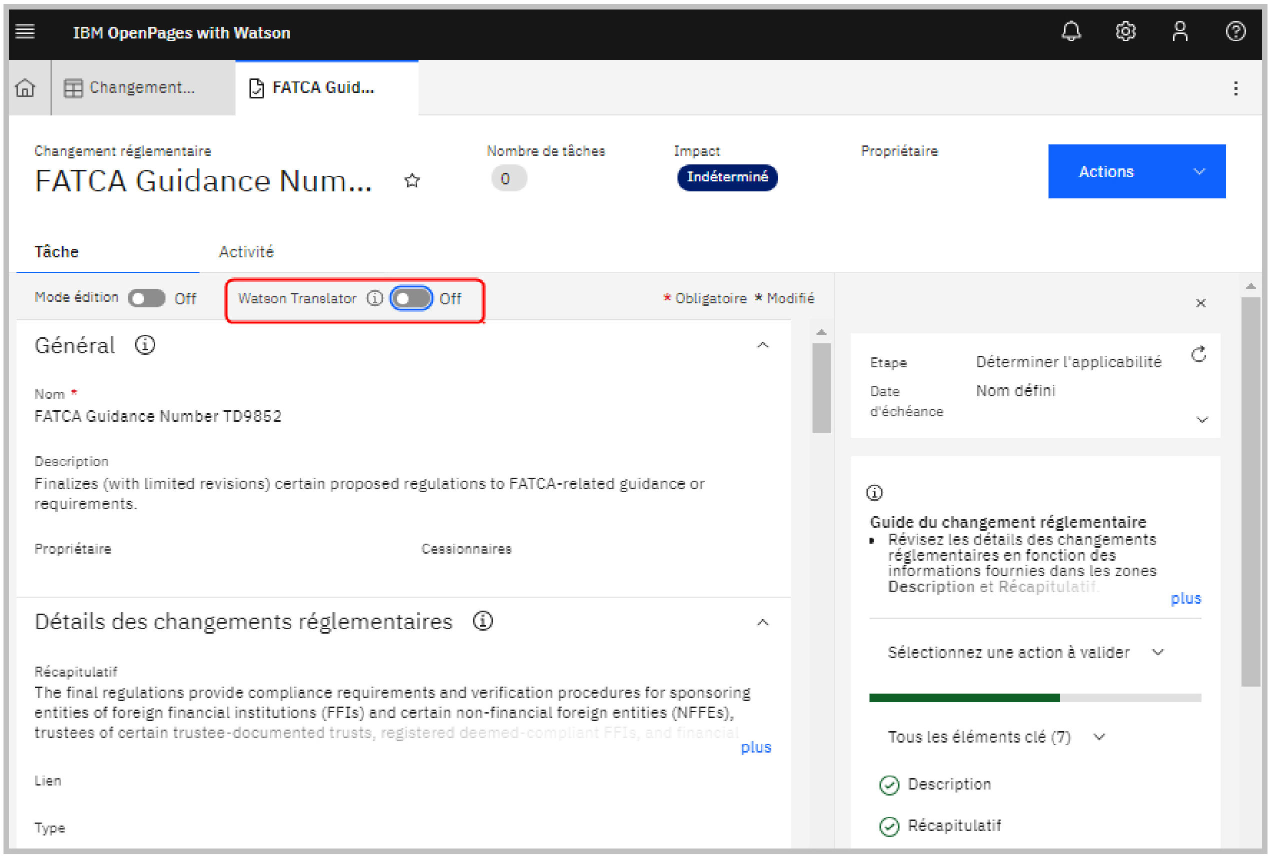
The icons and functionality for the IBM Watson Language Translator are different depending on whether the access point is for users or administrators.

Users can work with translated text by using the 

and 

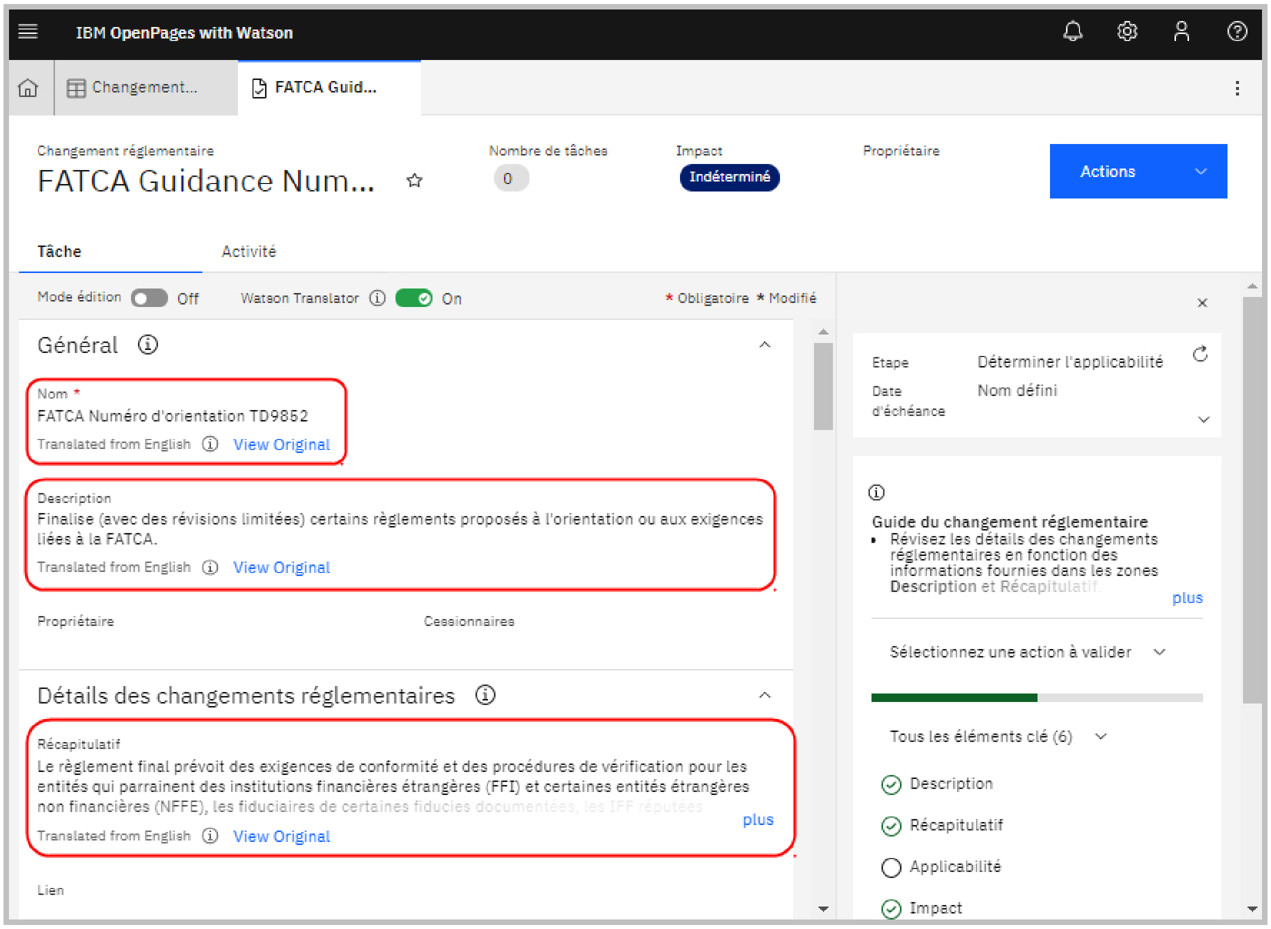
icons in Task Views.

A user, for example, logs on with a locale that is associated with French and views a Regulatory Change that was originally issued in English.



You can click 

to translate the English text to French. Toggle between the languages by clicking **View Original** and **View Translation**. Click the Info icon to view a confidence score.

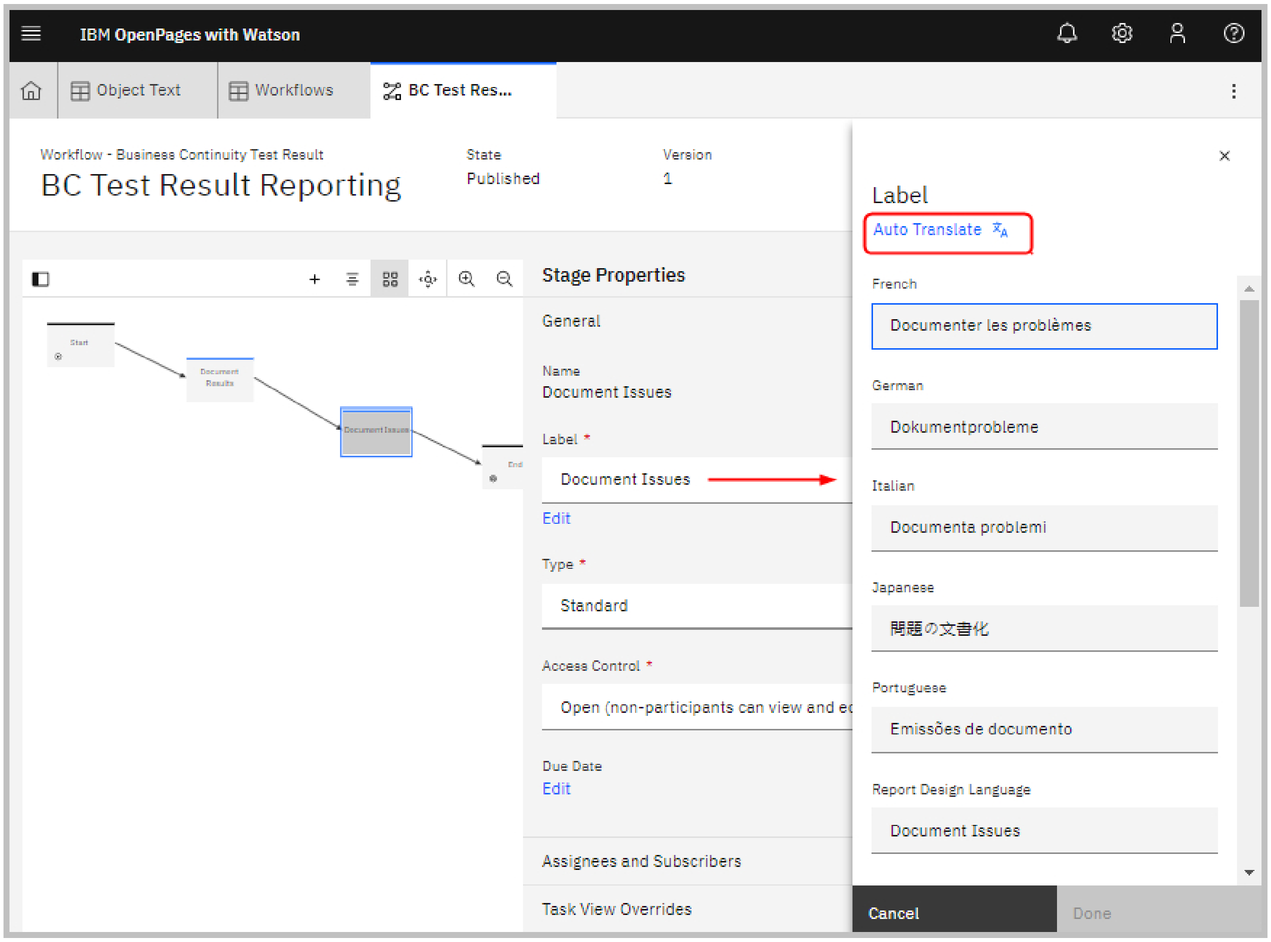


Administrators can work with translated text by using the Auto Translate icon on the following screens:

- Application Text
- Object Text
- Fields
- Dashboard configuration (administrators)
- View Designer
- GRC Workflow Designer

An administrator, for example, logs on with a locale that is associated with English and opens the GRC Workflow Designer.

Click Auto Translate to translate stage label text that is written in English to other languages.



A IBM Watson Language Translator must be configured on IBM Cloud. The integration with the IBM Watson Language Translator must be configured in OpenPages.

Net Promoter Score (NPS) survey

It is now possible for users to send feedback about OpenPages to IBM using a Net Promoter Score survey .

User feedback helps IBM improve OpenPages.

If a Net Promoter Score survey is enabled, users are presented with two ways to complete a survey:

- An NPS Feedback button
- An NPS survey form after logging in

An NPS Feedback button is always displayed on the Home page for users who are eligible to receive a survey. Users can provide feedback at any time and as often as they want.

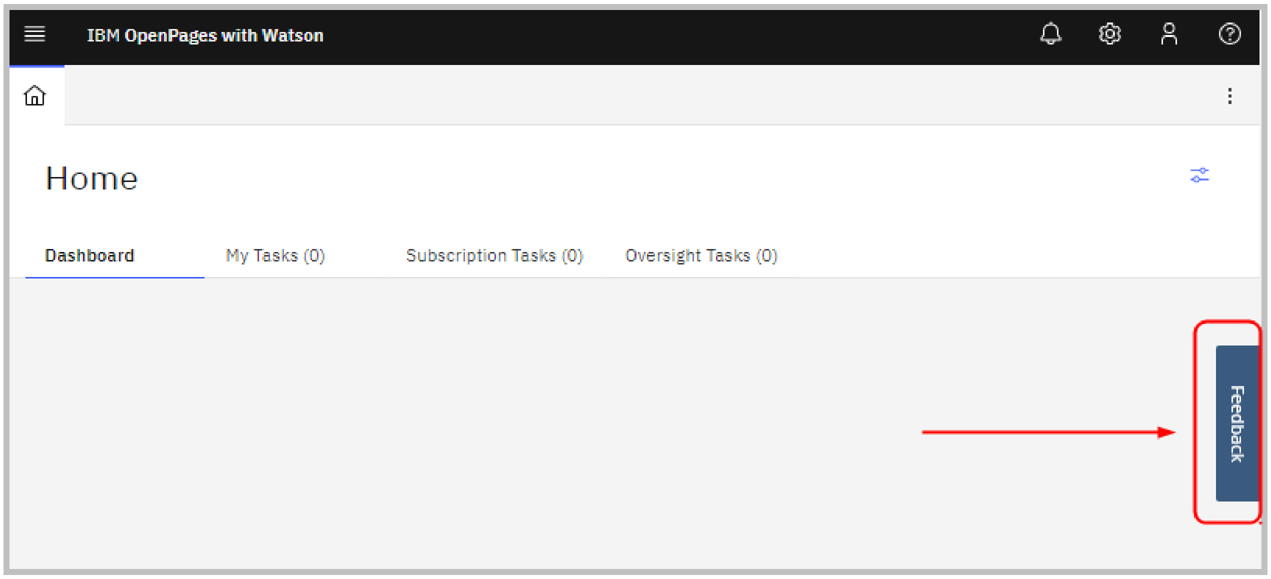


Figure 15. NPS Feedback button on the Home page

An NPS survey form is displayed on log in to users who meet the following conditions:

- The user must be eligible to receive the survey, as defined in **Included Users or Groups** and **Excluded Users or Groups**.
- The user must meet the Medallia frequency requirements:
  - The user was last presented with a survey at least 90 days ago. This prevents the survey from being presented too frequently. It is presented regardless of whether the user provided feedback or declined to provide feedback on the last survey.
  - The user must have logged in at least 30 days ago. This prevents the survey from being presented to brand new users.

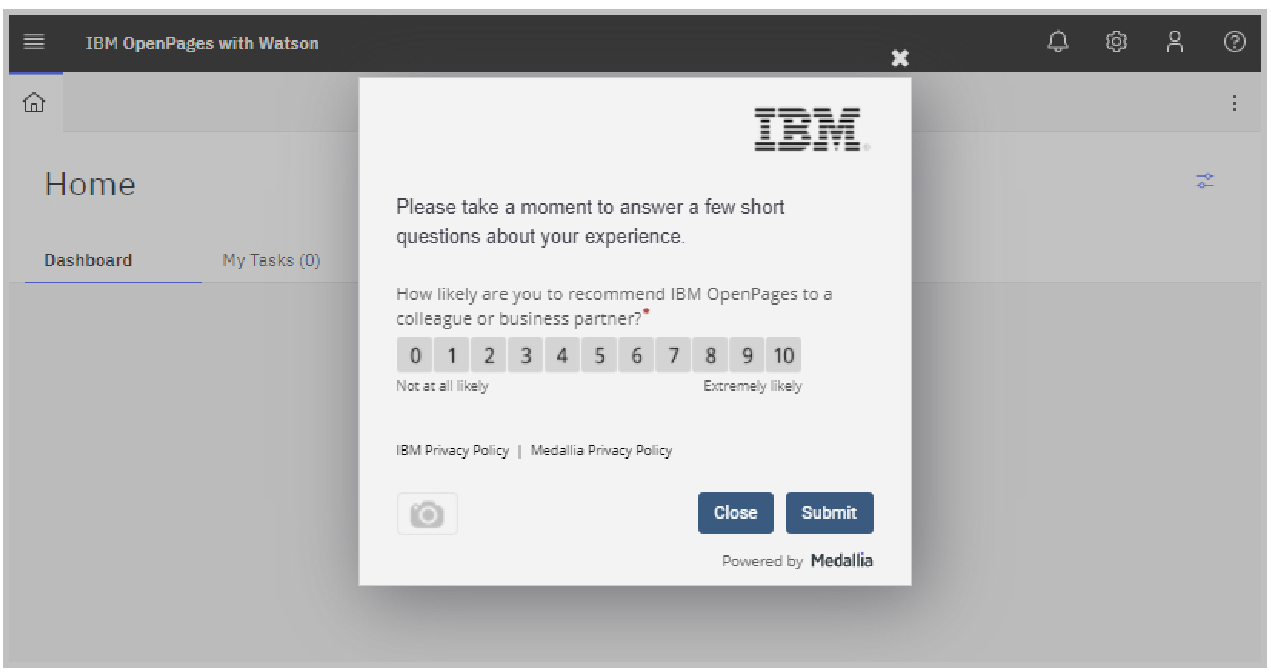


Figure 16. NPS survey form displayed after logging in

The survey is displayed in the language of the locale that the user has selected. If the locale is changed, the language of the survey changes. Users answer the questions, add screen shots (optional), and click **Submit**.

Opening Microsoft Office files directly from OpenPages

It is now possible to open and edit Microsoft Office files directly from OpenPages.

Whether this feature is enabled is controlled by the new setting: **Applications** > **Common** > **Configuration** > **Disable opening files with MS Office desktop**. It is enabled by default.

The functionality of this feature is similar to inline editing. Users can open Microsoft Office files directly from OpenPages. Every time a user clicks save within a file that is opened in this way, the file is saved in the OpenPages file repository. However, other users cannot see the changes until the file is checked in.

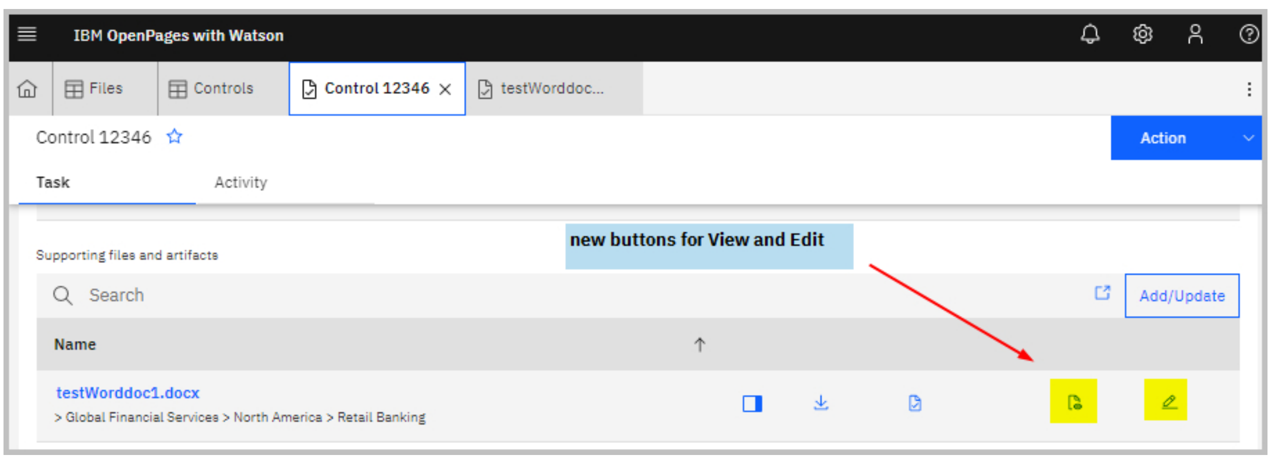
If enabled, users can open and edit Microsoft Office files from the following access points in the Task Focused UI:

- In a Task View for an object type, where the Task View contains a Grid relationship field for the File object type.
- In a Task View for the File object type.

The feature is available:

- When SSL is enabled on the application server.
- Only on Microsoft Windows clients. It is not available on Mac operating systems.
- Only if Microsoft Office 2016 or Microsoft 365 are installed locally for users.
- Only for Word, Excel, and PowerPoint files with the following extensions: .doc, .docx, .xls, .xlsx, ppt, pptx.

The following example shows the new (View) and (Edit) icons. A Task View for a Control is displayed and one Word document is attached to the Control. The Word document can be opened, viewed, and edited in Microsoft Word directed from the Control. Every time a user clicks save, the file is saved in the OpenPages file repository. The user must check in the file. Then, the latest version of the document is available to other users to view and edit.



Enhancements to the Task Focused UI

The Task Focused UI includes numerous new capabilities and features.

Administrator tasks migrated from the Standard UI

The following tasks can now be accessed on the Administration menu in the Task Focused UI under > **Solution Configuration**:

- **Objects** with access to fields and field groups
- **Profiles**

The following tasks can now be accessed on the Administration menu in the Task Focused UI under > **Users and Security**:

- **Domains & Groups**
- **Role Templates**
- **Security Rules**

The tasks are still available in the Standard UI.

Solutions enhancements

IBM OpenPages solutions have been enhanced to make them more complete and easier to use.

Enhancements to IBM OpenPages Regulatory Compliance Management

IBM OpenPages Regulatory Compliance Management (RCM) includes numerous enhancements that continue to build on the strategy and direction that was introduced in 8.2.0.

New object types

The following object types have been added:

- Reg-Track Regulatory Event
- Reg-Track Regulatory Event Series

Reg-Track connector

IBM OpenPages Regulatory Compliance Management now includes a connector for Reg-Track.

The Reg-Track Regulatory Event object enables the direct ingestion of regulatory event feeds from Reg-Track into RCM, and the automated generation of workflows assigned to users based on supplied data points. This automation helps to assign tasks to users efficiently, enabling them to effectively respond to, and prepare for, regulatory change.

Taxonomy mapping

Users can associate their own taxonomy to the Reg-Track taxonomy that is used for Regulatory Events.

Users can populate fields on a Regulatory Event record that are more consistent with other values that are used in IBM OpenPages with Watson. The converted data points are available for use in the same way as existing data points on the Regulatory Event record, such as for setting conditions within the Rules Engine or in a workflow.

Reg-Track Rules Engine

The IBM OpenPages with Watson Rules Engine helps users to handle the daily influx of regulatory events, automatically route them to the right users in their organization, and start any necessary workflows.

The data from the Reg-Track feeds is loaded into OpenPages, and then passes through the Rules Engine. One regulatory event can trigger multiple rules if more than one rule's conditions are met.

Users can access the Rules Engine via a link on the **Reg-Track Regulatory Events** page.

For information about how to configure the Reg-Track connector, see the *IBM OpenPages with Watson Administrator's Guide*.

Sample workflows for the Reg-Track connector

The following workflows are available with the Reg-Track connector:

- Trigger Change - Regulatory

  This workflow creates a Regulatory Change record and associates the record to a Reg-Track Regulatory Event when the conditions of a rule from the Rules Engine are met that indicate the Reg-Track Regulatory Event addresses a regulatory change, such as a proposed or final rule published in the Federal Register. The workflow also populates certain fields on the created Regulatory Change record, including categorizing the Regulatory Change record as **Regulatory Change**. This workflow enables the association of multiple Regulatory Change records to a Reg-Track Regulatory Event so that multiple users can analyze the impact of the Reg-Track Regulatory Event on their particular areas of responsibility within the organization.

- Trigger Change - Horizon Scanning

  This workflow creates a Regulatory Change record and associates the record to a Reg-Track Regulatory Event when the conditions of a rule from the Rules Engine are met that indicate the Reg-Track Regulatory Event addresses an issue other than a regulatory change, such as a speech or enforcement action published by a regulator. The workflow also populates certain fields on the created Regulatory Change record, including categorizing the Regulatory Change record as **Horizon Scanning**. This workflow enables the association of multiple Regulatory Change records to a Reg-Track Regulatory Event so that multiple users can analyze the impact of the Reg-Track Regulatory Event on their particular areas of responsibility within the organization.

- Reg-Track Regulatory Change Review Workflow

  When a Regulatory Change record is created, this workflow starts. The workflow guides the user through the processing of a Reg-Track Regulatory Event. The user determines the applicability of the Reg-Track Regulatory Event that is associated with the Regulatory Change record and determines the impact of the Reg-Track Regulatory Event. The user can also create and assign Regulatory Tasks to users within RCM for actions that need to be taken to respond to the Reg-Track Regulatory Event. When Regulatory Tasks are assigned to users, this workflow cannot be closed until all related Regulatory Tasks have been completed.

- Send Email Notification

  This workflow can be used to send mail notifications to users who are named within a rule that is created in the Rules Engine.

Sample rules for Reg-Track regulatory event processing

The following rules are available with the Reg-Track connector:

Change Management – US Federal

This rule creates a regulatory change object if the incoming Regulatory Event is a US Federal regulatory change.

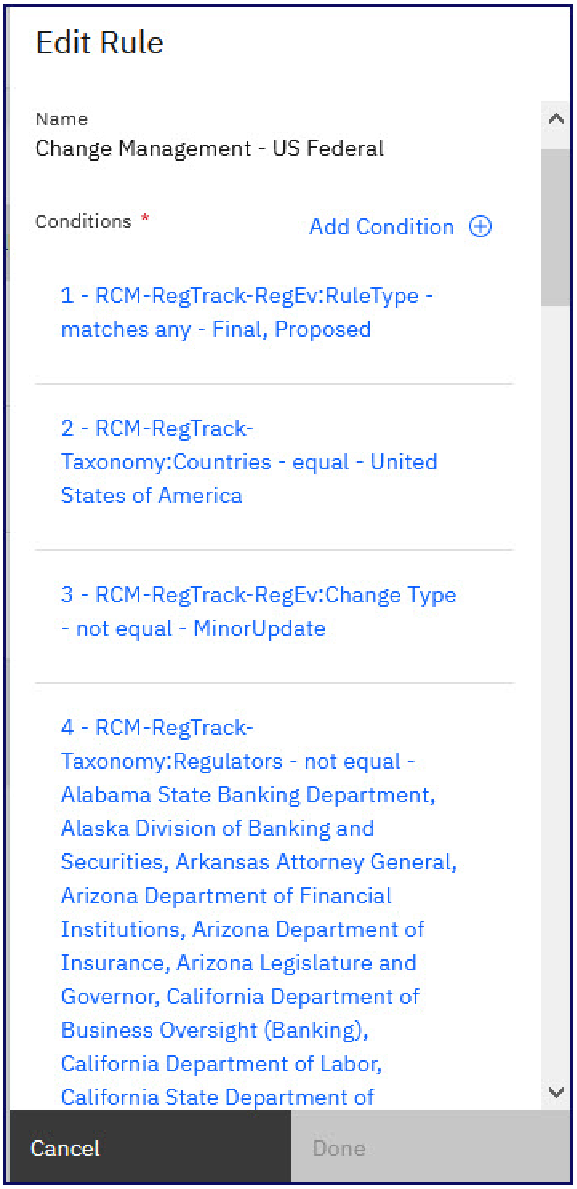


Figure 17. Change Management – US Federal rule

Change Management – Global

This rule creates a regulatory change object if the incoming Regulatory Event is a Global regulatory change.

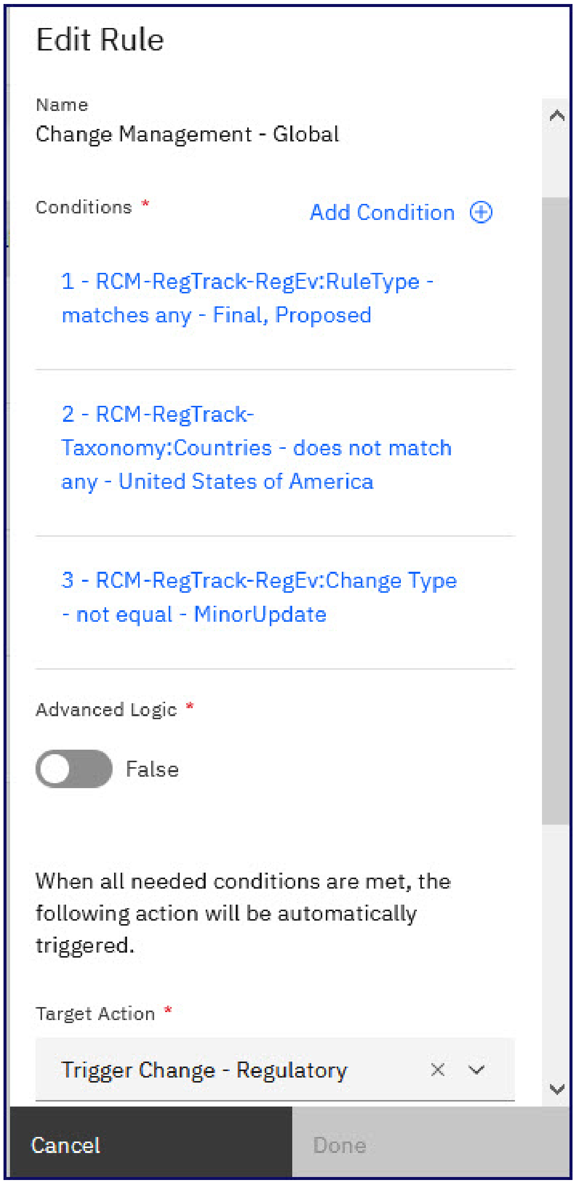


Figure 18. Change Management – Global rule

Horizon Scanning – Change Management Notices

This rule sends an email notification if the incoming Reg-Track Regulatory Event is any type of regulatory change.

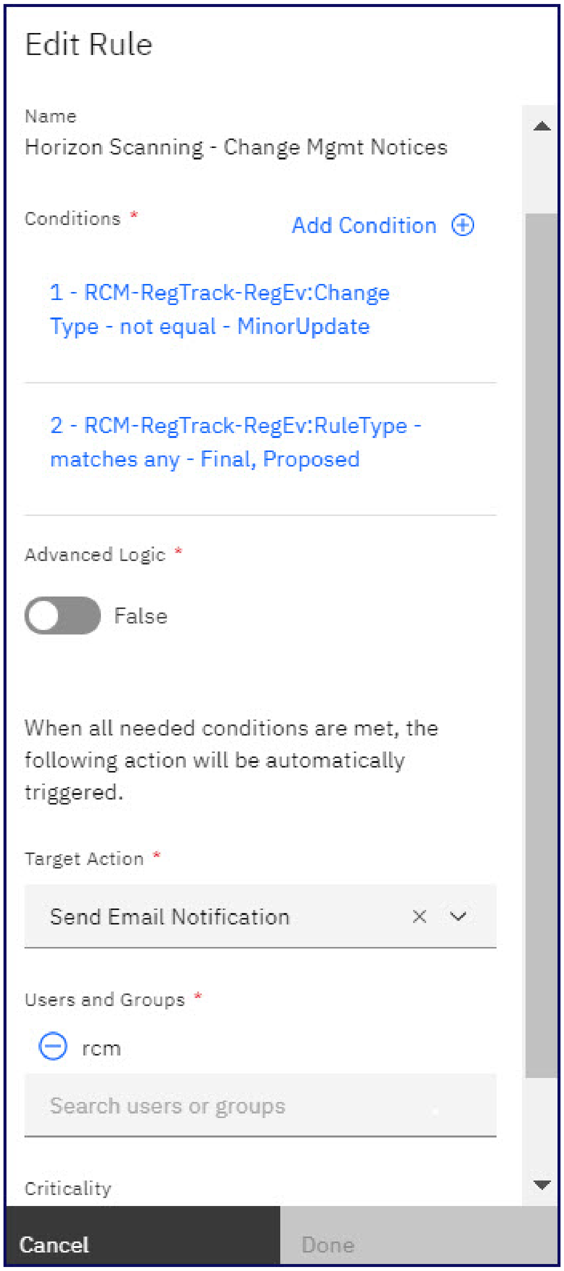


Figure 19. Horizon Scanning – Change Management Notices rule

Horizon Scanning – Secondary Materials

This rule creates a regulatory change object with `type: horizon scanning` if the incoming Reg-Track Regulatory Event is not a regulatory change.

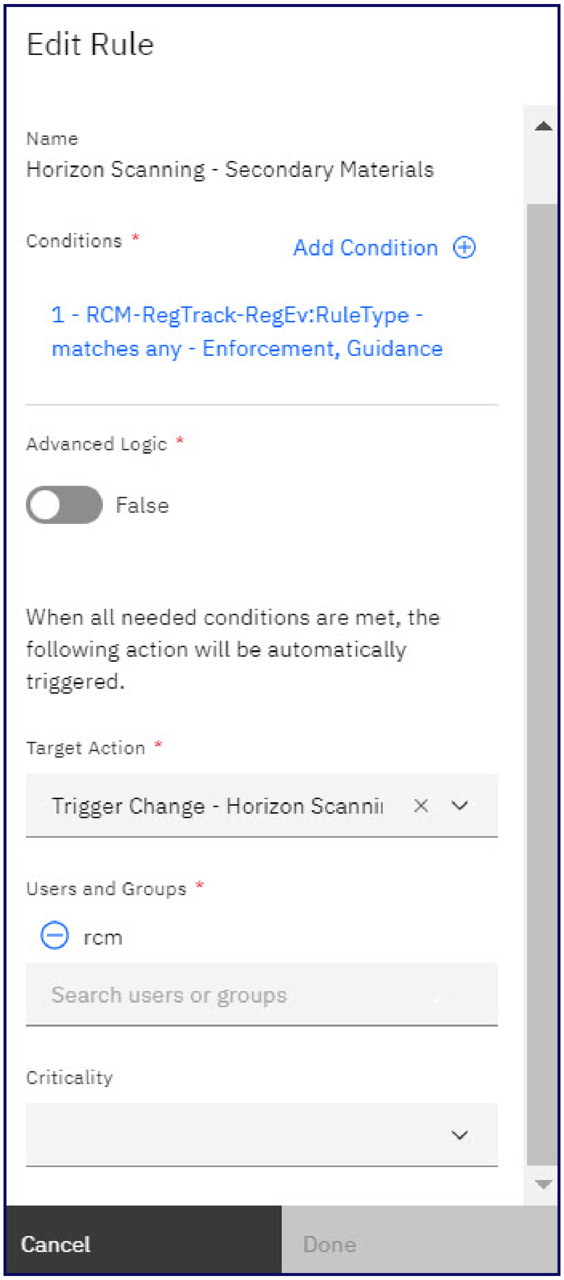


Figure 20. Horizon Scanning – Secondary Materials rule

Enhancements to OpenPages Third Party Risk Management

OpenPages Third Party Risk Management (TPRM) now includes a connector for Security Ratings from SecurityScorecard.

SecurityScorecard connector

The SecurityScorecard connector enables users to ingest security ratings to Vendor objects in OpenPages.

After the security ratings have been ingested, users can view them on Vendors, as show in the following example.

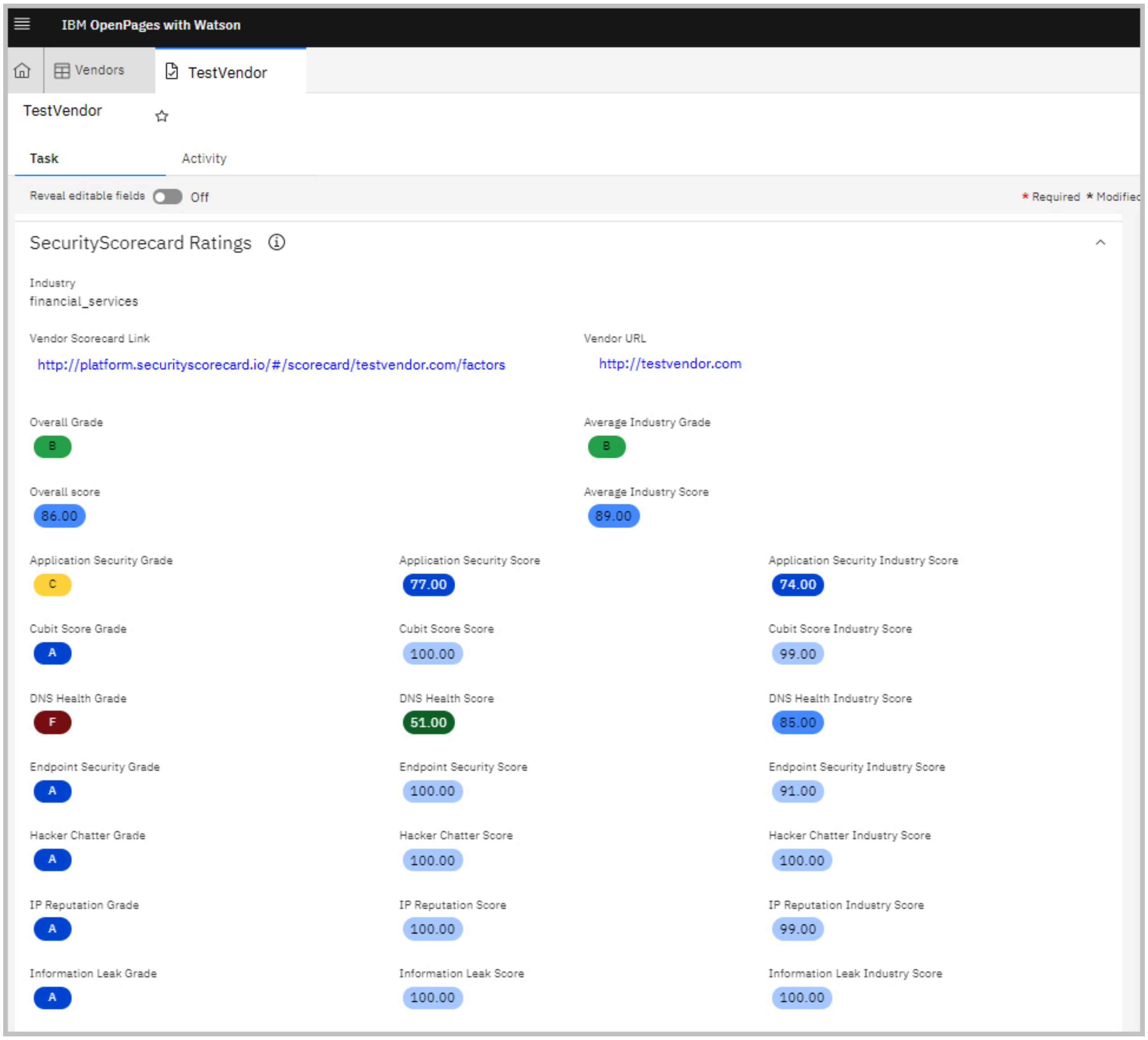


Figure 21. Example Vendor with security ratings

Scheduler job

Administrators configure and schedule the SecurityScorecard feed by using the new Security Scorecard administrative job in the Scheduler.

Fields on Vendors

The following fields have been added to Vendors:

- Application Security Grade, Score, and Industry Score
- Average Industry Grade
- Average Industry Score
- Cubit Score Grade, Score, and Industry Score
- DNS Health Grade, Score, and Industry Score
- Endpoint Security Grade, Score, and Industry Score
- Hacker Chatter Grade, Score, and Industry Score
- IP Reputation Grade, Score, and Industry Score

- Industry
- Information Leak Grade, Score, and Industry Score
- Network Security Grade, Score, and Industry Score
- Overall Grade
- Overall Score
- Patching Cadence Grade, Score, and Industry Score
- Social Engineering Grade, Score, and Industry Score
- Vendor ScoreCard Link
- Vendor URL

Dashboard

The new TPRM Vendor with Security Scorecard dashboard provides a high-level overview of the different third-party risk management activities in your organization. A third-party risk manager can use the dashboard to manage tasks and stay informed of the activities of the third-party risk program. The following panels are included on the dashboard:

- The Critical Third-Party Overall Grade panel displays and counts the Security ScoreCard Overall Grade of the user's critical vendors.
- The SSC Overall Score Deficiency (<72) panel identifies vendors that have a Security ScoreCard score less than 72.

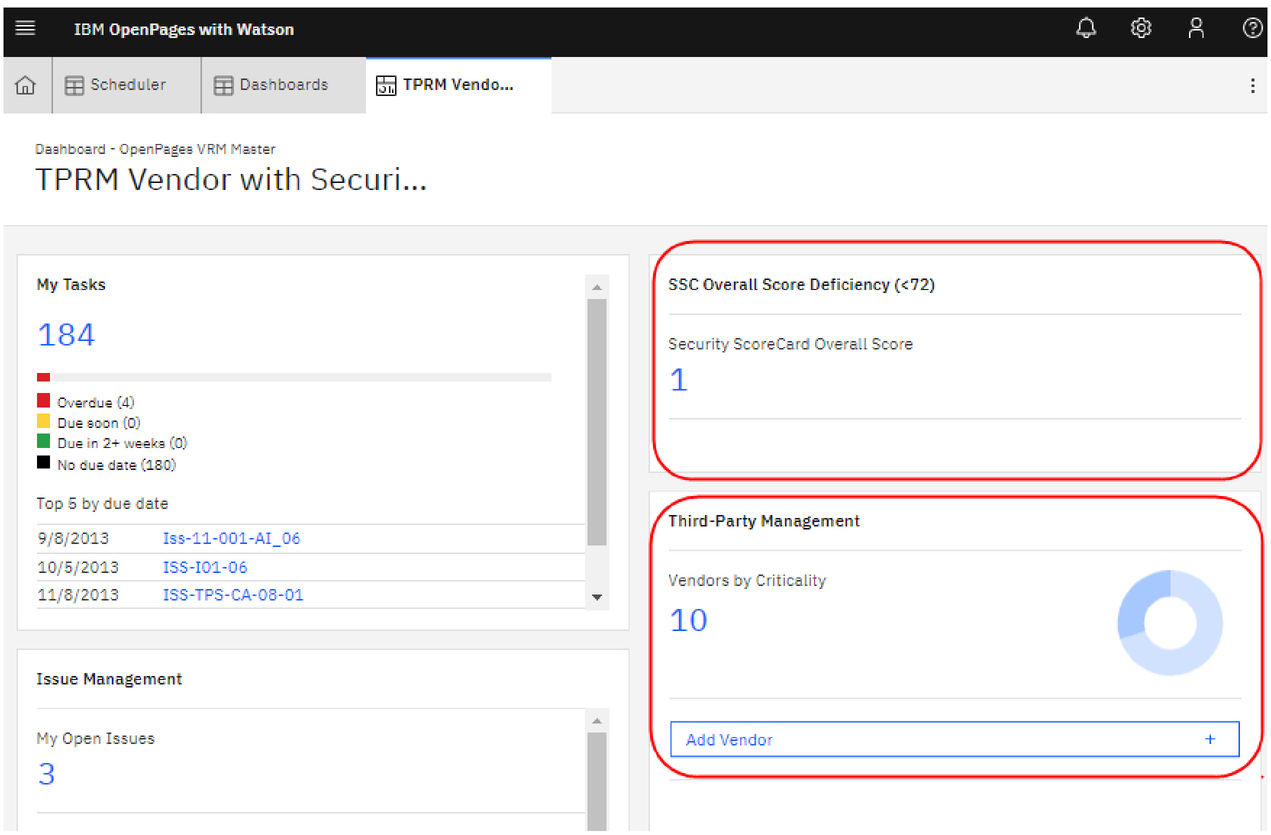


Figure 22. TPRM Vendor with Security Scorecard dashboard

Administration and serviceability enhancements

Enhancements have been made to help you administer, maintain, and support IBM OpenPages with Watson.

Supported software

IBM OpenPages with Watson 8.2.0.1 supports new versions of some software:

- IBM Db2 11.5.4 (and future 11.5.x.x releases) is now supported.

For more information, see the Supported Environments website.

Requests for Enhancements (RFEs) delivered

This release delivers on several RFEs.

For more information, see: Requests for Enhancement (RFEs) Delivered by Release.

Note: RFEs that request user interface enhancements are considered to be delivered if available in the Task Focused UI.

Chapter 7. New features in version 8.2.0

The new features in IBM OpenPages with Watson 8.2.0 include the following enhancements.

IBM OpenPages with Watson 8.1 was the last release to support integration with IBM Business Process Manager. Organizations are encouraged to transition to GRC Workflow, which is part of IBM OpenPages with Watson. For information about configuring GRC Workflow, see the *IBM OpenPages with Watson Administrator's Guide*.

Platform enhancements

Enhancements to functionality are included in this version of IBM OpenPages with Watson.

GRC Calculations

GRC Calculations, together with GRC Workflow and the Task Focused UI, offer a powerful and comprehensive platform to both tailor IBM OpenPages with Watson to your business requirements and to easily deploy and update it in an agile environment.

The goal of a calculation is to set a value for one or more output fields on an object, based on the values of one or more other fields. Only fields on the object type for the calculation can be set. Fields on related object types cannot be set. Calculations run when an object is created, calculation input fields are updated, or object associations are made. They can also be run manually by an administrator.

To calculate a value for an output field, a calculation can access values from the following sources:

- Fields on an object itself
- Fields on directly related objects
- Fields on indirectly related objects
- Fields on Preference objects
- Values from registry keys

Accessing information across objects types allows you to have a broader view of aggregated data. For example, you can build calculations that define risk score for business entities based on inherent risks, control efficiency ratings, KRIs, test results, as well as calculated risks from underlying business entities.

GRC Calculations are accessed on the Administration menu by clicking > **Solution Configuration** > **Calculations**.

The Calculation List allows users to create, view, enable, disable, and run calculations.

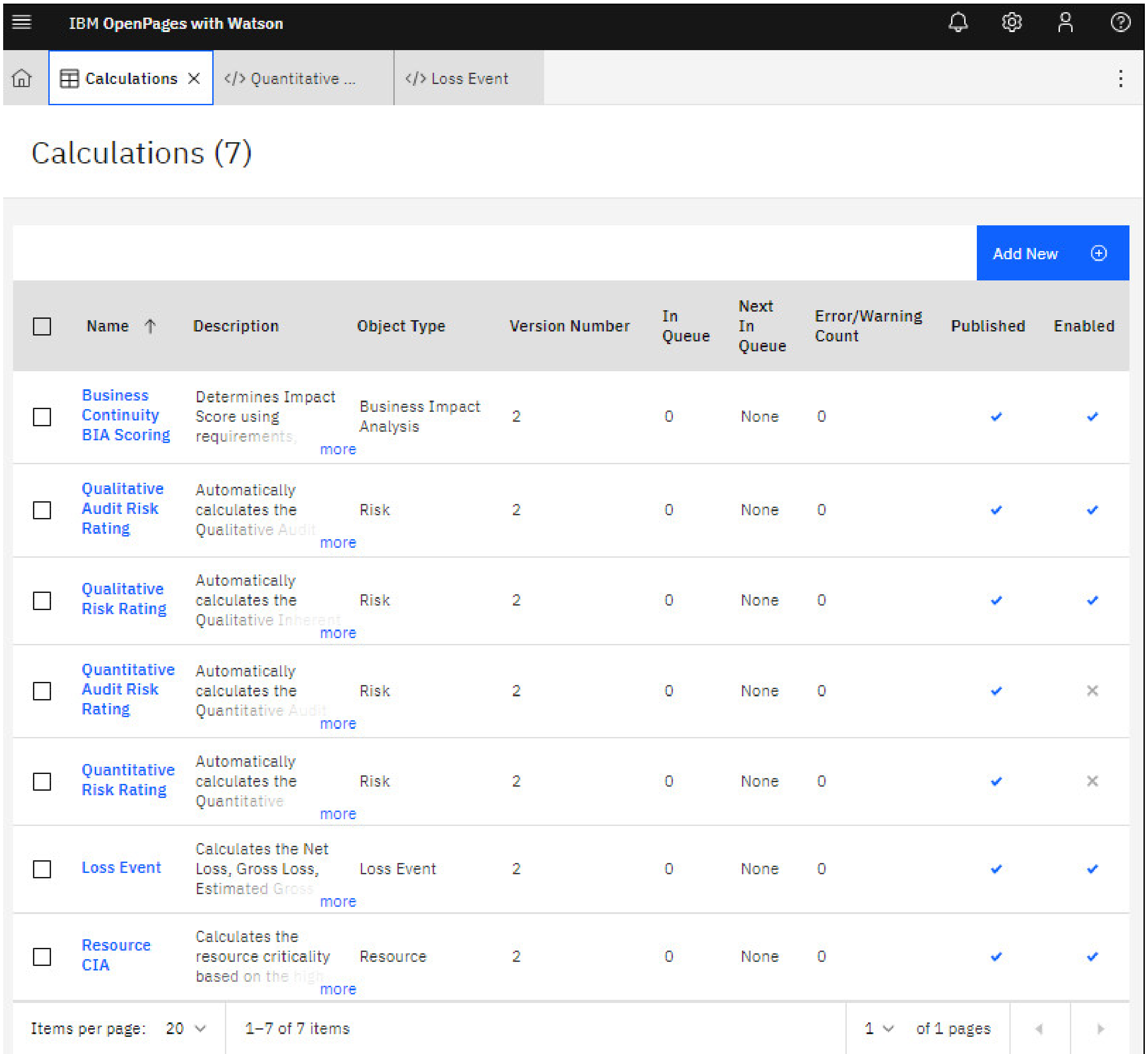


Figure 23. Calculation List

A calculation definition contains the object type, enabled flag, Applicability, and Operations.

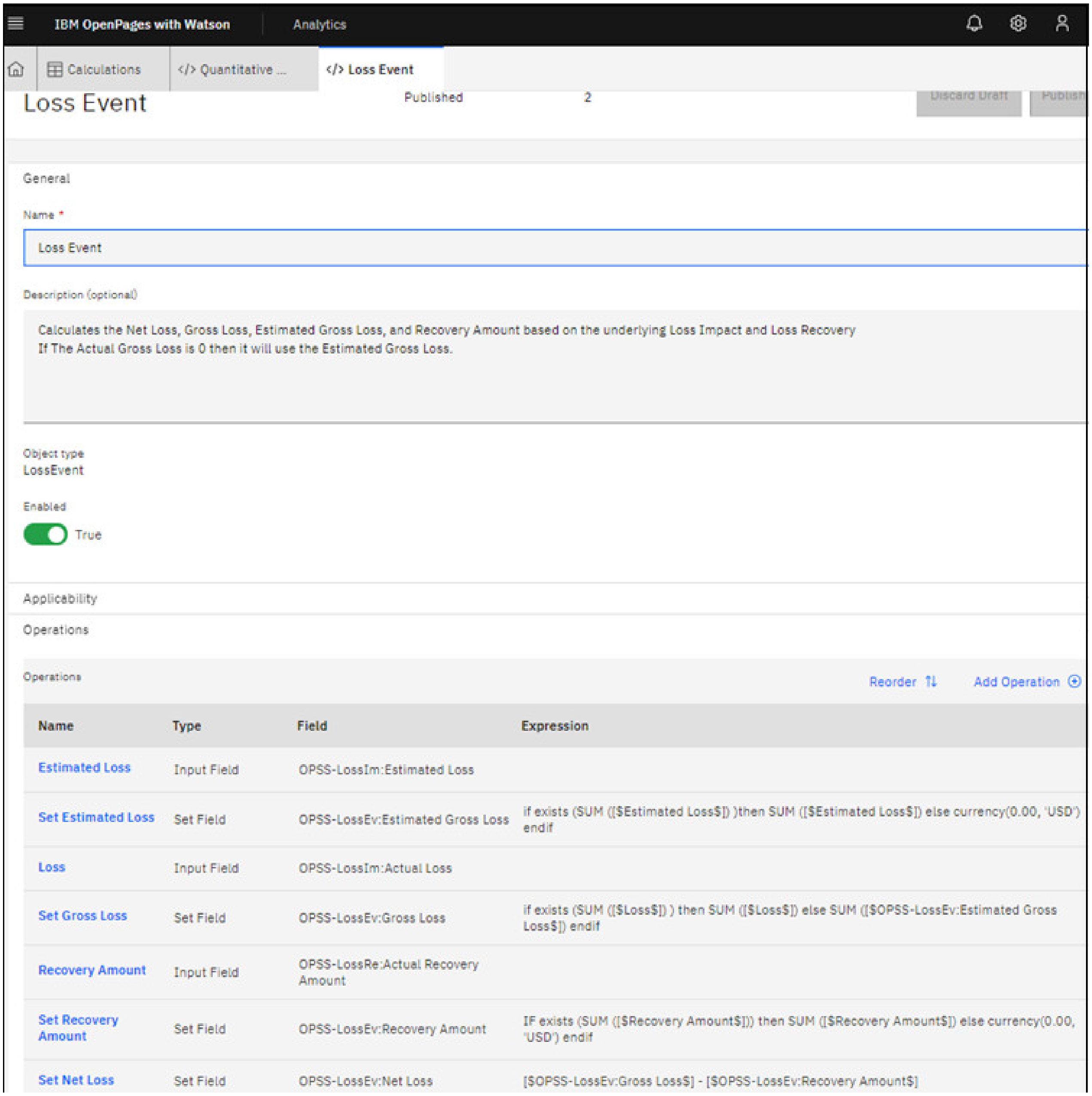


Figure 24. Calculation definition

Sample calculations

IBM OpenPages with Watson is delivered with a set of sample calculations that you can use as delivered or as the basis for your own calculations.

Triggers

For organizations that currently use triggers in IBM OpenPages with Watson, trigger functionality can be transitioned to GRC Workflow and GRC Calculations. Compared to triggers, the new features are faster and easier to deploy, and update.

Triggers that currently work in your environment, continue to work. However, your organization should make a plan to transition triggers and leverage functionality that is based on the GRC Workflow and GRC Calculations features.

Scheduler

Administrators can use the Scheduler to manage administrative jobs.

The Scheduler supports the following kinds of jobs:

- Custom jobs

  Custom jobs are defined, started, and viewed in the Scheduler.
- Workflow Start jobs

  Workflow Start jobs are started and viewed in the Scheduler. They appear automatically in the Scheduler for workflows that are defined with a scheduled start.
- Ascent jobs

  Ascent administrative job are started and viewed in the Scheduler. They appear automatically in the Scheduler if the Ascent feed is used. The job defines the configuration and scheduling for the Ascent feed.

Jobs can be defined to run on the following types of schedules:

- Recurring - daily, weekly, monthly, or quarterly
- Specified Date/Time - a specific date and time
- Cron Expression - an advanced schedule that can be set as frequently as every 60 minutes

The Scheduler is available on the Administration menu by clicking > **Solution Configuration** > **Scheduler** . The Schedule List displays all jobs that are established through the Scheduler.

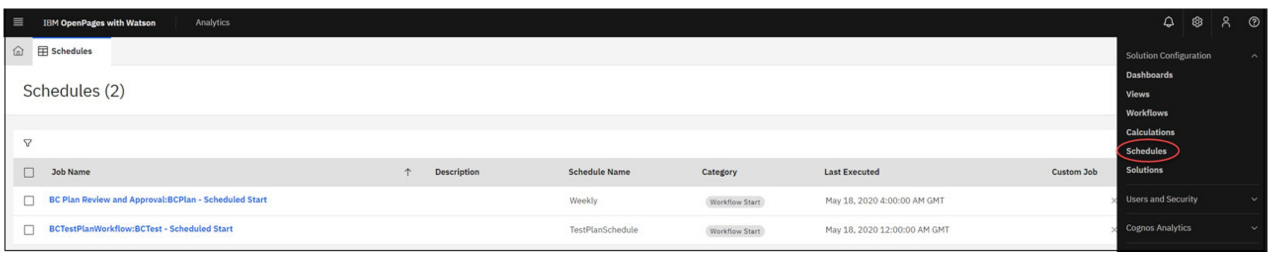


Figure 25. Schedule List

When a user clicks a job in the Schedule List, detailed information for the job is displayed.

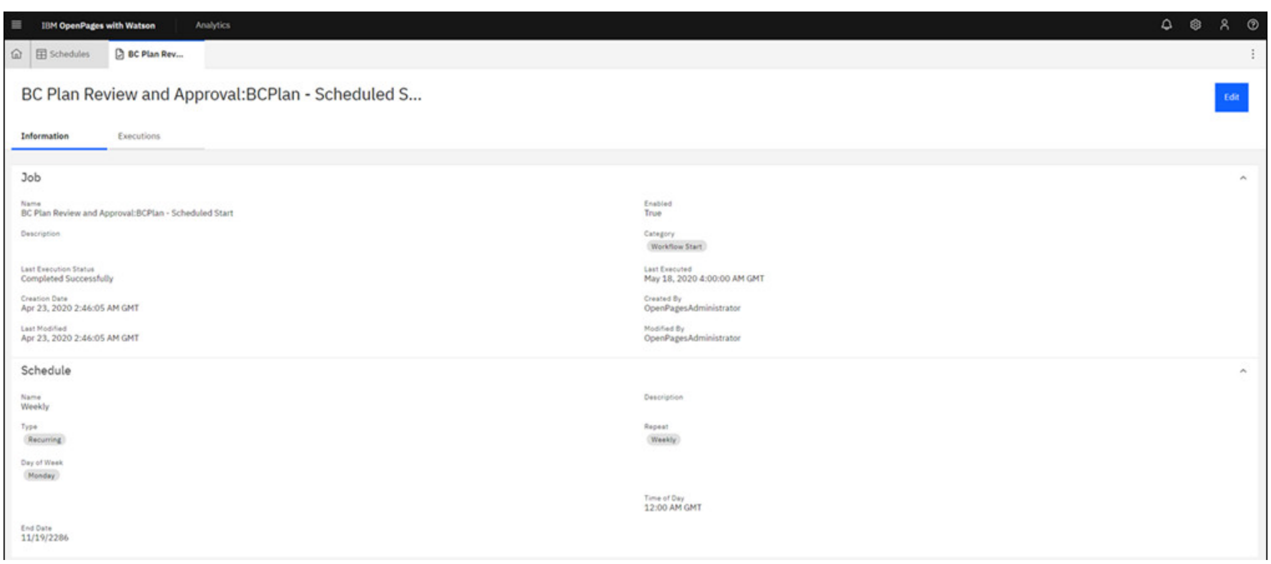


Figure 26. Job Information

Click **Executions** to view the instances when the schedule executed.

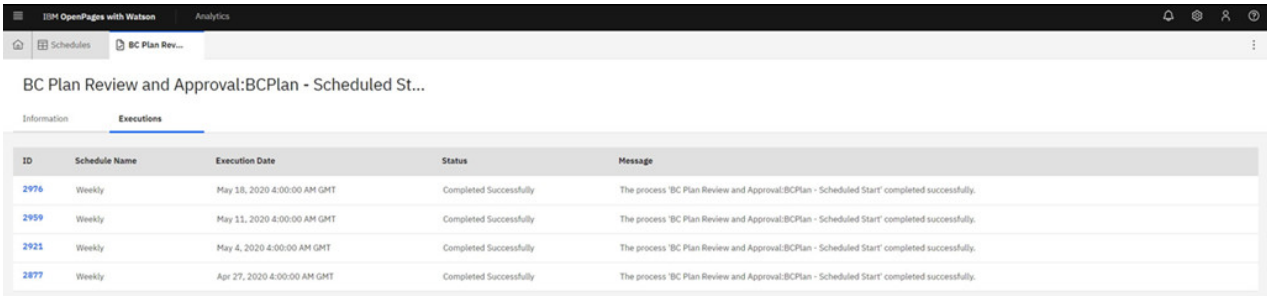


Figure 27. Job Execution Information

Select an entry to view log information related to each executed schedule.

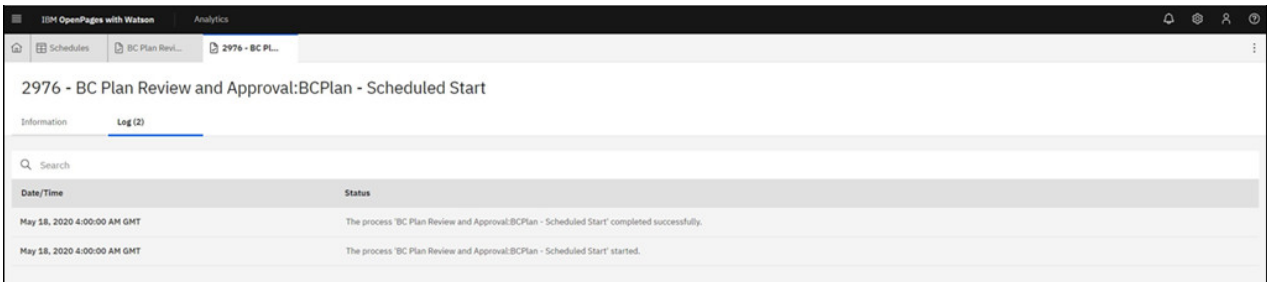


Figure 28. Job Log Information

Custom Jobs

Administrators can create custom jobs by clicking **Add New** on the Schedule List. A Java™ class name must be provided. Custom configuration and a schedule are optional.

The Java class implementing the custom job must derive from the OpenPages class `com.ibm.openpages.api.scheduler.AbstractScheduledProcess`, and override the `execute` method. The `execute` method has access to the job and all the configuration defined through the UI.

Workflow Start jobs

Using the GRC Workflow Designer, users who define workflows can set the initiation of a workflow according to a schedule. By clicking **Edit** on the **Scheduled Start** field within the Workflow Properties panel, a user can set the schedule for initiating a workflow.

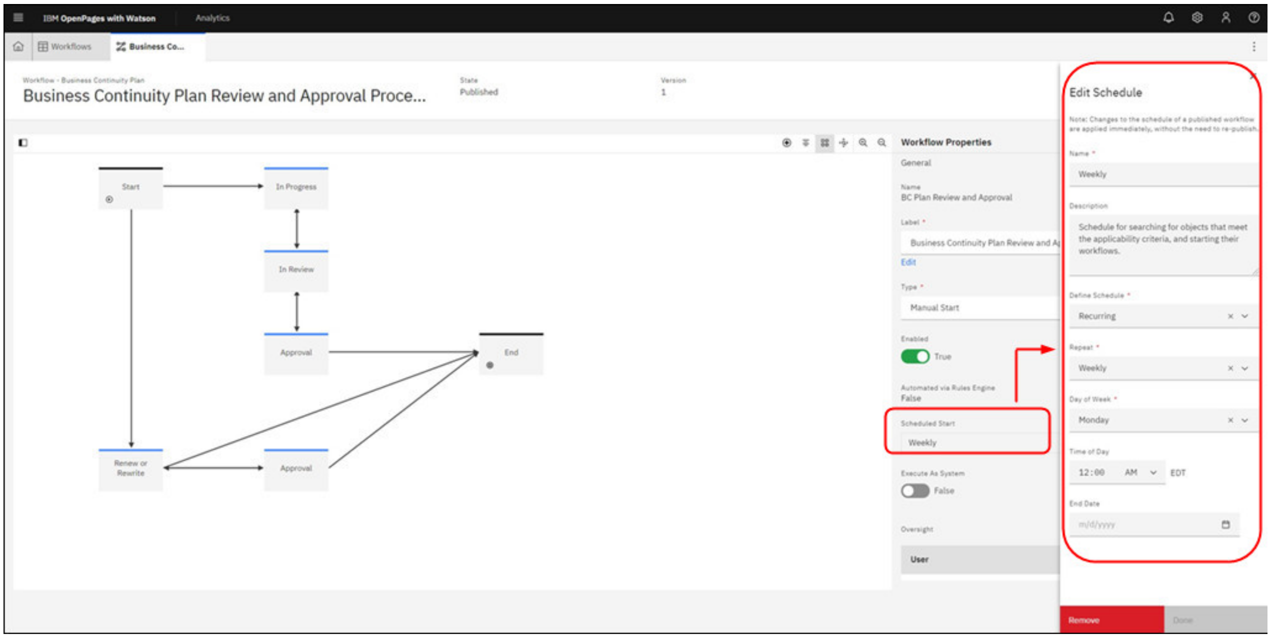


Figure 29. Defining Scheduled Start in the GRC Workflow Designer

After establishing the schedule, a corresponding job is automatically added to the Schedule List in the Scheduler. The job name is a concatenated value of the workflow name, the object type, and `- Scheduled Start`.

When the Scheduler executes a Workflow Start job based on its schedule, the Applicability criteria of the workflow is checked. Workflows for objects that meet the criteria are started. Users can utilize date fields within objects to refine the Applicability criteria. In the following example, by setting **Next Review Date** equal to the expression `[$TODAY$]`, workflows initiate when the Next Review Date field of a record is equal to the date that the schedule executes.

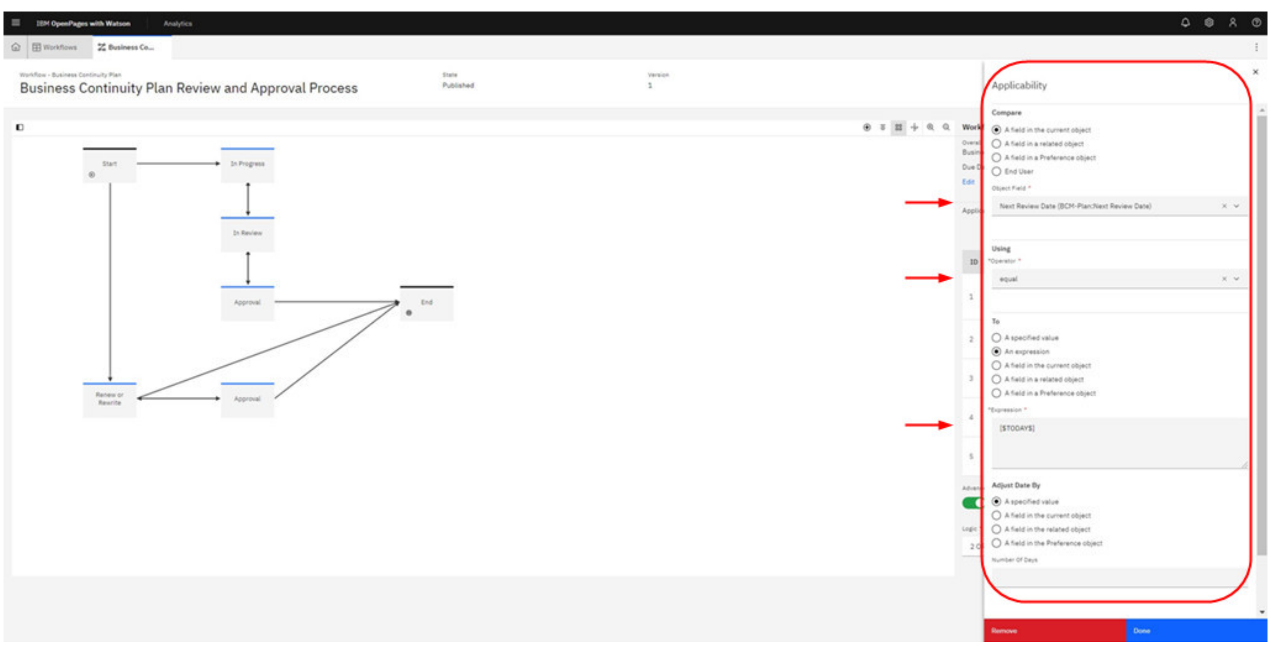


Figure 30. Defining Applicability in the GRC Workflow Designer

Ascent jobs and regulatory feeds

Regulatory content from the data provider Ascent is available for ingestion into OpenPages beginning in the 8.2 release. The configuration and scheduling for this feed provider is available through the Ascent administrative job in the Scheduler.

The configuration for feeds from Thomson Reuters and Wolters Kluwer remains on the Regulatory Event object in 8.2. Log information for these feeds is available for viewing in the Scheduler for the TRRI Feed and Wolters Kluwer Feed jobs.

Solution schema visualization

Administrators can use the new solution schema visualization to view the OpenPages object model.

OpenPages is delivered with out-of-the-box object models for the global object model and one for each OpenPages solution.

You can build new solution schema visualizations to meet your needs. For example, you can build an issue management or loss event management solution schema visualization.

A solution schema visualization provides access to object types and relationships. You can also access the following:

- Field groups (shared with other objects or not)
- Fields
- Public filters
- Profiles
- Task Views
- Workflows

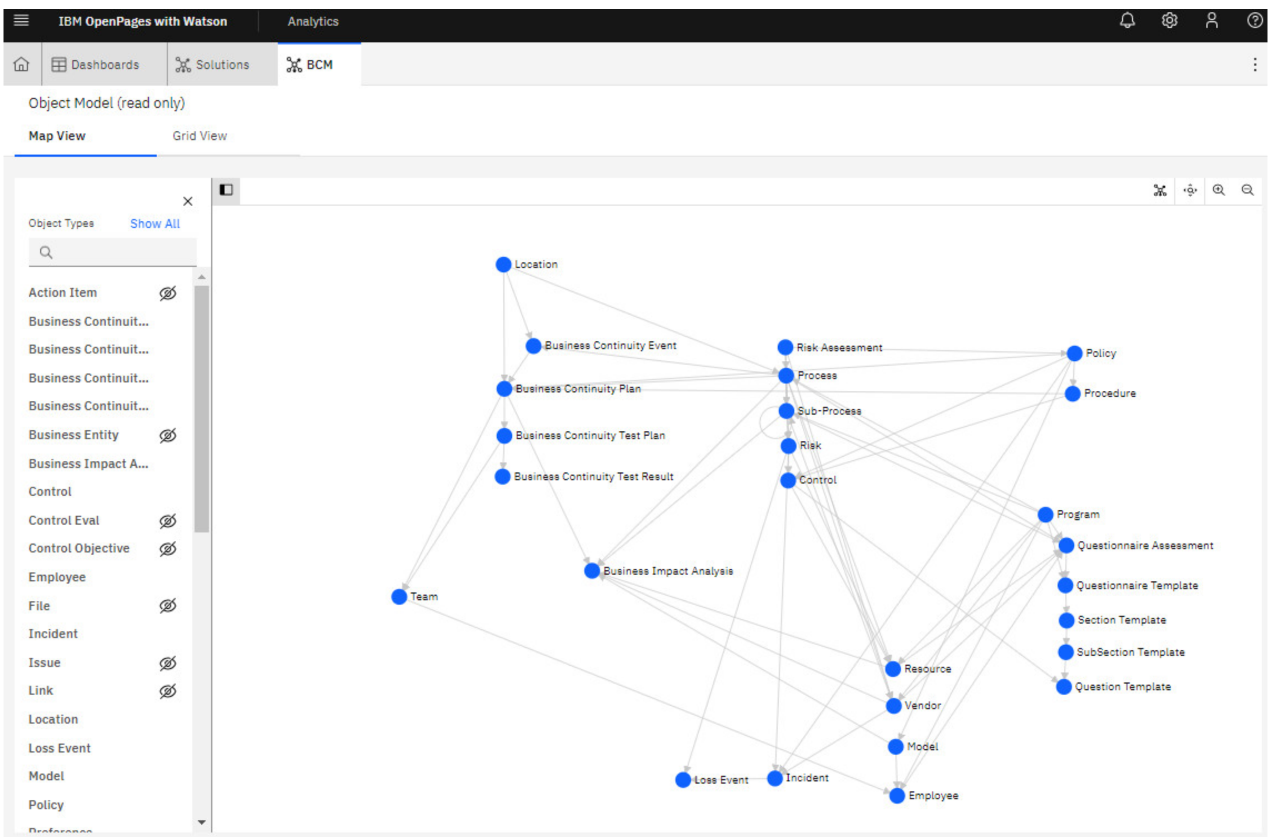


Figure 31. The BCM solution object model

Enhancements to the Task Focused UI

The Task Focused UI includes numerous new capabilities and features.

IBM Watson Assistant

IBM Watson Assistant is a chat bot that can appear in the Task Focused UI. It offers 24-hour support to the common questions that users have within OpenPages. It provides interactive text answers, natural language search, and direct links to specific pages in OpenPages, for example, to a Create View where a user can enter an Issue or Loss Event. A subscription to the IBM Watson Assistant Plus service is required.

When IBM Watson Assistant is configured, the Start Chat icon is displayed on all pages in the Task Focused UI.

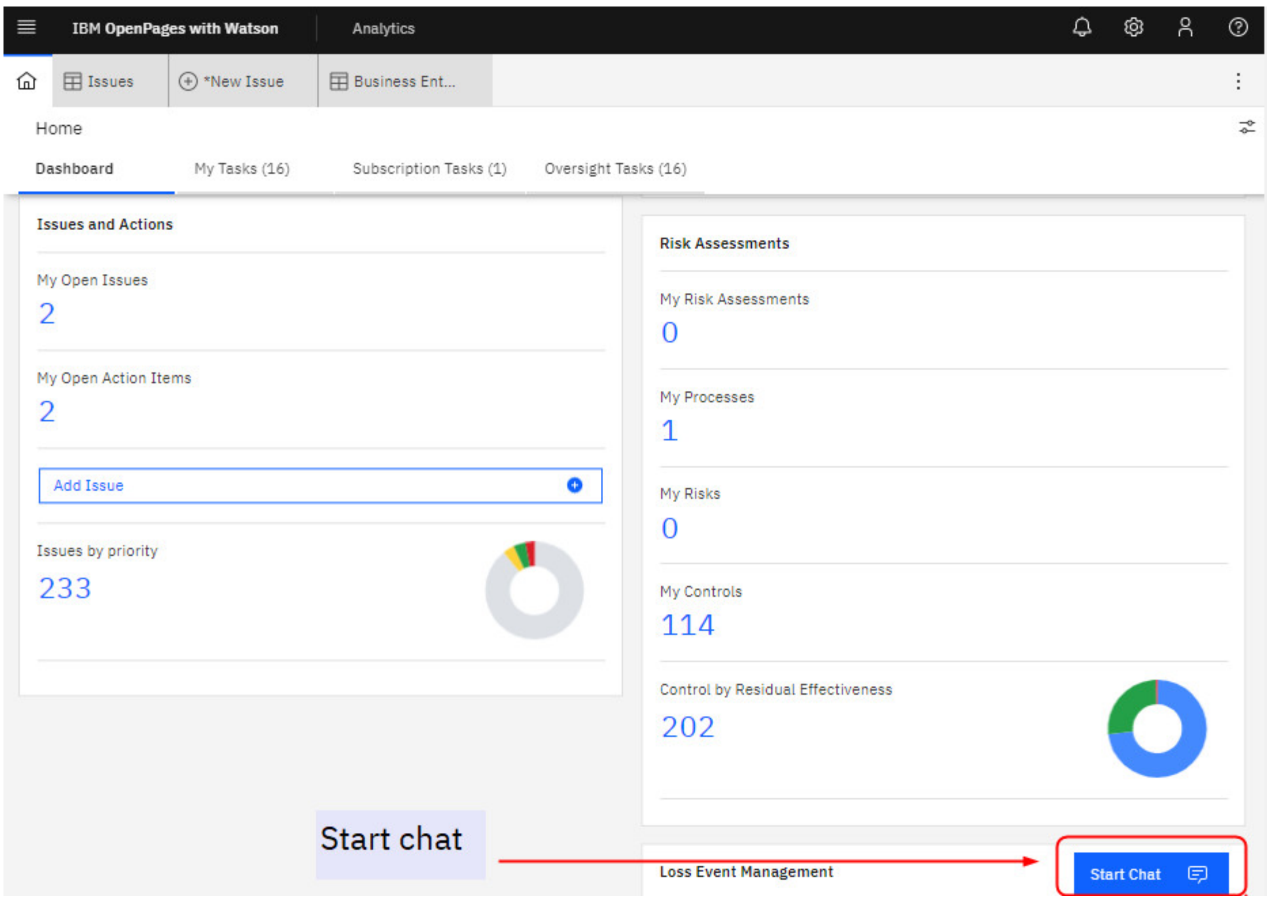


Figure 32. The Start Chat icon

Click Start Chat to begin interacting with IBM Watson Assistant.

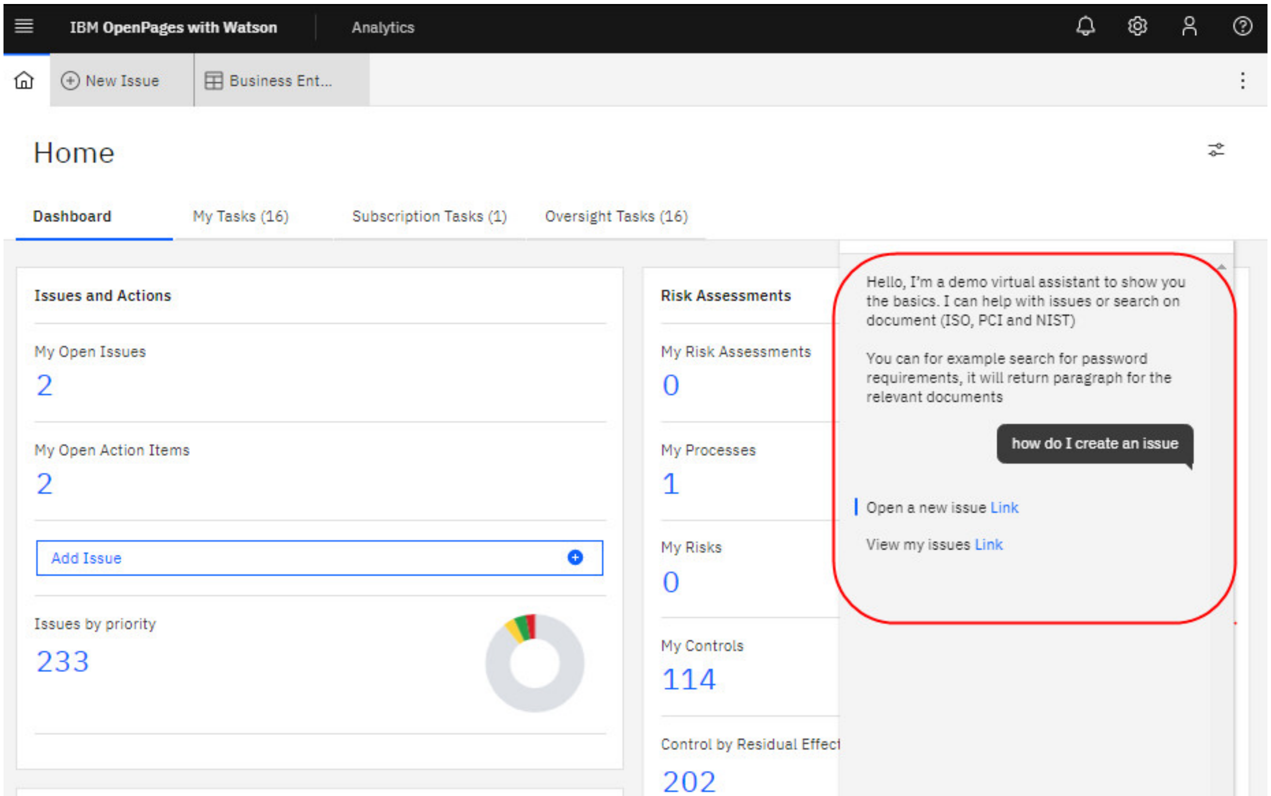


Figure 33. Interacting with IBM Watson Assistant

IBM Watson Insights

The Natural Language Classifier integration now displays in the Task Focused UI as IBM Watson Insights. IBM Watson Insights streamlines the user experience and improves the data quality. It appears only if there is information in the view that is pertinent to suggestions. Previously, it displayed even if no information in the view was pertinent to suggestions.

In the following example, the Natural Language Classifier object mapping has been configured to map Issues to Controls. When the user creates a new Issue, a link appears if the NLC is able to suggest a Control mapping based on the content of the description. The link does not appear if the description does not generate an mapping.

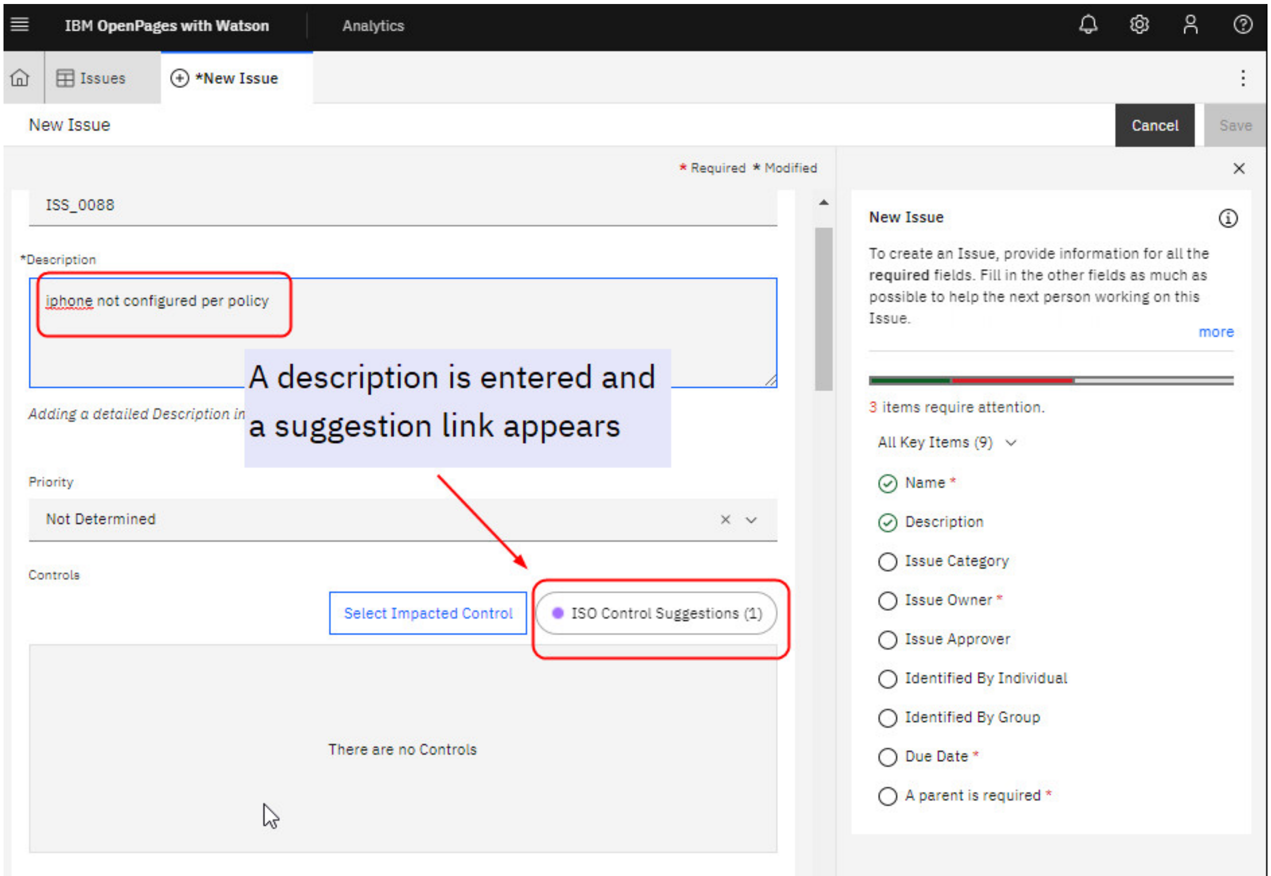


Figure 34. Suggestion link

The IBM Watson Insights side panel opens and the user can select a Control.

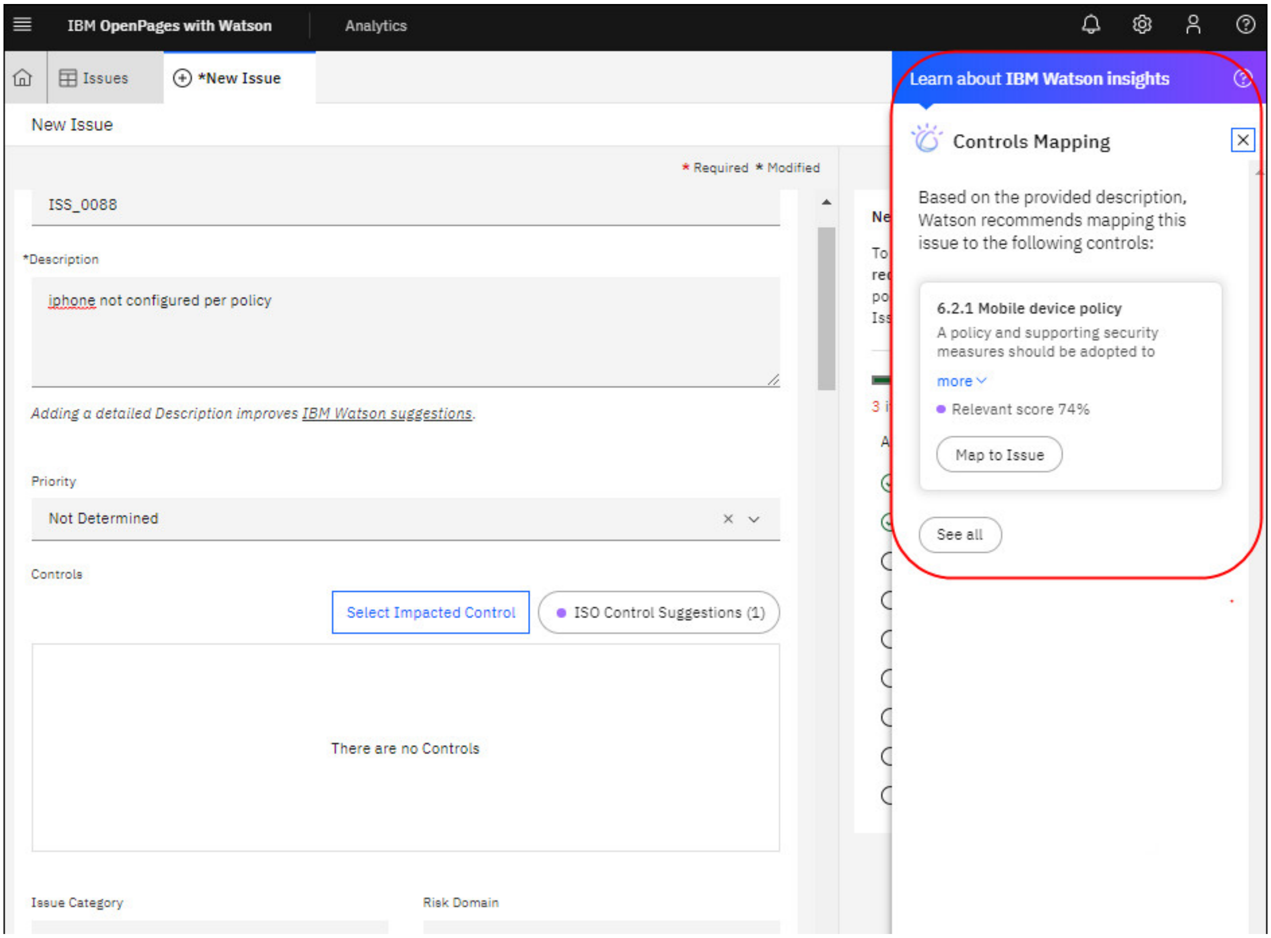


Figure 35. IBM Watson Insights side panel

The user selects a Control, which is then added as a Control on the Issue.

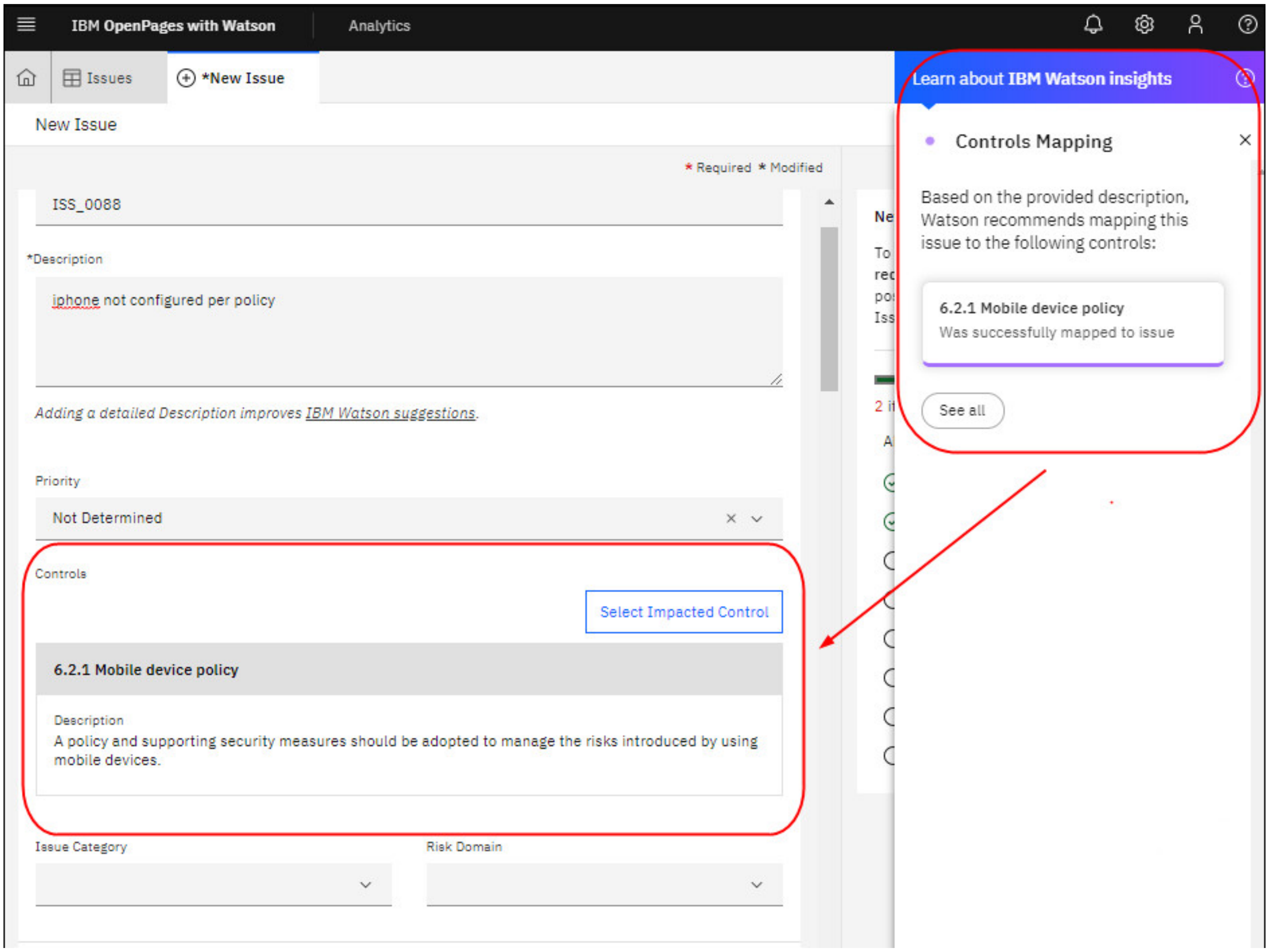


Figure 36. Suggestion is accepted

Gantt charts

Use a Gantt chart when you want to view project or task assignment status over time. Gantt charts are typically used to view work assigned to a team or an individual person.

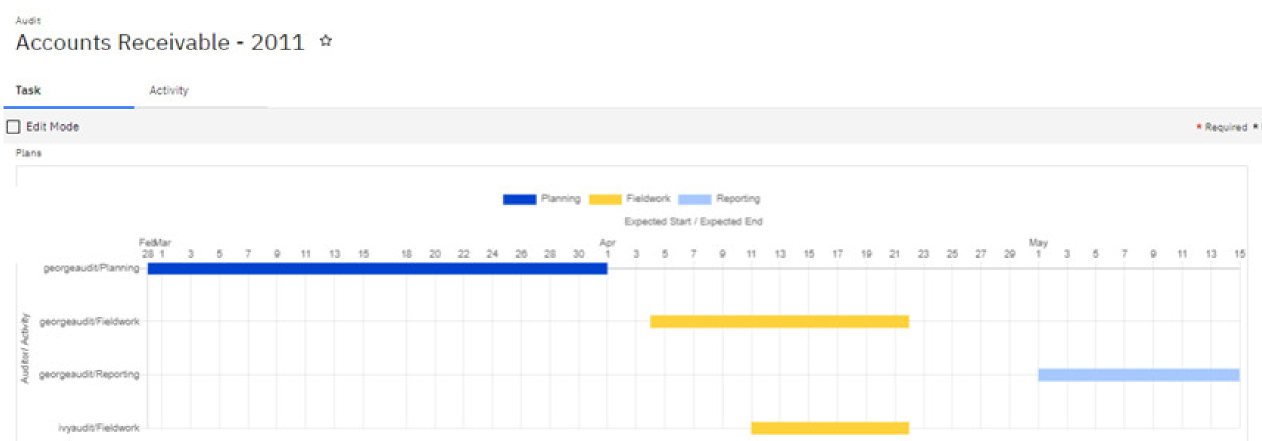


Figure 37. Gantt chart

New aggregation methods on charts

You can build charts using the following aggregation methods:

- `average`
- `max`
- `min`
- `sum`

Audit log (change history)

The new **Activity** tab on Task Views allows users to view change history. Activities can be filtered to display changes made to field values, object associations, and workflow fields.

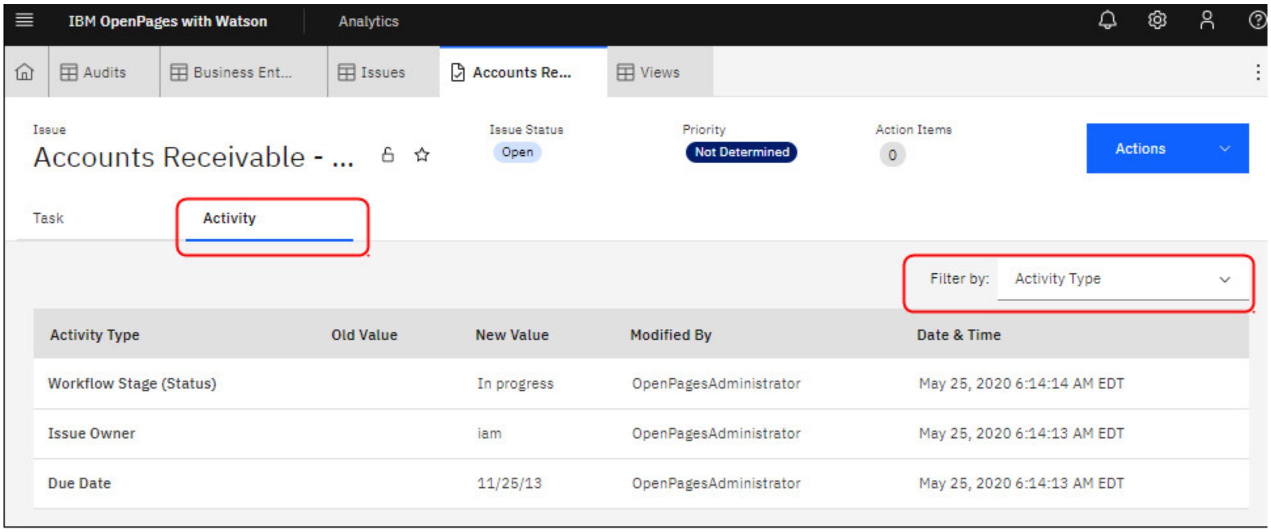


Figure 38. Activity tab on a Task View

Dashboard panel based on global search

Dashboards that are defined by administrators can now contain a Search panel that is based on global search. A Search panel can be for all or selected object types.

When a user enters text in a Search panel, global search analyzes the input and displays matching results. Up to 25 objects can be returned in a Search panel. If a user clicks an object in the Search panel result list, the object opens in a new tab. The user can also mark an object as a favorite.

In the following example, three Search panels are configured: all object types (titled Global Search), Business Continuity Plans, and Policies. The Favorites panel displays objects that are marked as favorites.

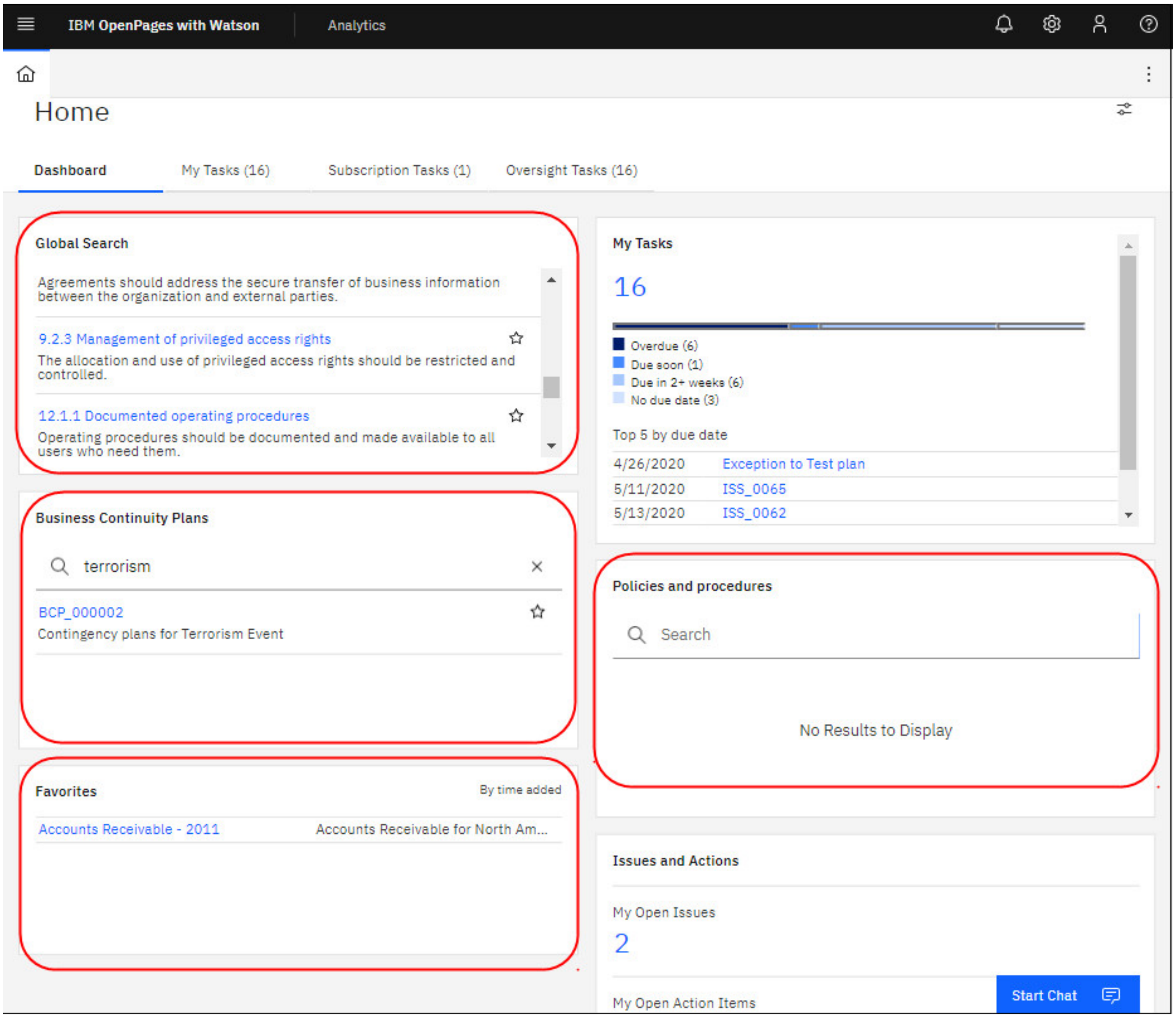


Figure 39. Search panels on the Home page

Changes to look and feel (Carbon v10)

The overall look and feel of the Task Focused UI changed due to an upgrade in the underlying infrastructure.

Renamed and restructured the Administrator menu

The menu that displays when you click , is now named the Administrator menu rather than the Settings menu.

Tasks on the Administrator menu are organized in the following categories:

- Solution Configuration
- Users and Security
- Cognos® Analytics
- System Configuration
- Watson Integrations
- Reporting Periods
- Fastmap

- Other

Administrator tasks migrated from the Standard UI

The following administrator task can now be accessed on the Administrator menu in the Task Focused UI:

- **Currencies**
- **Custom Security**
- **Enable/Disable System Admin Mode (SAM)**
- **Encryption Keystore**
- **Natural Language Classifier**
- **Object Resets**
- **Reporting Framework Generation**
- **Reporting Schema**
- **Reporting Periods**
- **Object Resets**
- **Users**
- **User LDAP Configuration**
- **System Files**

The tasks are still available in the Standard UI.

Enhancements to GRC Workflow

GRC Workflow includes numerous new capabilities and features.

Scheduled start

Workflows can be defined to run on a schedule, for example, every night at midnight.

Using the GRC Workflow Designer, the new **Scheduled Start** field on the Workflow Properties panel contains information about the schedule.

Workflows that are defined with a schedule automatically display as Workflow Start jobs in the Scheduler.

Sample workflows

New sample workflow have been delivered, including for Incidents and Questionnaire Assessments. For more information, see the *IBM OpenPages with Watson Solutions Guide*.

New login page

A new login page displays for the Task Focused UI and the Standard UI.

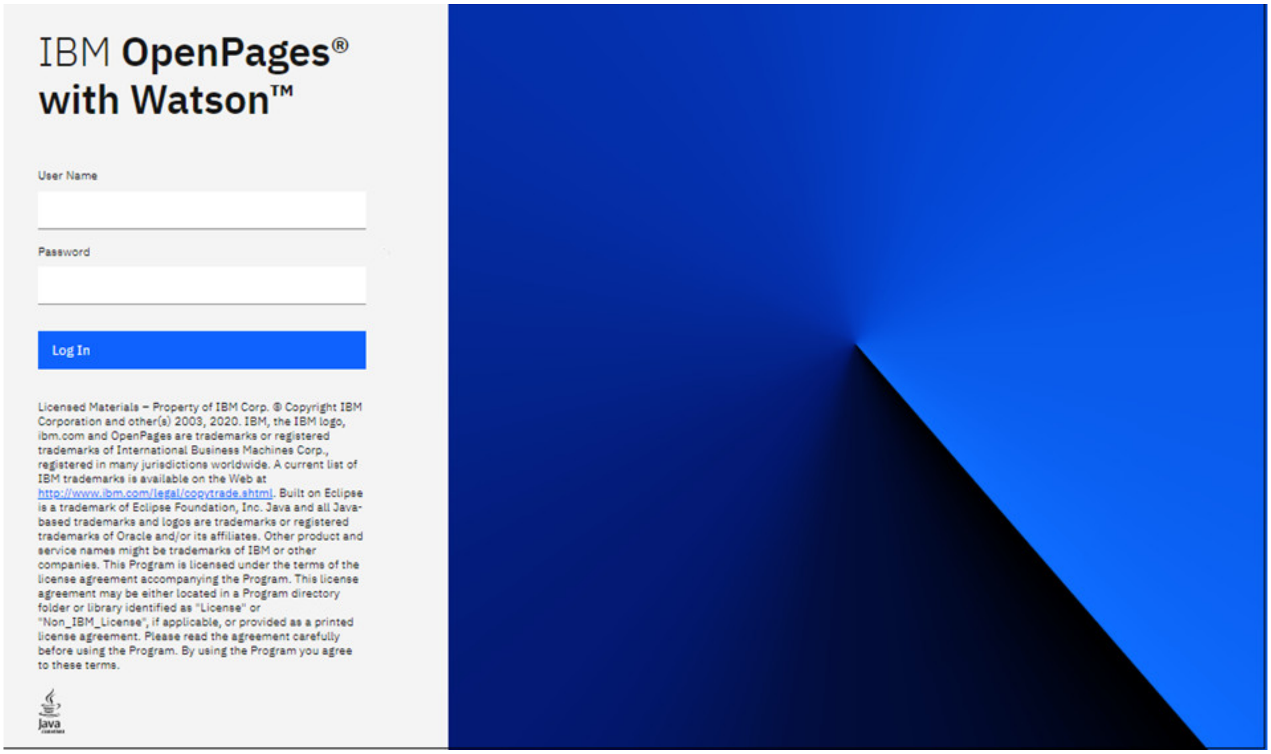


Figure 40. New OpenPages login page

Acceptable Use Policy added to the login page

An Acceptable Use Policy can contain a link, for example, to an intranet site with more information about acceptable use.

The link is also used by the **Acceptable Use** menu item in the Help menu in the Task Focused UI and the Standard UI.

Solutions enhancements

IBM OpenPages solutions have been enhanced to make them more complete and easier to use.

IBM OpenPages Business Continuity Management

The new IBM OpenPages Business Continuity Management (BCM) solution is used by an organization, or group, to maintain or resume a predetermined level of operations during or after a disruptive event. All risks that can potentially impact the business during or following an event are identified.

Using BCM, organizations can build a framework for identifying critical assets and processes and creating company-wide business continuity plans.

BCM helps organizations to:

- Centralize business continuity data
- Perform business impact analyses to determine criticality of people, processes, and assets
- Develop business continuity plans, including, but not limited to, preparedness for disaster recovery, communication plans, equipment checklists, emergency readiness, employee logistics, and vendor checklists
- Identify relevant plans and stakeholders by using trigger events

- Run workflows to automate critical processes
- Test the effectiveness of your business continuity plan and identify and mitigate key risks
- Visualize key planning and management activities with a user-friendly dashboard

BCM has built-in calculations to help organizations determine the criticality of processes to their business and generate impact tiers with acceptable thresholds. Pre-built workflows allow organizations to draft, review, approve, and publish plans with triggers for expiry and archival. These plans can be mapped to the client's business impact analyses, policies, procedures, processes, locations, events, issues, and tests.

Take a look at BCM

This video provides an overview of BCM:

https://youtu.be/3EeMaF0ehiA

User profiles

BCM includes two profiles:

- OpenPages BCM Master profile
- OpenPages BCM End User profile

The OpenPages BCM Master profile includes the fields and configuration required for BCM.

This profile includes:

- My Work tab, Dashboard tab, and all home page tabs
- Dependent fields and dependent pick lists
- Detail, Context, Folder, Overview, Filtered List, and List Views

The OpenPages BCM End User profile has read-only access and is intended for employees who need to view business continuity plans.

Dashboards

BCM includes two dashboards:

- OpenPages BCM Master dashboard
- OpenPages BCM End User dashboard

The OpenPages BCM Master dashboard provides a high-level overview of the different business continuity activities in your organization. A business continuity manager can use the dashboard to manage tasks and stay informed of the activities of the business continuity program.

The OpenPages BCM End User dashboard is intended to be used by employees who need to view business continuity plans. The end user can search for applicable plans and mark specific documents as favorites.

Sample workflows

BCM includes the following sample workflows:

Business Continuity Plan Review and Approval Process

> This workflow allows the user to start the review and approval process for a new or published Business Continuity Plan (BC Plan).
>
> For a new BC Plan, the workflow guides the process through the in progress, in review and approval stages. The author, reviewer, and approver are required fields to advance the workflow. Upon completion of the process, the workflow sets the next review date to 365 days and the status to published.
>
> For a published BC Plan, the user has two options:

- Renew the current BC Plan without making changes to the published version

  If this option is selected, a comment is required by the reviewer and the workflow sets the next review date to 365 days. The workflow advances the process to require only an approval.

- Revise the published BC Plan

  If this option is selected, the workflow "locks" the current BC Plan, makes a copy of the plan, and sets the status of the copied plan to draft.

  The copied draft version of the plan moves through the review and approval process of the workflow. Upon completion, the workflow sets the plan status to "published", increments the version number, and sets the next review date to 365 days. The status of the previously published plan is set to archived.

Note: The following child associations that were present on the previous ("locked") BC Plan also appear on the new version of the BC Plan: BCTest Plan, Teams, and Business Impact Analysis (BIA). All parent associations, with the exception of BC Events, are preserved for the new BC Plan.

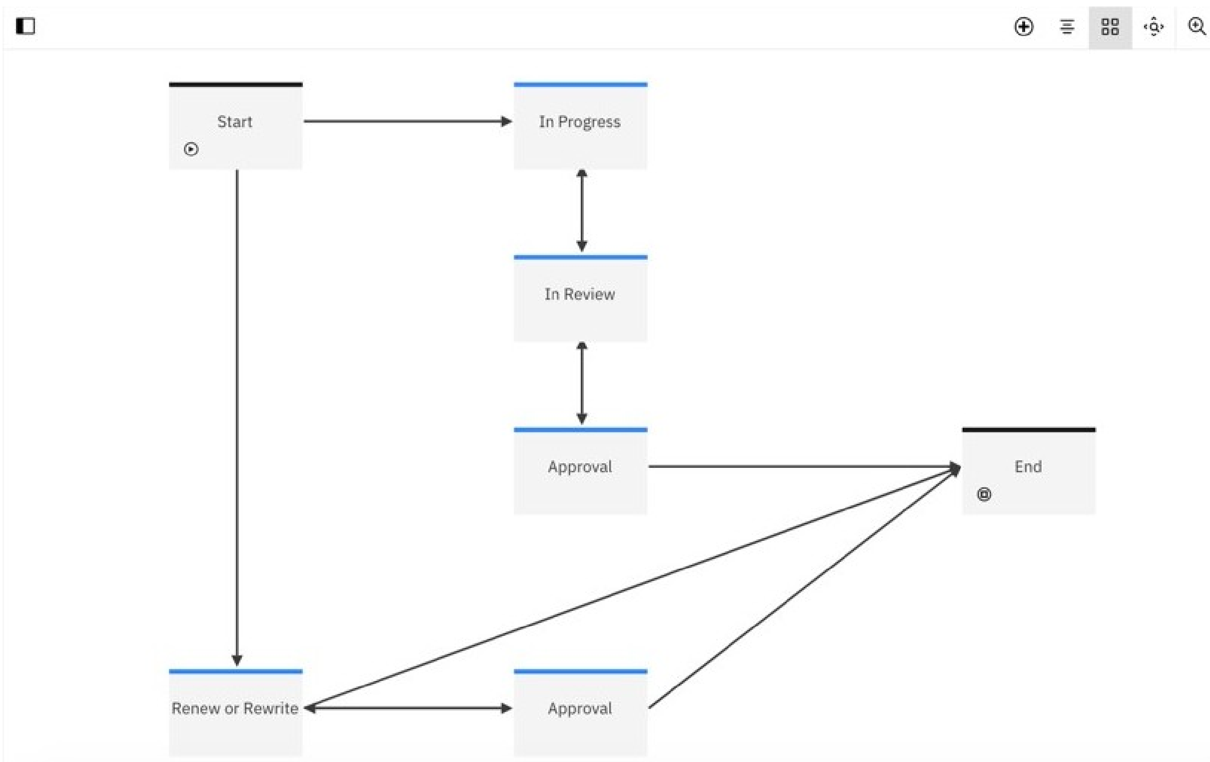


Figure 41. Business Continuity Plan Review and Approval Process workflow

Business Impact Analysis to Determine Critical Processes

This workflow moves the Business Impact Analysis (BIA) through a review and approval process. A calculation on the BIA object is required to move it to the approval phase. After approval, two of the resulting values of the calculation, Impact Tier and Maximum Acceptable Outage, are saved on the Process parent of the BIA object.

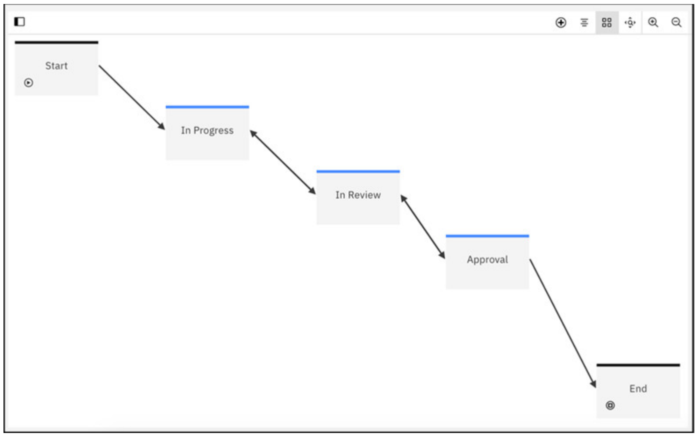


Figure 42. Business Impact Analysis to Determine Critical Processes workflow

Business Continuity Test Result Reporting
This workflow allows the user to move document test results through a review and approval process.

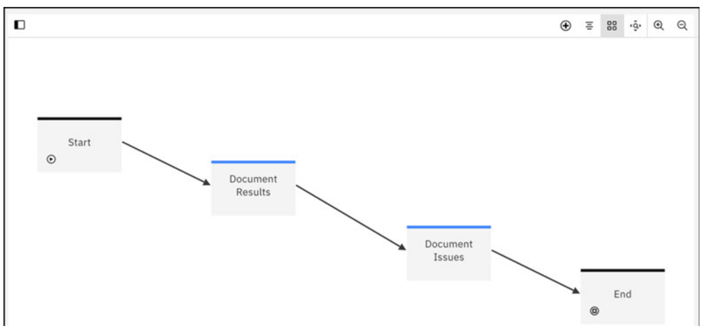


Figure 43. Business Continuity Test Result Reporting workflow

Cognos report

BCM includes one out-of-the-box Cognos report. The report is located on the Business Continuity Plans object, and the link to it is named *Print BC Plan Details*. The link generates a Cognos Report with the Business Continuity Plan object details in PDF format.

Calculation on the Business Impact Analysis object

A calculation is defined on the Business Impact Analysis object. It assigns a suggested Impact Score, Impact Tier, and Maximum Acceptable Outage for a Process.

A user completes a business impact analysis to determine the criticality of a process or an asset or resource. The user provides a Contract/Regulatory Requirement, Financial Impact, and Reputation Impact. Each of those answers has a previously assigned weighted score. Based on the answers chosen, the calculation adds the three weighted scores to generate an Impact Score. Impact Score has a range of 0-15. Based on that range, an Impact Tier is assigned. Lastly, based on the Impact Tier, the calculation generates a Maximum Acceptable Outage (measured in days).

The following example shows the results of the calculation in the Impact Score, Impact Tier, and Maximum Acceptable Outage fields, given the input provided by the user.

Figure 44. Calculation results

The calculation can be changed to meet your requirements. For more information about the GRC Calculations feature, see "GRC Calculations" on page 49.

Enhancements to IBM OpenPages Internal Audit Management

IBM OpenPages Internal Audit Management now includes a Master dashboard in the Task Focused UI that provides a high-level overview of various internal audit activities. The user can use the dashboard to manage tasks that are applicable to their role. They can access a Gantt chart for audit planning, track tasks, search for objects, and mark specific objects as favorites for easy recall.

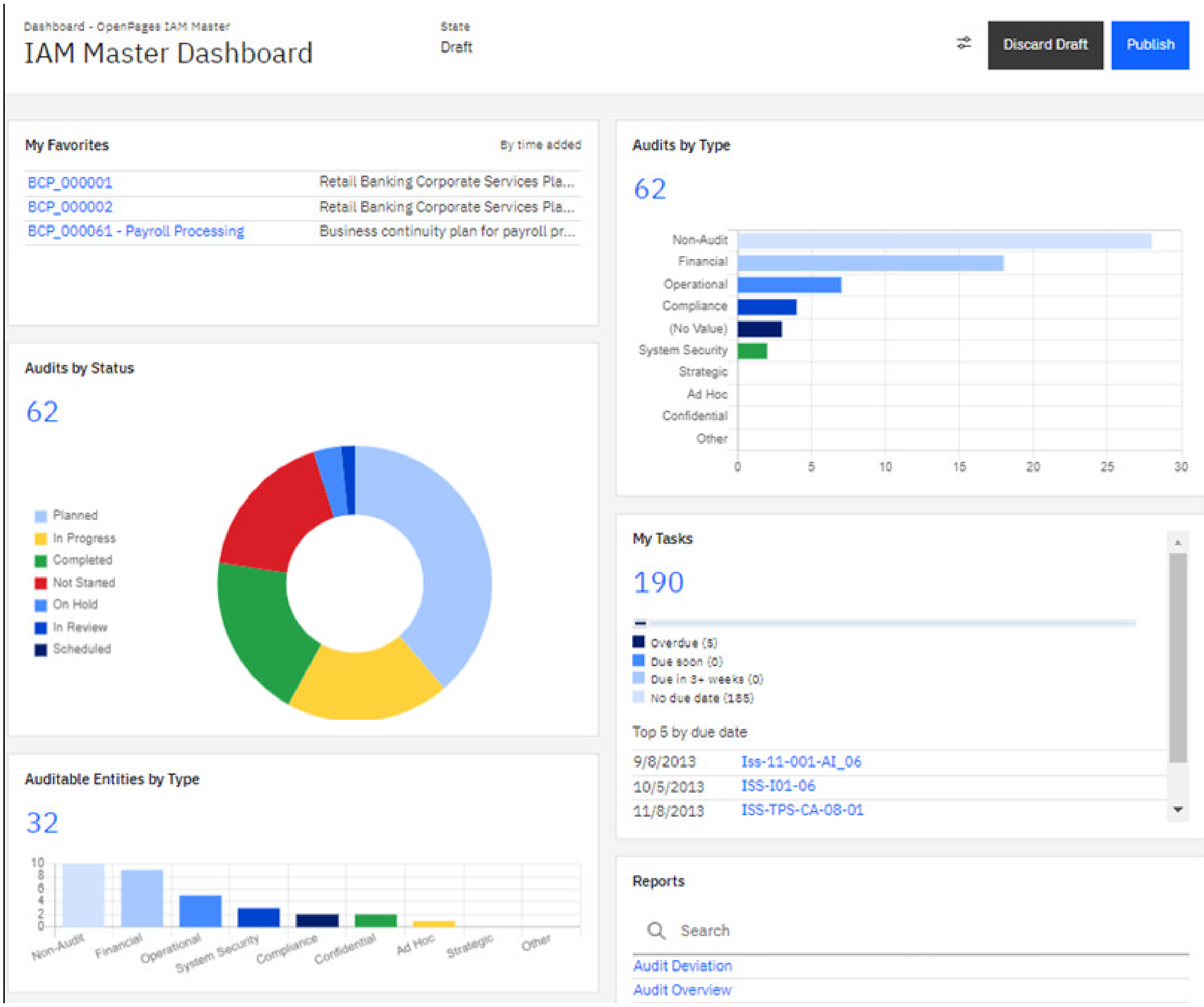


Figure 45. IAM Master dashboard

Enhancements to IBM OpenPages Model Risk Governance

IBM OpenPages Model Risk Governance (MRG) now includes an out-of-the-box integration with IBM Watson OpenScale.

IBM Watson OpenScale Integration

IBM Watson OpenScale is a tool that monitors and measures outcomes from AI Models across their lifecycle and performs ongoing validations of AI Models. Organizations can include AI models in their Model Inventory and send the results of the performance monitoring directly to OpenPages.

MRG profiles were updated and new fields, a workflow, and a public filter were added to support the integration between OpenPages and IBM Watson OpenScale.

Show me how

This video provides an overview of how OpenPages is integrated with IBM Watson OpenScale:

https://youtu.be/cfaG2krAERo

Fields

MRG includes the following new fields:

- MRG-Model field group
  - Machine Learning Model
  - Monitored with Watson OpenScale
- MRG-Metric-Shared field group
  - Metric Type
  - OpenScale Category
  - OpenScale Description
  - OpenScale Metric
  - OpenScale Metric Value

Sample workflow

MRG includes a new workflow that is named OpenScale Update Metric Last Value Info. It updates the Metric Last Value Information fields on Metric objects for IBM Watson OpenScale models with values from the most recent Metric Value object that IBM Watson OpenScale sent to OpenPages. The workflow updates the following fields on the Metric object:

- Breach Status
- Collection Status
- Value
- Value Date

Public Filter

MRG includes a new public filter for the Model object that IBM Watson OpenScale uses to locate Models in OpenPages that have the Monitored with Watson OpenScale field set to Yes.

User profiles

The existing MRG profiles have been updated to include the new fields:

- OpenPages MRG Master
- MRG Model Owner
- MRG Model Validation

Enhancements to IBM OpenPages Policy Management

IBM OpenPages Policy Management (PCM) includes numerous enhancements to profiles, dashboards, and workflows.

User profiles

PCM includes a new profile, OpenPages PCM End User profile.

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

Dashboards

PCM includes two new dashboards:

- OpenPages PCM Master dashboard
- OpenPages PCM End User dashboard

The OpenPages PCM Master dashboard provides a high-level overview of the various policy management activities in your organization. A policy manager can use the dashboard to visualize relevant data such as the status of policies. They can also track tasks, mark specific documents as favorites, and create a Gantt chart to aid in policy planning.

The OpenPages PCM End User dashboard is intended to be used by employees who need to view policies and procedures that are relevant to their roles. The end user can search for applicable documents and mark specific ones as favorites.

Workflow

The new Policy Review workflow is designed to advance a Policy object through a policy review and approval process. A Policy Review Comment (PRC) object is created by each action prior to the review stages (SME, executive, and final) and associated with the Policy in review. The PRC captures the comments and approvals for each reviewer. The executive review is optional, depending on whether the policy changes are substantive.

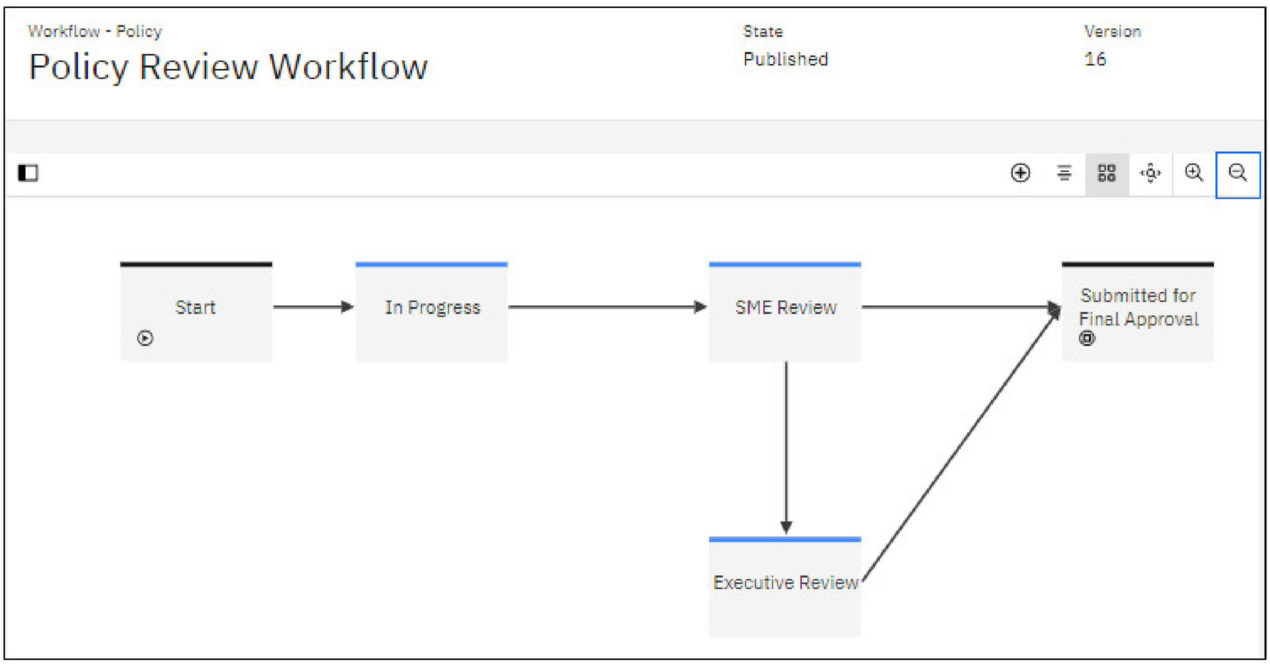


Figure 46. Policy Review workflow

Changes to the Regulatory Interaction object

PCM includes the following changes to the Regulatory Interaction object:

- RI Category has a new label: RI Component
- RI Request has a new label: RI Sub-Component
- RegTask has the following new parents: Regulator Interaction, RI Component, and RI Sub-Component
- The Regulator Interaction, RI Component, and RI Sub-Component object types have the following new parents: Mandate, Sub-Mandate, Requirement, Policy, Procedure, and Control

For more information, see "Regulatory Interaction objects " on page 73.

Enhancements to IBM OpenPages Regulatory Compliance Management

IBM OpenPages Regulatory Compliance Management (RCM) includes numerous enhancements that continue to build on the strategy and direction that was introduced in 8.1.0.

Ascent connector

IBM OpenPages Regulatory Compliance Management now includes a connector for Ascent Reg Tech (Ascent).

The Ascent connector enables users to ingest Ascent Library content directly into RCM as Mandate, Sub-Mandate, and Requirement objects.

Ascent content is categorized as follows:

Table 2. Ascent content categorization

Ascent content that is categorized as a ...	**Is ingested as...**
Section	Mandate
Rule	Sub-Mandate
Task	Requirement

Using Regulation B as an example, 12 CFR 1002 is ingested into RCM as a Mandate, each section of Regulation B (e.g., 12 CFR 1002.4) is ingested as a Sub-Mandate, and the Task is the parsed text of the Sub-Mandate. Sub-Mandates are associated to their parent Mandate objects as part of the ingestion process, for example, 12 CFR 1002 is automatically associated to 12 CFR 1002.4. Requirements are associated to their parent Sub-Mandate and to their grandparent Mandate. Fields that are provided by Ascent for these records include the title, task detail, sub-mandate text, issuer, document type, breadcrumb trail, issuing body, effective date, impacted industry, jurisdiction, type of document, and a link to the document. As the regulator updates/adds content, Ascent provides updates through the ingestion process to those Regulatory Library objects.

Thomson Reuters API

IBM OpenPages Regulatory Compliance Management includes a new API from Thomson Reuters (TR) that allows for the display of the regulatory text that is maintained in the TR rulebooks.

When the TR sub-mandate is opened, the API is automatically called, bringing forth the regulatory text of the Sub-Mandate. To assist with displaying the entire text of the regulation, a “fly-over” view has been added that can be opened in the right-hand panel. The “fly-over” provides the ability to scroll the regulatory text and the Sub-Mandate object independently to assist with review and mapping.

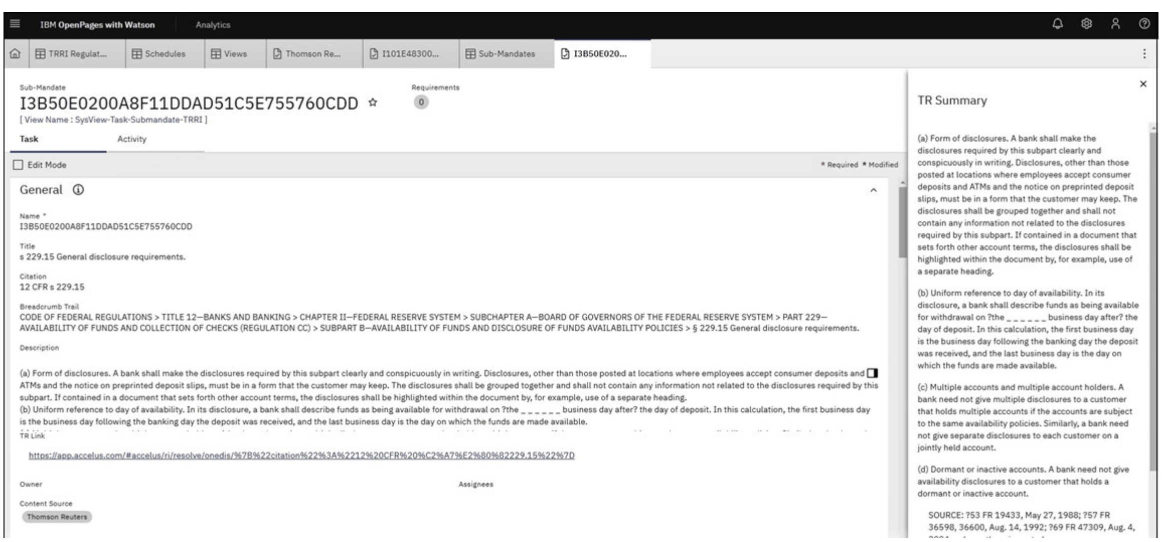


Figure 47. Example of how regulatory text is displayed for a sub-mandate

Regulatory Interaction objects

IBM OpenPages Regulatory Compliance Management now includes the Regulator Interaction (RI) objects.

Regulatory Interaction 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. Individual tasks that are related to the management of and response to the regulator interaction might be assigned to users through Regulatory Task child objects. Several associations were created between RI and Mandate, Sub-mandate, Requirement, Policy, Procedure, and Control. Additionally, Regulatory Tasks can be added. The Compliance Review Comment object was added to bring in some of the functionality for Audit and/or Policy review.

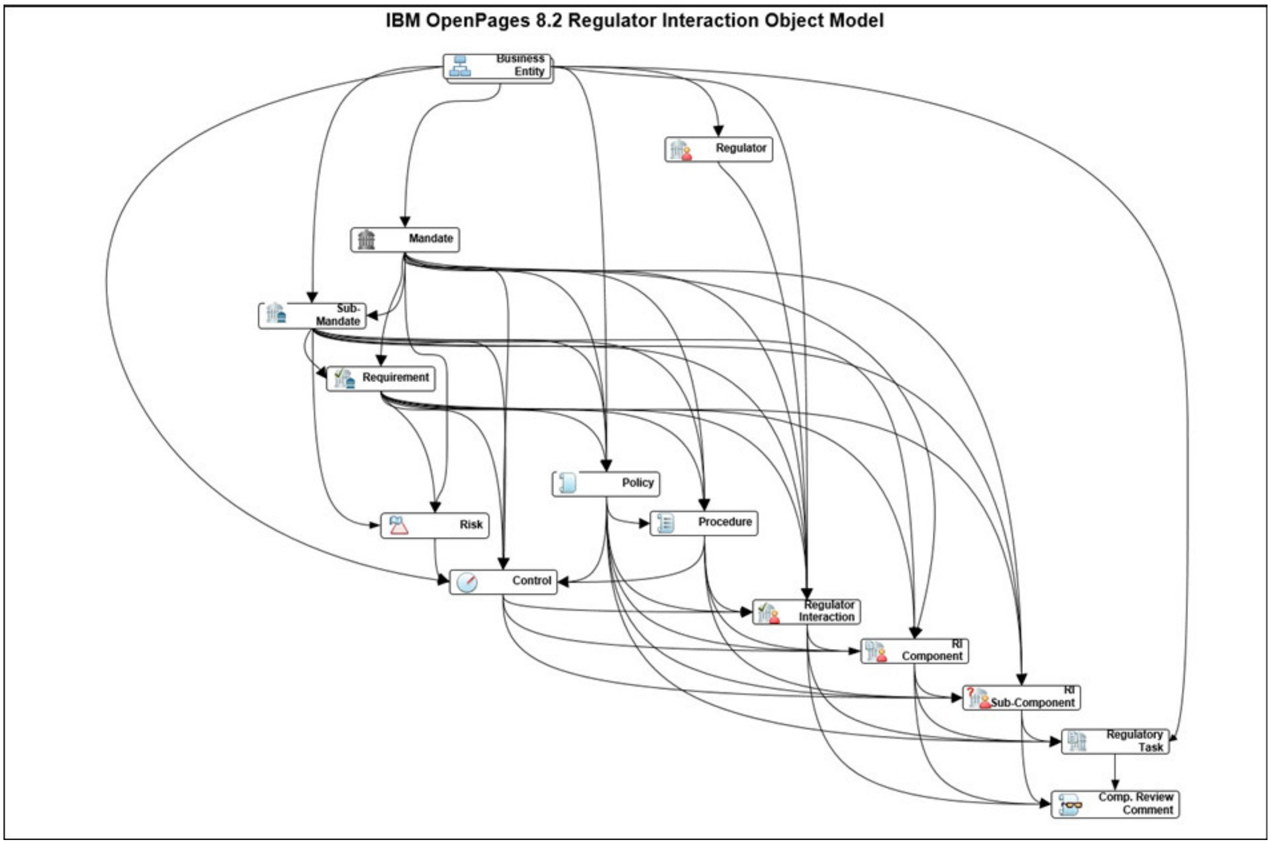


Figure 48. The Regulatory Interaction object model

Regulatory Interaction workflow

IBM OpenPages Regulatory Compliance Management includes a new Regulatory Interaction workflow.

The Regulatory Interaction workflow is designed to advance a Regulatory Interaction through the ingestion to final disposition of a regulatory inquiry. The RI Workflow is manually started once a Regulatory Interaction object is created. After creation and depending on the input, the RI Workflow can travel down four paths. The four paths assist the user to prepare for 1) Meeting, 2) Examination, 3) Response to an Inquiry, or 4) Other. The stages of the workflow include: 1. Capturing of the relevant details of the Regulatory Interaction, 2. Owner Identification based on identified Regulator, 3. Request Type will determine which Path the workflow will travel, 4. Preparation steps based on path traveled, 5. Execution of response, and 6. Final disposition.

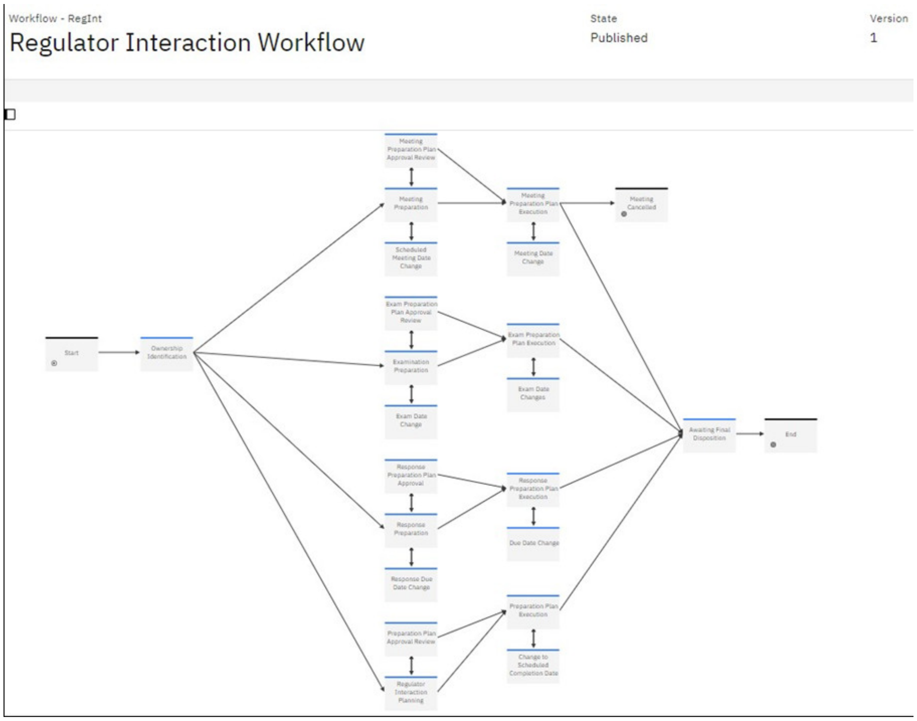


Figure 49. Regulator Interaction workflow

IBM OpenPages Third Party Risk Management

OpenPages Third Party Risk Management has been renamed to IBM OpenPages Third Party Risk Management.

Supported software

IBM OpenPages with Watson 8.2.0 requires new versions of some software:

- IBM OpenPages with Watson now uses IBM WebSphere® Liberty. IBM WebSphere Application Server Network Deployment (also called traditional WebSphere) is no longer supported.
- Red Hat Enterprise Linux (RHEL) Server 6.6 is no longer supported.
- Microsoft Windows Server 2012 Standard Edition and Microsoft Windows Server 2012 R2 Standard Edition are no longer supported.
- AIX® is no longer supported.
- Oracle 12.1.0.2 is no longer supported.
- IBM Db2 11.5.0 (and future 11.5.x.x releases) is now supported. Version 11.1.4.4 is now the minimum supported version.
- IBM Java SDK/JRE 8.0.6.5 (or higher fix packs) is now supported.
- Cognos Analytics 11.1.3 (and higher 11.1.x continuous releases) is now the minimum supported version. Cognos Analytics 11.0.x is no longer supported.
- The integration of IBM Business Process Manager with IBM OpenPages with Watson is no longer supported.
- Microsoft Edge Chromium is now supported by IBM OpenPages with Watson.

  Note: Current IBM Cognos Analytics 11.1.x versions do not support Microsoft Edge Chromium. For the latest information, see the Supported Software Environments report for Cognos .

For more information, see the Supported Environments website.

Administration and serviceability enhancements

Several enhancements have been made to help you administer, maintain, and support IBM OpenPages with Watson.

- Performance improvements for Advanced Filters that include multi-actor selector fields in the filter criteria.
- Performance improvements for Security Rules that include multi-actor selector fields in the rule criteria.
- For Oracle, when you do a fresh installation or upgrade, the installation server checks the objects that are required by OpenPages with Watson. If public access is missing on an object, the installation process grants access to the `openpages` database user automatically.
- You can now install and run the following tools and utilities on a remote system:
  - ObjectManager
  - Update Password Encryption Algorithm (UPEA)
  - `chng-sys-password.sh|.bat`
  - `RpsRpf.sh|.bat`
  - Notification Manager

Requests for Enhancement (RFEs) delivered

This release delivers on several RFEs.

For more information, see: Requests for Enhancement (RFEs) Delivered by Release.

Note: RFEs that request user interface enhancements are considered to be delivered if available in the Task Focused UI.

Chapter 8. New features in version 8.1.0.1

The new features in IBM OpenPages with Watson 8.1.0.1 include the following enhancements.

Platform enhancements

Enhancements to functionality are included in this version of IBM OpenPages with Watson.

Enhancements to the Task Focused UI

The OpenPages Task Focused UI includes numerous new capabilities and features.

Changes to look and feel (Carbon v10)

The overall look and feel of the Task Focused UI changed due to an upgrade in the underlying infrastructure. Some icons changed and some buttons are larger than in previous releases.

Quick View

A Quick View is a Task View that is displayed in a small sidebar rather than a new tab. It is accessed from the following places in a Task View:

- In a Grid relationship field, click ◨ next to the object that you want to open. The object opens in a Quick View.
- In a tree diagram, click a circle title for the object that you want to open. If you click an object type name, a list of objects displays as cards. If you click an object name, the object opens in a Quick View.

Use a Quick View to view and edit a related object in a sidebar without leaving the original object. When you open a Quick View, the Task View where you started becomes read only.

From a Quick View, you can:

- View an object.
- Edit an object, either field-by-field or in edit mode.
- Click 🔍 to search for fields in the Quick View.
- Mark an object as a favorite.
- Start a workflow action.
- Create a new child object of the object that is open.
- If a tree diagram is displayed, drill through to other objects.
- Click ↗ to expand the Quick View to open the object in a new tab. The object opens in the Task View for the object type. Full functionality is then available.

All of the functionality that is available in a Task View is also available in a Quick View with the following exceptions:

- Actions in relationship fields except for Add New (direct children only)
- User Guidance
- The IBM Watson Insights button that supports IBM Watson cognitive technology

Additionally, the Add New action for Grid relationship fields can now be configured to open either in a new tab or a Quick View sidebar. In this situation, the Quick View opens a Creation View rather than a Task

View. It has all the functionality of the Creation View with the exception that only direct children of the object can be created.

The following example shows a Task View for Risk objects with a Grid relationship field for related Controls. Click ◨ to open a Control in a Quick View.

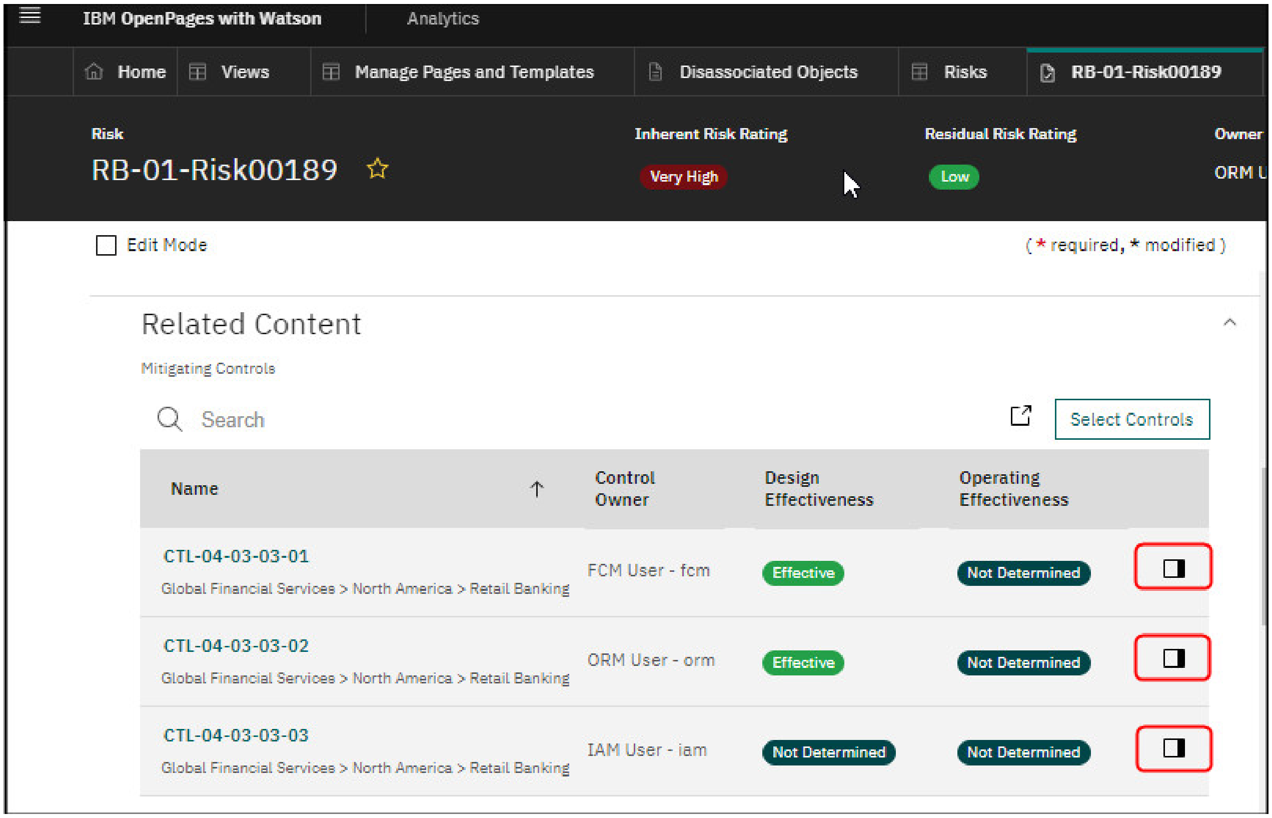


Figure 50. Opening a Quick View from a Grid relationship field

The following example shows a Control open in a Quick View. You can edit the Control and choose a workflow action.

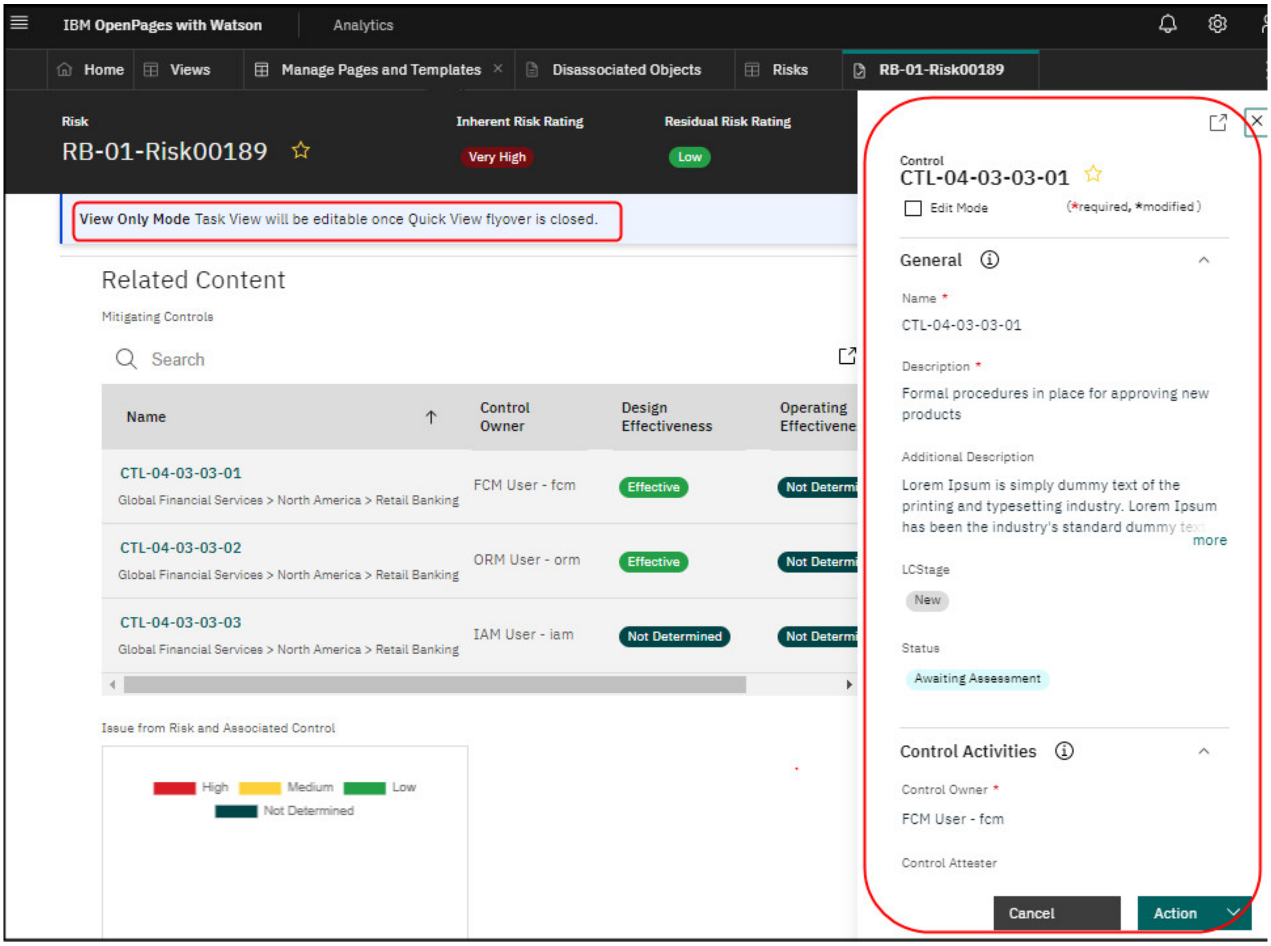


Figure 51. Viewing and editing an object in a Quick View

Bulk Update

Administrators can use bulk update in Grid Views to edit field values across multiple objects.

The **Bulk Update** option is displayed in a Grid View if the user has the appropriate access permissions. Registry settings that determine access to bulk update in the Standard UI are also used in the Task Focused UI.

The **Bulk Update** option is displayed when one or more objects are selected with a check mark.

In the example below, three controls have been selected. The user is ready to select fields to be changed and provide new values.

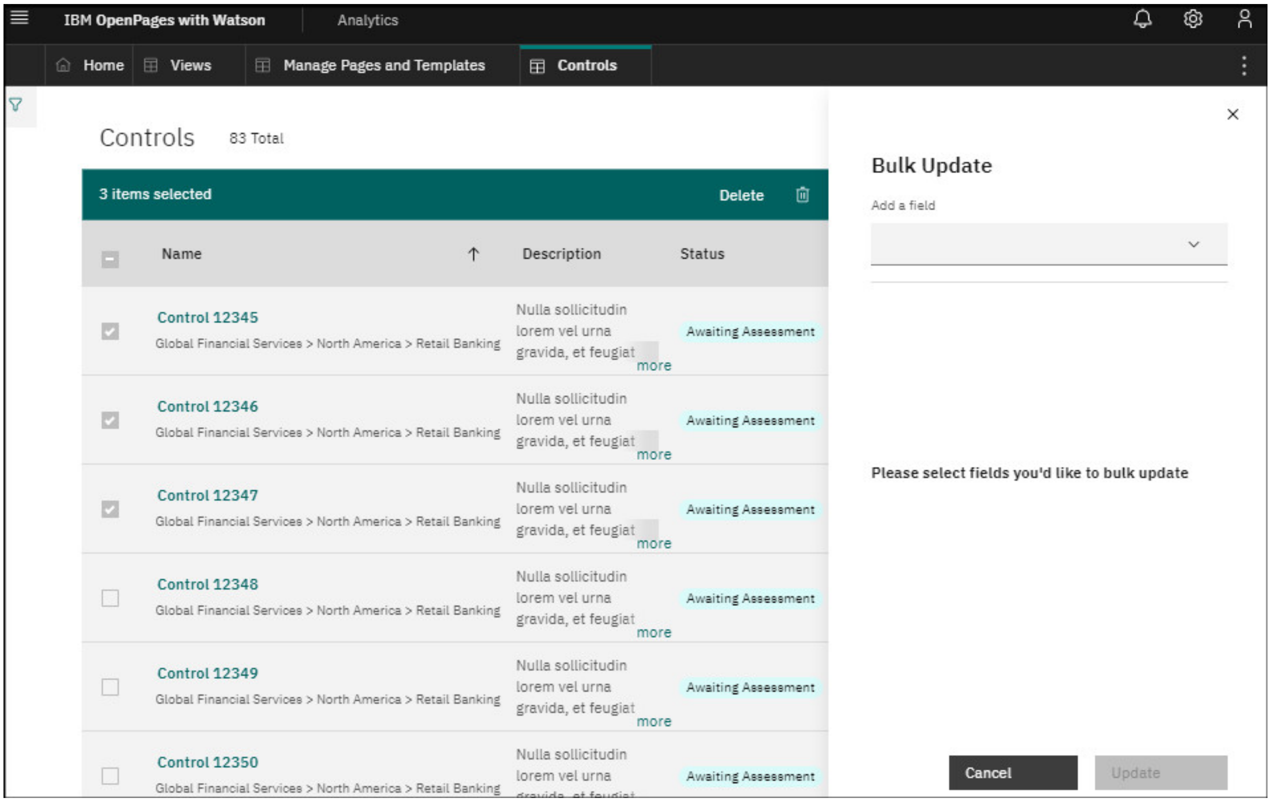


Figure 52. Using Bulk Update to modify field values

Manage Pages and Templates

The new **Manage Pages and Templates** task on the Settings menu is used to manage reporting folders and define report pages and page templates. In previous versions, reporting folders, report pages, and page templates were accessed in OPX.

The **Add Folder**, **Add Page**, and **Add Page Template** options are displayed if a folder is selected with a check mark. The **Copy**, **Move**, and **Delete** options are displayed if multiple folders or one or more report pages or page templates are selected with a check mark.

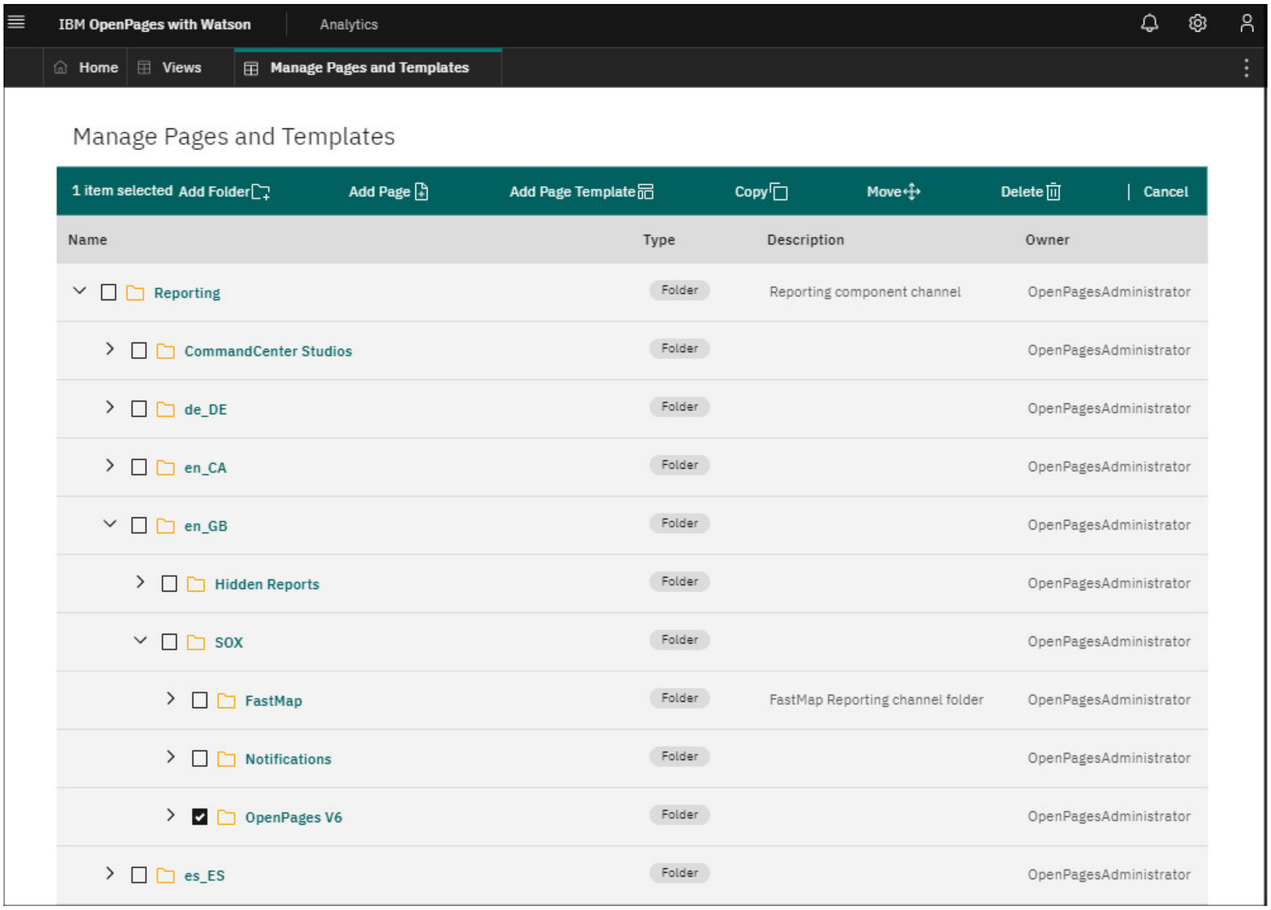


*Figure 53. The **Manage Pages and Templates** task*

Why can't I save? is now part of the Display debug info feature

Why can't I save? is used to find out why **Save** is not enabled for an open object in a Task View or Creation View. It is displayed only if **Display debug info** is enabled and there is an error in an open object.

In the following example, **Display debug info** is enabled. An issue is open in a Task View where the Issue Owner is a required field but it has no value. Therefore, **Why can't I save?** is displayed in the header.

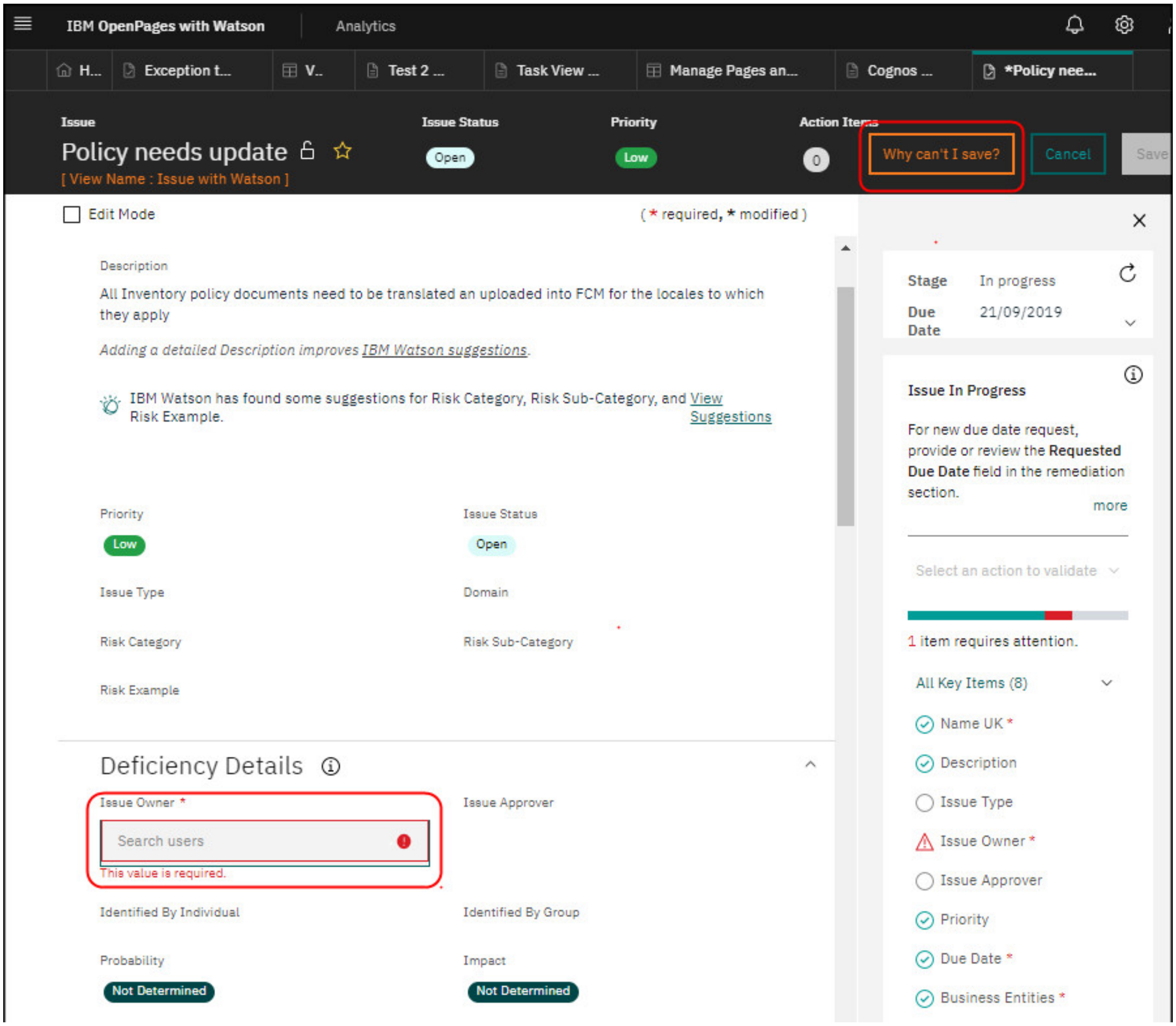


Figure 54. Example of a Task View that shows ***Why can't I save?***

Enhancements to GRC Workflow

Advanced logic was added to applicability, workflow actions, and workflow end stages.

Removal of OPX

OPX has been removed from IBM OpenPages with Watson. Reporting functionality has been moved to the new **Manage Pages and Templates** task on the Settings menu in the Task Focused UI.

For information, see "Enhancements to the Task Focused UI" on page 77.

Solutions enhancements

IBM OpenPages solutions have been enhanced to make them more complete and easier to use.

Enhancements to IBM OpenPages Regulatory Compliance Management

IBM OpenPages Regulatory Compliance Management (RCM) includes numerous enhancements that continue to build on the strategy and direction that was introduced in 8.1.0.

Wolters Kluwer connector

IBM OpenPages Regulatory Compliance Management includes a connector for Wolters Kluwer (WK).

The WK Regulatory Event object enables the direct ingestion of regulatory event feeds from Wolters Kluwer into RCM, and the automated generation of workflows assigned to users based on supplied data points, as well as documents impacted by regulatory change. This helps to efficiently assign tasks to users to effectively respond to, and prepare for, regulatory change.

The Wolters Kluwer connector also enables users to ingest Wolters Kluwer Library content directly into RCM as Mandate and Sub-Mandate objects. Wolters Kluwer content that is categorized as "Authoritative Source" is ingested as a Mandate, and content that is categorized as "Citation" is ingested as a Sub-Mandate. Using Regulation B as an example, 12 CFR 1002 is ingested into RCM as a Mandate and each section of Regulation B (e.g., 12 CFR 1002.4) is ingested as a Sub-Mandate. Sub-Mandates are associated to their parent Mandate objects as part of the ingestion process (e.g., 12 CFR 1002 is automatically associated to 12 CFR 1002.4). Additionally, a WK Regulatory Event record that impacts a Sub-Mandate ingested from Wolters Kluwer is automatically associated to the impacted object as part of the ingestion process. Fields that are provided by Wolters Kluwer for these records include the issuing body, effective date, impacted industry, jurisdiction, type of document, and a link to the document.

Taxonomy mapping

Users can associate their own taxonomy to the Jurisdiction, Document Type, and Regulator fields provided by Wolters Kluwer on Regulatory Events, Mandates, and Sub-Mandates.

Users can populate fields on a Regulatory Event, Mandate, or Sub-Mandate record that are more consistent with other values that are used in IBM OpenPages with Watson. The converted data points are available for use in the same way as existing data points on these records, such as for setting conditions within the Rules Engine for triaging Regulatory Events or within a workflow.

WK Rules Engine

The Rules Engine helps users to handle the daily influx of regulatory events, automatically route them to the right users in their organization, and start any necessary workflows.

The data from Wolters Kluwer is loaded into OpenPages, and then passes through the Rules Engine. One regulatory event can trigger multiple rules if more than one rule's conditions are met.

Users can access the Rules Engine via a link on the **WK Regulatory Events** page.

Sample workflows

IBM OpenPages with Watson includes sample example workflows for processing WK Regulatory Events. For more information, see the *IBM OpenPages with Watson Solutions Guide*.

For more information, see "Out-of-the-box workflows for Wolters Kluwer Regulatory Event processing" on page 85.

Out-of-the-box rules for WK Regulatory Event processing

IBM OpenPages with Watson includes example rules for the incoming WK Regulatory Events. These rules can be modified to match an organization's methodology for processing alerts published by regulatory agencies.

For more information, see "Out-of-the-box rules for Wolters Kluwer Regulatory Event processing" on page 87.

For information about how to configure the Wolters Kluwer connector, see the *IBM OpenPages with Watson Administrator's Guide*.

Advanced logic in rules

You can now use advanced logic in rules. You view and create rules in the Rules Engine.

Previously, all conditions in a rule had to be met for a rule to be triggered. For example, if you defined three conditions, the rule was triggered if all three conditions were met: `1 and 2 and 3`. This behavior is still the default for rules in 8.1.0.1.

However, you can now override the default behavior by defining advanced logic. You can use the condition numbers together with the operators `and`, `or`, `not`, and parentheses. For example, if you define three conditions, you can use advanced logic such as:

- `1 or 2 or 3`
- `1 and (2 or 3)`
- `1 and not (2 or 3)`

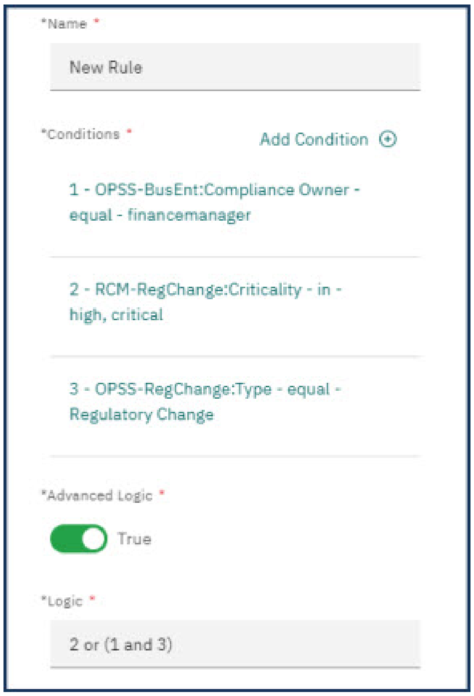
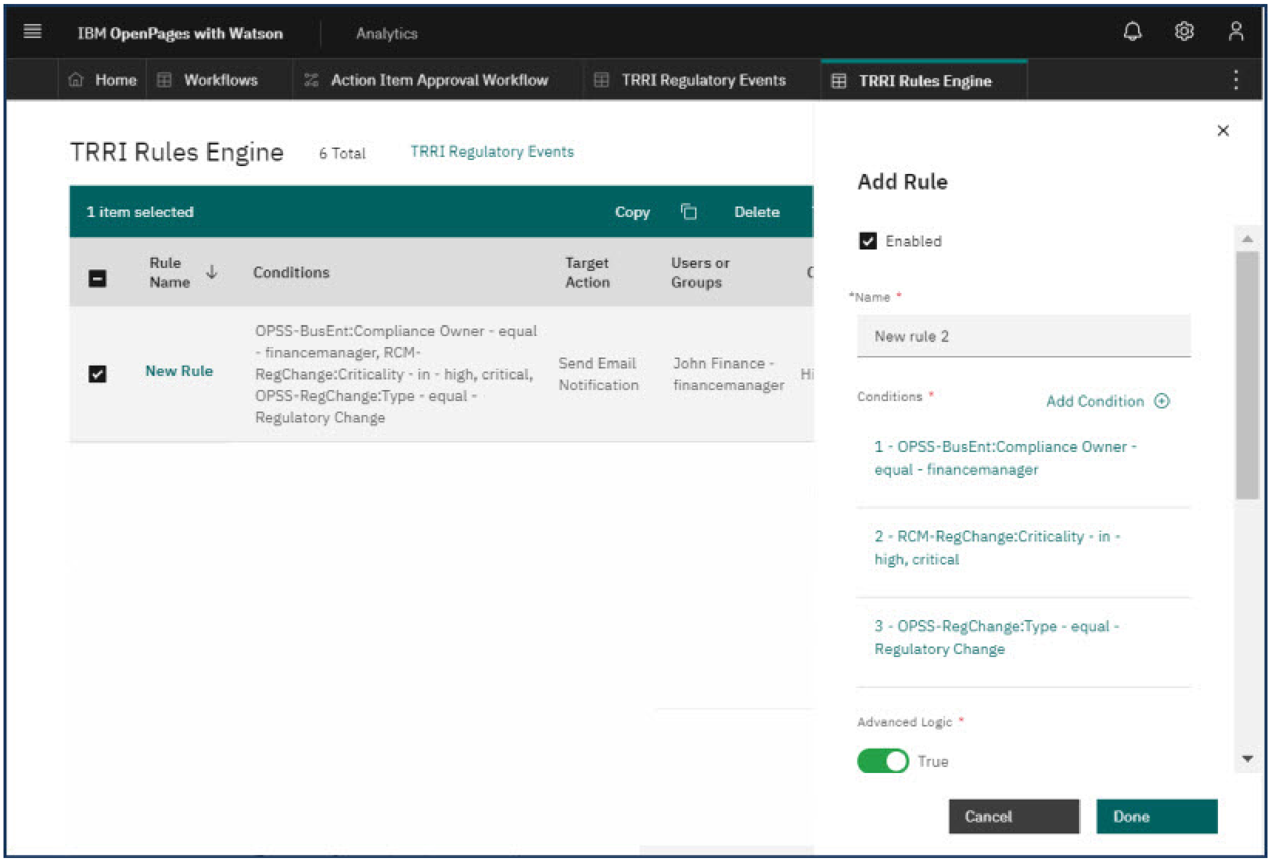


Figure 55. Advanced logic for rule conditions

Copy rules

You can now create rules in the Rules Engine by copying an existing rule.



Out-of-the-box workflows for Wolters Kluwer Regulatory Event processing

IBM OpenPages with Watson 8.1.0.1 includes example workflows for processing Wolters Kluwer Regulatory Events. These workflows can be modified by users – without the need for development resources or coding – to tailor the workflows to match an organization's methodology for processing alerts published by regulatory agencies.

Trigger Change - Regulatory

This workflow creates a Regulatory Change record and associates the record to a WK Regulatory Event when the conditions of a rule from the Rules Engine are met that indicate the WK Regulatory Event addresses a regulatory change, such as a proposed or final rule published in the Federal Register. The workflow also populates certain fields on the created Regulatory Change record, including categorizing the Regulatory Change record as **Regulatory Change.** This workflow enables the association of multiple Regulatory Change records to a WK Regulatory Event so that multiple users can analyze the impact of the WK Regulatory Event on their particular areas of responsibility within the organization.

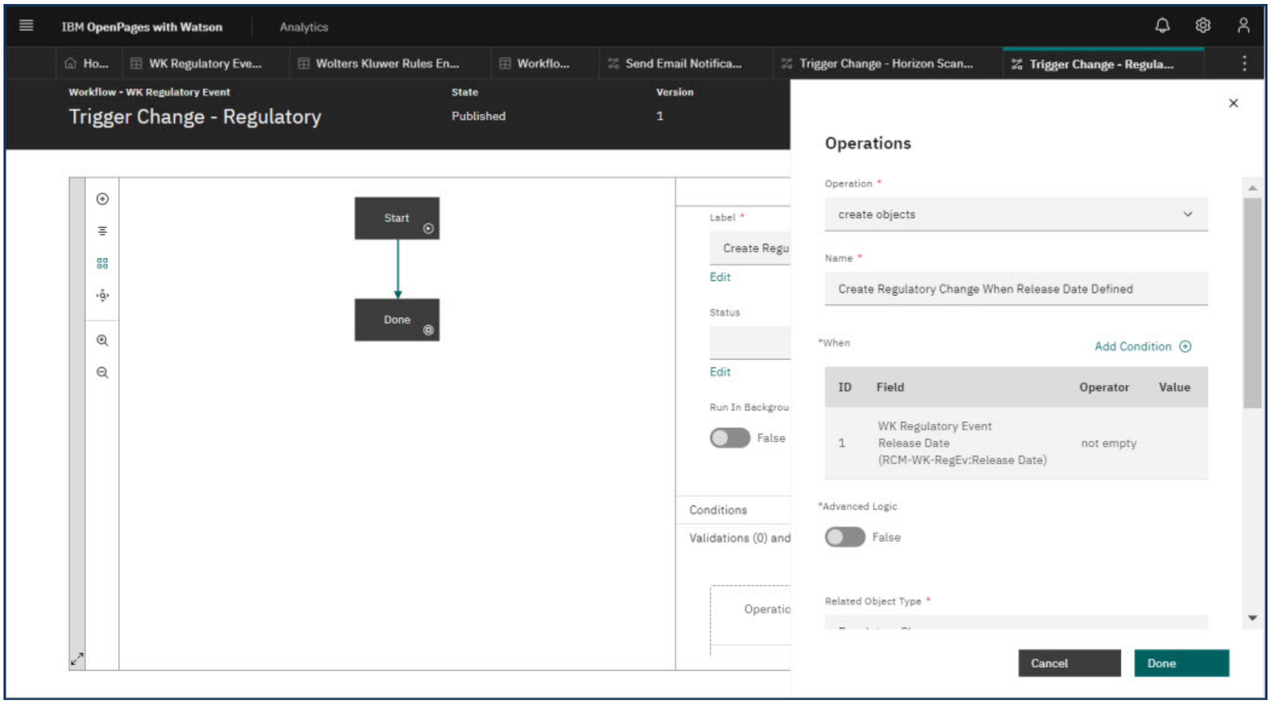


Figure 56. Trigger Change - Regulatory workflow

Trigger Change - Horizon Scanning

This workflow creates a Regulatory Change record and associates the record to a WK Regulatory Event when the conditions of a rule from the Rules Engine are met that indicate the WK Regulatory Event addresses an issue other than a regulatory change, such as a speech or enforcement action published by a regulator. The workflow also populates certain fields on the created Regulatory Change record, including categorizing the Regulatory Change record as **Horizon Scanning**. This workflow enables the association of multiple Regulatory Change records to a WK Regulatory Event so that multiple users can analyze the impact of the WK Regulatory Event on their particular areas of responsibility within the organization.

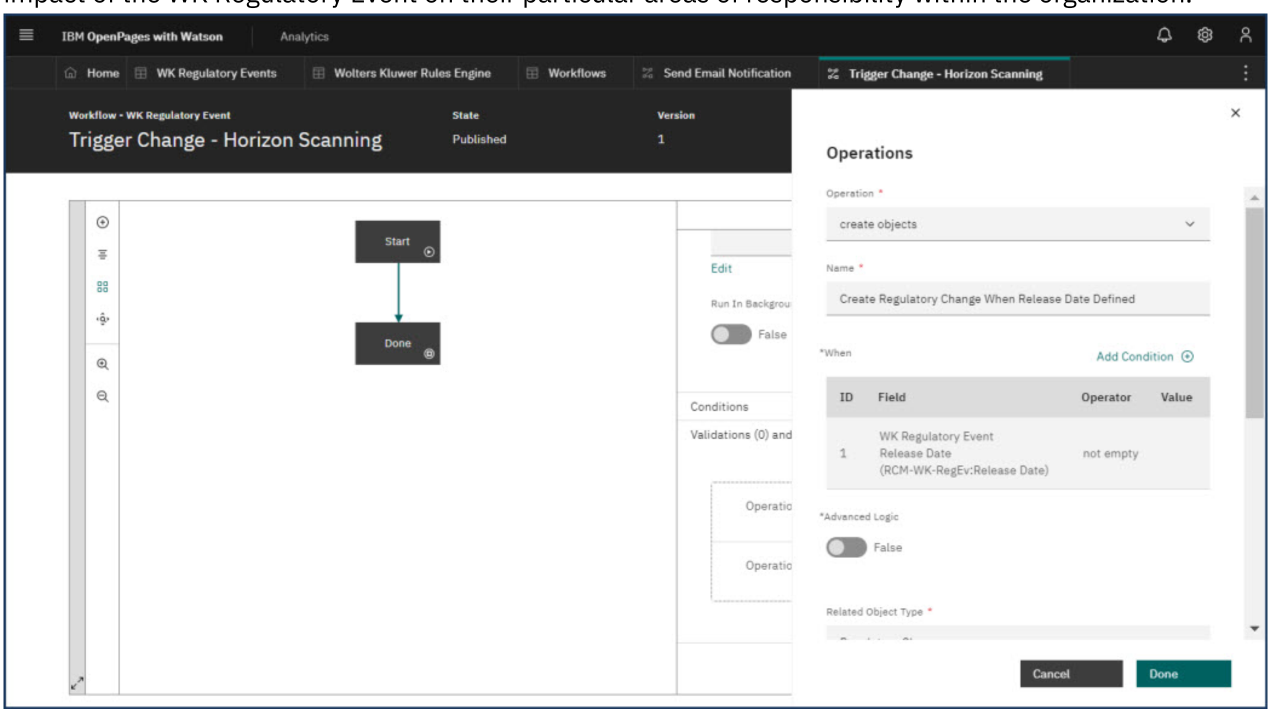


Figure 57. Trigger Change - Horizon Scanning workflow

WK Regulatory Change Review Workflow

When a Regulatory Change record is created from a WK Regulatory Event, this workflow starts. The workflow guides the user through the processing of a WK Regulatory Event. The user determines the applicability of the WK Regulatory Event that is associated with the Regulatory Change record and determines the impact of the Regulatory Event. The user also has the option to create and assign Regulatory Tasks to users within RCM for actions that need to be taken to respond to the Regulatory Event. When Regulatory Tasks are assigned to users, this workflow cannot be closed until all related Regulatory Tasks have been completed.

Additional workflows

The following example workflows are also available for processing Wolters Kluwer Regulatory Events.

- Regulatory Task Workflow

  When a Regulatory Task record is created, this workflow starts. The workflow alerts the owner of the Regulatory Task that a record has been created and assigned to them. After the user completes the assignment that is provided in the Regulatory Task record and clicks **Task Completed**, the workflow changes the status field to **Completed** and populates the date that the task was completed.
- Send Email Notification

  This workflow can be used to send mail notifications to users who are named within a rule that is created in the Rules Engine.

These workflows were added in OpenPages 8.1. For more information, see "Regulatory Task Workflow" on page 114 and "Send Email Notification" on page 114.

Out-of-the-box rules for Wolters Kluwer Regulatory Event processing

IBM OpenPages with Watson 8.1.0.1 includes example rules for the incoming WK Regulatory Events. These rules can be modified by users **–** without the need for development resources or coding **–** to tailor the rules to match an organization's methodology for processing alerts published by regulatory agencies.

Change Management – US Federal

This rule creates a regulatory change object if the incoming WK Regulatory Event is a US Federal regulatory change.

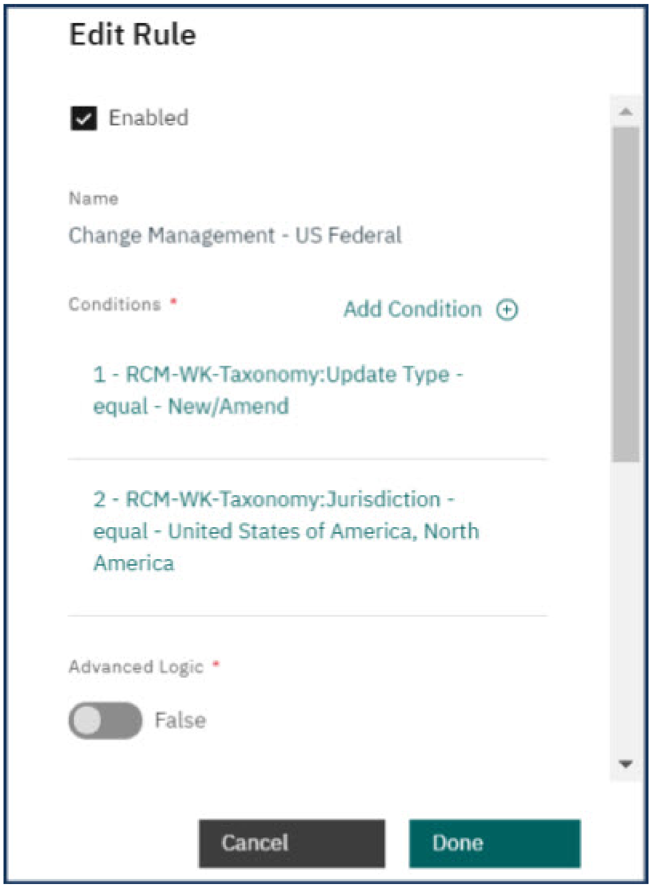


Figure 58. Change Management – US Federal rule

Change Management – US State

This rule creates a regulatory change object if the incoming WK Regulatory Event is a US State regulatory change.

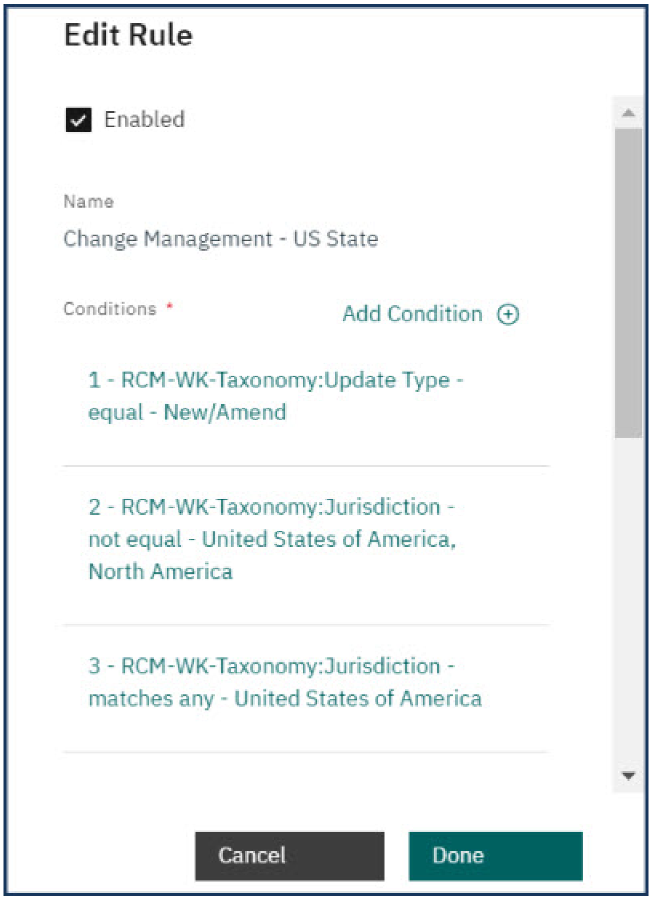


Figure 59. Change Management – US State rule

Change Management – Global

This rule creates a regulatory change object if the incoming WK Regulatory Event is a Global regulatory change.

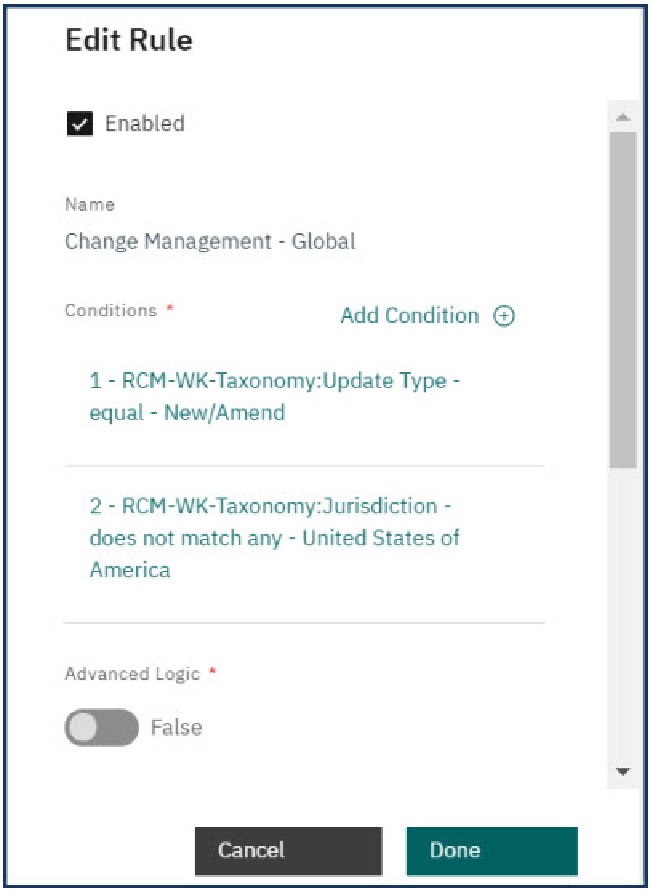


Figure 60. Change Management – Global rule

Horizon Scanning – Change Management Notices

This rule sends an email notification if the incoming WK Regulatory Event is any type of regulatory change.

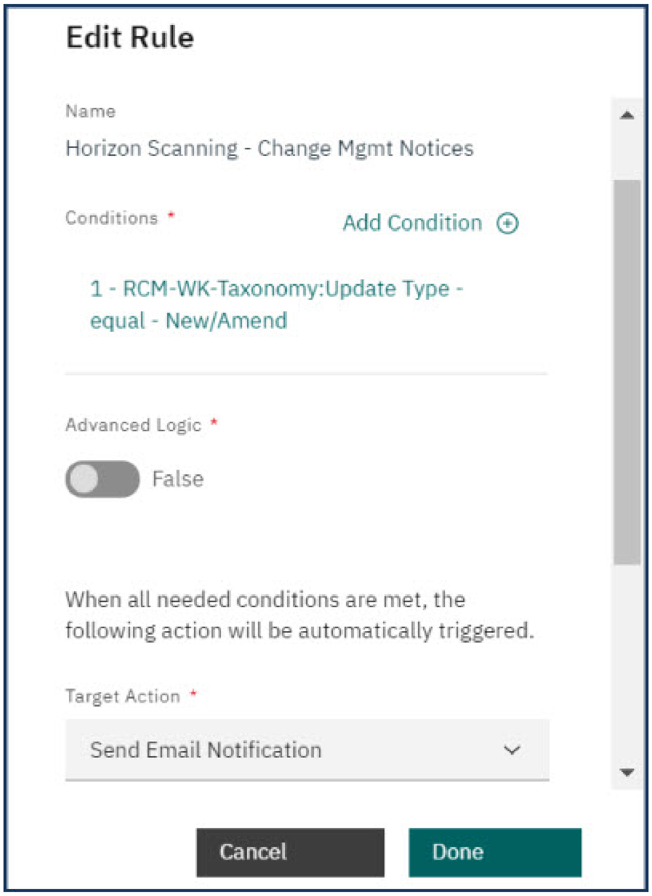


Figure 61. Horizon Scanning – Change Management Notices rule

Horizon Scanning – Secondary Materials

This rule creates a regulatory change object with `type: horizon scanning` if the incoming WK Regulatory Event is not a regulatory change.

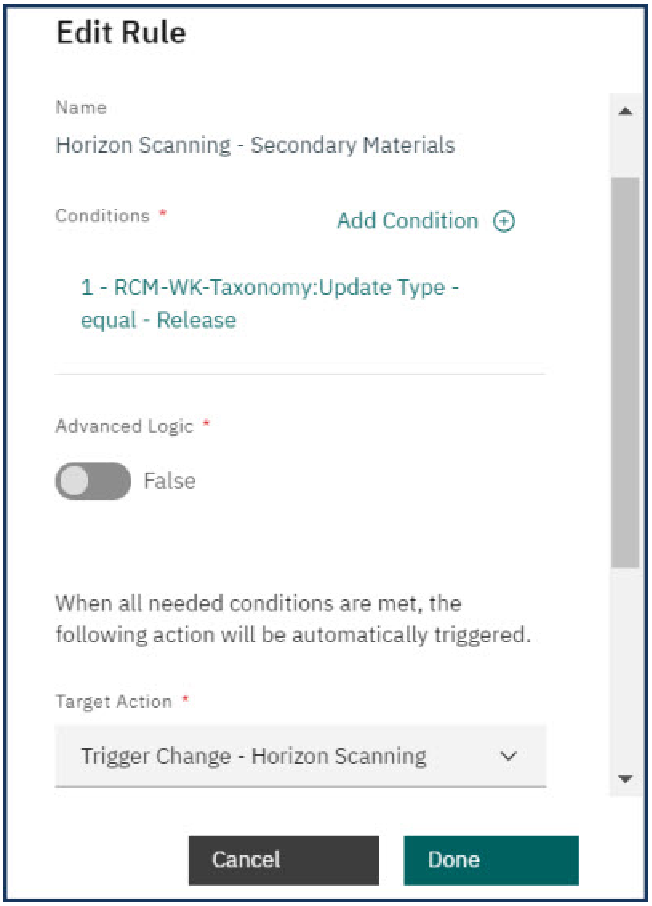


Figure 62. Horizon Scanning – Secondary Materials rule

Supported software

IBM OpenPages with Watson 8.1.0.1 supports new versions of some software:

- Oracle 19c is now supported.

Requests for Enhancement (RFEs) delivered

This release delivers on several RFEs.

For more information, see: Requests for Enhancement (RFEs) Delivered by Release.

Note: RFEs that request user interface enhancements are considered to be delivered if available in the Task Focused UI.

Chapter 9. New features in version 8.1.0

The new features in IBM OpenPages with Watson 8.1.0 include the following enhancements.

Platform enhancements

Enhancements to functionality are included in this version of IBM OpenPages with Watson.

Enhancements to the dashboard in the Task Focused UI

The new OpenPages dashboard provides users and administrators with the ability to build a landing page that is relevant to them based on their responsibilities and duties.

- Administrators can define dashboard content by profile.
- Users can further personalize their dashboard and adapt it to the things that matter to them.
- For upgrades, existing user panels are automatically uploaded.

New types of panels can be added to the dashboard:

- Workflow-driven panels provide a quick abstract of tasks, links to the most urgent tasks, and links to more detailed views.
  - The My Tasks tab shows the tasks that are assigned to the logged-in user.
  - The Subscription Tasks tab shows the tasks that the user is subscribed to.
  - The Oversight Tasks tab shows the tasks for which the user has oversight responsibility.
- The Favorites panel contains links to activities that were marked as favorites by the user.
- Charts that present a set of filter activities or objects that are grouped by a specified criteria.
- Quick access to Creation Views for specified objects.
- Reports panels. The list of reports is defined in the profile.
- Custom panels can contain one or more widgets:
  - A Filter Count widget displays a count for a specific activity.
  - A Guidance widget displays a text explanation that is specific to your organization and written by an administrator.
  - A Static Link widget provides quick access to a specific URL.
  - A Chart widget displays a chart but in a smaller layout than the Chart panels.

The following example shows the new dashboard with various types of charts.

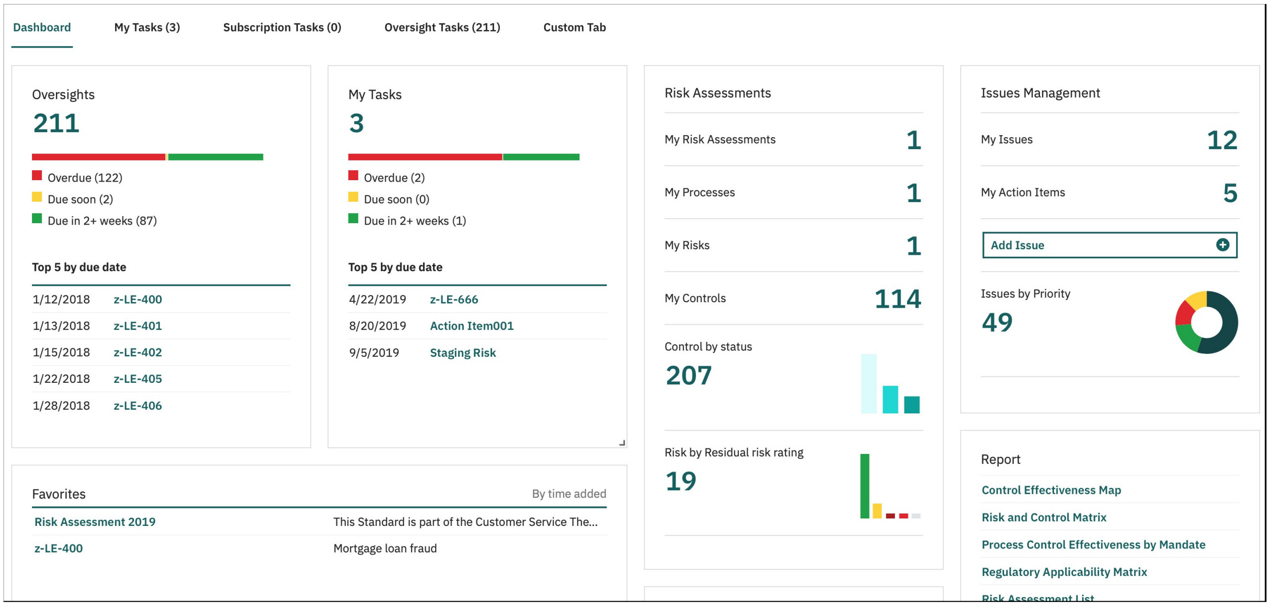


Figure 63. Dashboard in the Task Focused UI

Enhancements to the Task Focused UI

The OpenPages Task Focused UI includes numerous new capabilities and features.

Reporting periods

The Task Focused UI provides the ability to switch to past reporting periods, if they exist, by using the **Change Reporting Period** option on the User menu.

Advanced filters in Grid Views

The Grid Views provide users with the ability to define and update advance filters, similar to what is available in the Standard UI. Filters that are defined in the Task Focused UI are also available in the Standard UI.

The following example shows the new private filters panel in Grid Views. A filter on a specific value is also applied in the Search box.

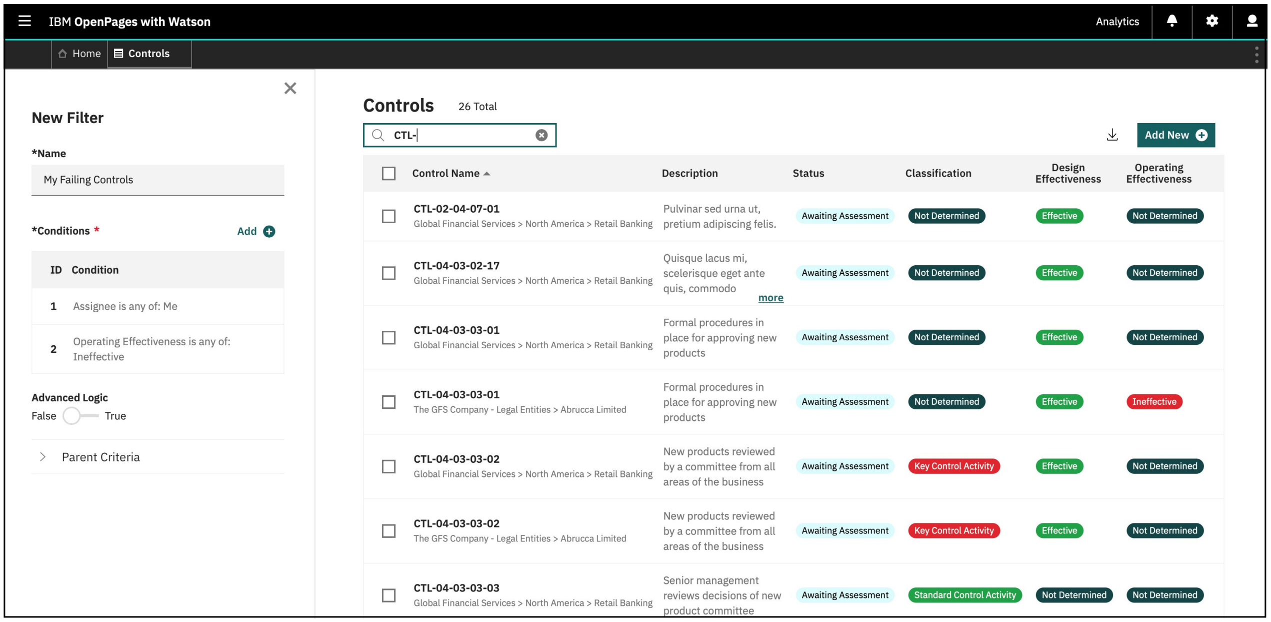


Figure 64. Private filters panel in Grid Views

Folder filter (Business Entity) in Grid Views

Grid Views include the ability to filter the list by drilling through a Business Entity hierarchy. The hierarchy shows all objects or activities that are in a folder. Users can quickly search for activities or objects in a specific folder or subfolder.

The following example shows the new folder filter panel in Grid Views.

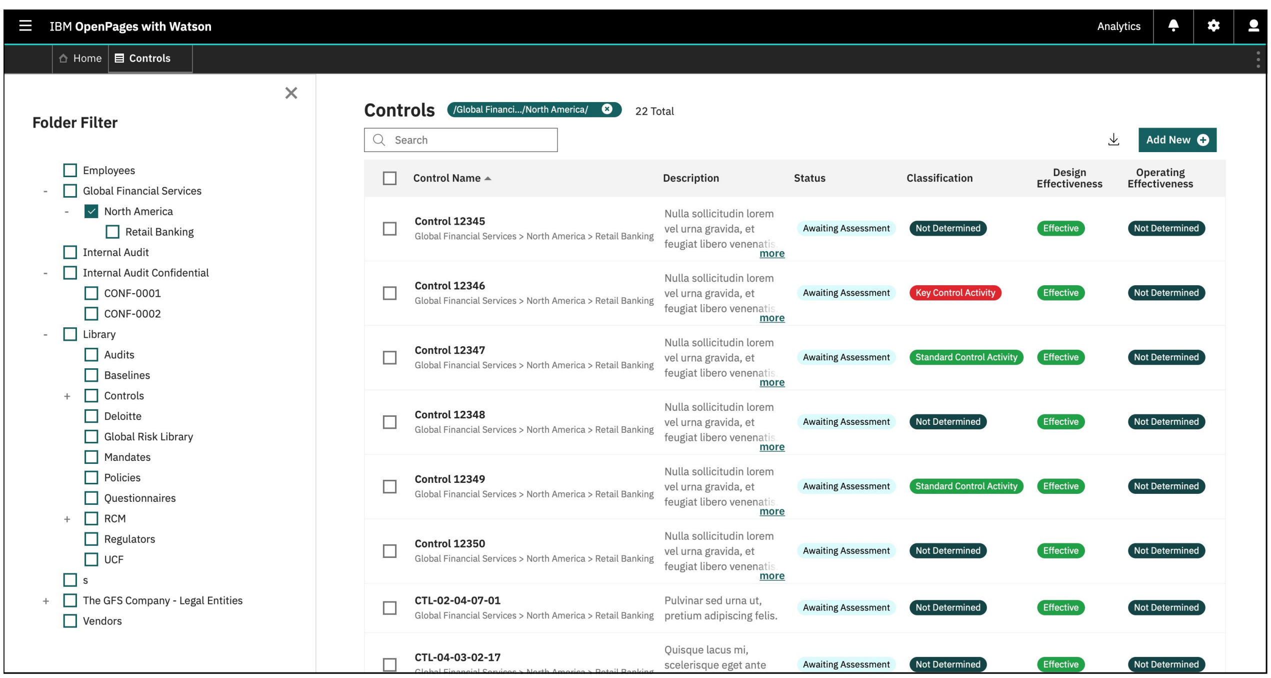


Figure 65. Folder filter (Business Entity) in Grid Views

Enhancements to Task Views

The Task Views are updated to streamline the process for users, even in complex processes and tasks.

- User guidance dynamically builds the list of key fields based on:

- The task's requirements. As fields become required, they are automatically added to the key fields section.
- The workflow validation rules. As the workflow validation rules define what is required to move to the next steps, the key field can automatically include the relevant fields in the key field area.

- Users can mark an activity or object as a favorite. It then appears in the Favorites panel on the Homepage.
- Users can control how they interact with a Task View by using the new Edit Mode toggle. Some Task Views might have only a few fields that are editable, which makes it difficult to find them quickly. Turning on Edit Mode automatically makes all editable fields clearly visible to the user.
- Users can add new types of charts to their Homepage panels:
  - Zone-based heatmap
  - Count-based heatmap
  - Single stack bar
- The new Siblings relationship type for relationship fields provides a list of activities or objects that have the same parent type. For example, use it to show all the other Controls that are mapped to the same Risk.
- The business entity selector picker is supported in the Task Focused UI.
- Inline guidance supports the same formatting that is available in user guidance.

The following example shows a Task View with the new user guidance panel and the Edit Mode toggle.

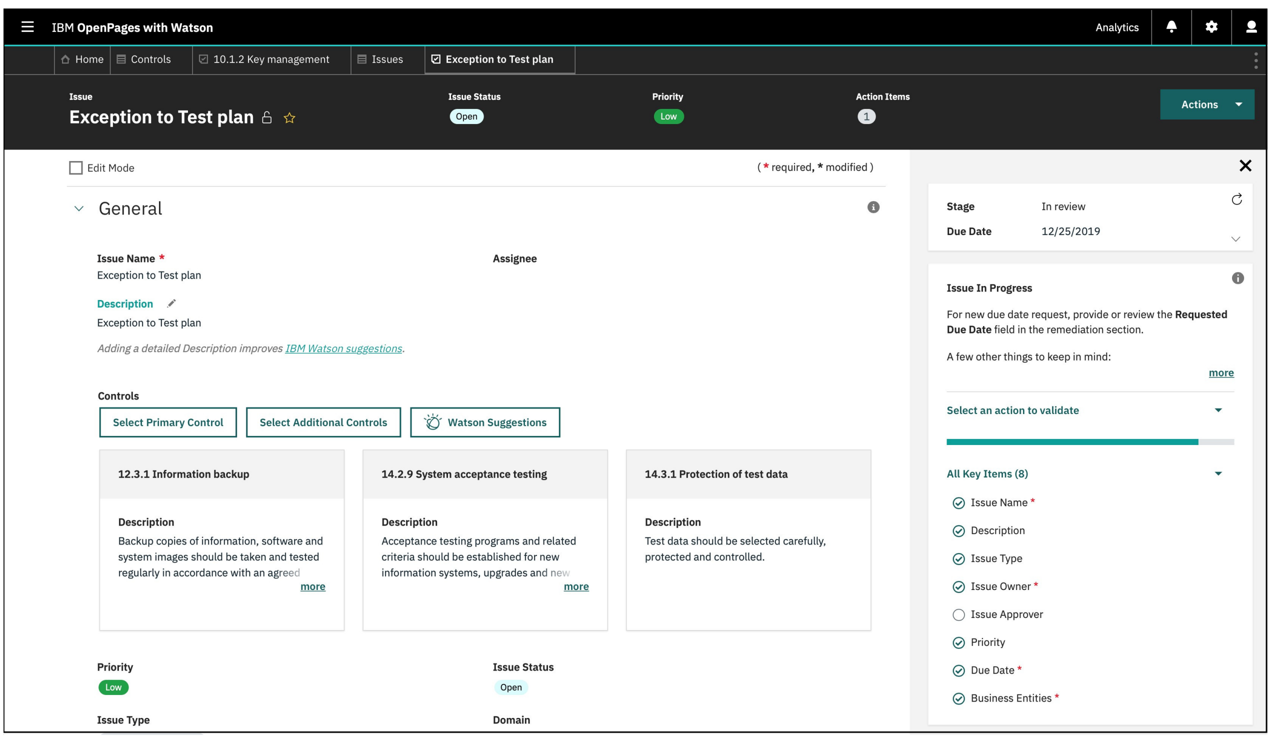


Figure 66. Task View

The following example shows heat maps.

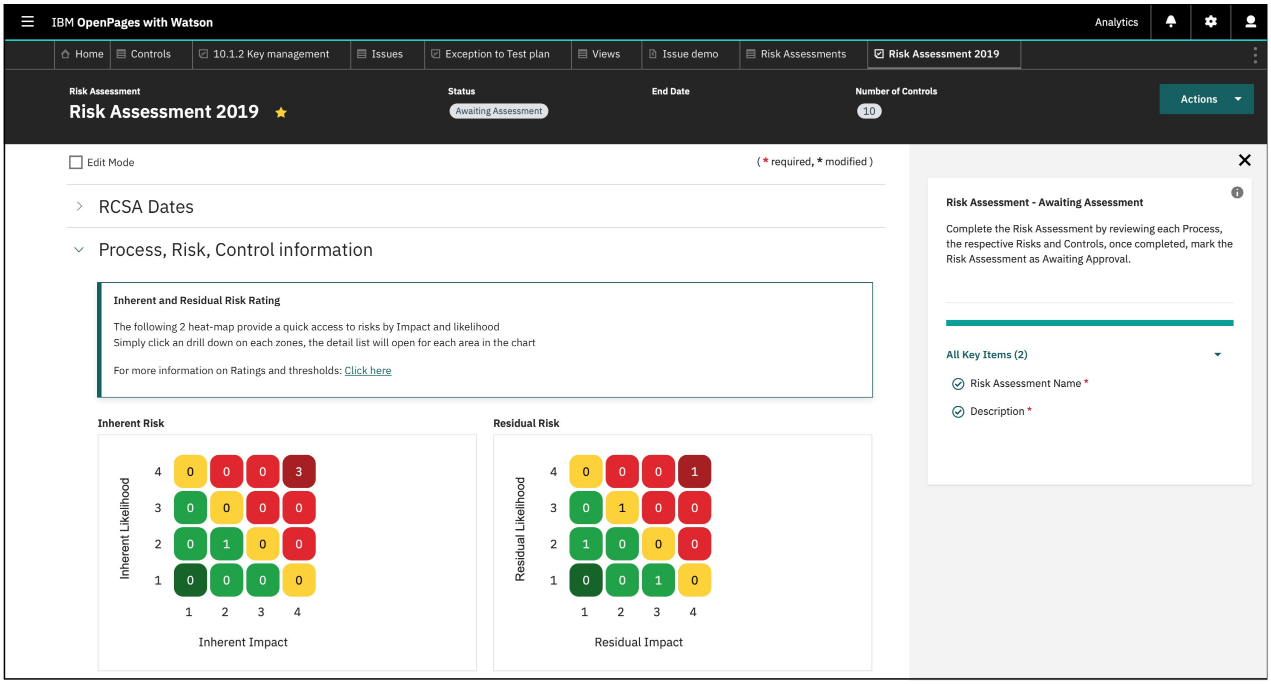


Figure 67. Heat map charts

Enhancements to GRC Workflow

The embedded GRC Workflow feature that was introduced in 8.0.0.2 is enhanced to cover more use cases:

- Assignments can leverage multiple sources. The assignee can be picked from one or more fields.
- Task View overrides provide the ability to:
  - Add relationship fields as key fields (in user guidance)
  - Hide or show entire sections
- Operation and validations are combined in one section and can be ordered by simply dragging and dropping.
- Operations provide the ability to:
  - Create objects and set fields on the objects
  - Lock or unlock objects
  - Set fields on related objects (directly or indirectly related)
  - Start another workflow
    - On related activity or objects (directly or indirectly related).
    - On the same activity or object, so workflows can be sequential.
- By workflow stage, access control can be defined as read-only for non-participants.
- An action can be defined to request or require that a user enter a comment.
- New workflow variables are available for expressions or as email variables:
  - Workflow Start User references the user who started a workflow.
  - Last Action User references the user who performed the previous action.
- For workflows that are defined to auto-start, a workflow is now launched when an object is created by copying another object. Previously, copy was not supported for auto-start workflows.

Solutions enhancements

IBM OpenPages solutions have been enhanced to make them more complete and easier to use.

Enhancements to system task and creation views

Enhancements have been made to system task and creation views in the Task Focused UI. The enhancements provide better experiences for users. Fields that are set by workflows or triggers are now made read-only. Fields required for the process flow are included in the view and made required.

Enhancements available for all solutions

Added reports for questionnaires:

- **Program Report**

  For a selected Program, the report shows overall score, questionnaire progress, and response summary per section.
- **Single Assessment Report**:

  For a selected questionnaire assessment, the report shows sections, questions, and answers.

Considerations for customers who are upgrading or migrating to 8.1

Significant enhancements have been made to the following solutions:

- IBM OpenPages Model Risk Governance
- IBM OpenPages Operational Risk Management
- IBM OpenPages Regulatory Compliance Management

The updated solutions are available in fresh installations only. If you want to update these solutions, contact IBM OpenPages Support.

Enhancements to the sample workflows in GRC Workflow

New and updated sample workflows support the GRC Workflow feature.

New sample workflows have been added for the following solutions:

- IBM OpenPages Model Risk Governance
- IBM OpenPages Operational Risk Management
- IBM OpenPages Regulatory Compliance Management

For more information, see "Enhancements to IBM OpenPages Model Risk Governance" on page 99, "Enhancements to IBM OpenPages Operational Risk Management" on page 107, and "Enhancements to IBM OpenPages Regulatory Compliance Management" on page 108.

Enhancements to IBM OpenPages Internal Audit Management

Enhancements to IBM OpenPages Internal Audit Management improve how periodic risk assessments are handled.

Auditable Entities are periodically assessed to determine a weighted risk score, which is then used to determine how often and how thoroughly to perform an audit on it. The IBM OpenPages Internal Audit Management schema has been enhanced to assign the roles of assessor and approver for this periodic risk assessment and to allow the assessor to provide a rationale for their assessment of each risk factor.

Use the View Designer to easily include these new fields in task views for Auditable Entities.

Use the GRC Workflow Designer to create a workflow to assess, review, and approve Auditable Entities.

The following example shows the new fields on Auditable Entity.

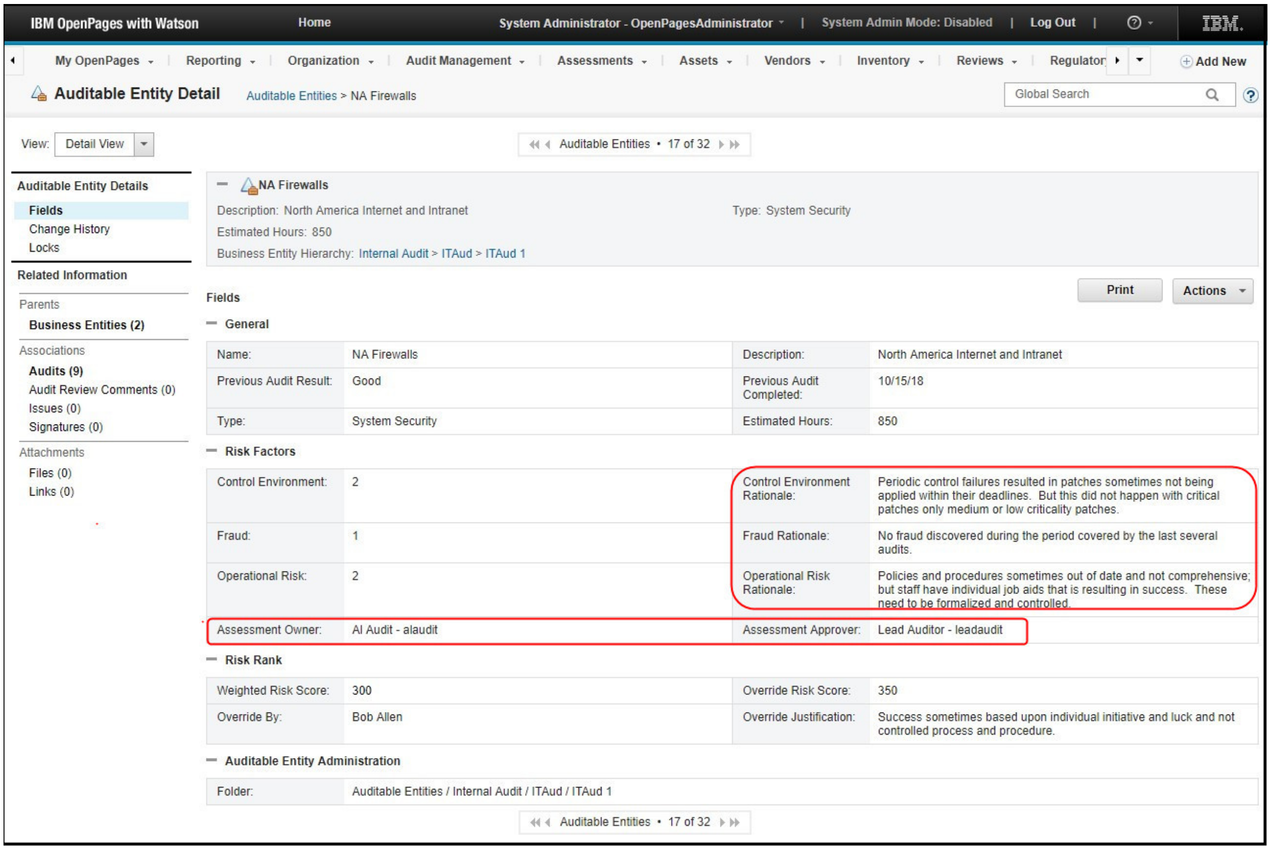


Figure 68. Auditable Entity

Enhancements to IBM OpenPages Model Risk Governance

IBM OpenPages Model Risk Governance includes numerous enhancements to all aspects of the solution.

IBM OpenPages Model Risk Governance supports organizations in organizing and centralizing their Model Inventory.

As a solution IBM OpenPages Model Risk Governance provides a configurable and customizable platform, allowing firms to:

- Organize, document, and maintain an enterprise-wide inventory of models and their usages
- Document and track issues that are associated with models in a central location
- Record Model Change management governance activities
- Schedule, track, and manage Model Reviews and Validations
- Conduct periodic model attestations and model risk assessments
- Assign appropriate roles and responsibilities for model ownership and model risk management
- Monitor performance and status of their Model Risk Management program
- View the relationships between their Model Inventory and the relevant aspects of their Policy and Compliance obligations

MRG object model and schema

Model Scorecard and Model Attestation object types were added to MRG, and the relationship between Model and Usage was reversed. The Model object type is a now a parent of the Usage object type as shown in Figure 69 on page 100. The reversal reflects the typical requirement to document the model and then identify its uses.

Model Attestation
Model Attestation allows an organization to request a regular sign off or *attestation* of a Model. The MRG administrator periodically creates a set of blank Model Attestations, which are assigned to the respective Model Owners. Each Model Owner answers a set of questions about the Model and submits their Model Attestation.

Model Scorecard
Model risk assessments are performed during the development and documentation phase of a Model. They are also typically performed periodically after a Model is in production. The Model Scorecard object is used to conduct this risk assessment. The user answers a number of questions about the Model. Model Scorecard triggers calculate a risk score and determine the Model tier.

The following graphic is the MRG object model.

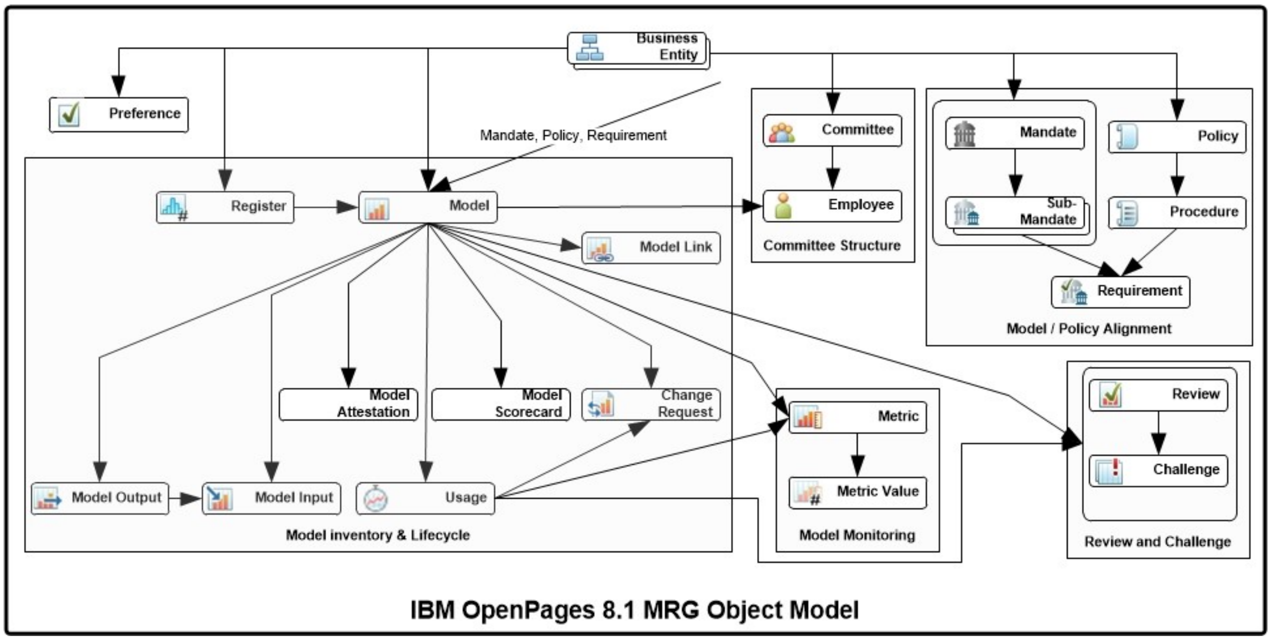


Figure 69. MRG object model

The existing Model Report, Report Section, and Documentation object types were removed.

Fields and field values have been added to many of the MRG object types to facilitate ownership and status tracking and operations in MRG workflows.

Triggers, dashboards, views, and workflows are dependent upon the object model and schema.

MRG profiles

Triggers, dashboards, views, and workflows are dependent upon key elements of the profiles.

MRG includes three profiles:

- OpenPages MRG Master
- MRG Model Owner
- MRG Model Validation

The profiles are the same except for what is included in each of their dashboards in the Task Focused UI. The OpenPages MRG Master profile dashboard in the Task Focused UI is a superset of content included in the other two dashboards.

The following example dashboard can display for a user who is assigned to the OpenPages MRG Master profile.

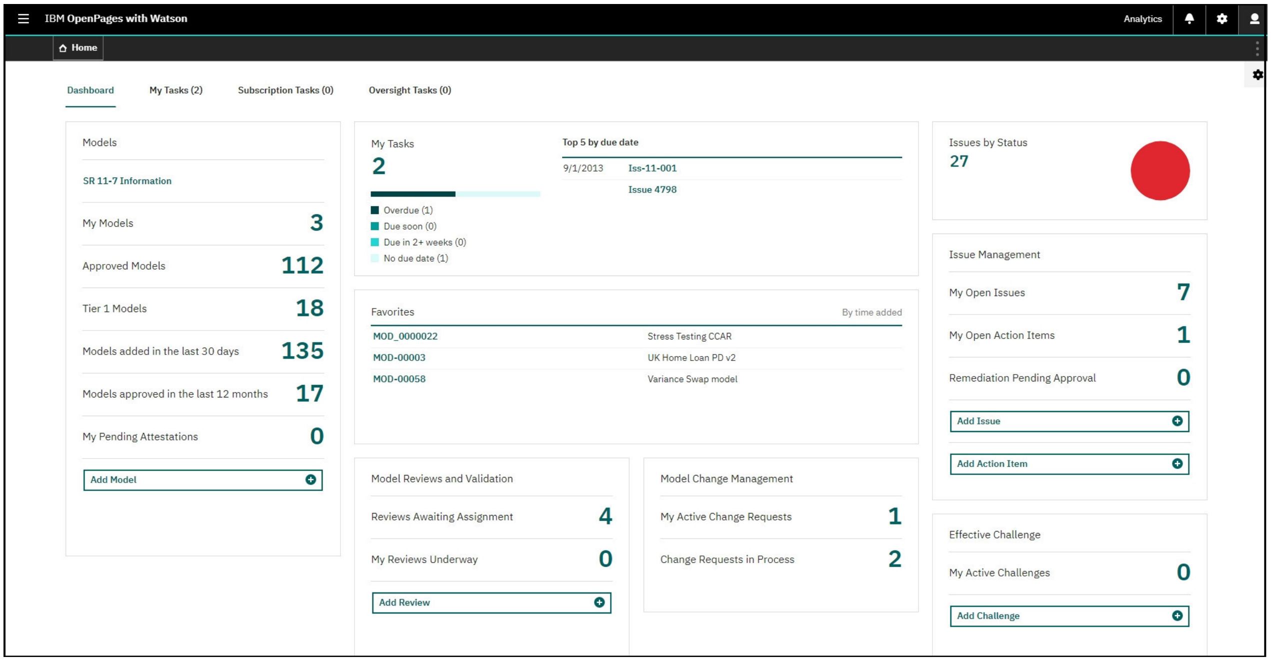


Figure 70. Task Focused UI dashboard for the OpenPages MRG Master profile

MRG role templates

Triggers, dashboards, views, and workflows are dependent upon key elements of the role templates.

MRG includes the following role templates:

Table 3. MRG role templates

Name	Description
MRG - All Data - Limited Admin	Full R/W/D/A access to all default MRG objects. Limited admin rights.
MRG - All Permissions	Full R/W/D/A access to all default MRG objects. Full admin rights.
MRG - Model Developer Owner	Used by model owners and developers. This role template is similar to the Model Risk Management role template except that no write access is granted to the Review object. Most admin application permissions are not granted.
MRG - Model Risk Management	Used by model risk managers (second line of defense). Read, write, and associate access rights are granted to MRG object types. Write access is denied to shared object types, Preference, and Business Entity. Most admin application permissions are not granted. Delete access is not granted to any object types.

Table 3. MRG role templates (continued)	
Name	**Description**
MRG - Model Validation	Used by model validation users. Read, write, and associate access rights are granted to a subset of MRG object types including Model, Register, Review, Change Request, and Challenge. Write access is denied to other MRG object types. Write access is denied to shared object types, Preference and Business Entity. Most admin application permissions are not granted. Delete access is not granted to any object types.

Views for MRG in the Task Focused UI

Enhancements have been made to most views for MRG in the Task Focused UI. Some of the changes are to align the views with the sample workflows, some are to take advantage of new capabilities in task views, and some are to use the existing capabilities to enhance the user experience with these views. New views have also been added.

Views for the object types that are specific to MRG are shared by all MRG users. There are MRG-specific views on the shared object types Business Entity and Preference that are available only to users of one of the three MRG profiles. MRG users share views with other users for other shared object types such as Issue and Action Item.

The following examples show task views for a Business Entity. Users of any one of the MRG profiles get an MRG-specific organization view.

Figure 71. Business Entity Task View for MRG profiles

A Business Entity also shows information about Validations/Reviews and Issues.

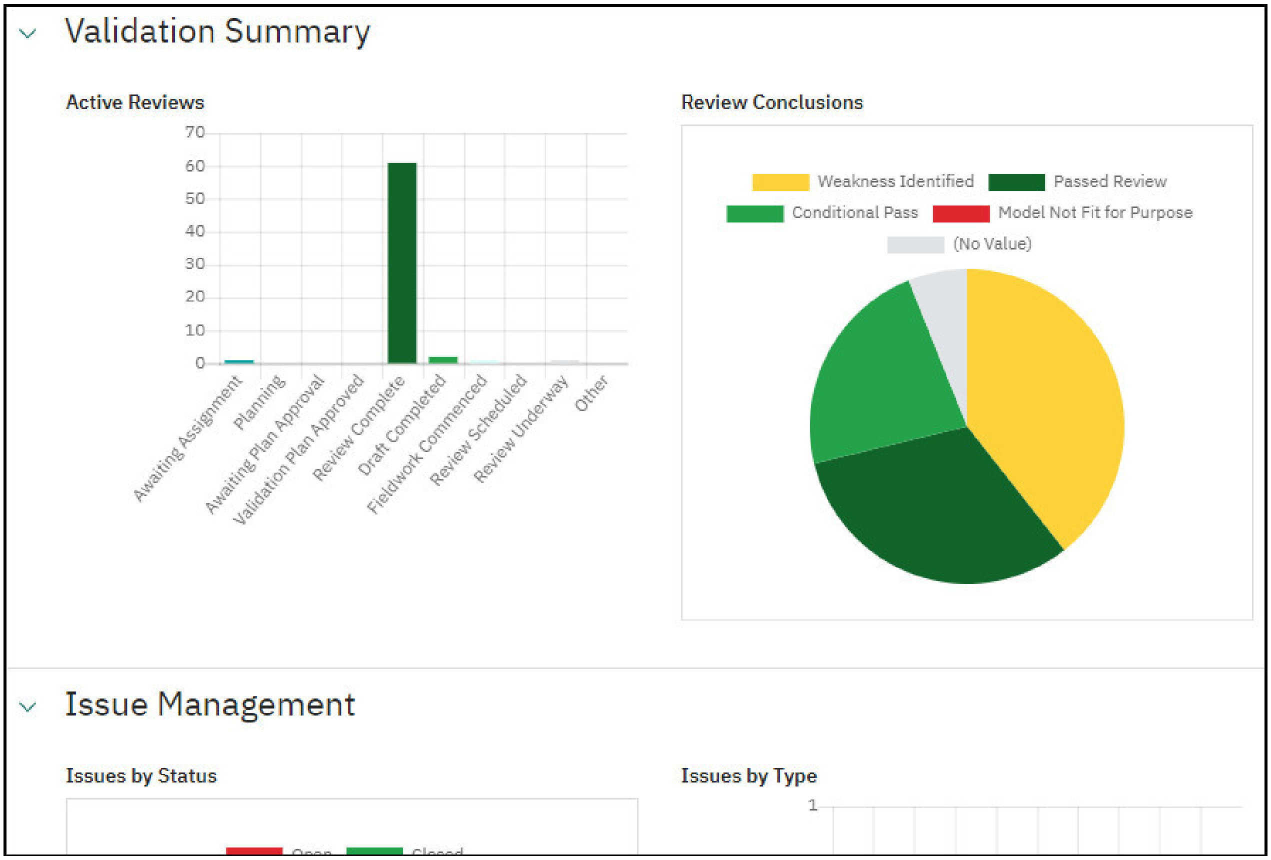


Figure 72. Business Entity Task View for IBM OpenPages Model Risk Governance

MRG workflows

Nine new sample workflows are provided to facilitate various MRG use cases.

If you have configurable life cycle or custom triggers on these object types, disable the workflows, life cycles or triggers when you decide which elements you will use.

The following illustration shows the process that the MRG workflows follow.

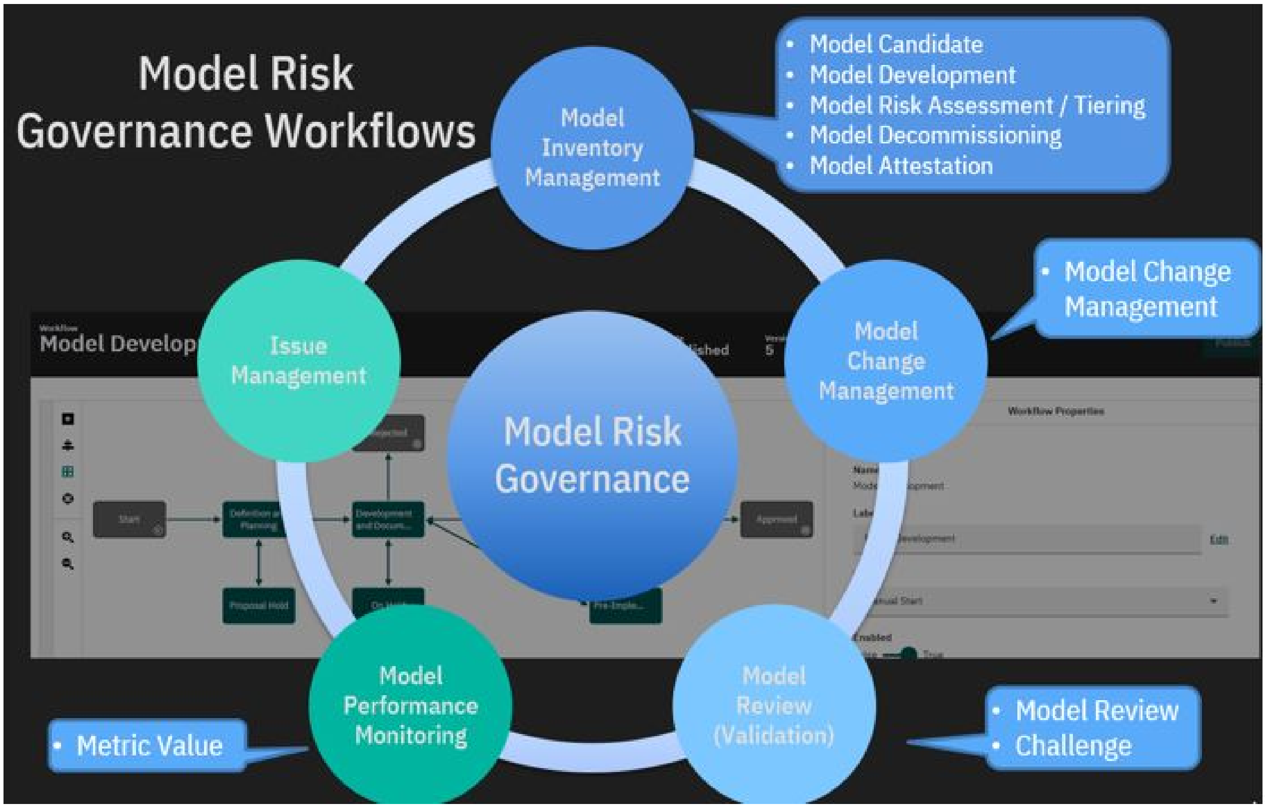


Figure 73. MRG workflow process

- Model Candidate workflow

  This workflow allows a user to add a Model object to the inventory as a candidate. The Model candidate is submitted for Approval as either a Model or a Non Model. The approver can perform an override of the candidate proposal. After a model candidate has been confirmed as a Model, the Model Development and Documentation process can begin.
- Model Development and Documentation workflow

  This workflow takes a model from the completion of the candidate process through to approval for deployment. It consists of four stages and multiple sub-workflows that involve various stakeholders:
  - Definition and planning (model owner)
  - Development and documentation (model developer)
  - Pre-implementation review (model validation)
  - Approval (head of model development)
- Model Tier Scorecard workflow

  This workflow performs a model tier assessment on the model, the results of which are used to assign a tier to the model. The Model Scorecard triggers and the values in Preference records are used to compute scores and tier. At the end of the workflow the scores and tier are copied up to the parent Model.
- Pre-implementation Review workflow

  This workflow is performed at the completion of the model development and documentation workflow. The Review Planning team that is identified on a Preference object is responsible for completing this review. This workflow is also used for conducting reviews after the model is in production.
- Model Attestation workflow

  This workflow is typically started by an MRG administrator and records a model owner's response to a request for attestation.

- Challenges workflow

  This workflow is started against a Model, one of its Usages, or a Review. The result can be no action or changes to a Model or Usage.
- Change Requests workflow

  This workflow provides governance for changes to Models. A workflow can be based upon changes in the business or to the data and other inputs to a Model. Users can accept, approve, or reject the change and decide whether it is material or not.
- Metric Value workflow

  This workflow automates the Breach Status calculation and facilitates performance monitoring of deployed models. This is critical to the ability to proactively decide to make changes to the model or its usages or to remove a model from production. Typically, an MRG administrator creates Metric Value objects, a Metric Capturer provides the latest data for the Metric, and the Metric Owner reviews and approves it. The workflow calculates breach status for the Metric and copies the most recent Metric Value information to the Metric.
- Model Decommission workflow

  This workflow is used to remove a Model from production and retire it.

MRG triggers

MRG includes triggers on the Model Scorecard that are evaluated if a Model Scorecard is created or if any of its scoring input fields are updated. The triggers calculate scores and weighted scores for each input, and calculate a score and a weighted score for each input category. The triggers also calculate an overall score and assign a Tier to the Model based on the overall score. The triggers are configured in registry settings and through weights and other values on Preference records of Type MRG. The triggers work in combination with the Model Tier Scorecard workflow to populate a summary of the most recent scorecard data on the parent Model.

To complete the assessment, the user answers questions about the model. The questions are in the categories of Regulatory, Operational, Complexity, and Materiality. Each customer determines the questions that are asked, the score and weighting assigned to each response, and the weighting assigned to each category. For three of the categories Yes/No questions are asked, for example: Does this model serve as an input to another model? For the Materiality category, the user enters a number based on your guidance.

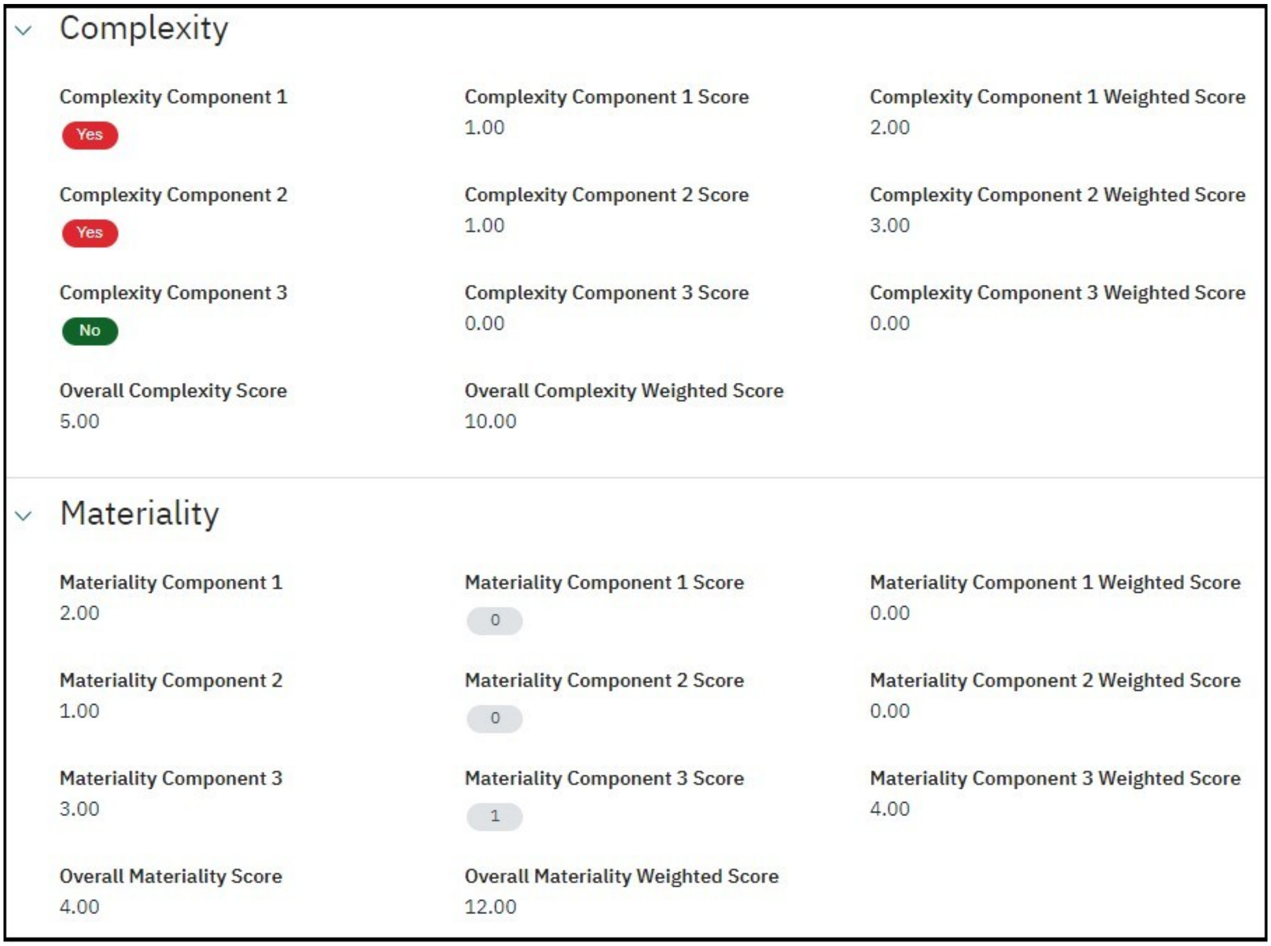


Figure 74. Complexity and Materiality Categories of a Model Scorecard

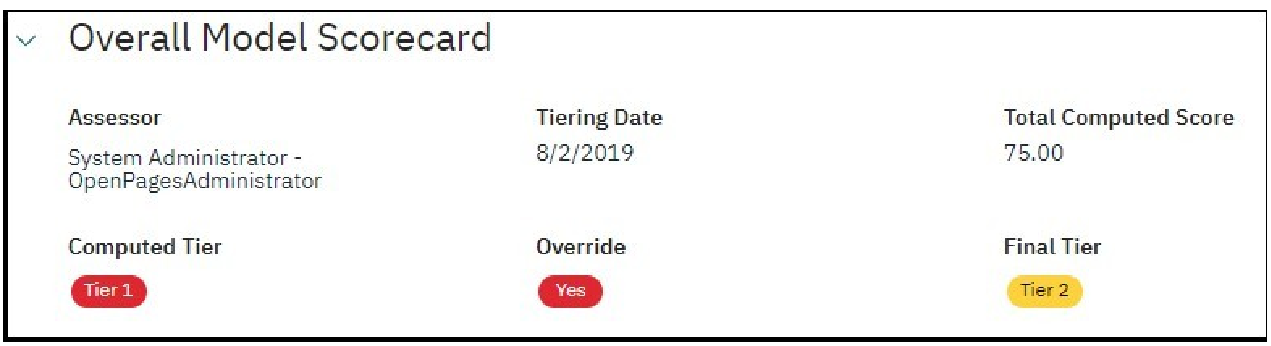


Figure 75. A total score tier is computed; the tier can be overridden

Enhancements to IBM OpenPages Operational Risk Management

Enhancements to IBM OpenPages Operational Risk Management improve how issues and action items are processed.

Action Item Approval workflow

A sample workflow has been included for the Action Item object type. The workflow uses the Action Item task view and depends on the out-of-the-box schema for Action Item and related object types. The Action Item Approval workflow is enabled by default in fresh installations of OpenPages.

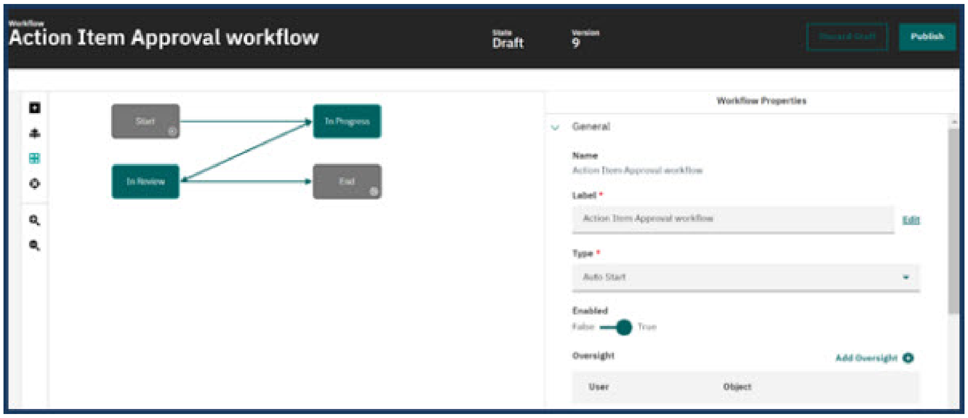


Figure 76. The Action Item sample workflow

The Action Item lifecycle trigger has been removed from fresh installations of 8.1.x.

Issue Review workflow

The sample Issue Review workflow has been enhanced to move all of the functionality that was in the issue lifecycle trigger to the Issue Review workflow. The Issue Review workflow is now enabled by default in fresh installations of OpenPages.

The Issue lifecycle triggers have been removed from fresh installations of 8.1.x.

Deprecated triggers

Deprecated the issue review, issue lifecycle triggers, and action item lifecycle trigger.

Changes to reports

The following reports were updated:

- ORM Issues Dashboard Report: The report has been updated to fix the double counting of issues when an issue is shared (multiple parents).
- ORM Issues and Actions Report: The report has been updated to use the correct Action Item Due Date field. (Previously the Action Item Due Date column was always blank in the report.)

New exchange rate trigger for loss events

The new exchange rate trigger recalculates the specified currency field value by using the nearest exchange rate based on the configured date field, instead of using the latest exchange rate loaded in the system.

Enhancements to IBM OpenPages Regulatory Compliance Management

IBM OpenPages Regulatory Compliance Management (RCM) includes numerous enhancements to all aspects of the solution.

IBM OpenPages Regulatory Compliance Management supports organizations in breaking down regulations into a catalog of requirements, evaluating their impact to the business, and creating actionable tasks.

As a solution it allows firms to:

- Maintain a repository of regulations and requirements that they must comply with
- Identify and create a catalog of requirements that fulfill the regulations
- Map regulatory requirements to their internal control framework
- Create groupings of requirements into Compliance Themes

- Conduct assessments of regulatory requirements under Compliance Plans
- Ingest, direct, and respond to regulatory events supplied by third-party data providers

Thomson Reuters connector

IBM OpenPages Regulatory Compliance Management now includes a connector for Thomson Reuters Regulatory Intelligence (TRRI).

The following object types have been added:

- TRRI Regulatory Event
- TRRI Regulatory Event Series

The TRRI Regulatory Event object enables the direct ingestion of regulatory event feeds from Thomson Reuters into RCM, and the automated generation of workflows assigned to users based on supplied data points, as well as documents impacted by regulatory change. This helps to efficiently assign tasks to users to effectively respond to, and prepare for, regulatory change.

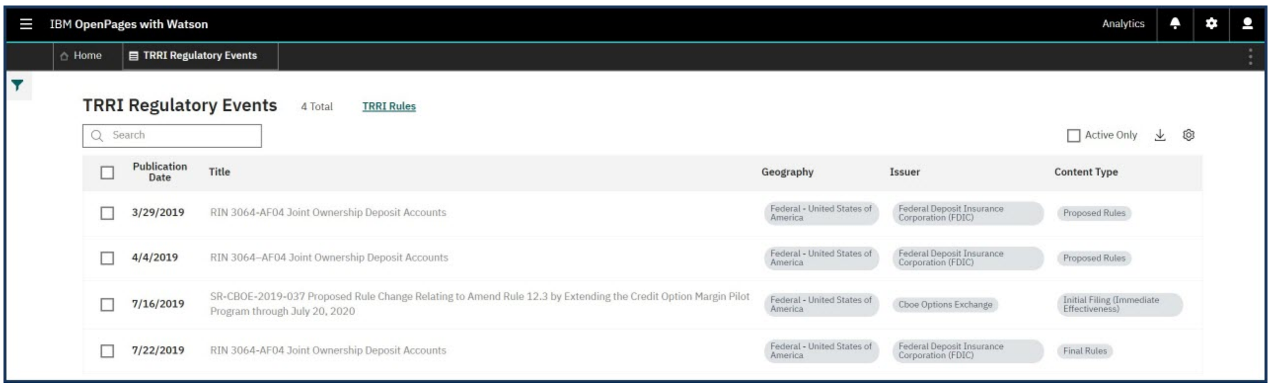


Figure 77. TRRI regulatory events

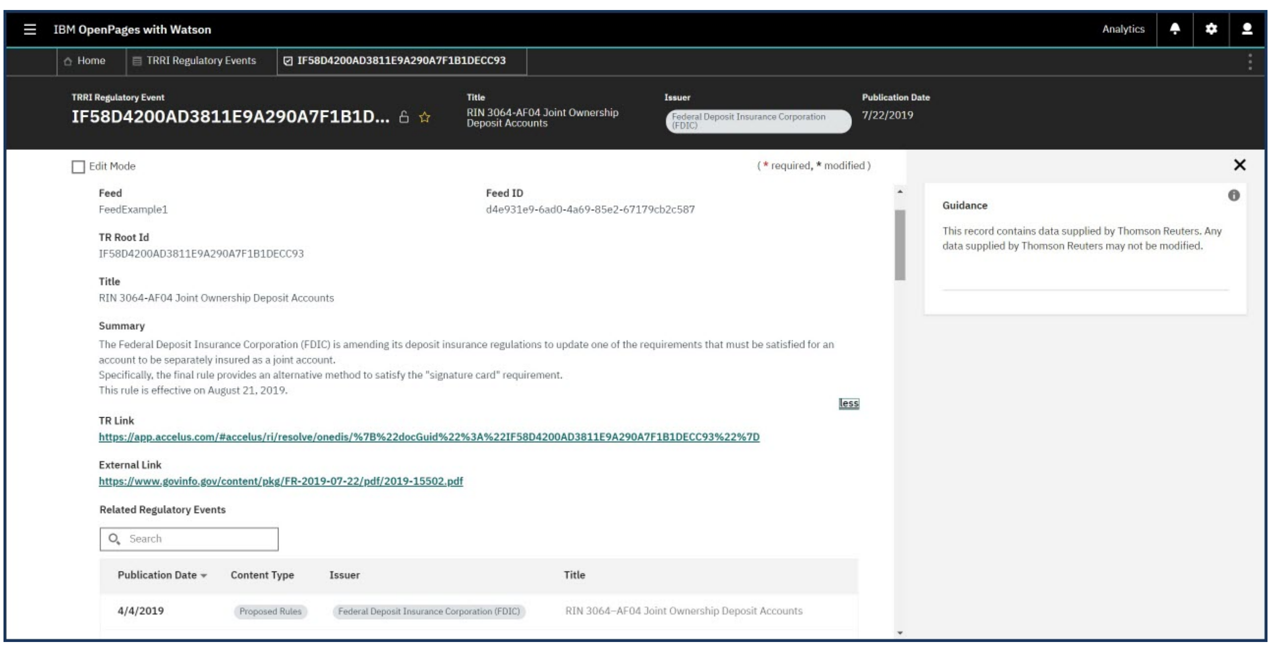


Figure 78. Example of a regulatory event

Taxonomy mapping

Users can associate their own taxonomy to the Thomson Reuters taxonomy that is used for Regulatory Events.

Users can populate fields on a Regulatory Event record that are more consistent with other values that are used in IBM OpenPages with Watson. The converted data points are available for use in the same way as existing data points on the Regulatory Event record, such as for setting conditions within the Rules Engine or in a workflow.

For example, Thomson Reuters does not include a regional designation for states within the United States. A user can add this additional level of categorization by assigning states from the taxonomy that is used by Thomson Reuters to the user's own taxonomy through an association document. The inclusion of the regional designation is performed when Regulatory Events are loaded into OpenPages.

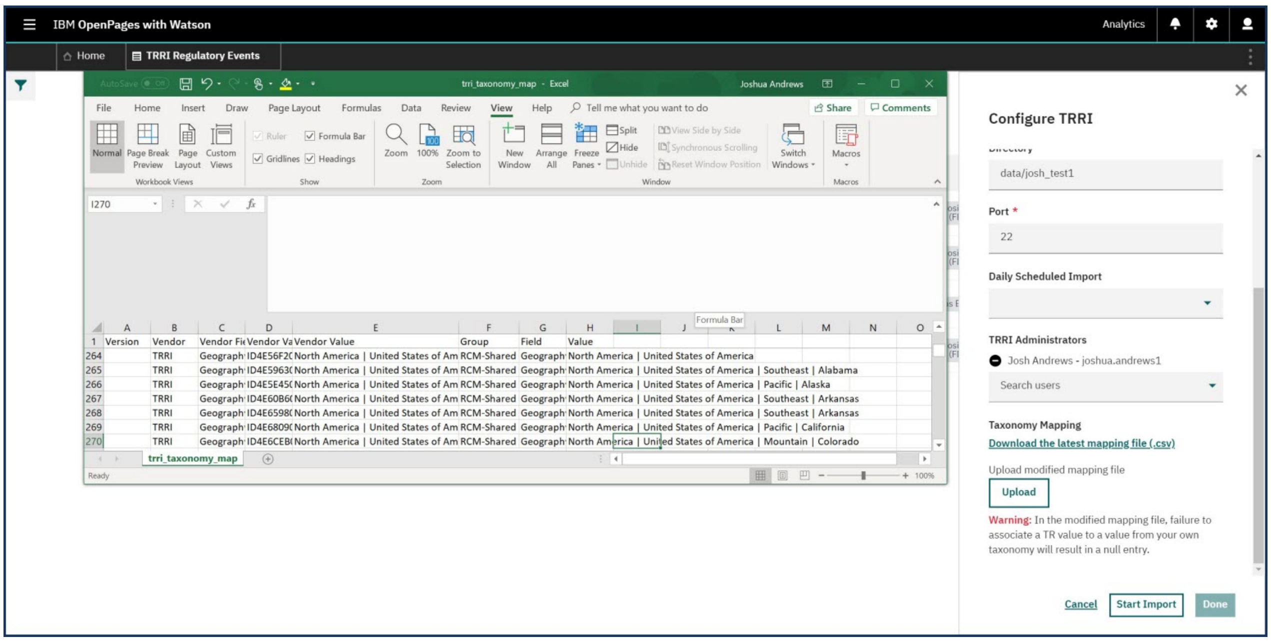


Figure 79. Example of a taxonomy mapping file

Rules engine

The IBM OpenPages with Watson Rules Engine helps users to handle the daily influx of regulatory events, automatically route them to the right users in their organization, and start any necessary workflows.

The Rules Engine allows users to set up conditions that, if met, trigger a selected action and inform one or more users and groups.

The data from the Thomson Reuters Regulatory Intelligence (TRRI) feed is loaded into OpenPages, and then passes through the Rules Engine. One regulatory event can trigger multiple rules if more than one rule's conditions are met.

Users can access the Rules Engine via a link on the **TRRI Regulatory Events** page.

Rules

Rules are set up to define the conditions by which users want the TRRI regulatory events routed.

Rules have the following fields:

- Name (required) – Used to help identify the rule and search for it.
- Conditions (at least one required) – Used to set up the criteria that the Rules Engine will match to the incoming TRRI regulatory events' fields.
- Target Action (required) – Used to determine the action that the Rules Engine will take if a rule is met.

- Users and Groups (at least one required) – Used to identify the users and groups that are on the receiving end of the target action if the rule is met.
- Criticality (optional) – Used to set a criticality (critical, high, medium, low), if desired.

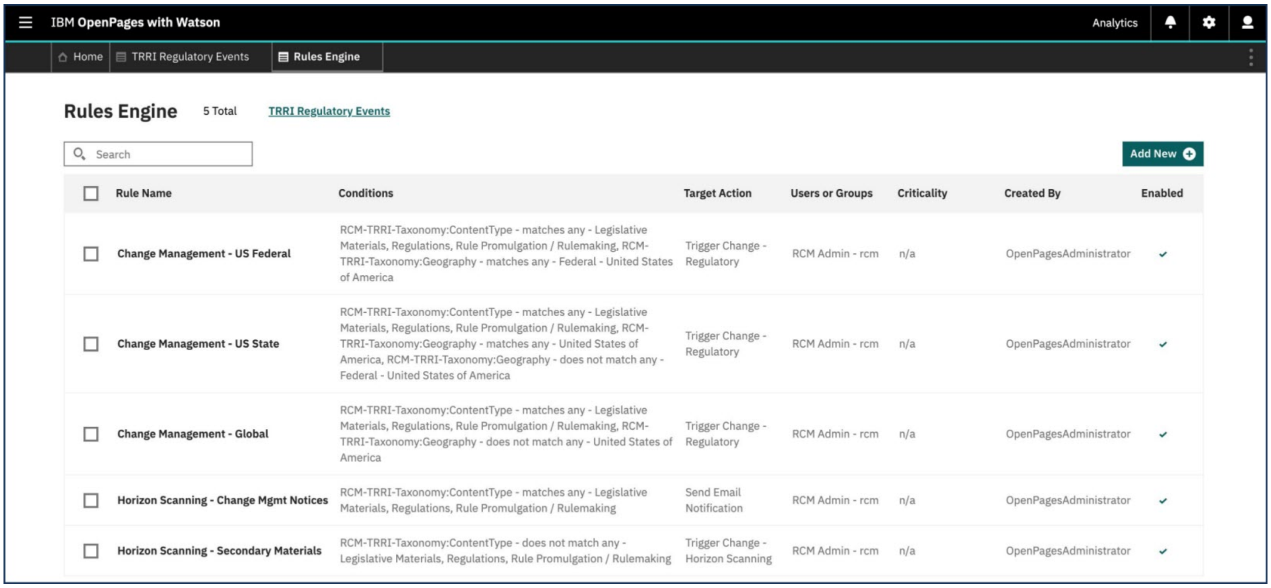


Figure 80. Rules Engine

Target actions

The target action on a rule is what will occur if a TRRI regulatory event meets the conditions of the rule.

To add options to the target actions list when creating a rule, the user creates a new workflow that uses the following condition:

- Automated: True

  This option creates a workflow with only a start and end stage.

Regulatory Library Updates: Library Views

Enhancements have been made to Task Views in the Task Focused UI to improve the user experience. Consistent views, formats, and data fields have been created for objects that are typically related in regulatory libraries and compliance processes.

Regulatory Library Updates: Object Associations

Enhancements have been made to the RCM objects to permit the user to map and associate related objects. This enhancement allows the user to understand relationships in a single view.

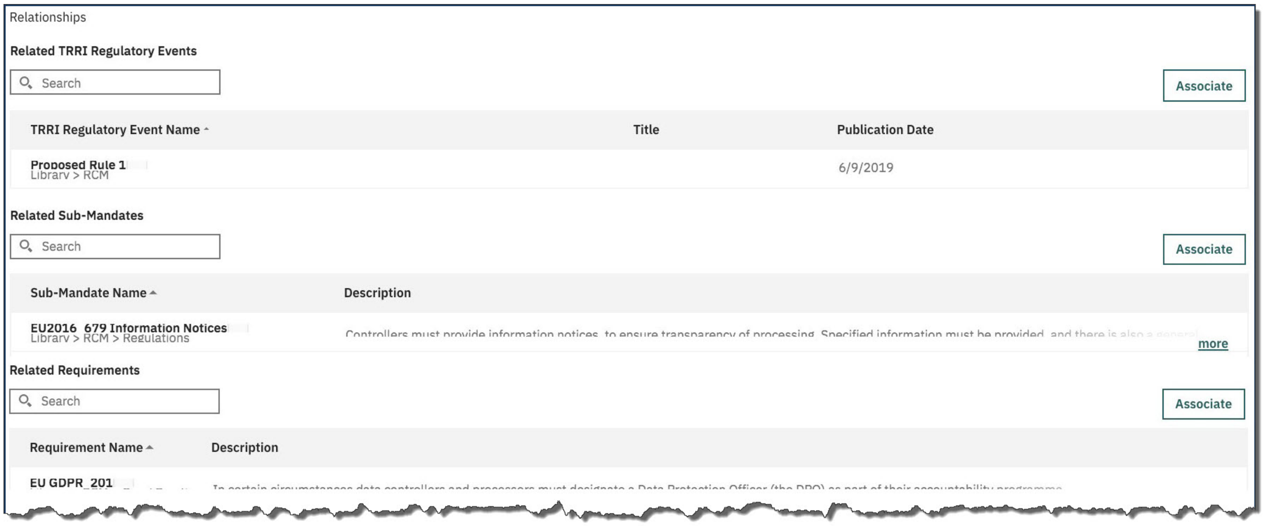


Figure 81. Object associations

Sample workflows for TRRI Regulatory Event processing

IBM OpenPages with Watson includes sample workflows for processing TRRI Regulatory Events. These workflows can be modified without the need for development resources or coding. They can be tailored to match an organization's methodology for processing alerts published by regulatory agencies.

Trigger Change - Regulatory

This workflow creates a Regulatory Change record and associates the record to a TRRI Regulatory Event when the conditions of a rule from the Rules Engine are met that indicate the TRRI Regulatory Event addresses a regulatory change, such as a proposed or final rule published in the Federal Register. The workflow also populates certain fields on the created Regulatory Change record, including categorizing the Regulatory Change record as **Regulatory Change**. This workflow enables the association of multiple Regulatory Change records to a TRRI Regulatory Event so that multiple users can analyze the impact of the TRRI Regulatory Event on their particular areas of responsibility within the organization.

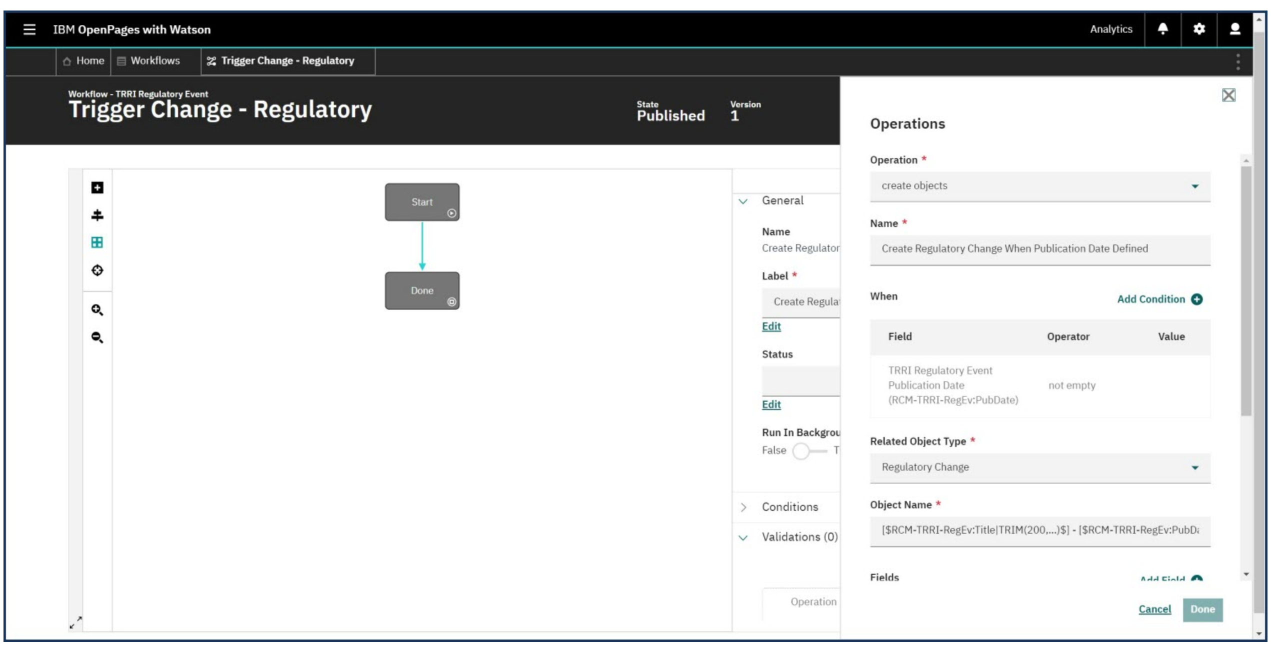


Figure 82. Trigger Change - Regulatory workflow

Trigger Change - Horizon Scanning

This workflow creates a Regulatory Change record and associates the record to a TRRI Regulatory Event when the conditions of a rule from the Rules Engine are met that indicate the TRRI Regulatory Event addresses an issue other than a regulatory change, such as a speech or enforcement action published by a regulator. The workflow also populates certain fields on the created Regulatory Change record, including categorizing the Regulatory Change record as **Horizon Scanning**. This workflow enables the association of multiple Regulatory Change records to a TRRI Regulatory Event so that multiple users can analyze the impact of the TRRI Regulatory Event on their particular areas of responsibility within the organization.

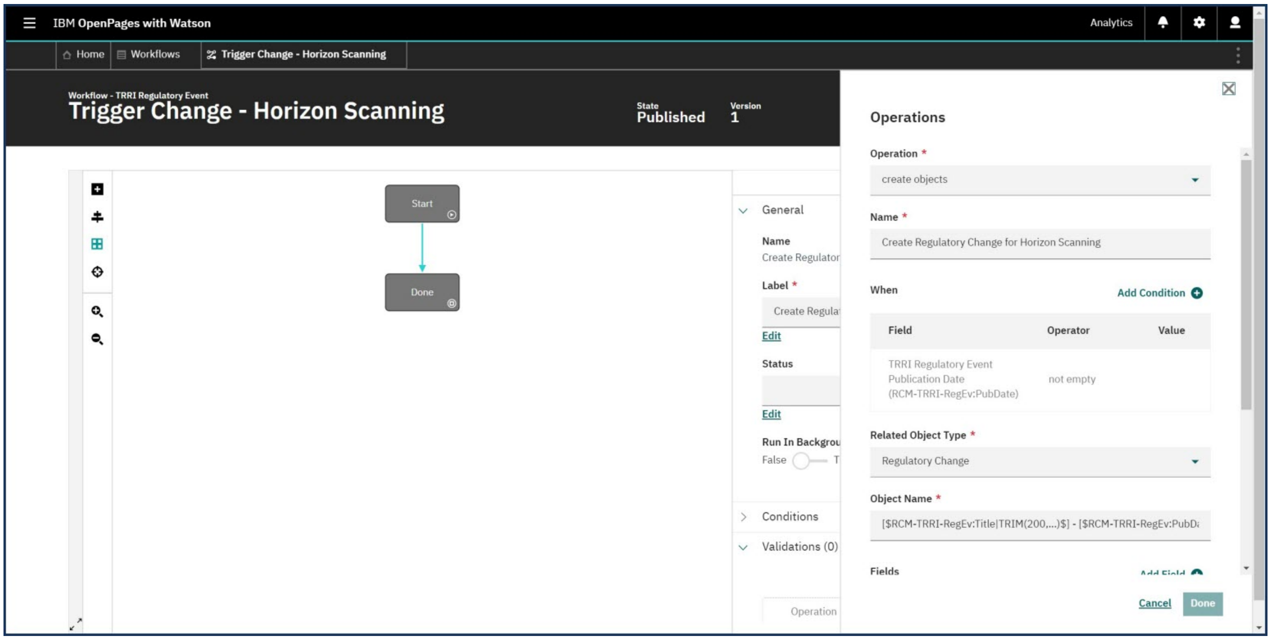


Figure 83. Trigger Change - Horizon Scanning workflow

Regulatory Change Review Workflow

When a Regulatory Change record is created, this workflow starts. The user determines the applicability of the Regulatory Change record and determines the impact of the Regulatory Event. The user can also create and assign Regulatory Tasks to users within RCM for actions that need to be taken to respond to the Regulatory Event. When Regulatory Tasks are assigned to users, this workflow cannot close until all related Regulatory Tasks have been completed.

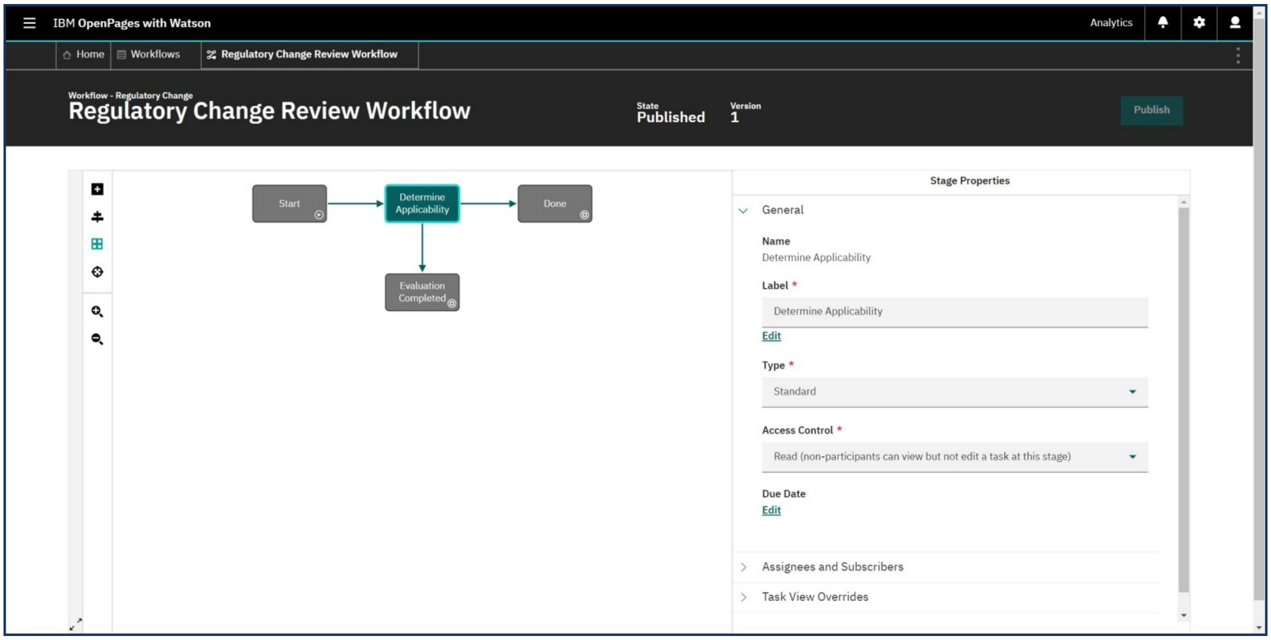


Figure 84. Regulatory Change Review Workflow

Regulatory Task Workflow

When a Regulatory Task record is created, this workflow starts. The workflow alerts the owner of the Regulatory Task that a record has been created and assigned to them. After the user completes the assignment that is provided in the Regulatory Task record and clicks **Task Completed**, the workflow changes the status field to **Completed** and populates the date that the task was completed.

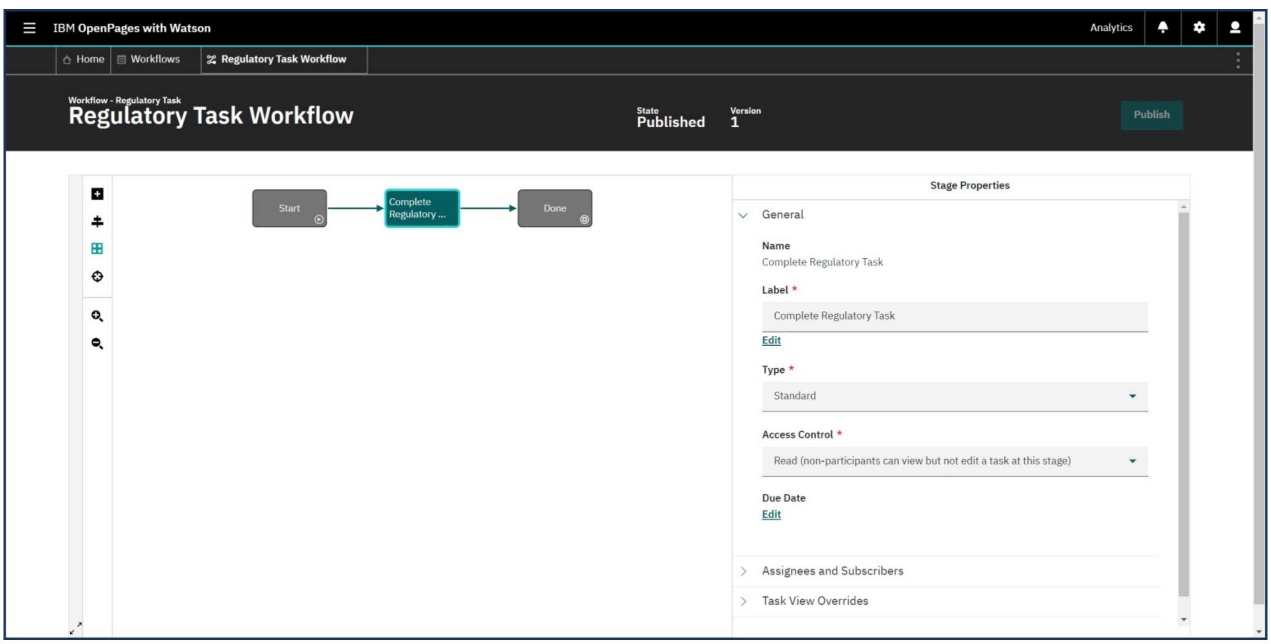


Figure 85. Regulatory Task Workflow

Send Email Notification

This workflow can be used to send mail notifications to users who are named within a rule that is created in the Rules Engine.

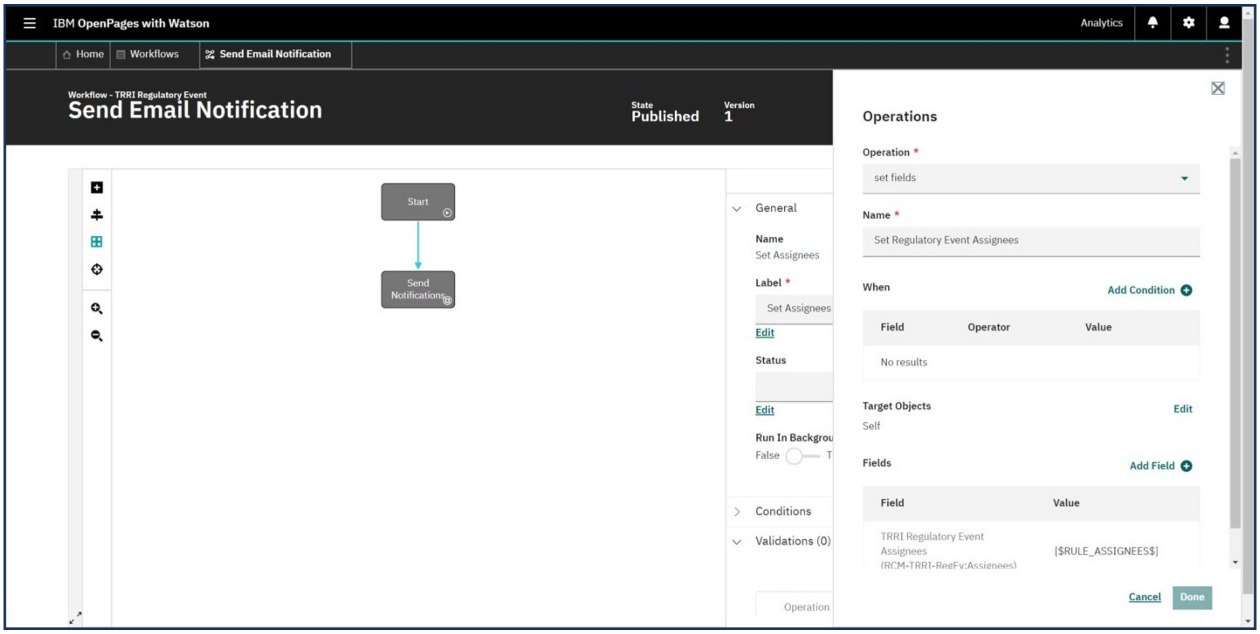


Figure 86. Send Email Notification Workflow

Out-of-the-box rules for TRRI Regulatory Event processing

IBM OpenPages with Watson includes example rules for the incoming TRRI Regulatory Events. These rules can be modified by users – without the need for development resources or coding – to tailor the rules to match an organization's methodology for processing alerts published by regulatory agencies.

Change Management – US Federal

This rule creates a regulatory change object if the incoming TRRI regulatory event is a US Federal regulatory change.

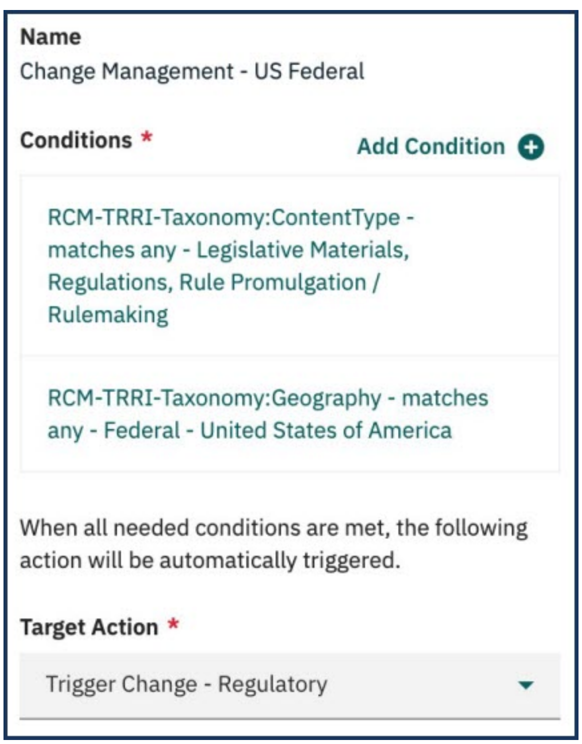


Figure 87. Change Management – US Federal rule

Change Management – US State

This rule creates a regulatory change object if the incoming TRRI regulatory event is a US State regulatory change.

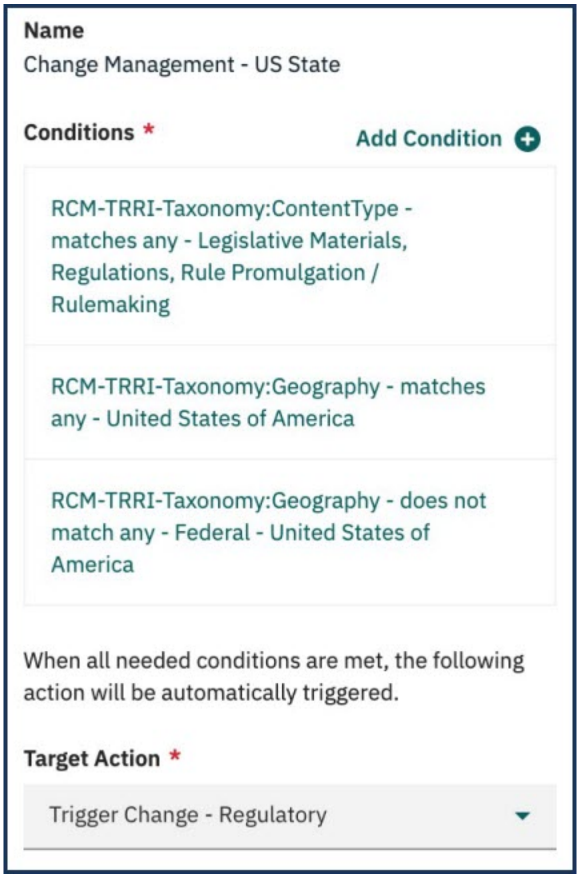


Figure 88. Change Management – US State rule

Change Management – Global

This rule creates a regulatory change object if the incoming TRRI regulatory event is a Global regulatory change.

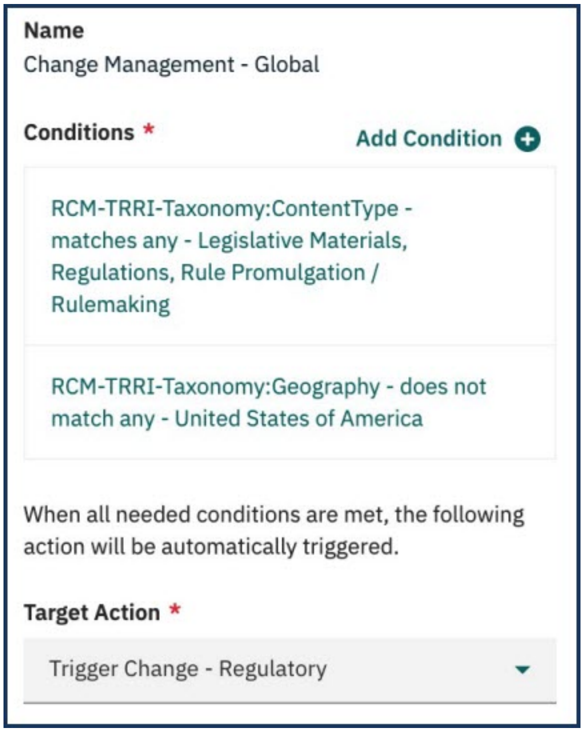


Figure 89. Change Management – Global rule

Horizon Scanning – Change Management Notices

This rule sends an email notification if the incoming TRRI regulatory event is any type of regulatory change.

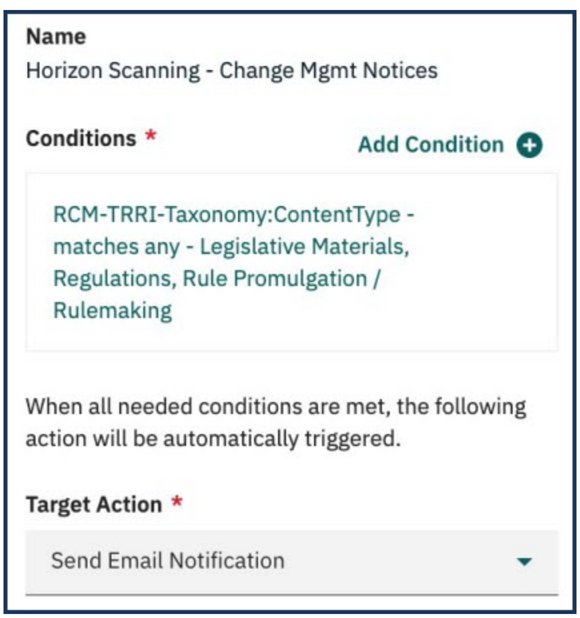


Figure 90. Horizon Scanning – Change Management Notices rule

Horizon Scanning – Secondary Materials

This rule creates a regulatory change object with `type: horizon scanning` if the incoming TRRI regulatory event is not a regulatory change.

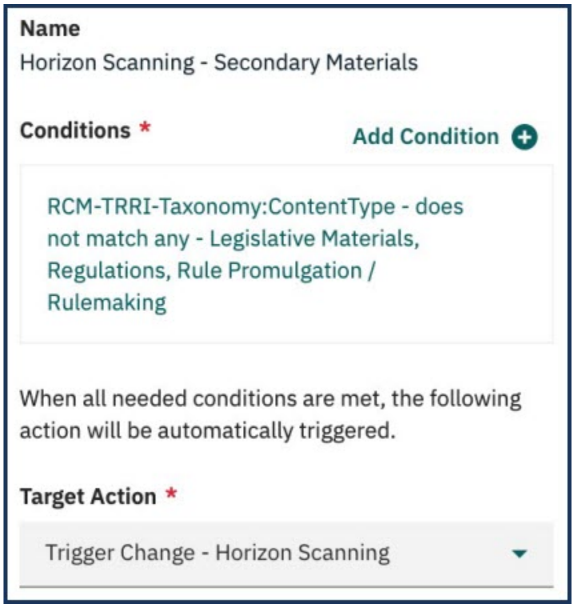


Figure 91. Horizon Scanning – Secondary Materials rule

Administration and serviceability enhancements

Several enhancements have been made to help you administer, maintain, and support IBM OpenPages with Watson.

In-place upgrades

IBM OpenPages with Watson now supports in-place upgrades.

If you are using OpenPages 7.4/8.0 or later, you can do an in-place upgrade to 8.1.0. Or, you can do a migration upgrade.

If you are using OpenPages 7.1.x, 7.2.x, or 7.3.x, you can do a migration upgrade.

Administrative functions in the Task Focused UI

Some administrative functions are now available in the Task Focused UI.

Administrators can access the following administrative functions in the Task Focused UI if they have the appropriate application permissions:

- Manage Application Text
- Manage Object Text
- Manage Settings
- Fast map import and export

Each of these functions has greatly improved performance, is easier and more intuitive to use, and includes search and filtering capability. The look and feel is aligned with other screens in the Task Focused UI. The functions remain available in the Standard UI. Changes made in one interface are immediately reflected in the other.

See the *IBM OpenPages with Watson Administrator's Guide* for more information about using these functions.

Manage Application Text in the Task Focused UI

Application text strings are the textual elements of the interface. Customers can use different terminology than what is provided out-of-the-box, or might want to modify translations or descriptions of text elements.

The following example shows how to find an application text string by entering a text value in the Search box. The search looks for matches in the text of the Name, Description, and US English Value fields.

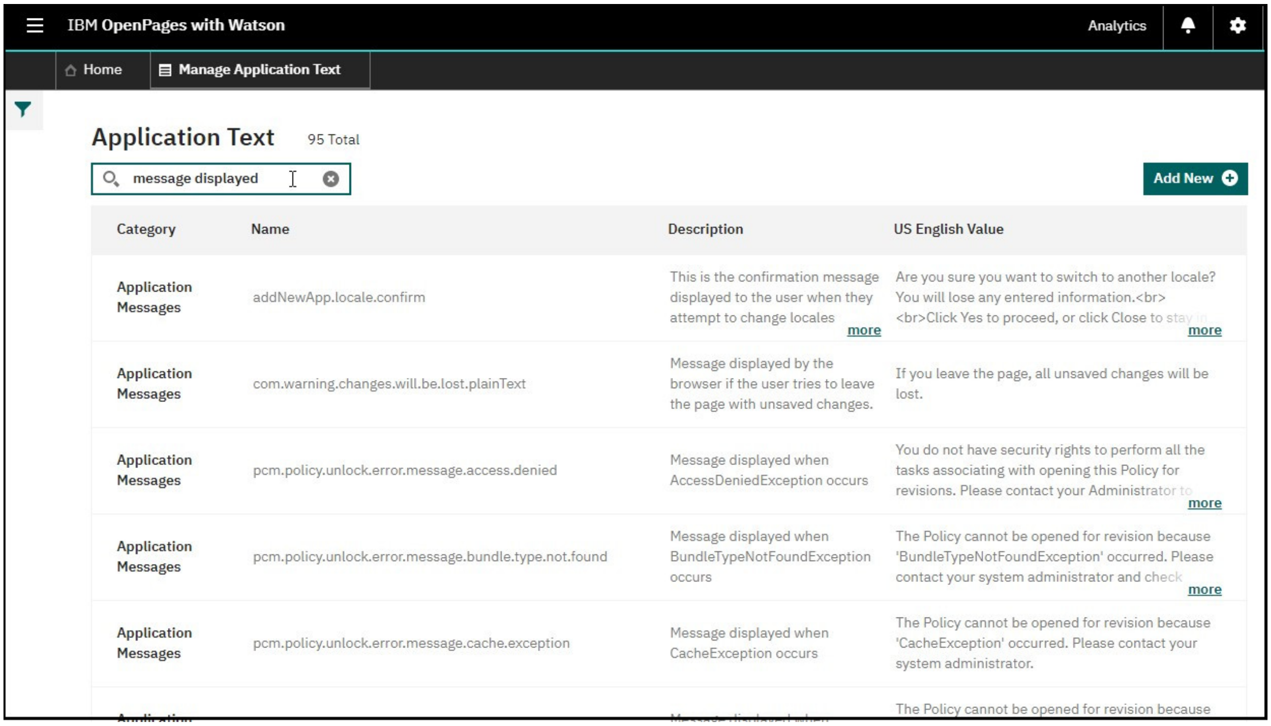


Figure 92. Example of a text search in the Search box

An administrator can filter results to one or more specific categories, can search across all categories for specific text, and can combine search and filter. This provides a rapid and powerful way to find a specific application text setting.

The following example shows how to find application text strings by using the Search Scope filter criteria and the Search box together.

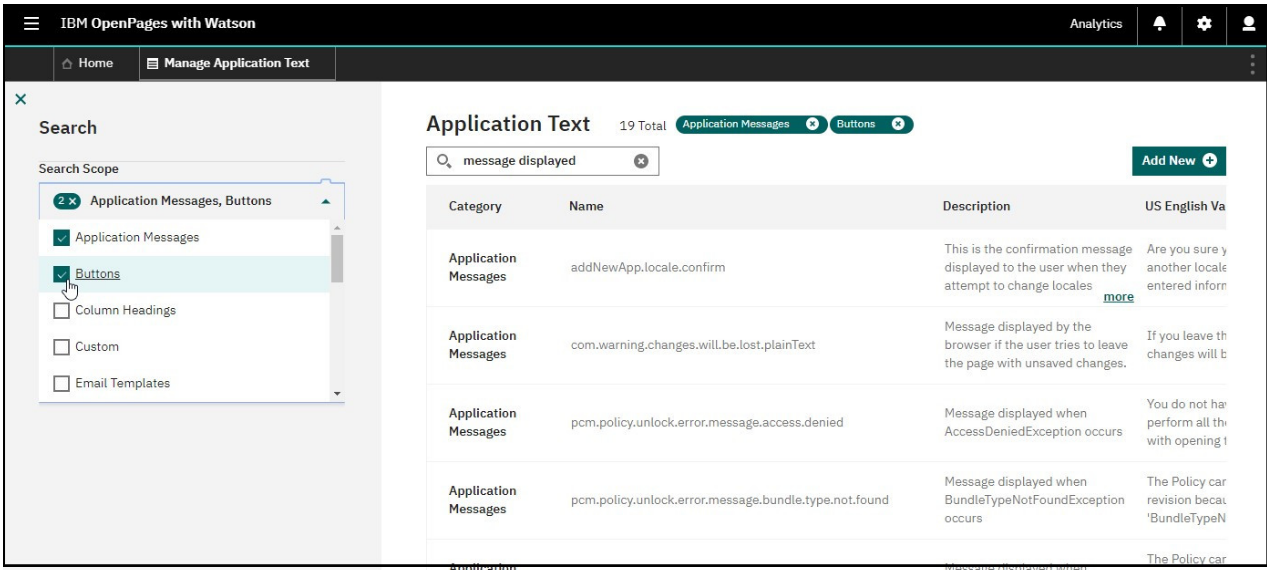


Figure 93. Example of search criteria in both the Search Scope and Search box

With a single click an administrator can view and edit the value and translations for the application text and can add or edit its description.

The following example shows the panel that is used to view and update the description and translations for application text.

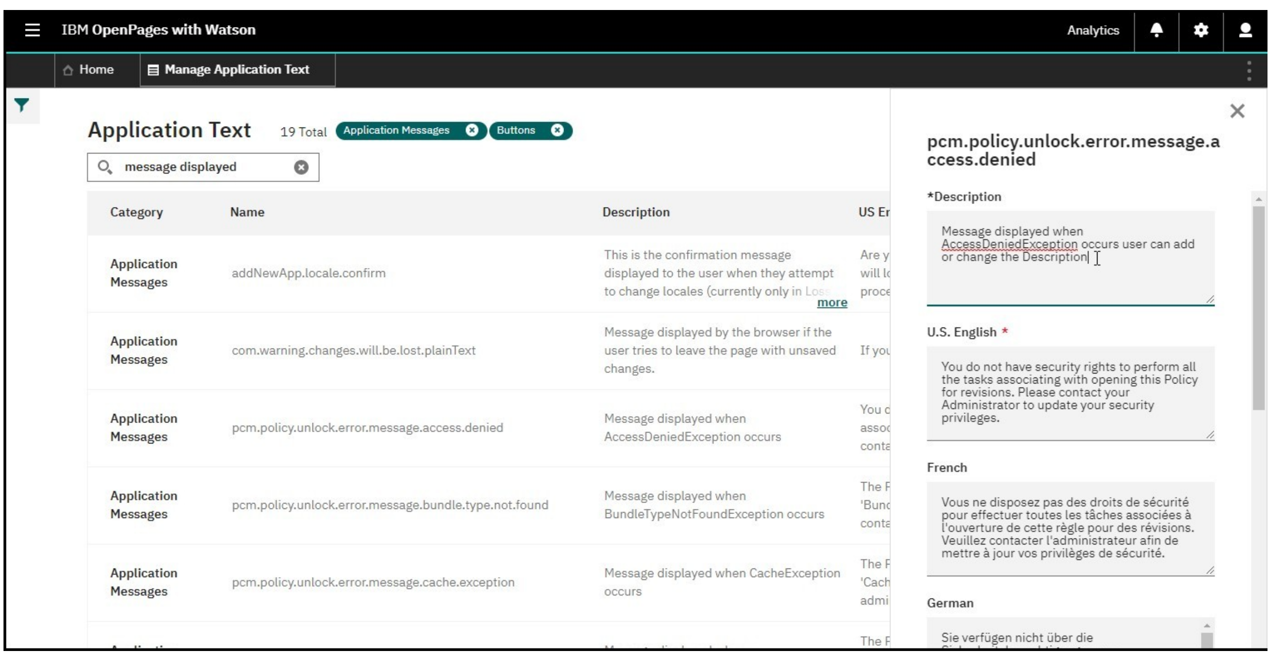


Figure 94. Example of updating application text values

Administrators can now add new application text entries in any of the available folders/categories.

The following example shows the panel that is used to add application text.

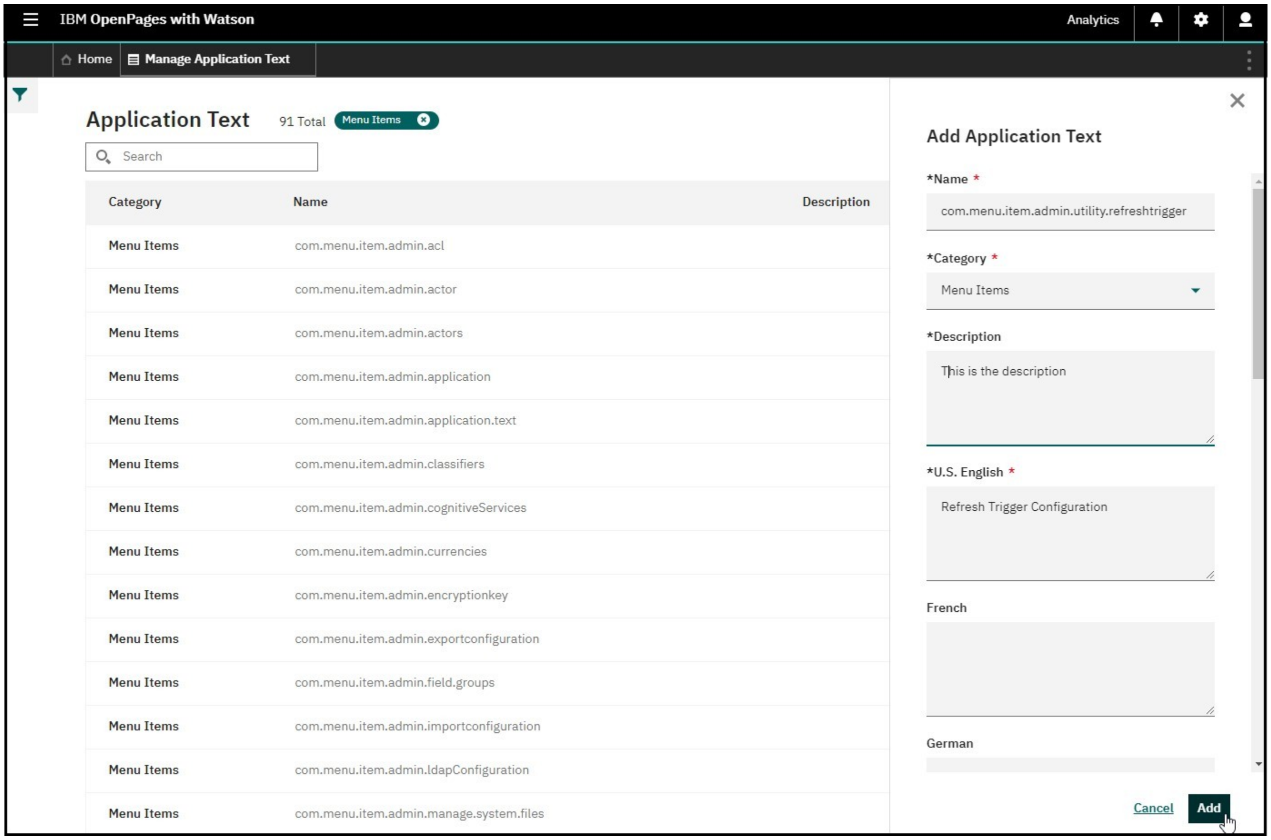


Figure 95. Example of adding an application text

Manage Object Text in the Task Focused UI

Object Text includes object, field, and filter names and enumerated values. Customers can use different terminology than what is provided out-of-the-box, or might want to modify translations or descriptions of text elements.

The following example shows how to find an object text string by entering a text value in the Search box. The search looks for matches in the text of the Name, Description, and US English Value fields.

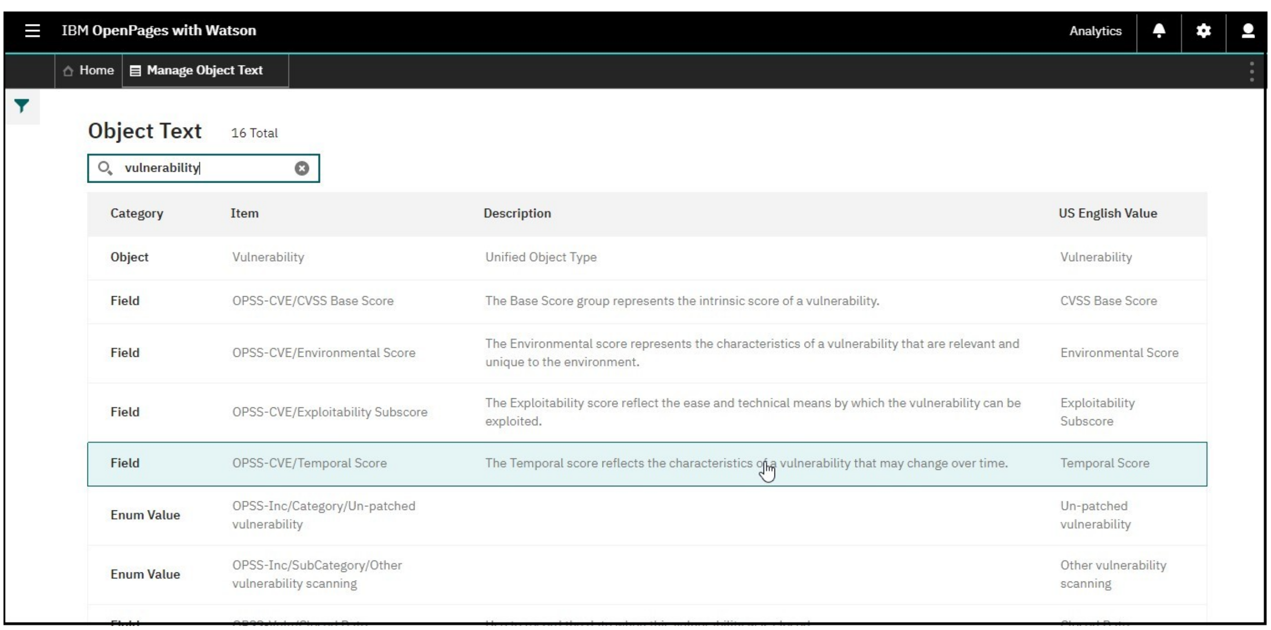


Figure 96. Example of a text search in the Search box

An administrator can filter results to one or more specific categories, can search across all categories for specific text, and can combine search and filter. This provides a rapid and powerful way to find a specific object text setting.

The following example shows how to find object text strings by using the Search Scope filter criteria and the Search box together.

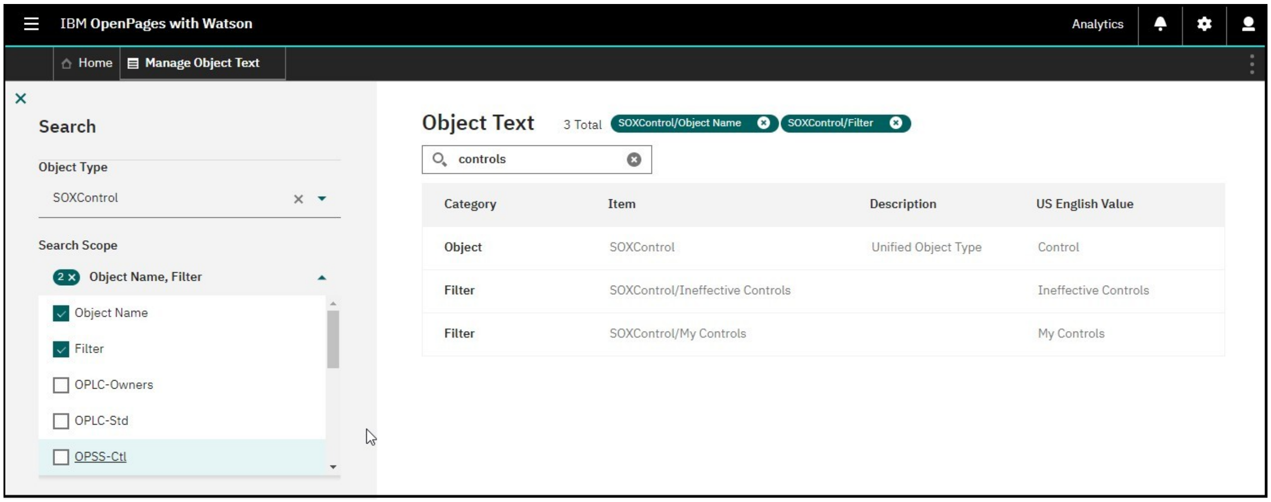


Figure 97. Example of search criteria in both the Search Scope and Search box

With a single click an administrator can view and edit the value and translations for the object text and can add or edit its description.

The following example shows the panel that is used to view and update the description and translations for object text.

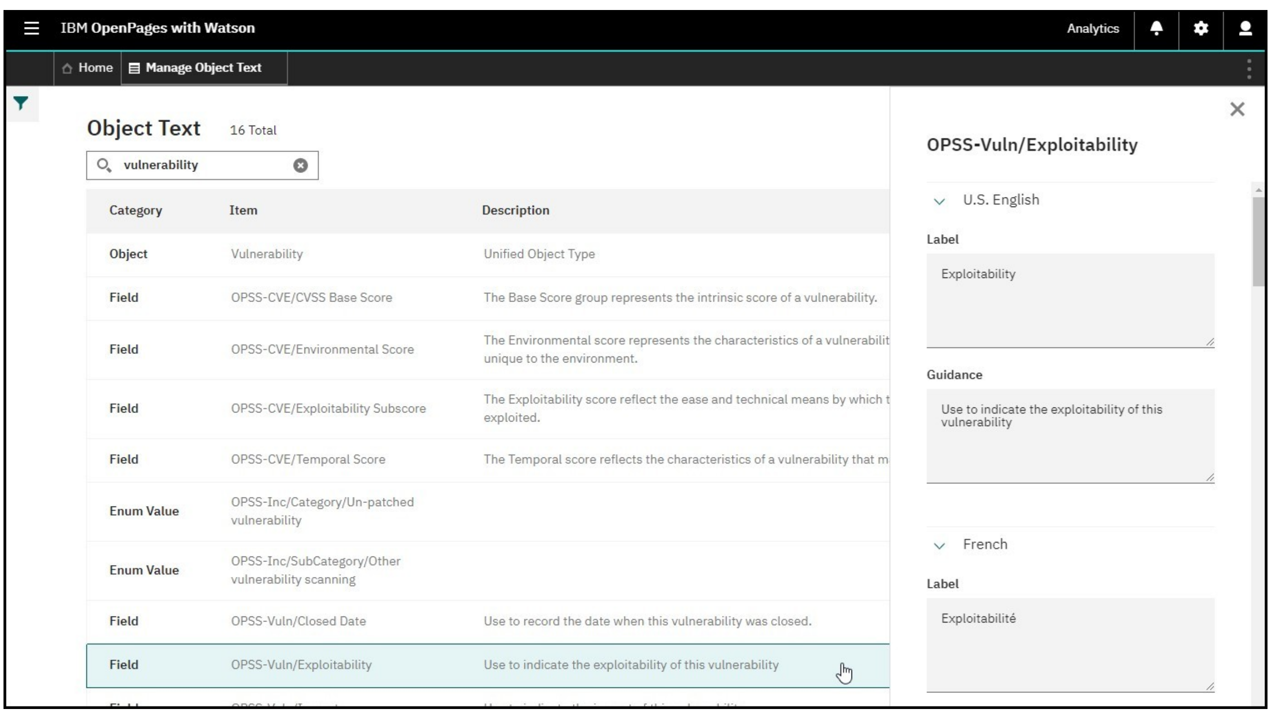


Figure 98. Example of updating object text values

Manage Settings in the Task Focused UI

More than 2000 settings provide a powerful capability to determine the behavior of the platform and solution components.

The following example shows how to browse the settings hierarchy to find a specific setting.

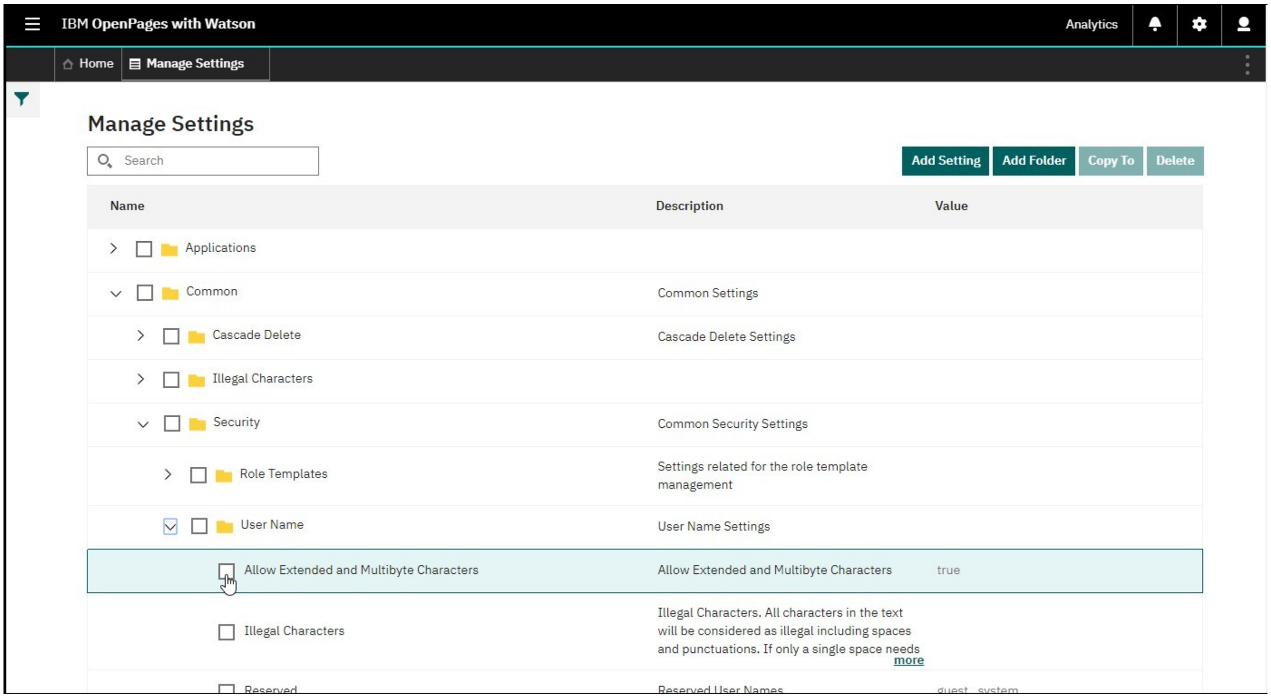


Figure 99. Example of the settings hierarchy

An administrator can filter results to one or more specific setting categories, can search across all categories for specific text, and can combine search and filter. This provides a rapid and powerful way to find a specific setting.

The following example shows how to find settings by using the Search Scope filter criteria and the Search box together.

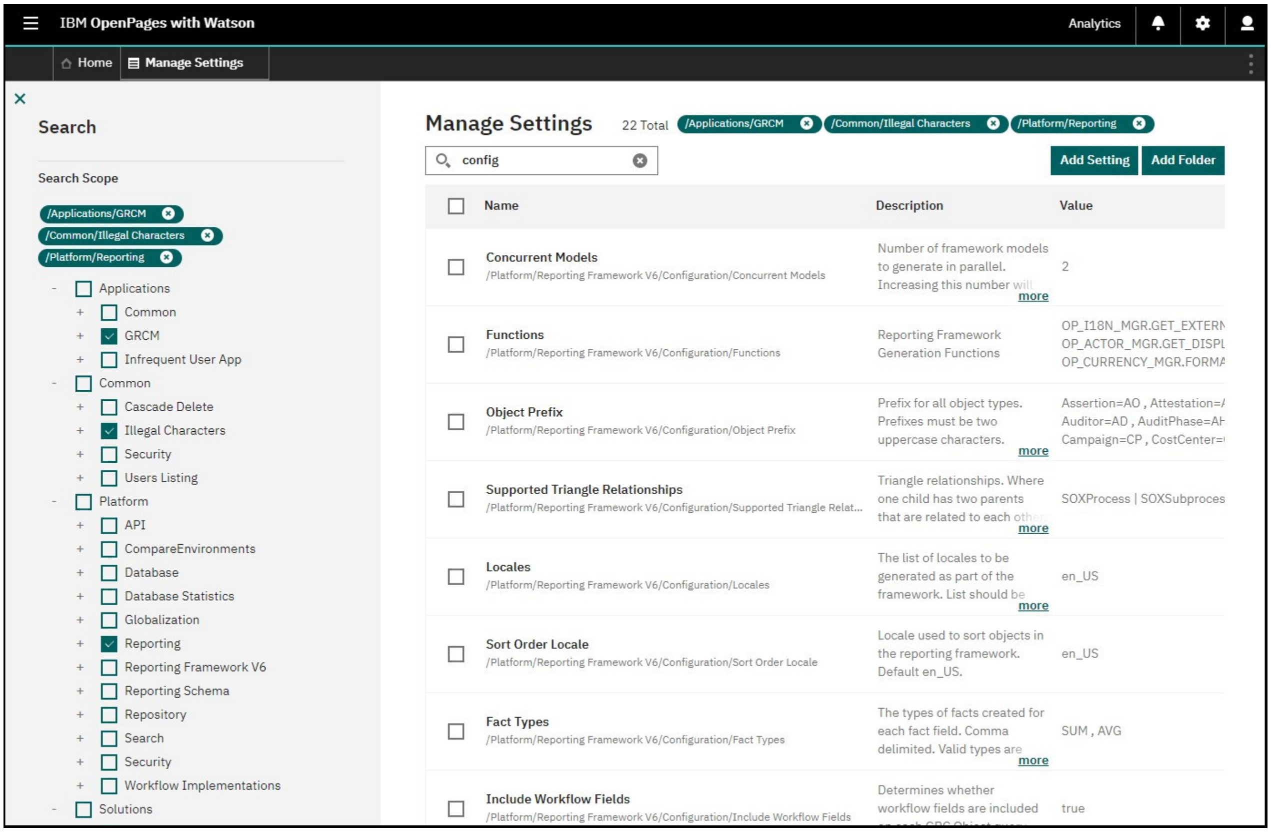


Figure 100. Example of search criteria in both the Search Scope and Search box

With a single click an administrator can view and edit the value and translations for a setting and can add or edit its description and value.

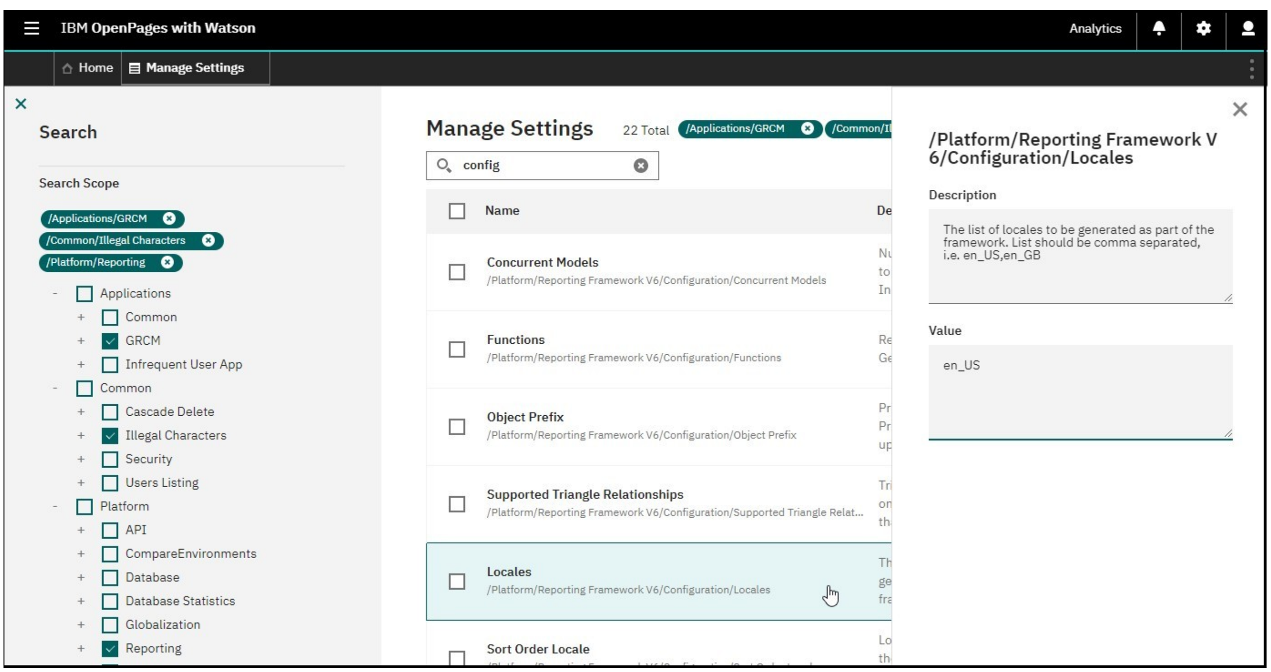


Figure 101. Example of updating setting values

Administrators can delete settings.

The following example shows how a setting can be deleted.

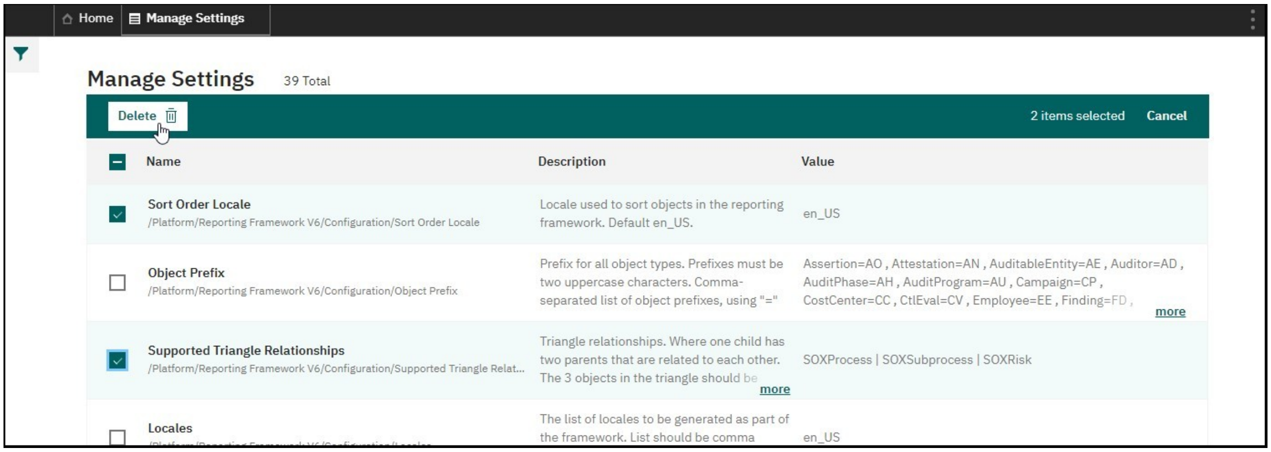


Figure 102. Example of deleting a setting

Administrators can add, delete, and copy settings and setting folders.

The following example shows the icons that are used to add settings, add folders, and copy settings and folders.

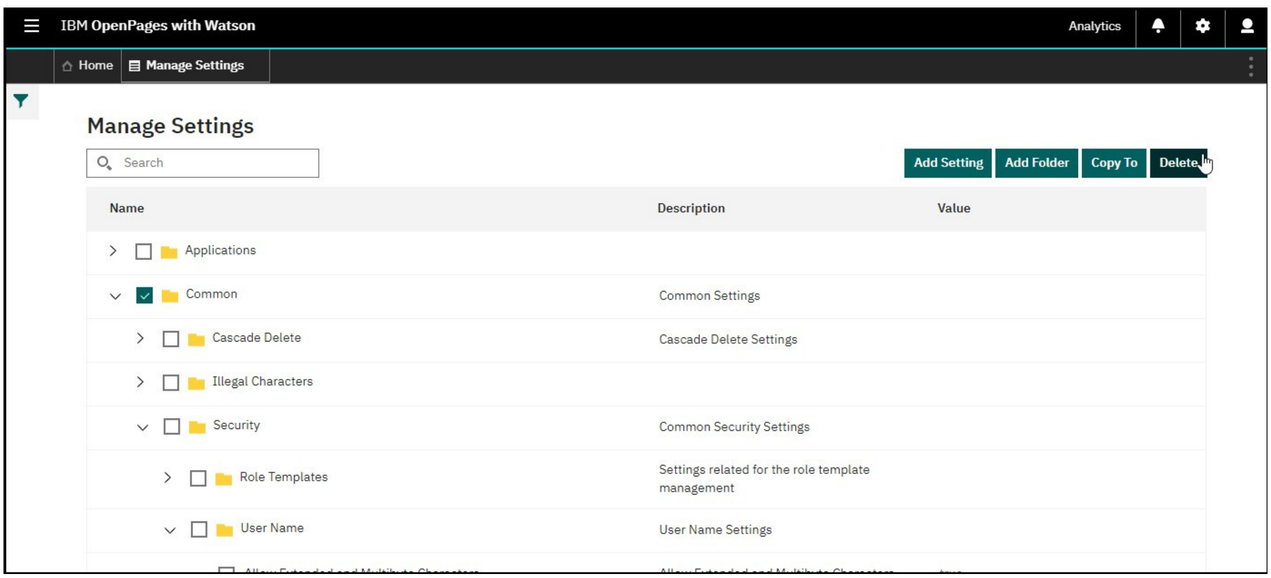


Figure 103. Example of icons for additional functions

Fast map import and export

Fastmap import or export is available in the Task Focused UI to users who have the correct permissions.

- Import is available on the Settings menu.
- Export is available in Grid Views for activities and objects, depending on how the system is configured.

API enhancements

Updates to IBM OpenPages with Watson APIs improve and extend the development of OpenPages applications.

- Date fields can now be set to a blank value. Previously, a blank value in a Date field returned an error.
- The API now supports `select *` statements even with excluded fields. The `select *` statement returns all fields, except for the ones that have been excluded from the reporting schema.
- The REST API now simplifies the mandatory information that is required when creating or updating GRC Objects.

When setting fields for GRC Objects, the API now requires each field to be identified by its `Name`. The `Id` is now optional. Previously, the `Id` was required.

When specifying the `typeDefinitionId` attribute of a GRC Object, you can now use an object type's system name or its `Id`. Previously, the `Id` was the only way to specify the object type.

Related information

IBM OpenPages with Watson API documentation

Supported software

IBM OpenPages with Watson 8.1.0 requires new versions of some software:

- IBM WebSphere Application Server 9.0.0.10 (or a higher fix pack). WebSphere 9.0.0.3 is no longer supported.
- IBM Db2 11.1.0 and future 11.1.x.x releases are now supported.
- Oracle 18c is now supported. Oracle 12.2.0.1 and 12.1.0.2 are still supported.
- IBM Java SDK/JRE 8.0.5.26 (or a higher fix pack) is now supported.
- Cognos Analytics 11.1.1 (and higher 11.1.x continuous releases). Cognos Analytics 11.0.x is no longer supported.
- IBM Security Directory Integrator (SDI) 7.2.0.3 is now supported. IBM Tivoli® Directory Integrator 7.1.1.x is no longer supported.
- Safari is now supported for the Task Focused UI only.

For more information, see the Supported Environments website.

Requests for Enhancement (RFEs) delivered

This release delivers on several RFEs.

For more information, see: Requests for Enhancement (RFEs) Delivered by Release.

Note: RFEs that request user interface enhancements are considered to be delivered if available in the Task Focused UI.

Chapter 10. New features in version 8.0.0.3

The new features in IBM OpenPages with Watson 8.0.0.3 include the following enhancements.

Platform enhancements

Enhancements to functionality are included in this version of IBM OpenPages with Watson.

View Designer

The View Designer provides users the ability to build new views without any knowledge of JSON. The View Designer provides a drag, drop, and configure user interface that supports all of the capabilities that were available in 8.0.0.2. The View Designer creates the JSON code for views automatically.

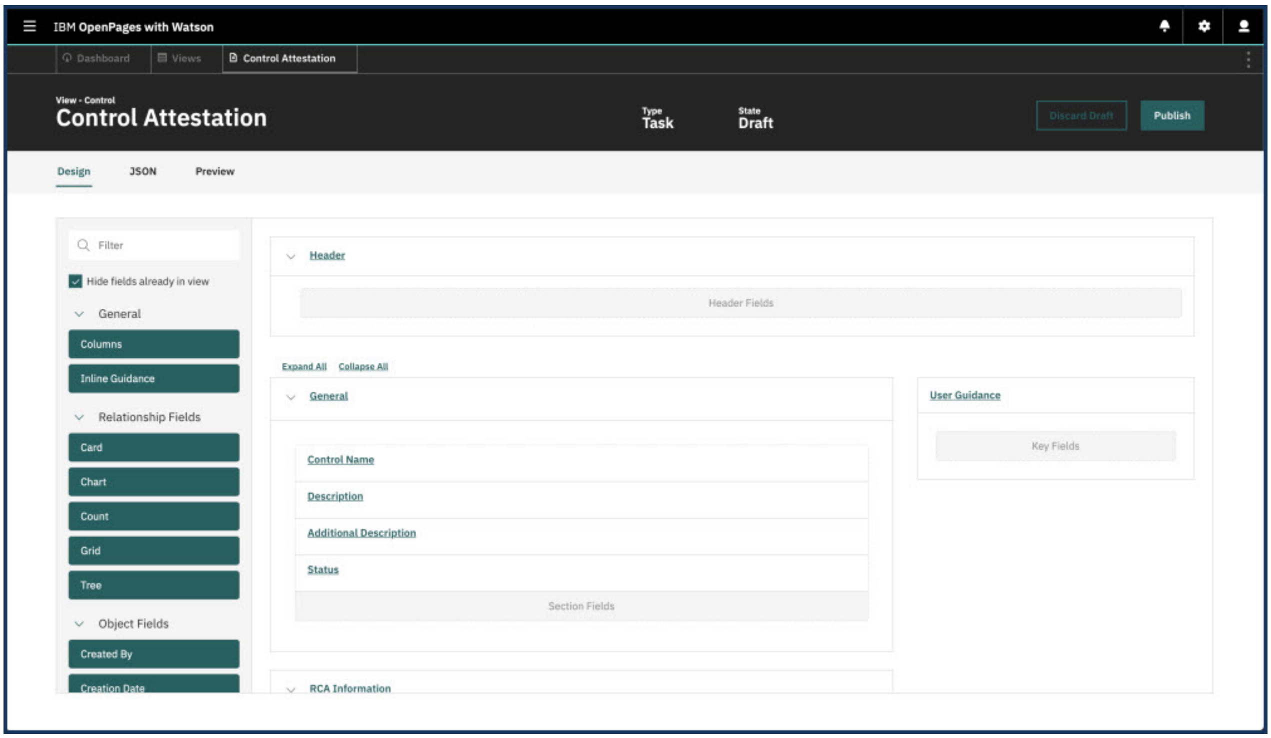


Figure 104. The Design tab in the View Designer

The View Designer still provides access to the JSON configuration. You can modify the JSON code right in the **JSON** tab. When you switch to the **Design** tab, the layout updates automatically based on the changes that you made in the JSON.

The preview feature is now on its own tab to provide a more accurate view of the page design. The preview feature now supports all three view types:

- Creation view
- Grid view
- Task view

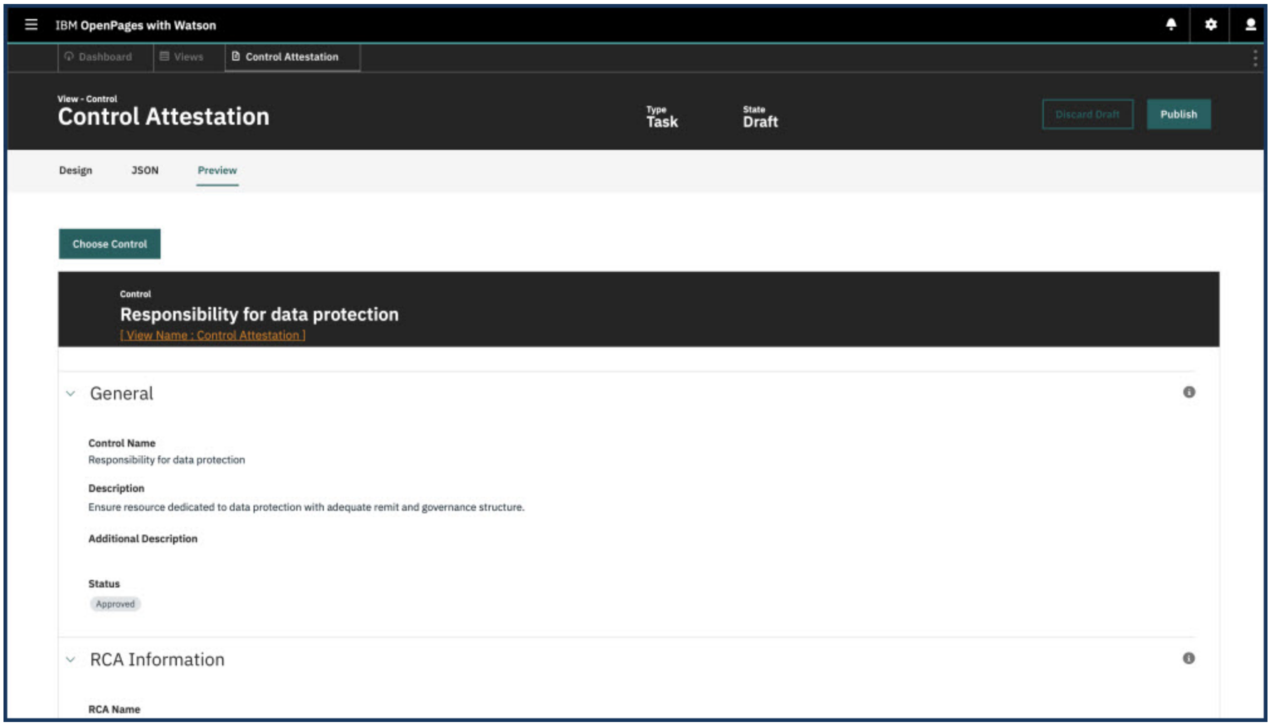


Figure 105. The Preview tab in the View Designer

When you open a view in the View Designer, the UI automatically opens a new application tab, allowing quick testing and validation of the view.

Administration and serviceability enhancements

Several enhancements have been made to help you administer, maintain, and support IBM OpenPages with Watson.

OpenPages APIs

Version 8.0.0.3 introduces the following changes:

Change in API error response behavior

The error response behavior has changed. Previously, a Java level stack trace was placed in the response body. In version 8.0.0.3 and later, the Java stack trace is not included in the response body. If you need this information, you can find it in the application server logs. Alternatively, you can change the registry setting **OpenPages** > **Platform** > **API** > **Error Responses** value to `detailed` to restore the legacy behavior.

Requests for Enhancement (RFE) Delivered

The following RFEs are delivered in this release.

Note: RFEs requesting user interface enhancements are considered to be delivered if available in the task-focused UI.

You can access each RFE via a URL that starts with `https://watsonfss-op.ideas.aha.io/ideas/` and ends with the RFE ID.

Table 4. Requests for enhancement delivered in 8.0.0.3		
ID	**Headline**	**Comment**
OPP-I-96	Add Admin Screen Design Capability for Task Focused Views	This release debuts the View Designer, which allows a user to easily build new task-focused views without any knowledge of JSON. The View Designer provides a drag and drop style user interface that supports all capabilities previously available only via JSON-based authoring. See "View Designer" on page 127.
OPP-I-413	Allow users to be able to reset their OpenPages passwords while utilizing Mixed Mode system access (SSO & Non-SSO)	This release improves support of "Mixed Mode" SSO. The password policies for Non-SSO users (that is, Native users) are now honored. These password policies include **User must change password at next logon** and **Password expires in x days**.

Chapter 11. New features in version 8.0.0.2

The new features in IBM OpenPages with Watson 8.0.0.2 include the following enhancements.

Platform enhancements

Enhancements to functionality are included in this version of IBM OpenPages with Watson.

An embedded easy-to-configure full-featured GRC Workflow feature has been added for use with the Task Focused UI. There have been enhancements to capabilities for grid and task views, along with a number of revised task views for out-of-the-box object types. Searching and filtering in Task Focused UI Grid views has been greatly enhanced.

The Task Focused UI now includes integration for Watson cognitive mapping, and the interface for cognitive classification has been enhanced.

The OpenPages login page can now be used to display privacy messages and links, as well as customer messages.

Easily Configured Embedded GRC Workflow

An embedded easy-to-configure full-featured GRC Workflow has been added for use with the Task Focused UI. Using GRC Workflow, you can design, configure, and administer workflow definitions and workflow instances for OpenPages.

GRC Workflow consists of the following primary components:

- Workflow definitions

  Create as many as needed for each object type, each of which addresses one or more use cases. The definitions include the workflow itself, its stages or tasks, and the actions possible at each stage. Information that drives the workflow can be directly entered into the workflow definition, can be pulled from a field value on the object, from a field value on a directly related object, from an expression, or from a field value on a Preference object.

- Workflow participants

  Three kinds of participants are involved in workflows:

  - Assignees

    Assignees are users who own a task in a workflow. Assignees are defined per stage. There can be many assignees at a time for a task and different ones throughout a workflow process.

  - Subscribers

    Subscribers are users who have an interest in one or more stages of a workflow. For example, the owner of the parent object in a workflow can be designated as a subscriber. Subscribers are frequently set to fields on the related object. They do not own tasks but they can complete tasks, if they choose to. Subscribers see subscribed tasks on their Subscriber dashboard and can act as a backup for the assignees.

  - Oversight users

    An oversight user is someone who has overall responsibility for an area. Oversight users are defined per workflow. There can be many oversight users for a workflow instance. Oversight users are ordinarily at a management level, and they can track workload and tasks for their teams. At any time during a workflow, they can add information to a task or complete it, if they choose to.

- Workflow instances

As users work in OpenPages, they launch instances of workflow definitions. Each object can be part of one workflow at a time. An unlimited number of workflow instances can be in progress at any given time.

- Workflow dashboards

  A dashboard is available for each type of workflow user. Each dashboard provides an interactive chart of tasks of interest to that user, along with the ability to easily drill into a specific task.

- Workflow actions

  Objects in a workflow or objects that can be submitted to a workflow have an **Actions** button on their Task view. The options on the **Actions** button are appropriate to the user.

- Workflow guidance

  Objects that are currently active in a workflow have a workflow guidance panel on their Task View. It provides workflow and stage-specific guidance to the user.

- Workflow monitoring and management

  Administrators can view and terminate active workflow instances.

- Workflow migration

  Workflows can be migrated from environment to environment by using the Export Configuration and Import Configuration administrative options.

Automatically Generated Workflow Dashboards

Three new home page dashboards are available to users when appropriate: My Assignments, the Oversight Dashboard, and the Subscriptions Dashboard. Each dashboard provides an interactive visualization of the relevant assignments and the ability to quickly drill in to a particular assignment.

My Assignments on the Dashboard

The Dashboard now contains **My Assignments** and a widget panel.

My Assignments displays assignments as a chart and a list. It is displayed by default. If a user has no task assignments, only the widgets panel is displayed.

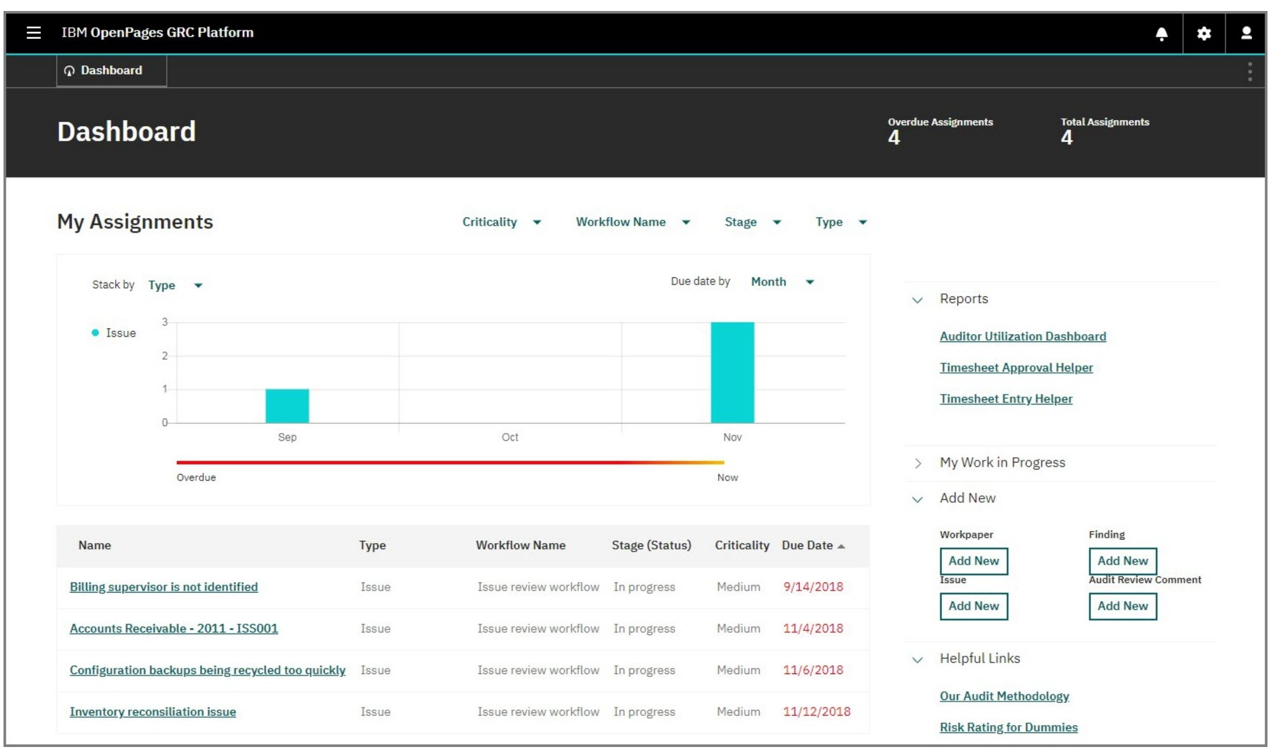


Figure 106. My Assignments workflow tasks dashboard viewed by month, with widget panels on the right

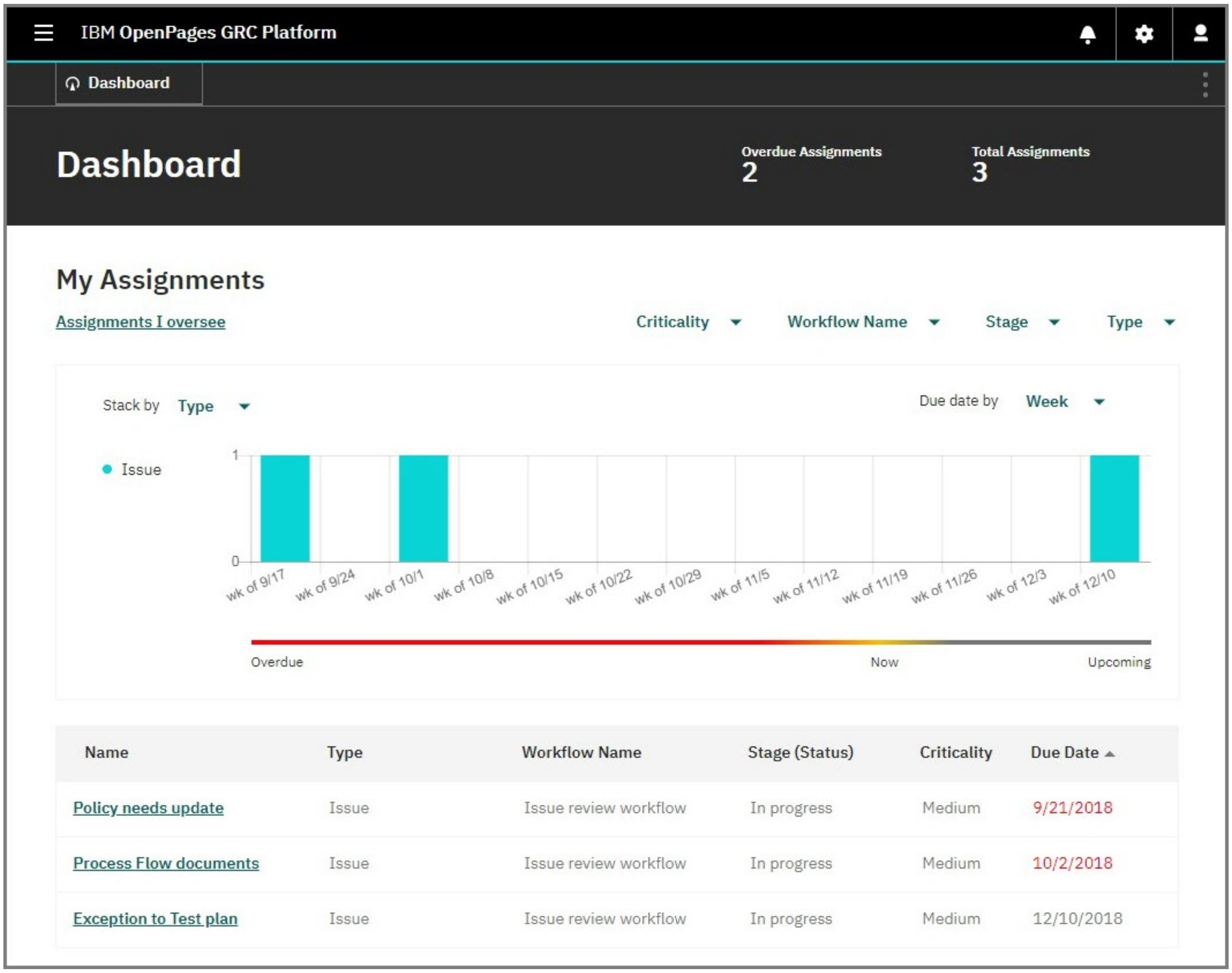


Figure 107. My Assignments workflow tasks dashboard, viewed by week

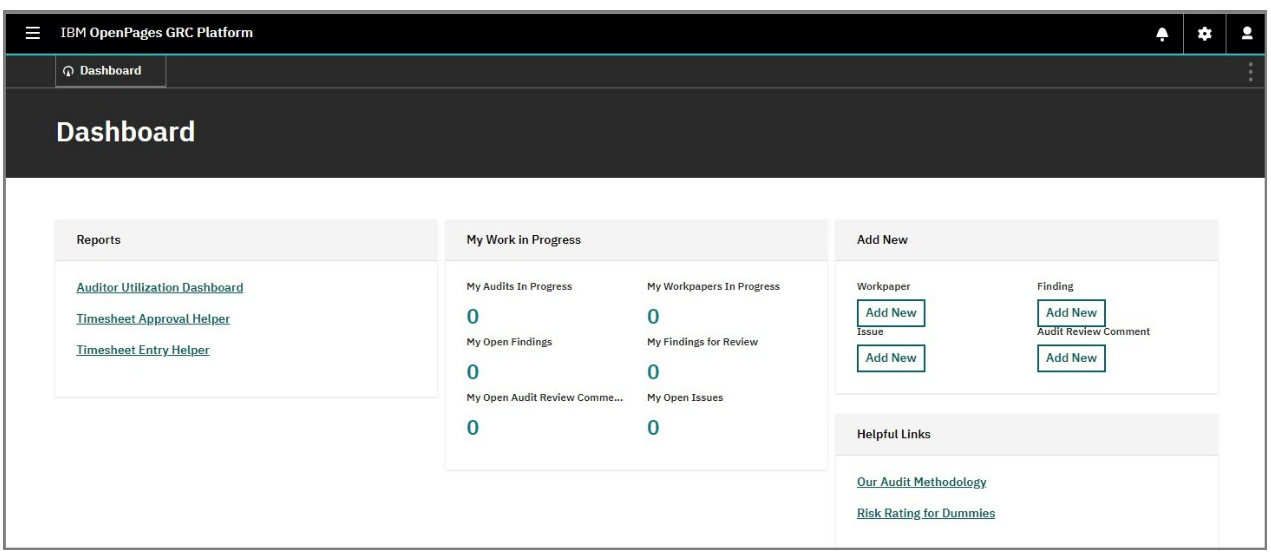


Figure 108. Users without assignments see their widget panels by default

Subscriber Dashboard

The Subscriber Dashboard provides a visual summary of the workflow tasks the user is subscribed to / following, with the ability to easily drill into an individual task.

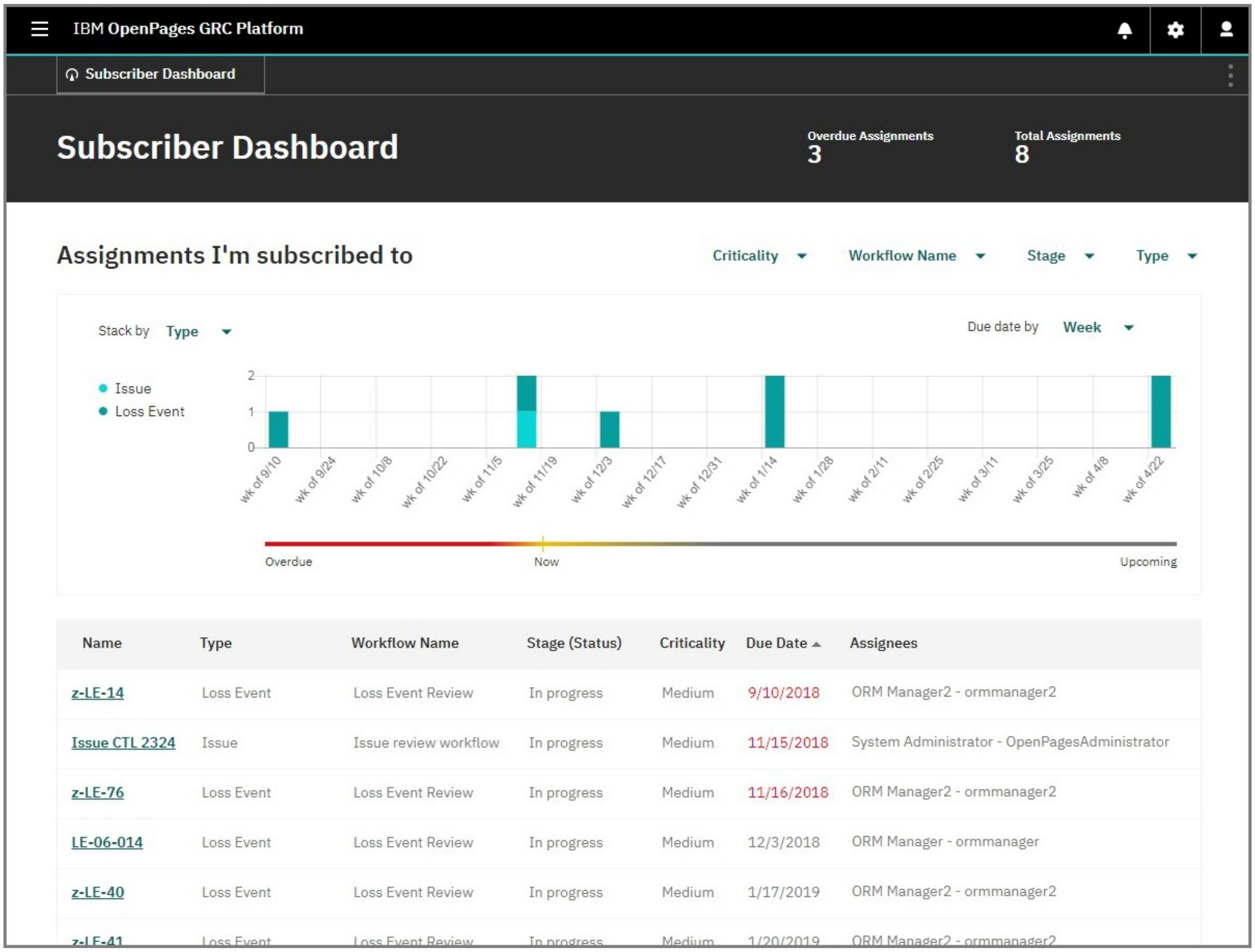


Figure 109. Subscriber dashboard shows tasks this user is subscribed to

Oversight Dashboard

Users who have an oversight role have single-click access to the Oversight Dashboard. This dashboard visualizes all of the past due and upcoming tasks for which they have oversight.

Users can sort and filter to the specific information relevant to them at that time, and can easily drill in to specific tasks. They can even view an Oversight Dashboard for a particular user.

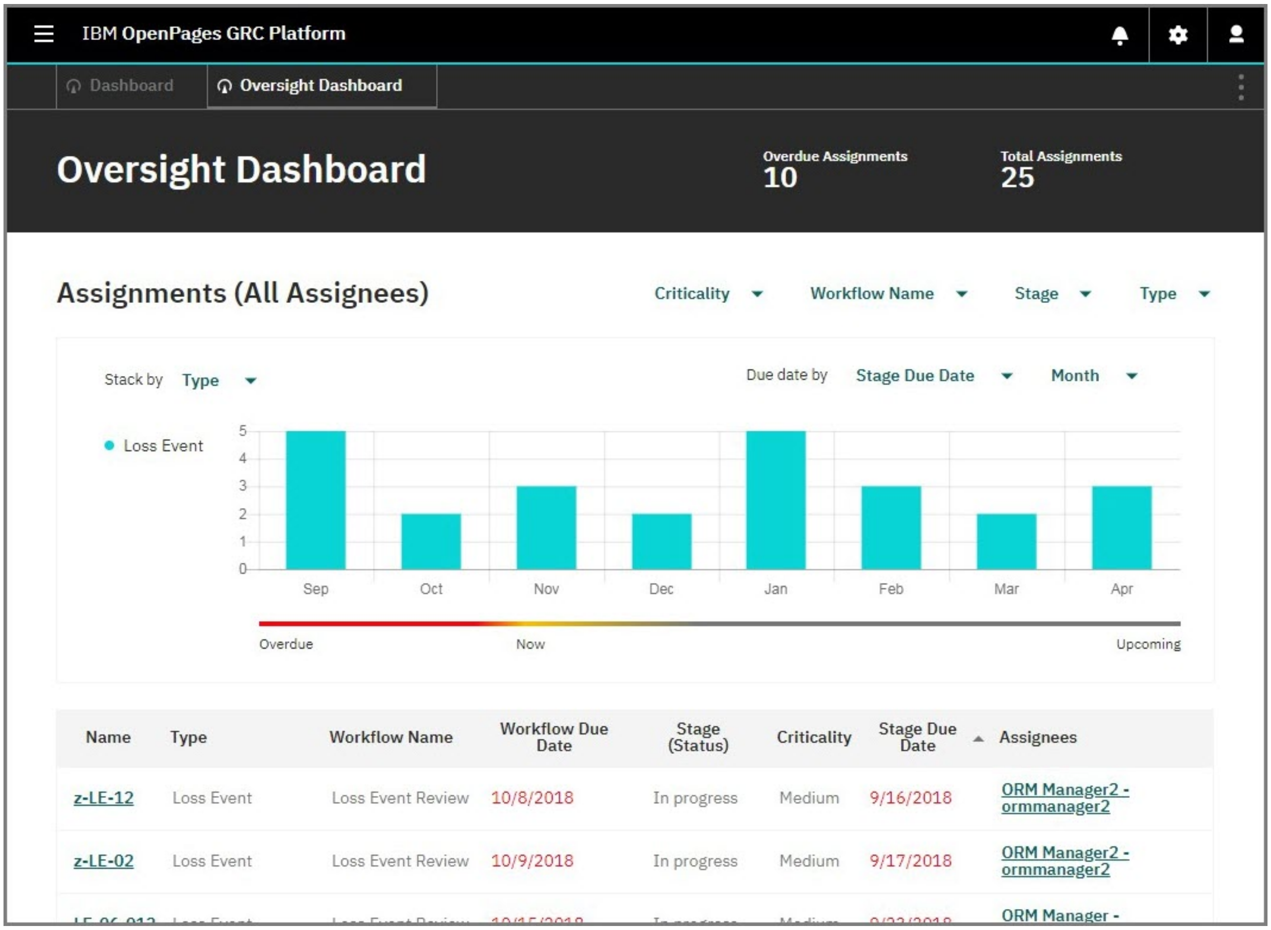


Figure 110. Oversight Dashboard for all Assignees

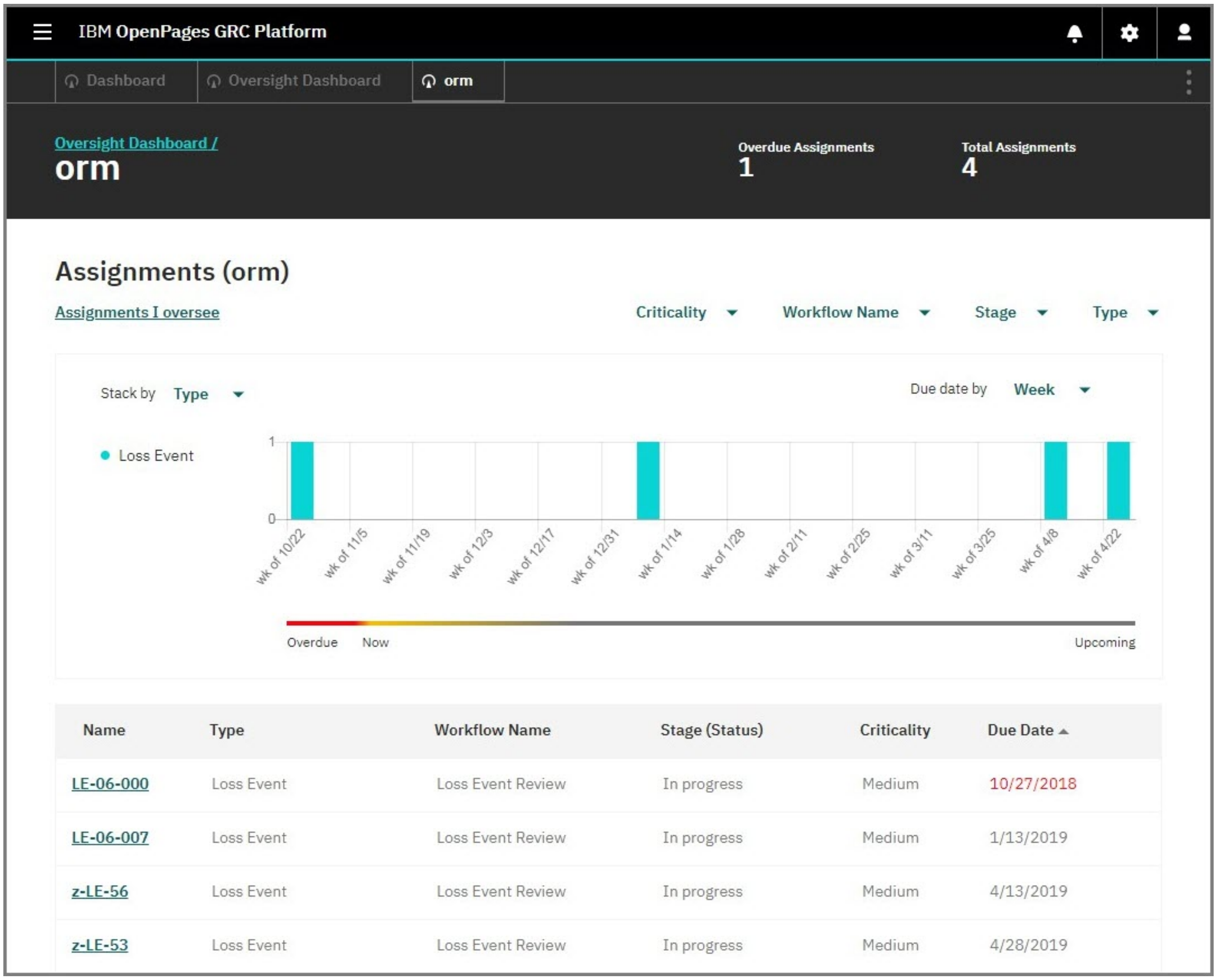


Figure 111. Oversight Dashboard for a particular Assignee

The GRC Workflow Designer

Workflows can be implemented in minutes by non-technical administrators by using the provided GRC Workflow Designer. It uses drag and drop interactions to build the stages and actions of the workflow.

Easy-to-use property panels are provided to configure the attributes of the overall workflow, each stage, and each action.

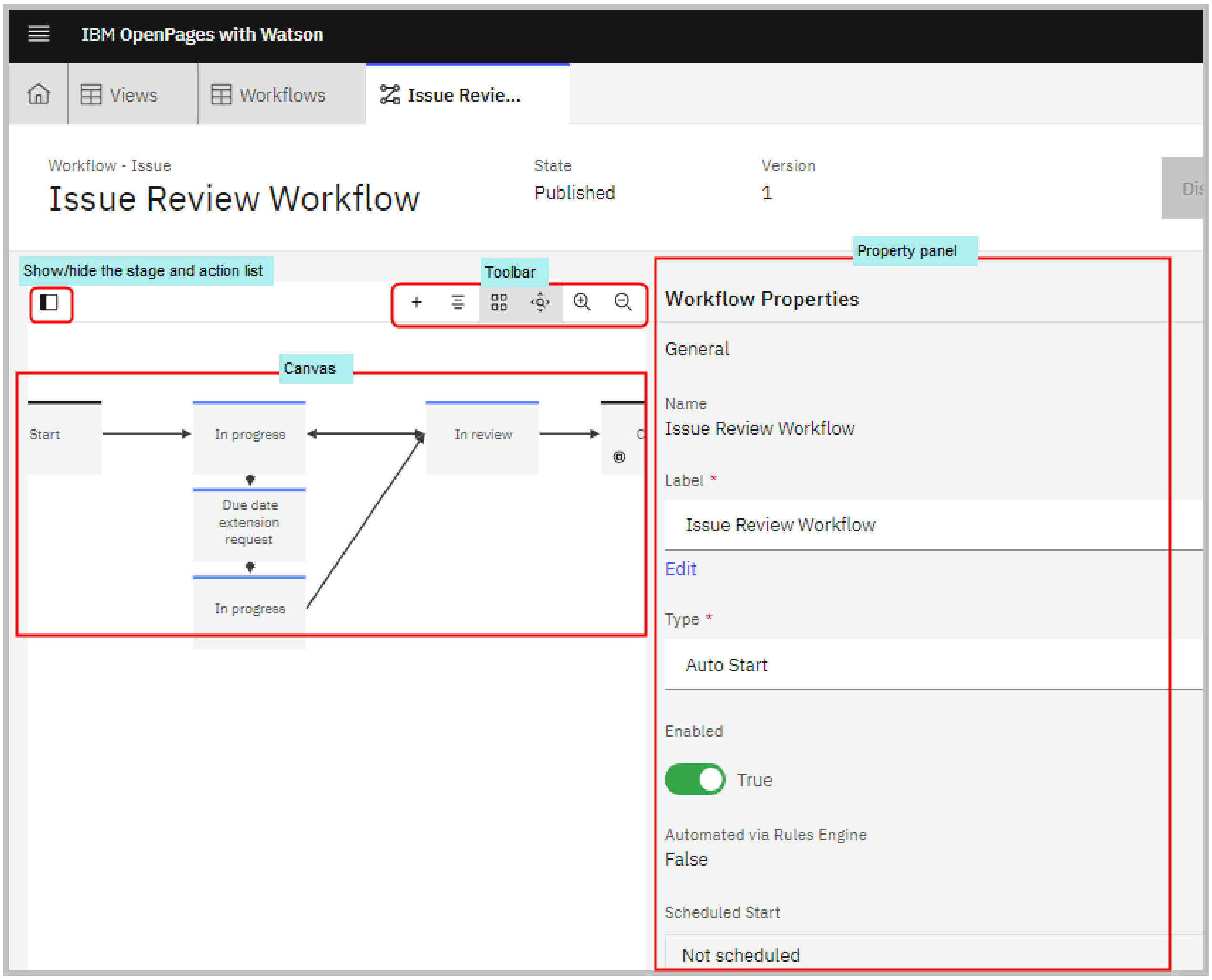


Figure 112. GRC Workflow Designer with toolbar, canvas, and properties panel (the stage and action list panel is hidden)

The GRC Workflow Designer can be used to specify three different types of users (assignees, subscribers, and oversight users and groups) for the workflow and its stages and actions. These can be specified as particular users or groups or can be pulled from field values on the object, on a related object, or on a Preference object. Email notifications can be included for each type of user for each action.

The stage property panel allows the administrator to specify access control for the stage and its actions, who should receive email notifications, the Task View to be used, and a set of Task View Overrides that tailor the view to this stage of the workflow.

The action property panel can be used to specify who should receive email notifications, conditions necessary in order for the action to be available to a user, field validations to perform when an action is selected, and operations to take when the action is selected and validated. The operations include the ability to set field values on the object and to run a custom Java action.

The workflow, its attributes, conditions, validations, notifications, and operations combine with the Task Focused UI to replace many triggers or other custom components that would previously have been required to implement the same functionality.

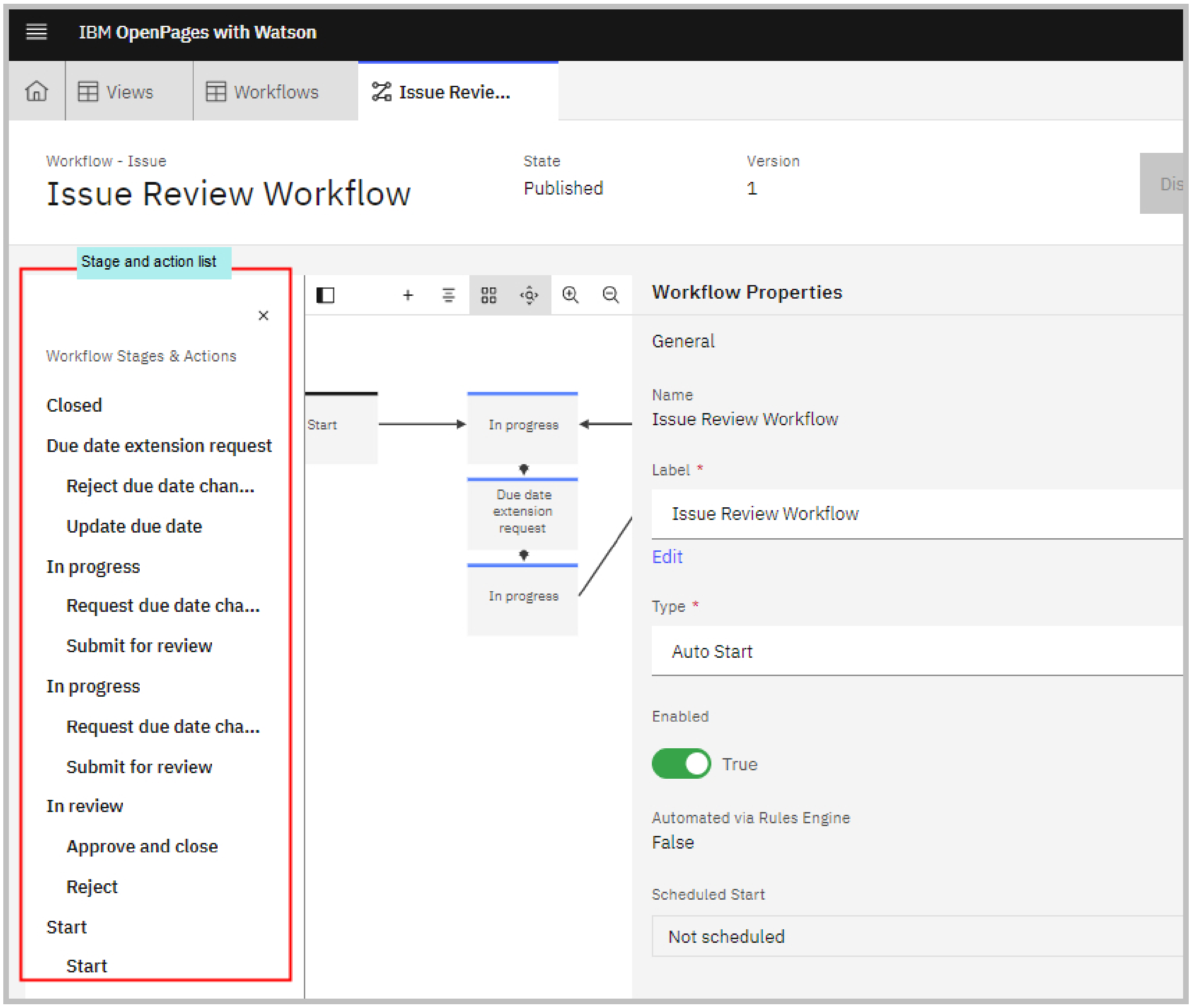


Figure 113. GRC Workflow Designer with the stage and action list panel and the ***Workflow Properties*** *panel displayed*

Workflow Monitoring and Management

Administrators can monitor and manage workflows in OpenPages by using a new administrative interface.

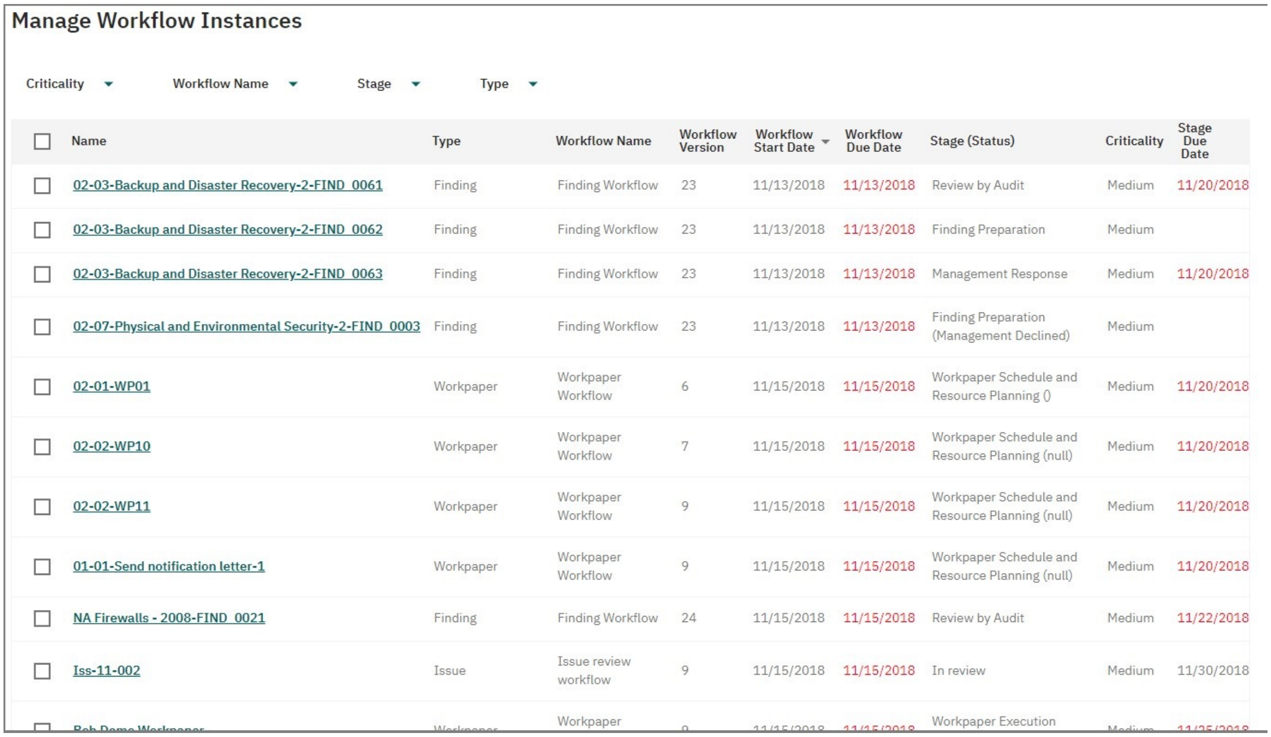


Figure 114. Monitor workflow instances

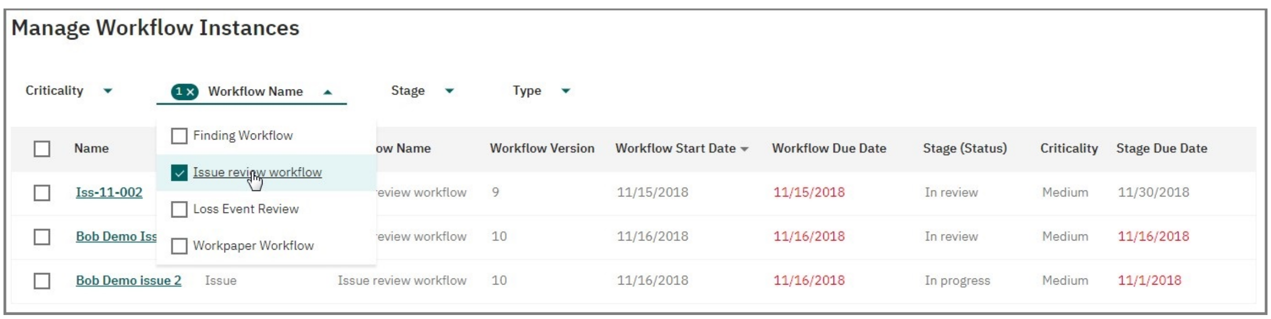


Figure 115. Filter workflow instances to focus on the relevant ones

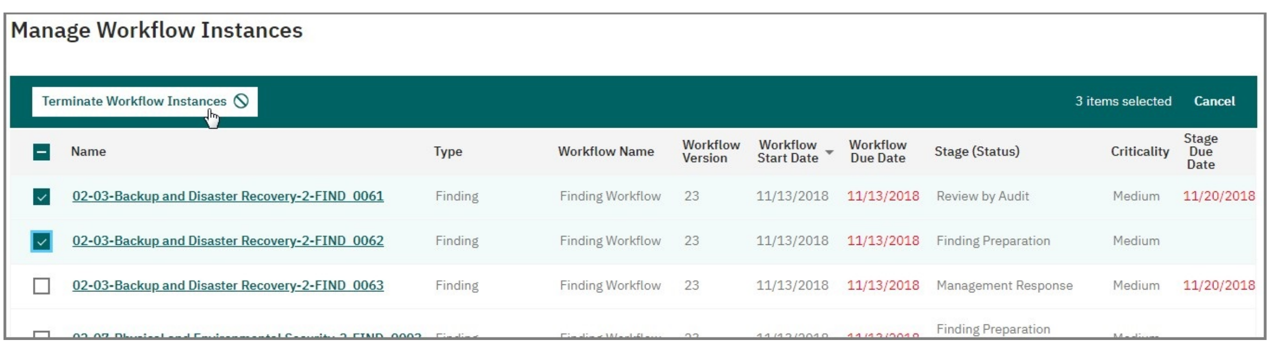


Figure 116. Easily terminate workflow instances as needed

Reporting Framework Workflow Information

You can write reports that include information from workflow fields on workflow instances.

The full set of information is available in both CQM and DQM Standard framework models, while a subset is available in Basic framework models. The information is available in workflow-specific query subjects and a subset of the information is available on every object type in the framework.

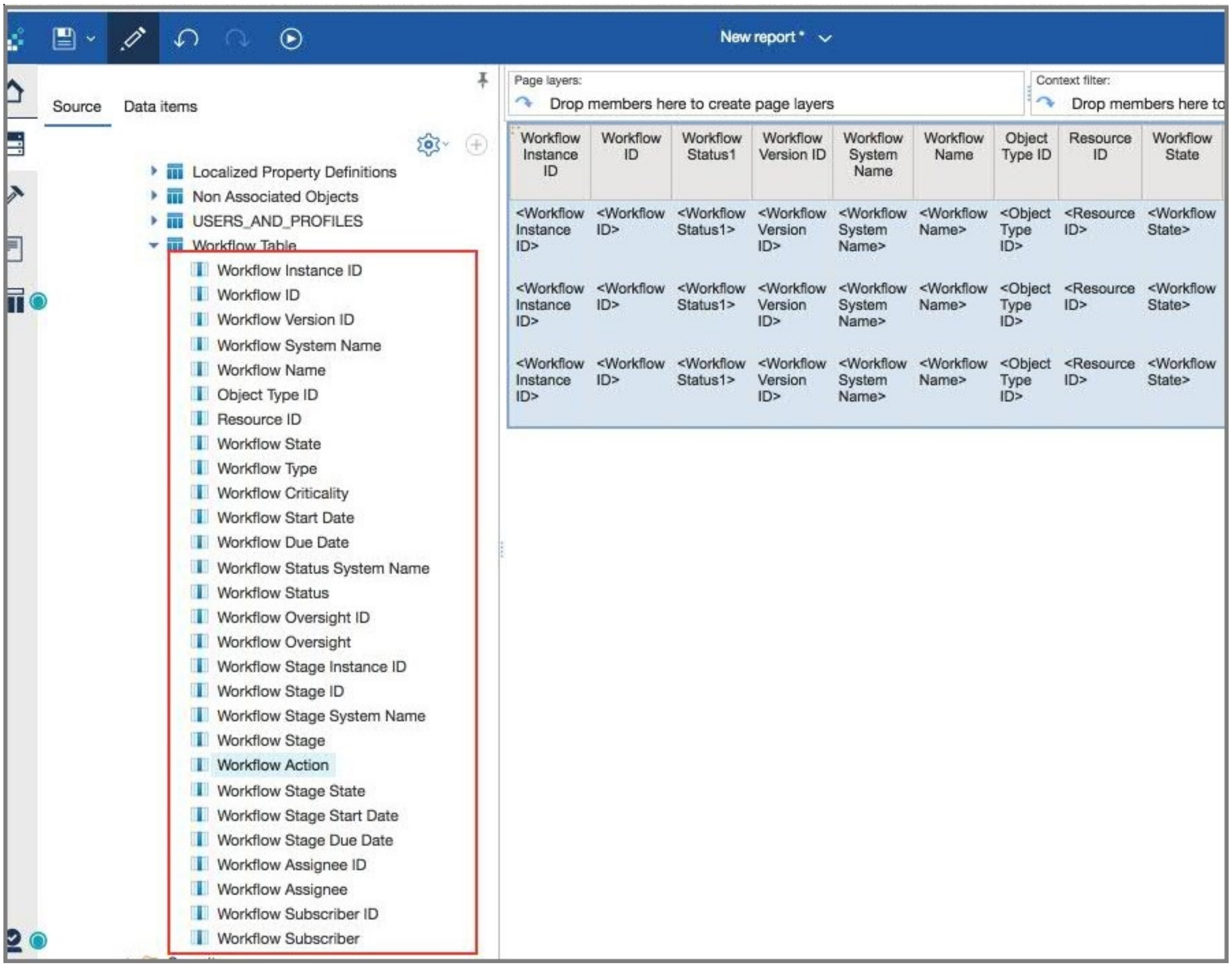


Figure 117. Workflow table in the reporting framework

Enhancements to Grid Views

Enhancements have been made to Grid Views in the Task Focused UI to make it easier for users to focus on the most relevant information.

A default filter is now applied to grid views for objects that have workflows available, to include only objects currently active in a workflow or not yet submitted to a workflow. Objects that have already completed the workflow are not shown by default. Alternatively, the administrator can configure a default filter to include only those objects that meet the specified filter criteria.

Users can now easily apply additional dynamic filters. As they type in the search box, OpenPages suggests filters to apply. Users can apply one or more of these filters, plus a dynamic text filter, all just by simple typing without leaving the page. These dynamic filters can be applied in addition to a saved filter.

Default Grid View filter

It is helpful to the user if a Grid View in the Task Focused UI is filtered to show by default only the relevant objects.

By default, for object types that have workflows defined, objects that have already completed their workflow are not shown. The user can easily choose to remove that filter.

Alternatively, a default filter can be specified for an object type for the Task Focused UI Grid View. This filter is applied instead of the workflow *active* filter. This default filter override is specified in the configuration of the Grid View for each object type.

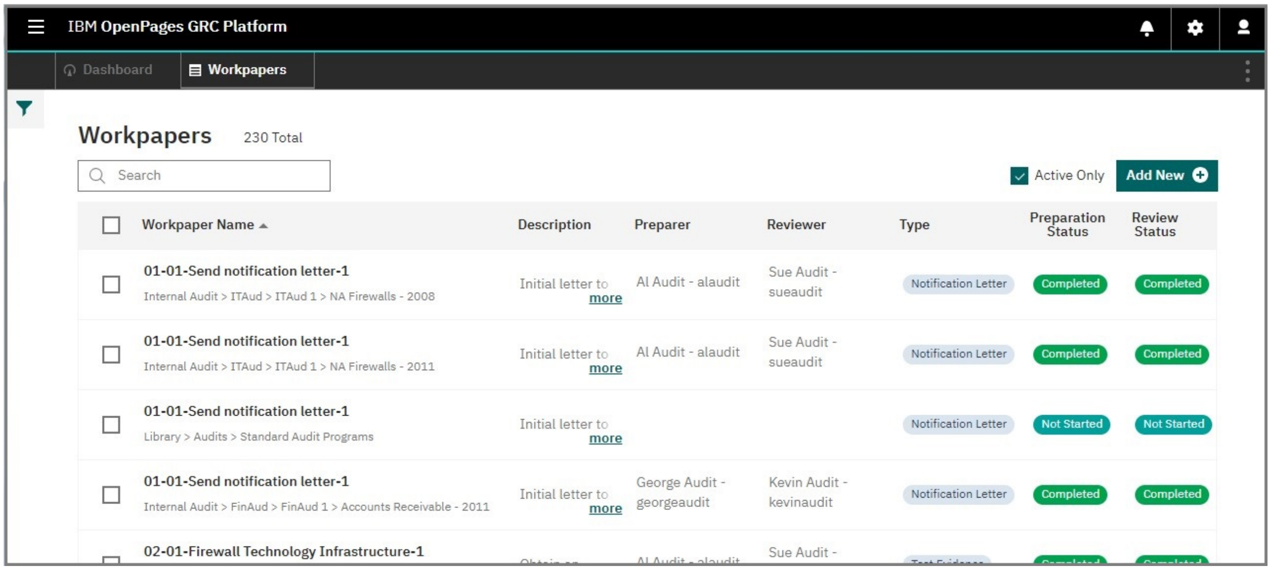


Figure 118. Grid View with default filter to show objects that are active in a workflow

Dynamic and Compound Grid View Filtering

Users can now easily apply additional dynamic filters.

As users type in the search box, OpenPages suggests filters to apply. Users can apply one or more of these filters, plus a dynamic text filter, all just by simply typing without leaving the page. These dynamic filters can be applied in addition to a saved filter.

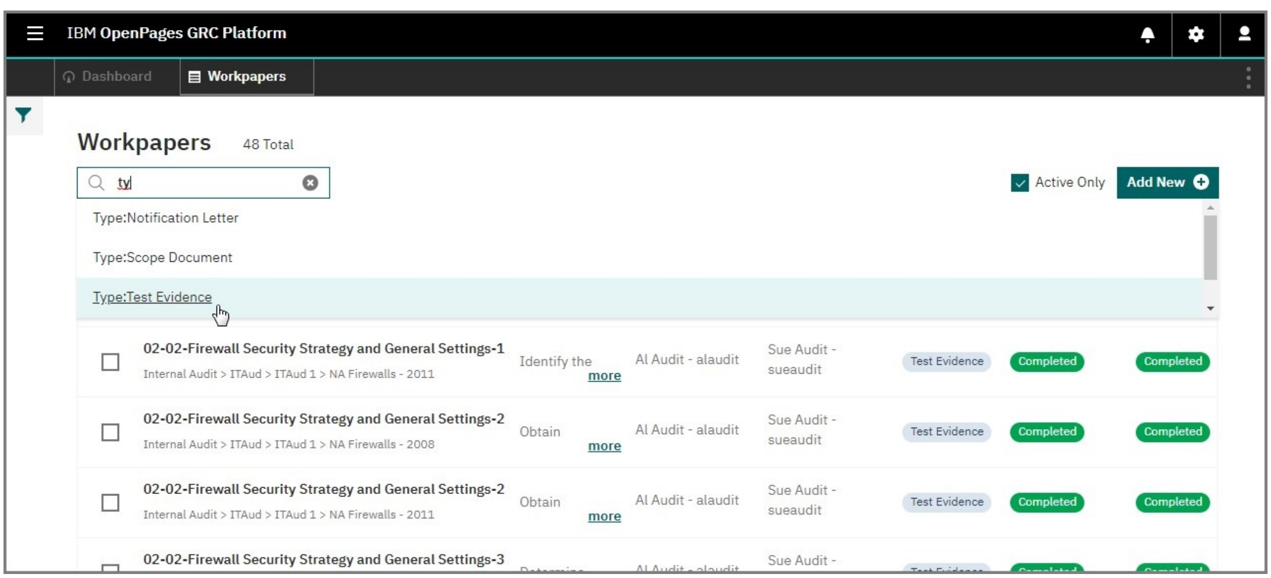


Figure 119. Type ahead on search suggests relevant filters to apply

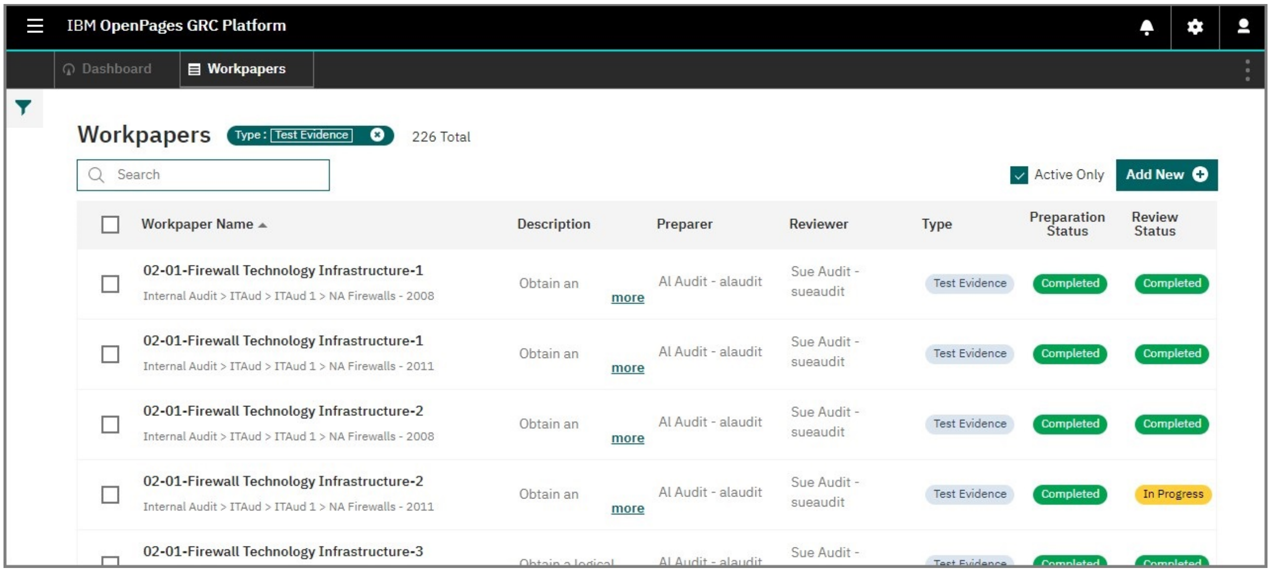


Figure 120. Dynamic filter applied

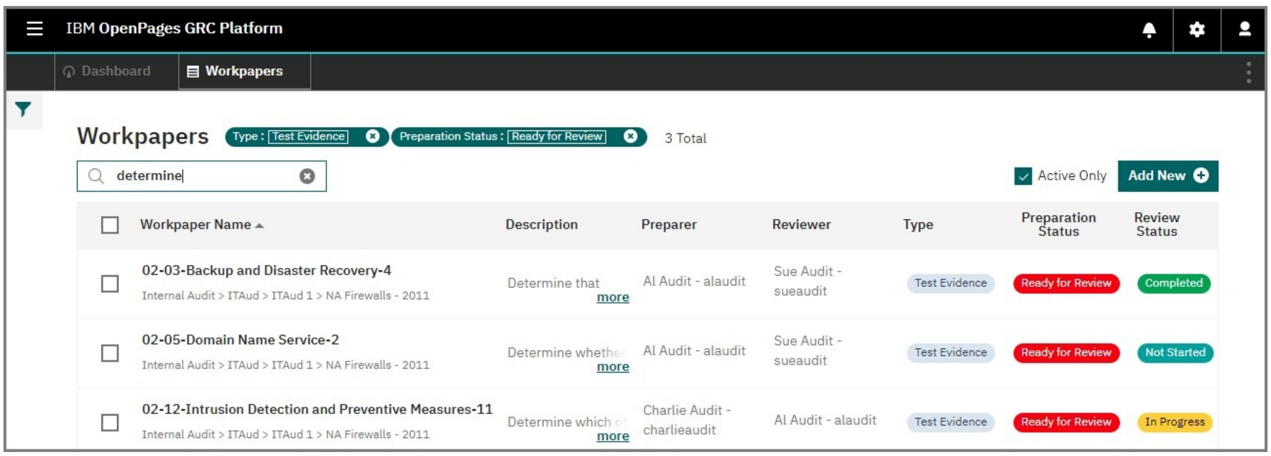


Figure 121. Compound Grid View search and filters to two enumerated values and search text

Enhancements to Task and Creation Views

Enhancements have been made to Task and Creation Views in the Task Focused UI to provide better experiences for users and to provide more features and flexibility for administrators.

The Task Focused UI now supports both the Watson cognitive classifier for taxonomy suggestions and the Watson cognitive mapper for object association suggestions. The user experience for cognitive suggestions leverages the guidance area of task views.

Use of the Task Focused UI on a mobile device (tablet or phone form factor) has been enhanced. The interface adapts to the form factor and size of the device by rearranging and limiting the data that is shown.

Phased implementation of the Task Focused UI is enhanced. You can choose to roll out the new Task Focused UI for one use case at a time, for example, Issue Management, Loss Event, RCSA, and so on. If a user who is enabled on the Task Focused UI encounters a use case for which it is not yet implemented, they are informed and provided a one-click way to get to what they need in the Standard UI.

Administrators have additional configuration options to control the display and function of relationship Grids and Cards. And a debug feature has been added so that Administrators can easily tell which view is being accessed by a user.

Enhanced Integration of Watson Cognitive Classifier

The Watson cognitive classifier can be used to assist the user in finding the appropriate taxonomy classification, for example, for the Basel Event Type three-level hierarchy of Risk Category, Risk Sub-Category, and Risk Example. When the user asks for suggestions, a guidance panel opens and provides a ranked list of suggestions, together with a confidence level for each. With a single click, the user can accept a suggestion.

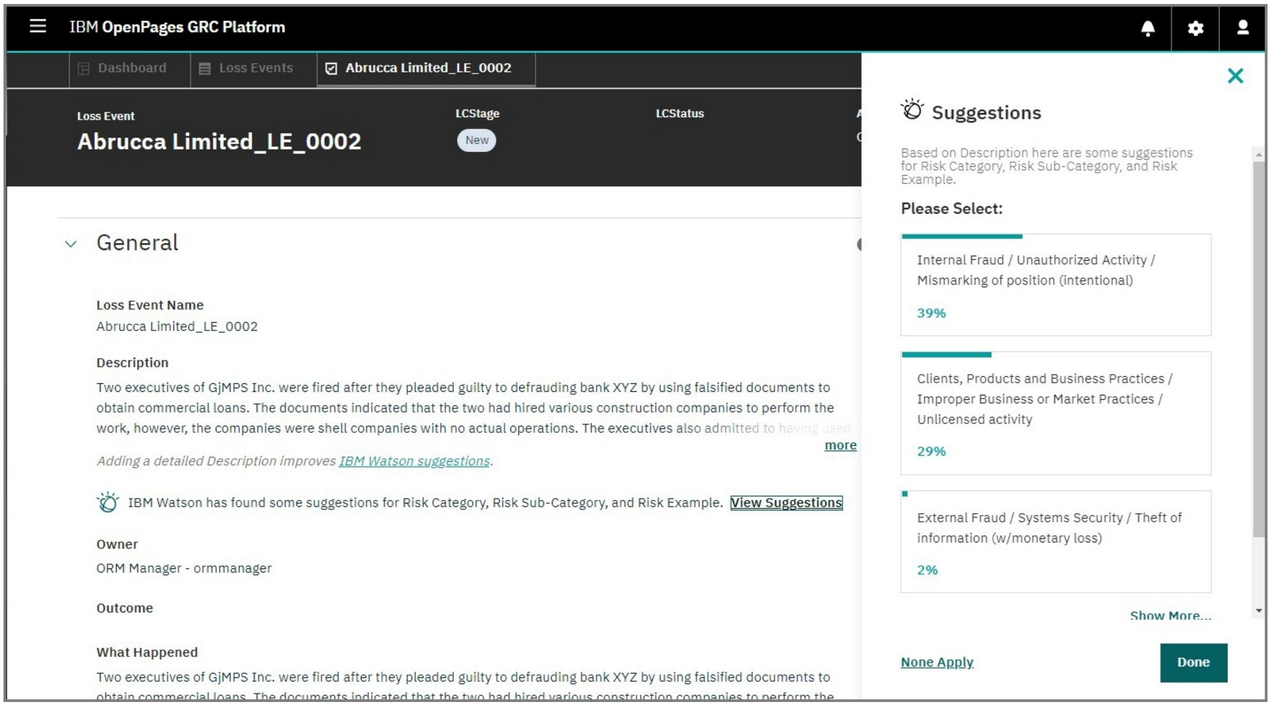


Figure 122. Integration of Watson cognitive classifier in Task views

Integration of Watson Cognitive Mapper

The Watson cognitive mapper can be used to assist the user in finding the appropriate objects with which to associate, for example, to find the Control that may have failed, based upon the Issue Description. When the user asks for suggestions, a guidance panel opens and provides a ranked list of suggestions, together with a confidence level for each. With a single click, the user can accept a suggestion.

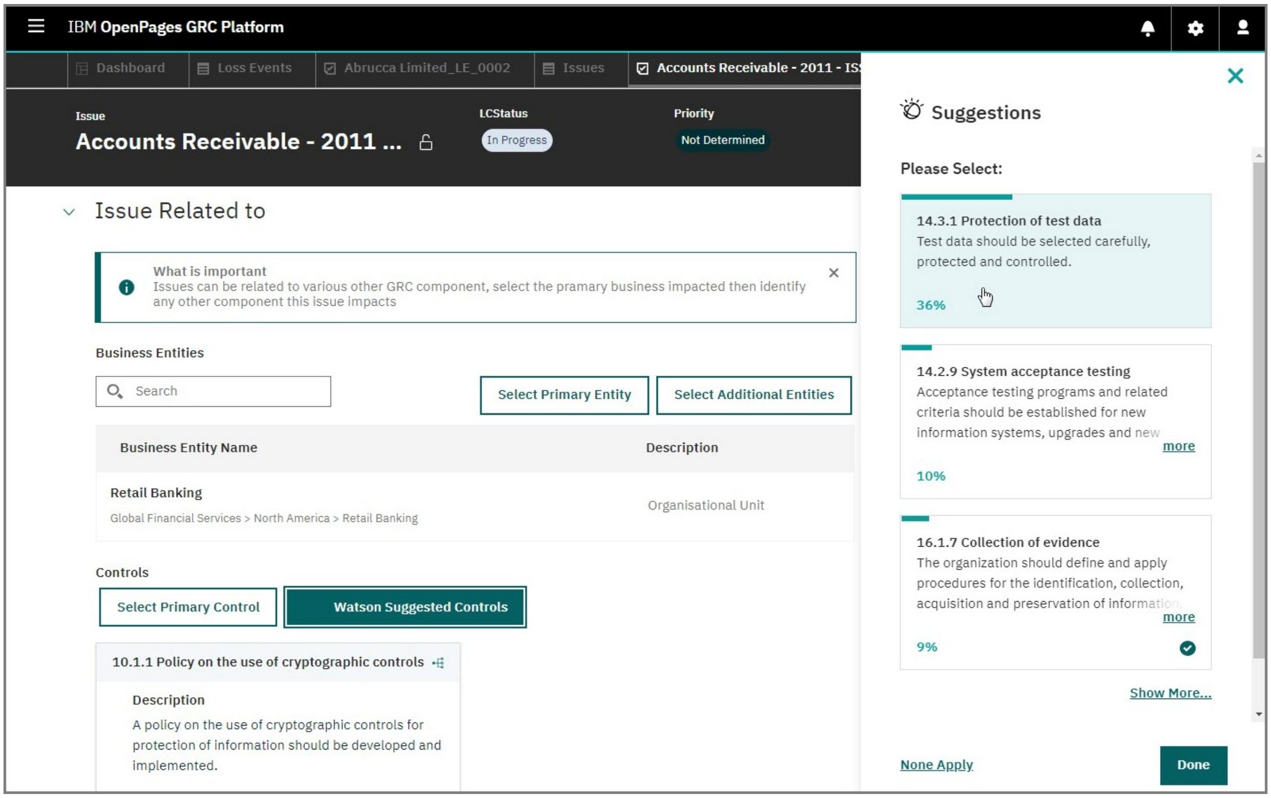


Figure 123. Integration of Watson cognitive mapper in Task Views

Task Focused UI on Tablets and Mobile Devices

The Task Focused UI can now be used on tablets and mobile devices, using the same browsers supported by the rest of the OpenPages application. The application will automatically adjust to a smaller form factor by using techniques such as reducing the number of columns, removing information such as the guidance panel, and converting grids to cards.

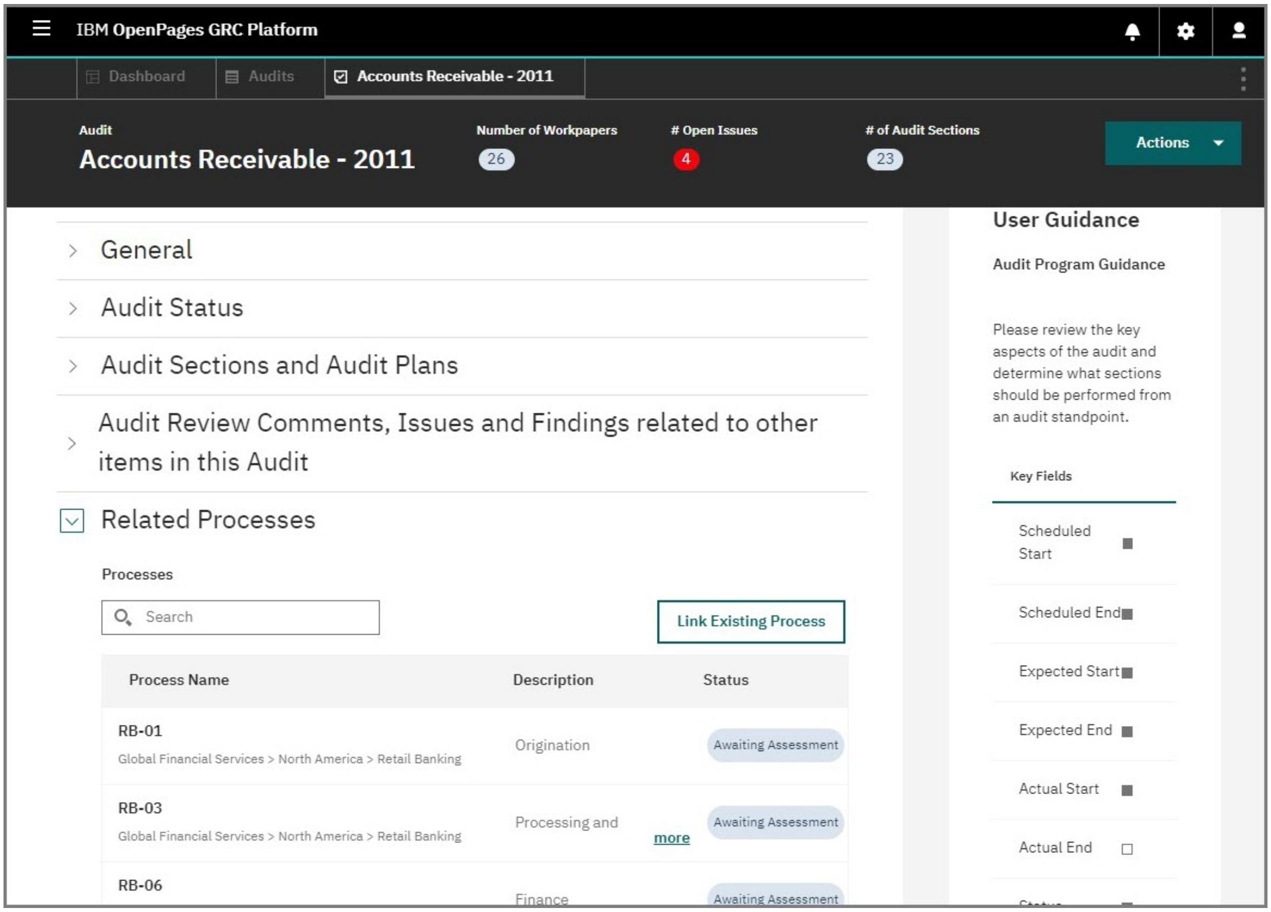


Figure 124. Task Focused UI on a standard form factor

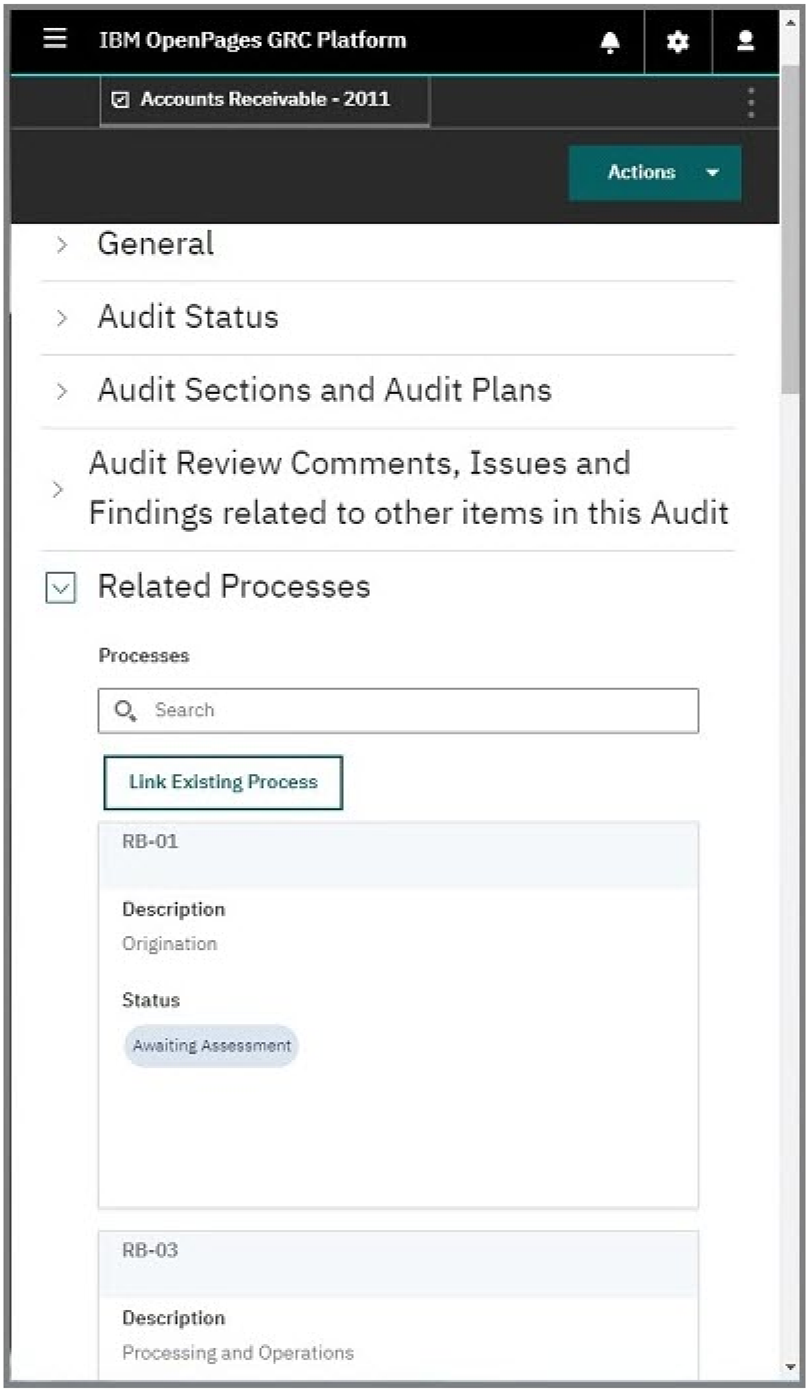


Figure 125. Task Focused UI on a mobile device form factor

Redirection to Standard UI when no Task View is defined

You can choose to roll out the new Task Focused UI for one use case at a time, for example, Issue Management, Loss Event, RCSA, and so on.

If a user who is enabled on the Task Focused UI encounters a use case for which it is not yet implemented, they will be informed and provided a one-click way to get to what they need in the Standard UI.

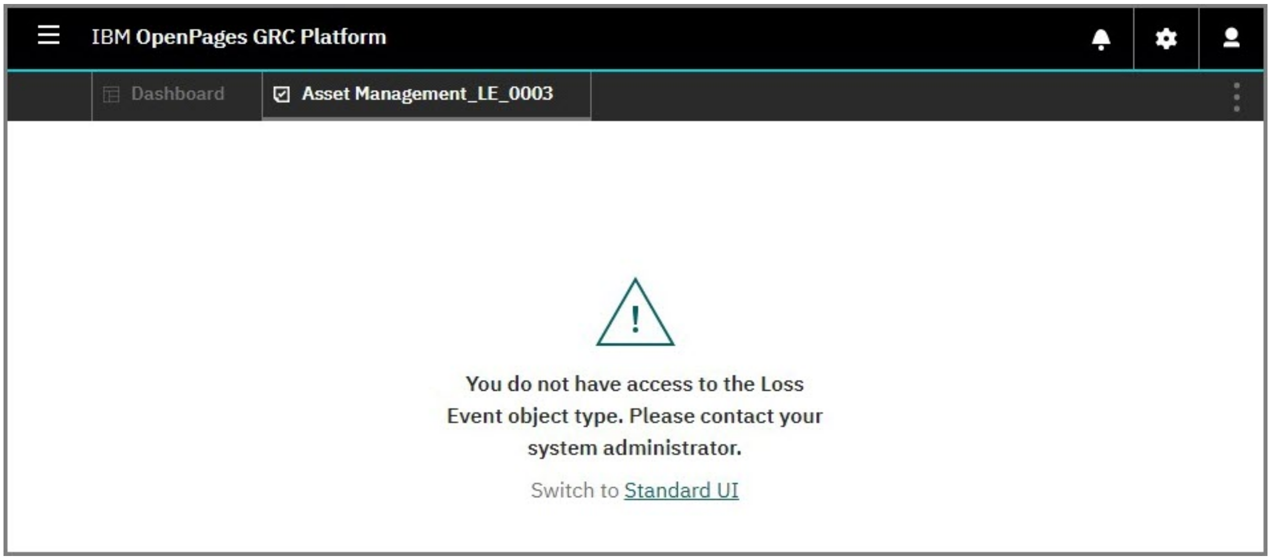


Figure 126. Redirection to the Standard UI when no page is enabled in the Task Focused UI

Enhancements to Task Focused UI View Administration

Numerous enhancements have been made to view administration in the Task Focused UI.

Administrators can now configure Creation views to include rules on relationship fields. You can use this capability on relationship grids and cards to determine which parent or child types are required, and which grids or cards will be shown or hidden.

When users enter values in the Task Focused UI that do not pass a field's validation rules, an error is issued and the object cannot be saved. To get around this, you can use the severity property so that a warning is issued instead. When a warning is issued, an object can still be saved.

If you are defining multiple task views for an object type, turn on the new Task Focused UI debugging feature. When the debugging feature is enabled, the view name is shown when you access the view. You can test the view rules, verify that the correct view is displayed, and access the view definition with a single click.

Task and Creation views now handle the case where an object requires at least one parent but from amongst a series of different parent types. For example, the user is creating an Issue, and must select either a Control, a Risk, or a Process parent. If none of the parent types is configured to be required, then selecting a parent of any type will suffice. This feature is available with relationship grids and cards.

OpenPages Login Page

The OpenPages login page has been redesigned. In addition, customers now have the option to include information on the login page that they might need to use to be compliant with various data privacy requirements. And customers can now optionally include a text message to users on the login page.

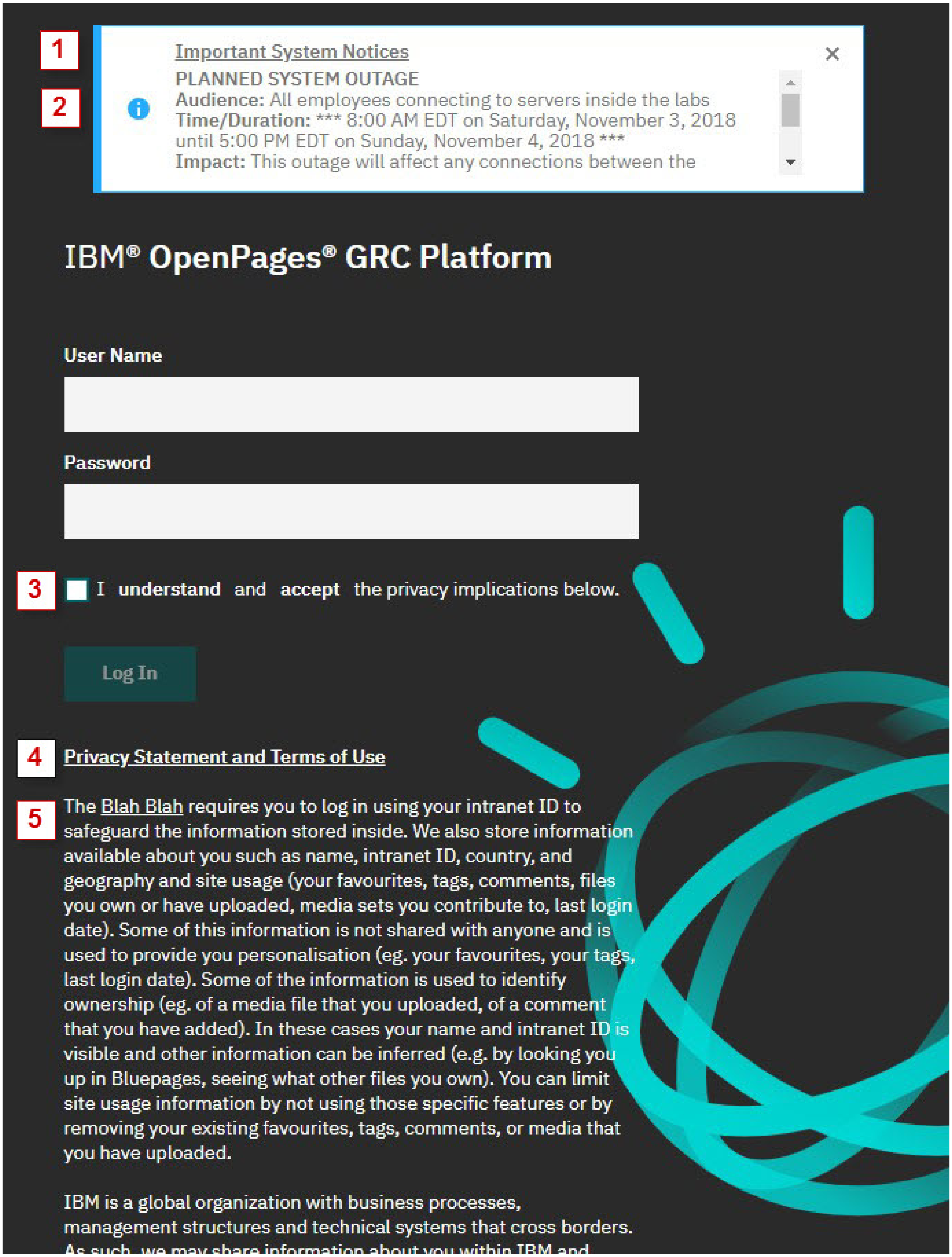


Figure 127. The redesigned login page

Table 5. Messages on the login page

#	Description
1 and 2	Header and text for a system notice.
3	Text displayed next to the check box. If provided, then the login button is disabled until the user has selected the check box, for example, to acknowledge the terms and conditions.
4	Text for a privacy statement.
5	Title for a privacy statement link. The privacy link is a hyperlink to an external privacy statement. The link appears above the copyright information on the login screen. Although this link can be used for a privacy statement, there is no restriction to where the link goes. The customer can specify the text of the link and also the URL to which the link will go.

Users who bypass the login page as a result of single sign-on configuration will not see the new login page or any of the optional new elements.

Users who login to the OPX application will not see the custom message text or the modified design, but they will see the other three elements, if specified.

Reporting Period Dropdown

The reporting period dropdown has appeared on all pages of the Standard UI, even if a customer did not use the reporting period feature. Now the dropdown will display only if the customer has created at least one reporting period. This removes distraction for users, and makes more room for other elements in the page header.

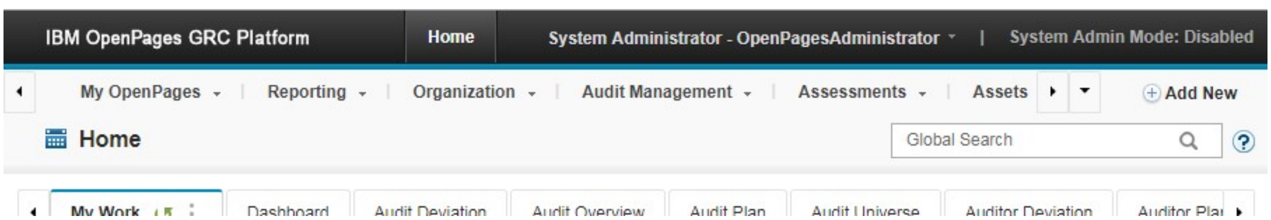


Figure 128. Reporting Period dropdown does not appear if there is only one reporting period

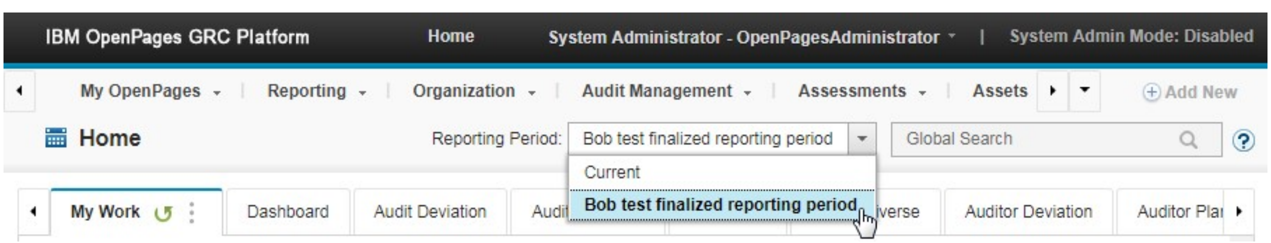


Figure 129. Reporting Period dropdown appears when there are additional reporting periods

Solutions enhancements

IBM OpenPages solutions have been enhanced to make them more complete and easier to use.

- Enhancements have been made to a number of views in the Task Focused UI.
- Four example workflows have been added to support various use cases.
  - for Loss Event for Operational Risk Management (ORM) users,
  - for Workpaper and Finding for Internal Audit Management (IAM) users, and
  - for Issue for users of all solutions.

- The timesheet module of the IBM OpenPages Internal Audit Management solution has been redesigned and enhanced to become a complete end-to-end auditor resource management module.

Task Focused UI System Views

Enhancements have been made to a number of views in the Task Focused UI. Some of the changes are to align the views with the example workflows, some are to take advantage of new capabilities in Task views, and some are to use the existing capabilities to enhance the user experience with these views.

Use the system views as examples, with the understanding that they might be overwritten in the future. If you plan to rely upon these views, either create your own, or copy and rename them. For objects where you have your own views, you might want to disable the out-of-the-box system views.

Significant enhancements have been made to most of the internal audit related views, including those for Auditable Entity, Audit, Audit Section, Workpaper, Finding, and Audit Review Comment.

Significant enhancements have been made to views used in issue management and remediation. This includes reducing the number of Issue task views and instead taking advantage of the ability to override elements of a task view in a workflow.

A number of the financial controls object type views have been enhanced, including those for Account and Sub-Account, and a special Business Entity Task view has been added for financial controls users of the OpenPages FCM 7.4.0 Master profile.

Many enhancements have also been made to regulatory compliance views.

The following figures show examples of a few of these views.

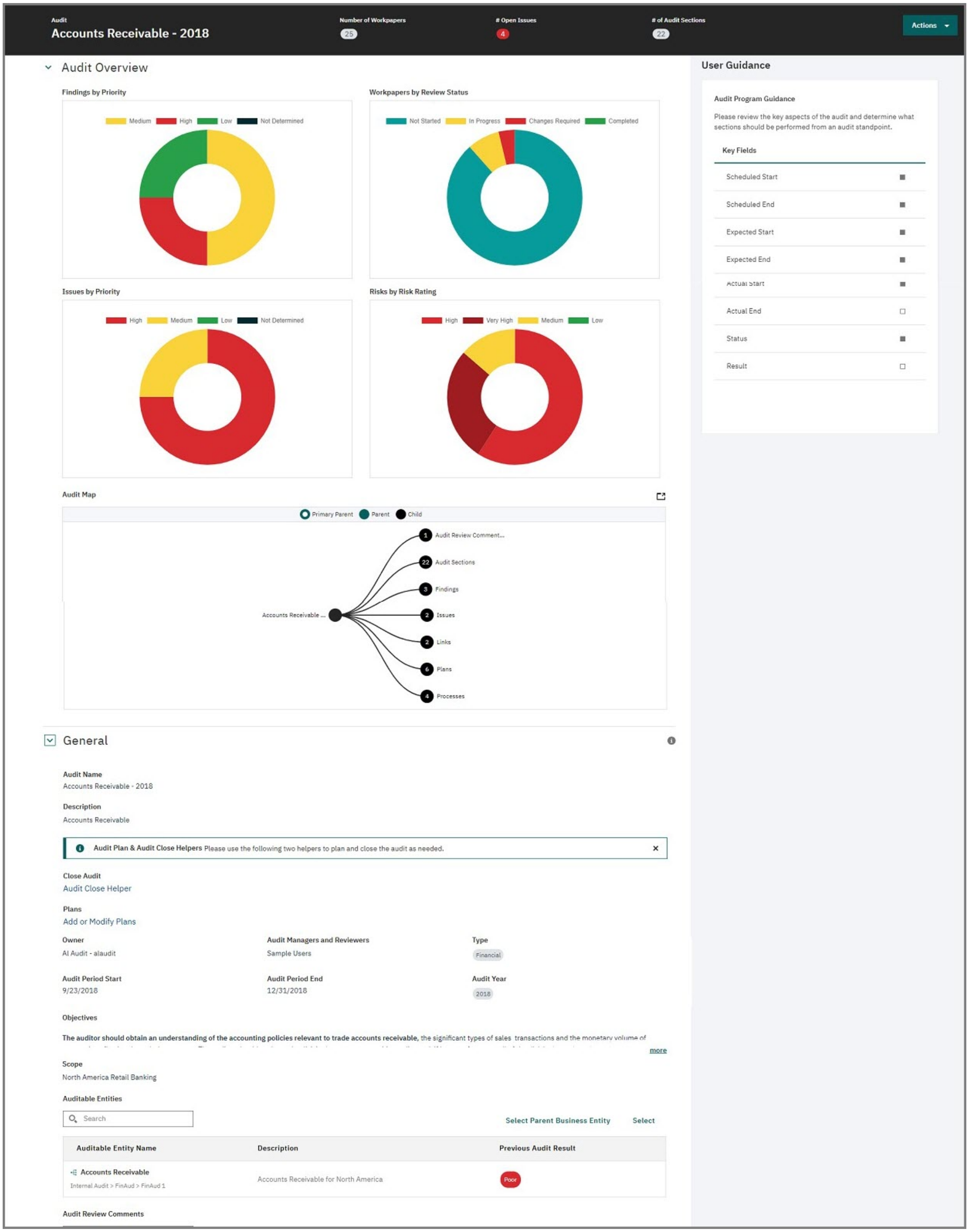


Figure 130. The first sections in the Audit Task view provide a view of the entire audit at a glance

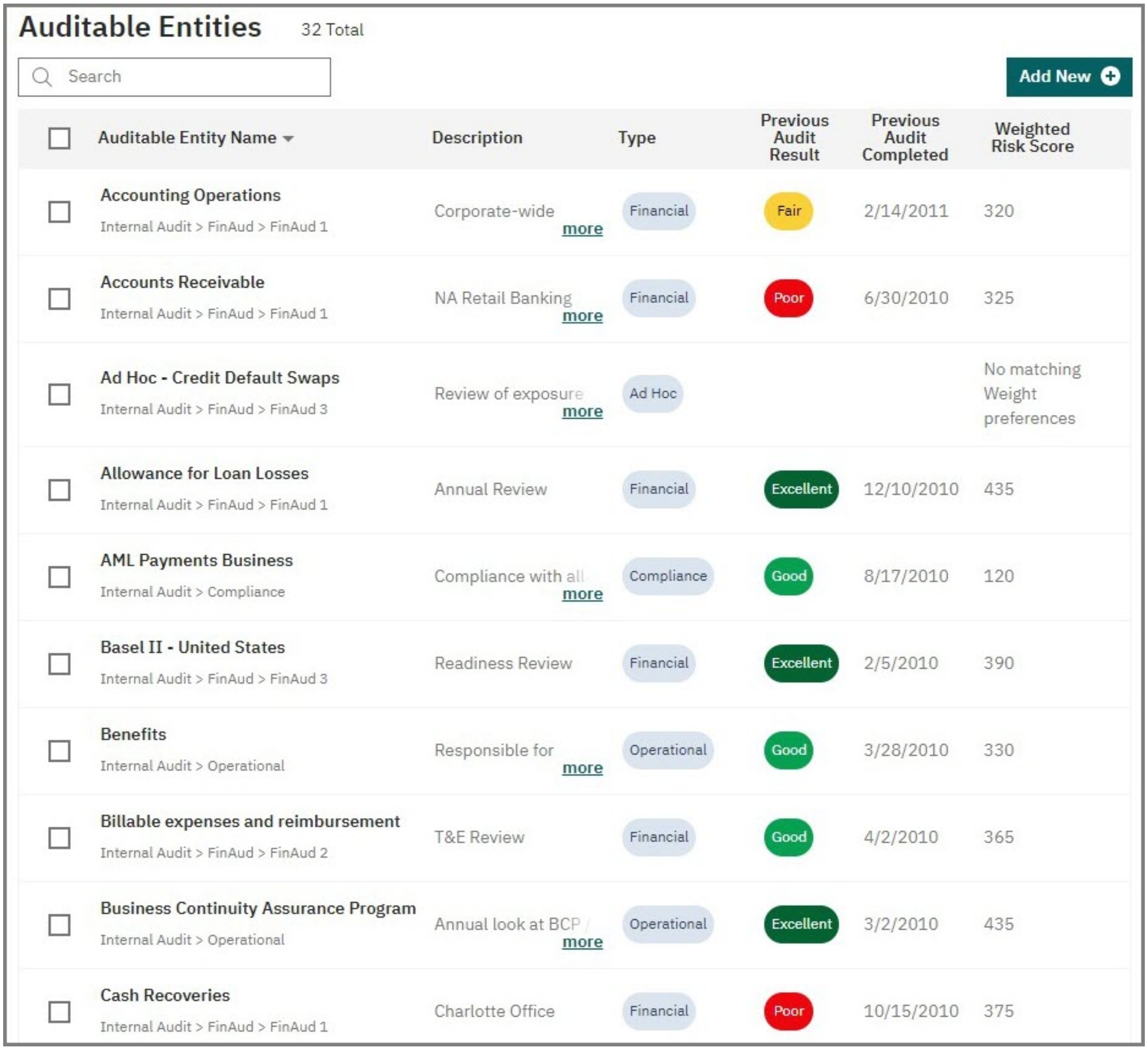


Figure 131. The Auditable Entity Grid view provides key information

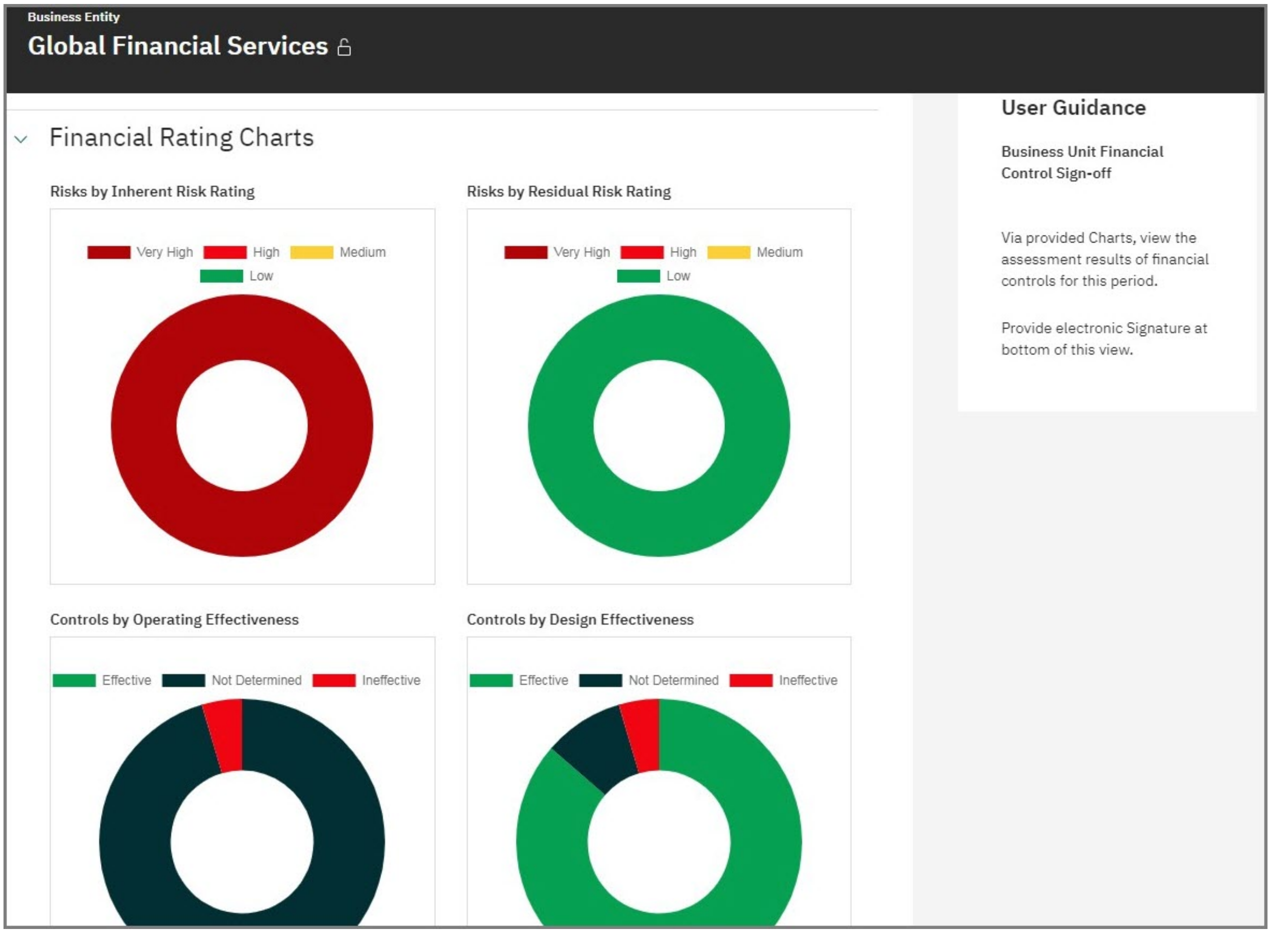


Figure 132. Portion of the Business Entity Task view for users of the FCM Master profile

Out-of-the-box Example Workflows

Four out-of-the-box example workflows have been provided – for Issue, Loss Event, Workpaper, and Finding. You can use the example workflows as templates and learning tools for your own workflows.

The out-of-the-box workflows are examples that might be added to, modified, or deleted in future releases. Use them as examples, with the understanding that they might be overwritten in the future.

Do not use or make changes directly to the example workflows. Instead, learn from the workflows and implement the concepts in your own workflows.

If you have configurable lifecycles or custom triggers on these object types, disable the workflows, lifecycles, or triggers until you decide which elements you will use.

Issue Review workflow

The Issue Review workflow is similar to the Issue configurable lifecycle.

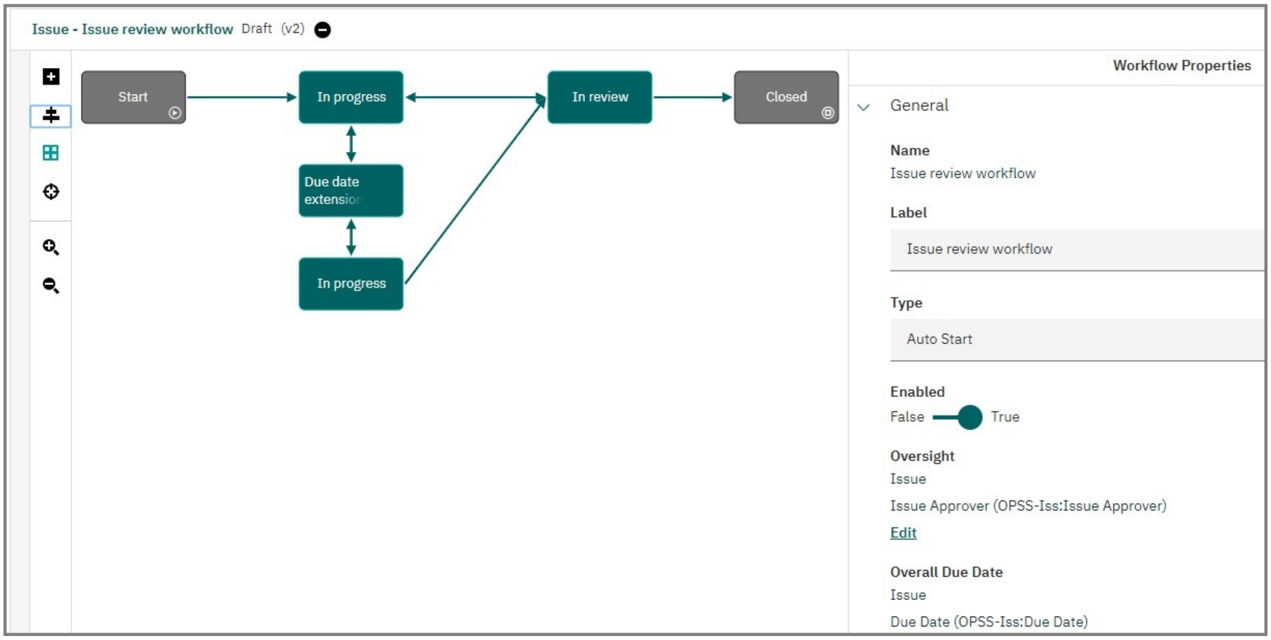


Figure 133. The Issue example workflow

Loss Event Review workflow

The Loss Event Review workflow is similar to the Loss Event configurable lifecycle.

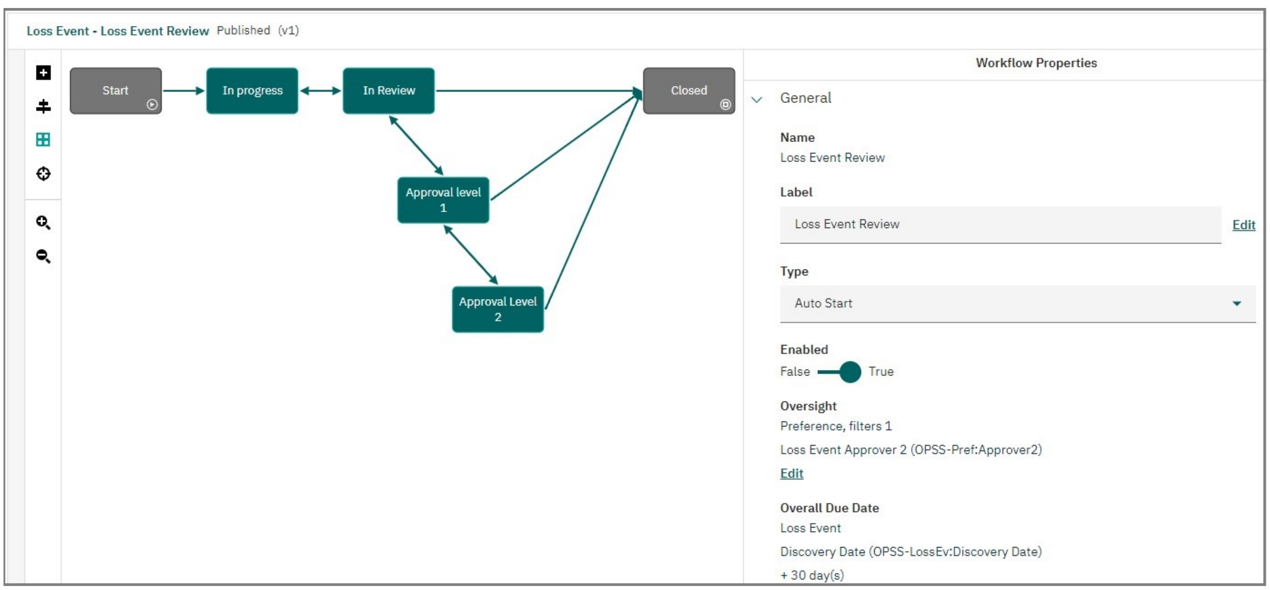


Figure 134. The Loss Event example workflow

Workpaper workflow

An example workflow has been included for the Workpaper object type. The example uses the Workpaper System Task view and depends upon the out-of-the-box schema for Workpaper and related object types.

There are multiple types of Workpapers, for example Notification Letters and Test Evidence. This workflow is at a higher level and does not have elements that are specific to the type of Workpaper. You could choose to have separate workflows or separate workflow branches with conditions specific to each type of Workpaper.

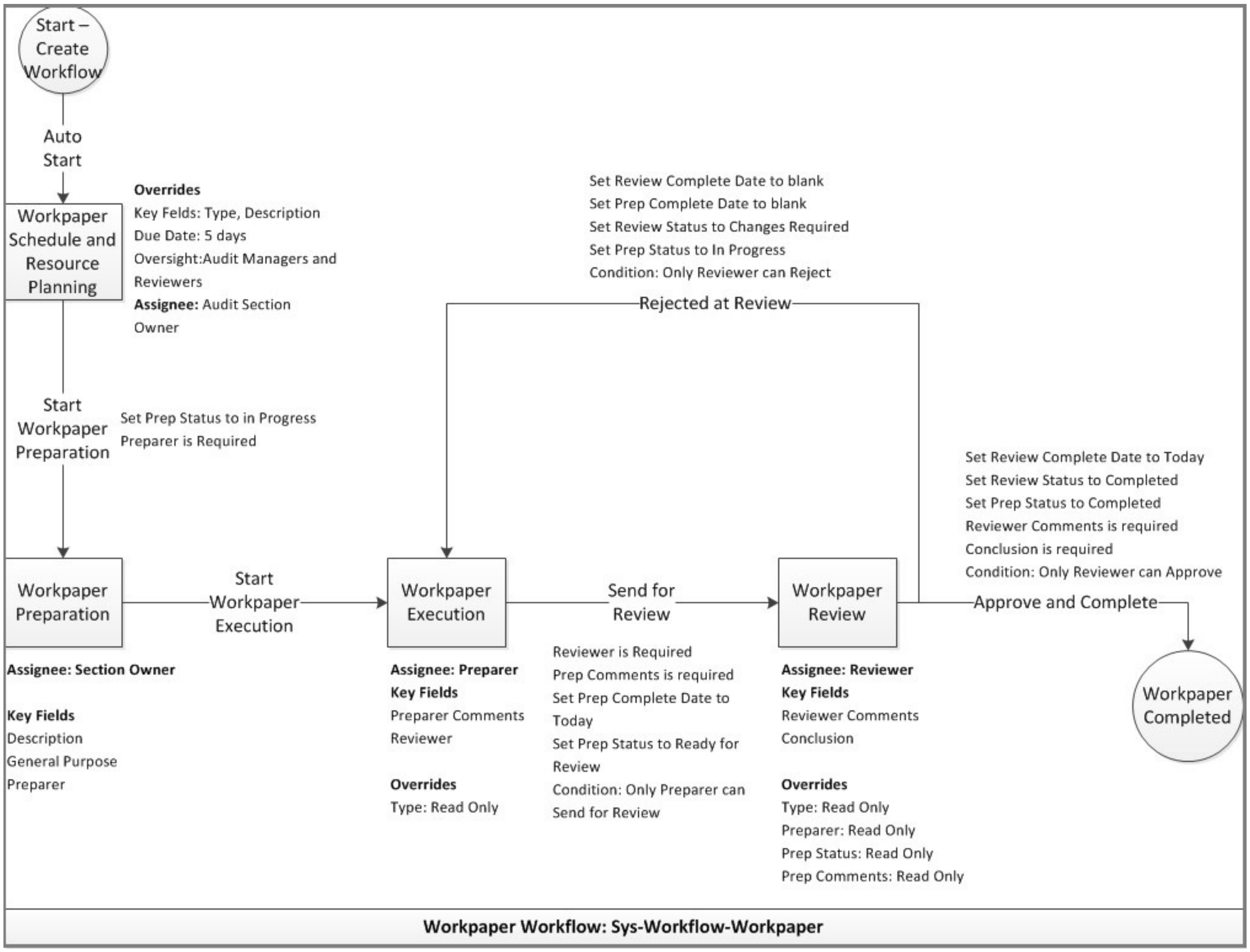


Figure 135. The specification for the Workpaper example workflow

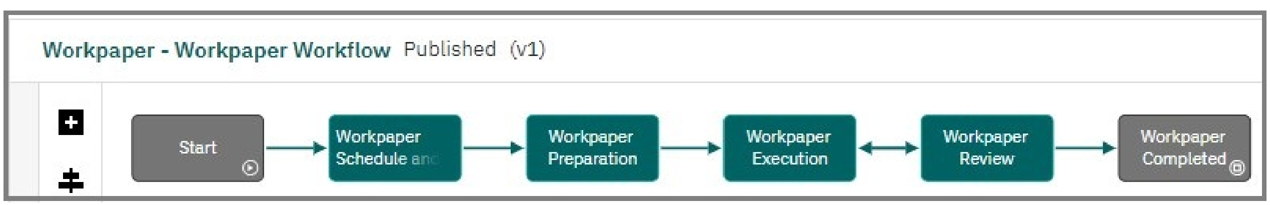


Figure 136. The Workpaper example workflow

Finding workflow

An example workflow has been included for the Finding object type. The example uses the Finding System Task view and depends upon the out-of-the-box schema for Finding and related object types.

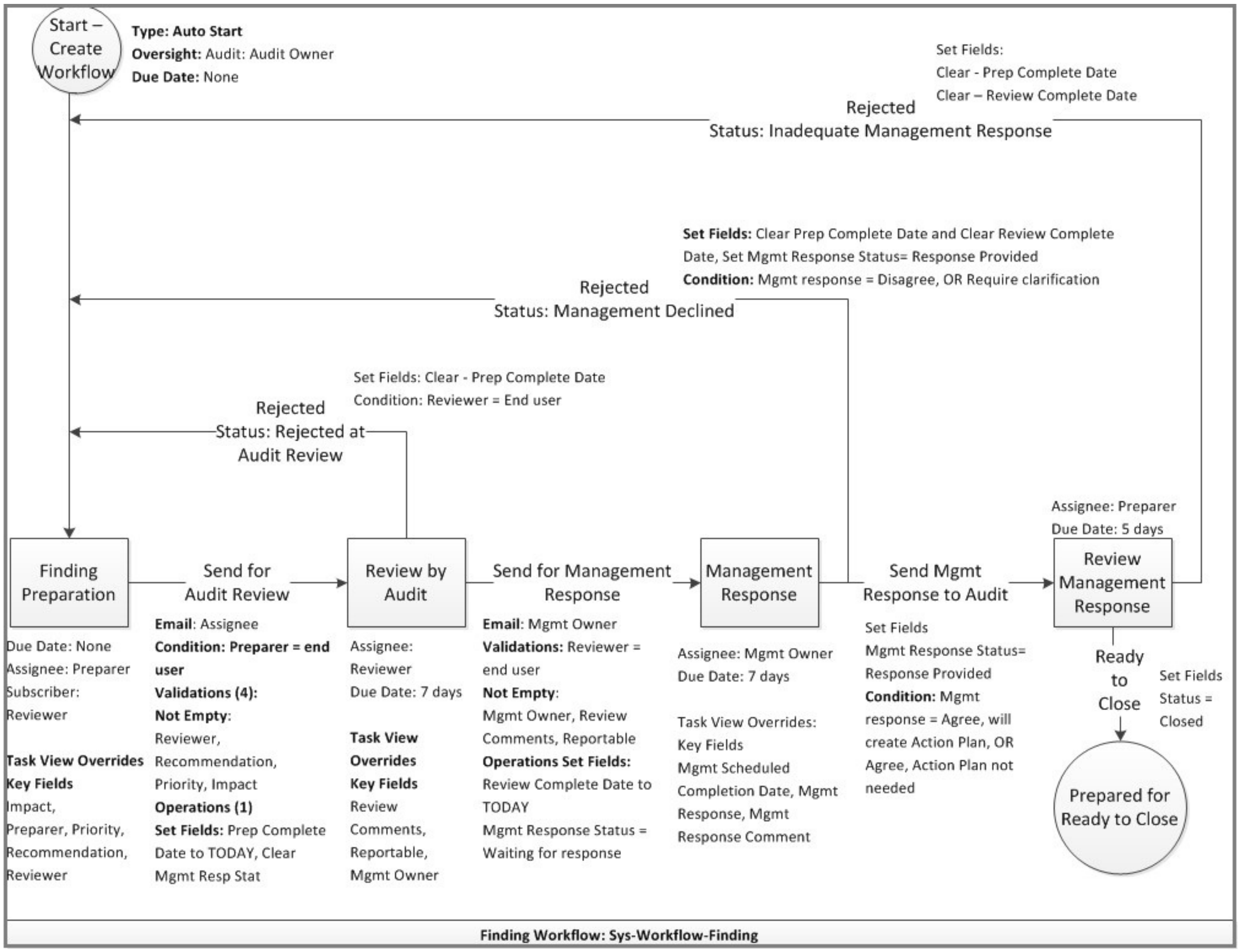


Figure 137. The specification for the Finding example workflow

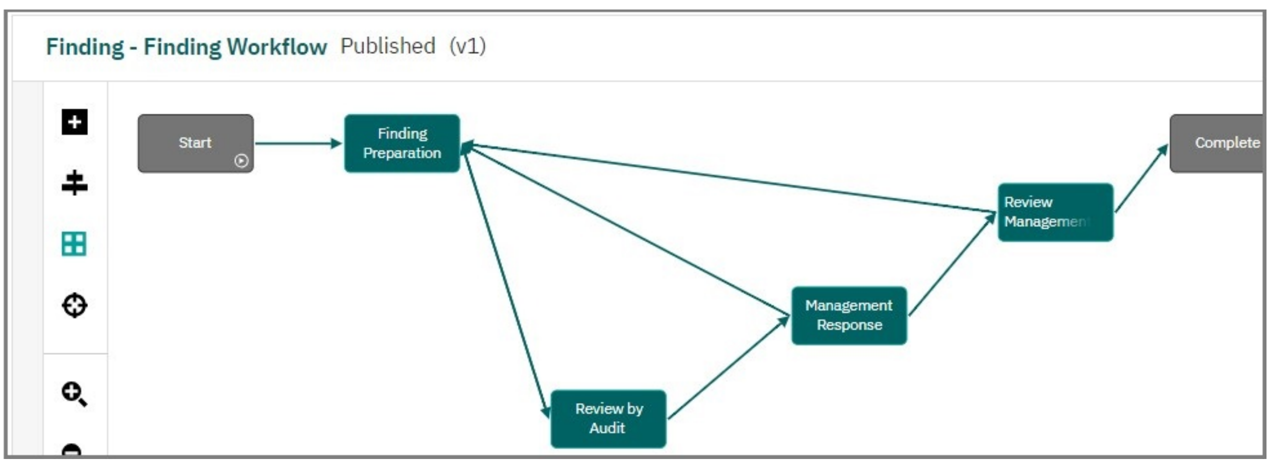


Figure 138. The Finding example workflow

Internal Audit Management Timesheet Module

The audit timesheet capability has been transformed into a complete end-to-end auditor resource management and tracking module. This optional module redesigns and combines the existing Timesheet Entry helper report and Administrator Timesheet Entry helper report into a single Timesheet Entry Helper. A new Timesheet Approval Helper has been added which includes automatic notification to an auditor when one or more of their timesheets has been rejected. Three new auditor dashboards are also included.

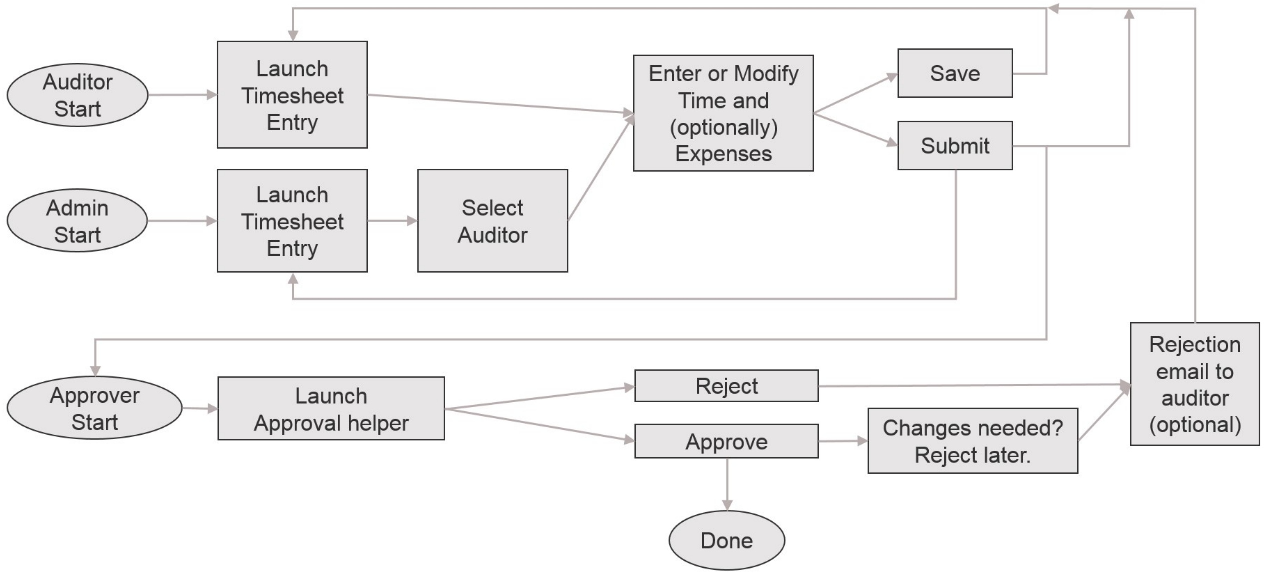


Figure 139. Timesheet process flow diagram

Timesheet Entry Helper

The timesheet entry helper has been redesigned and combines the existing Timesheet Entry helper report and Administrator Timesheet Entry helper report into a single Timesheet Entry Helper. The helper has an improved look and feel, responds more quickly, and has improved messaging to the user. It includes more data entry validations, and allows auditors to delete existing timesheet entries one row at a time.

Members of a configured user group can use this helper to enter time on behalf of another auditor. Auditors can view all rejection comments at once, and can easily jump to timesheets that they need to update as a result of their having been rejected in the past.

Users can now search and filter for the Audit and Plan they want when adding a timesheet row. To help the user choose, administrators can configure the Audit and Plan fields that appear.

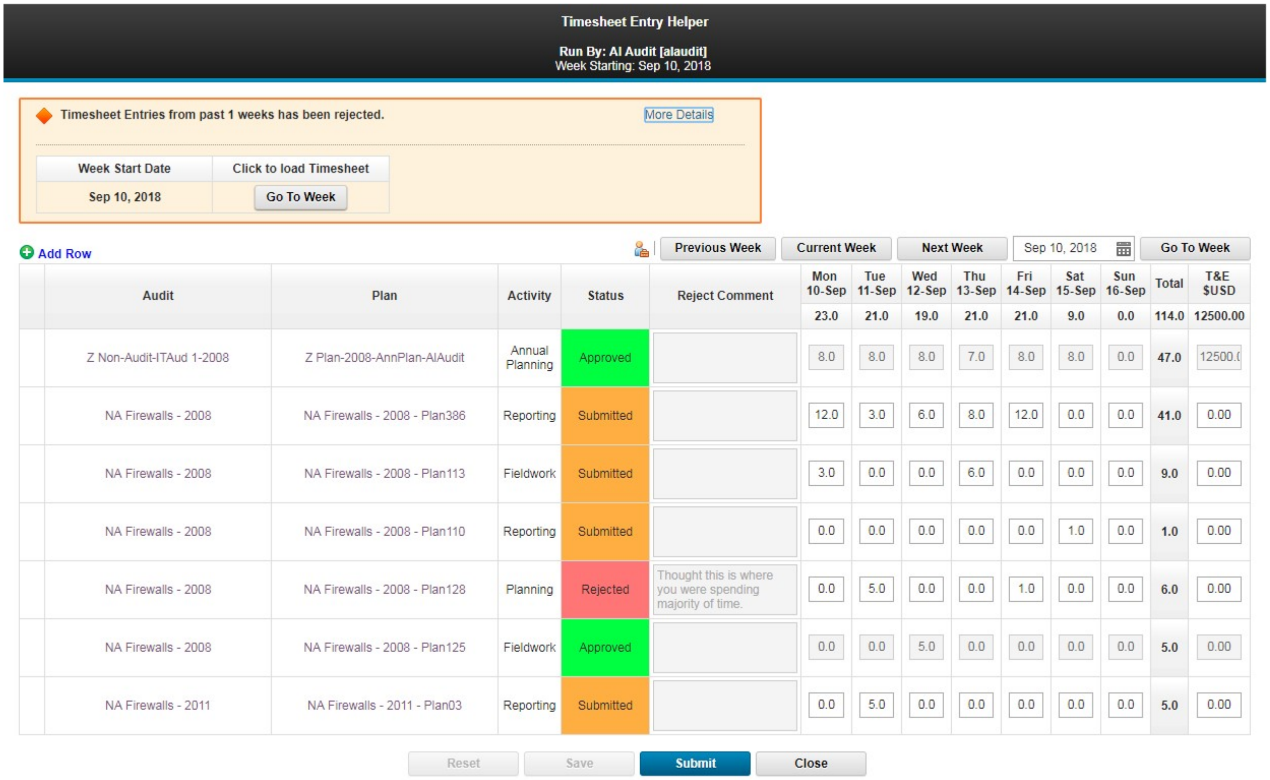


Figure 140. The Timesheet Entry Helper gives the ability to see and easily jump to a rejected timesheet

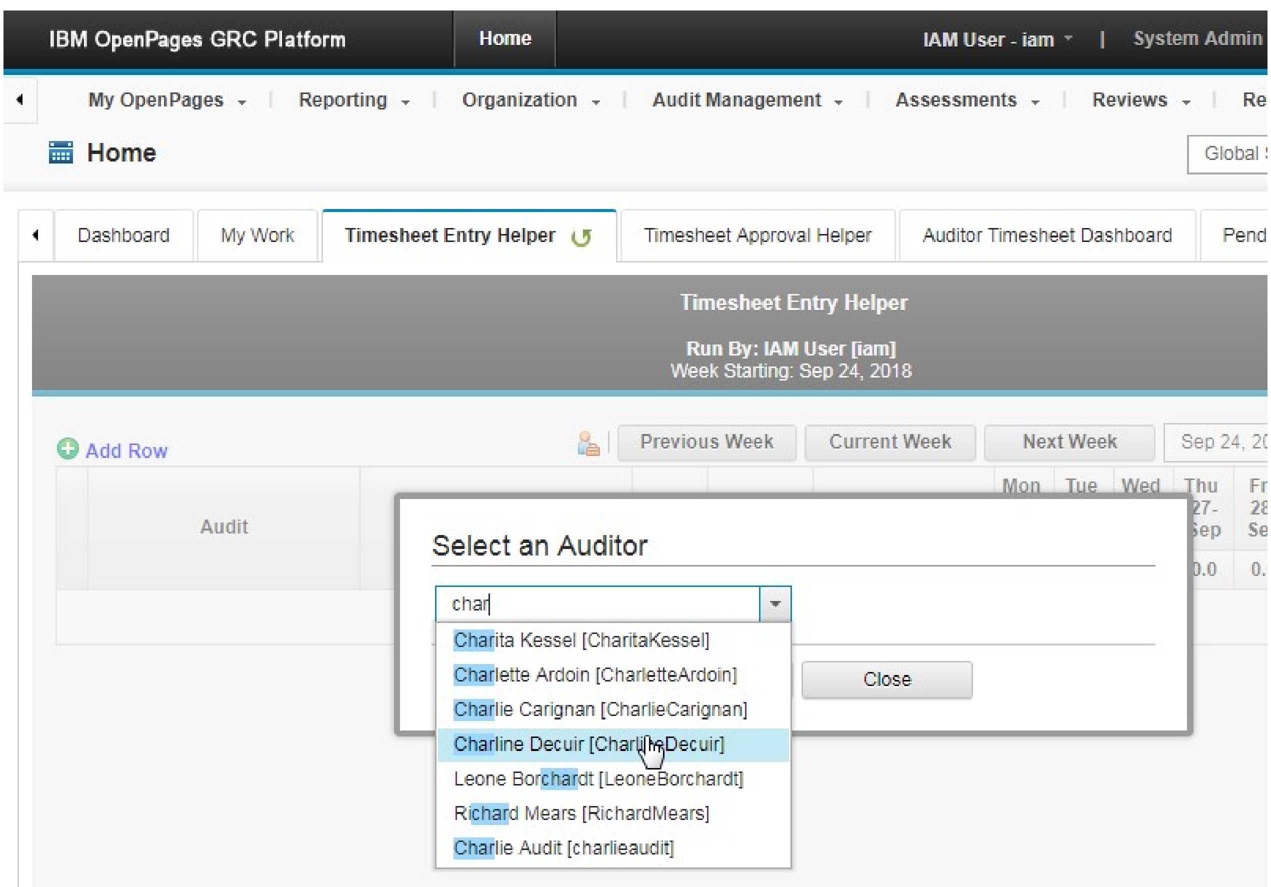


Figure 141. The Timesheet Entry Helper gives the ability to enter time on behalf of an auditor

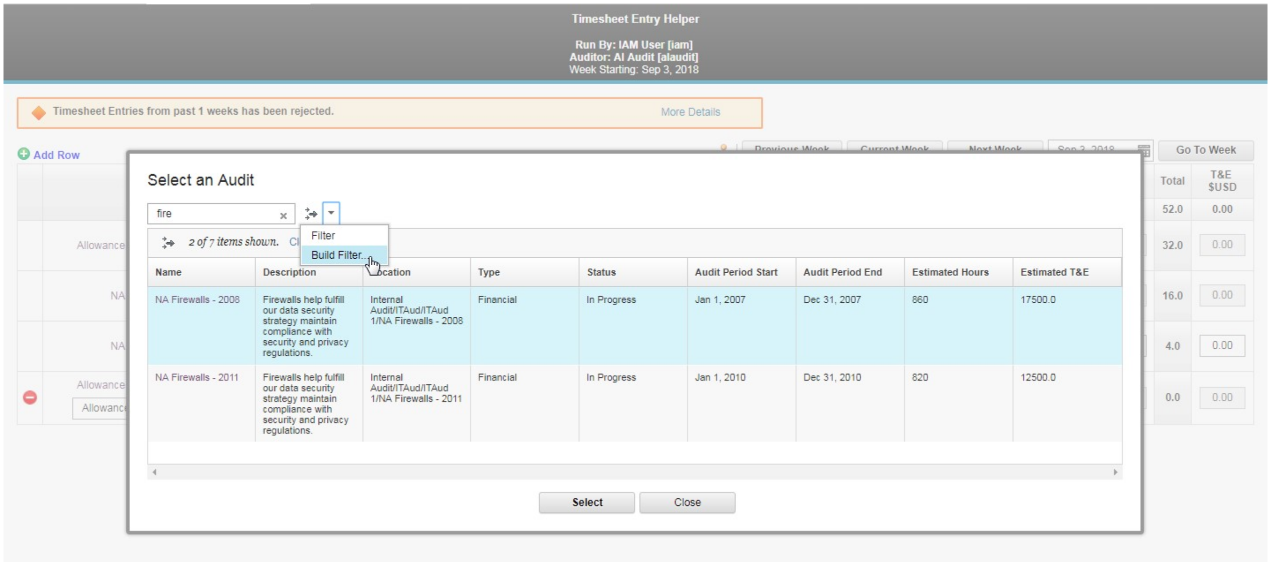


Figure 142. The Timesheet Entry Helper gives the ability to search and filter for an Audit and Plan when adding a timesheet row

Timesheet Approval Helper

The addition of the Timesheet Approval Helper separates timesheet entry from timesheet approval, and gives enhanced ability to determine who can approve or reject timesheets. Configure the approver to be the Audit or Plan Owner or perhaps the Time Approver for an Auditor.

Approvers can handle all of their approvals at once, across Audits and Auditors. Approvers can obtain easy access to the queue of timesheets that are awaiting approval.

The timesheet rejection loop is now closed. Auditors receive optional notification emails when one or more of their timesheets are rejected.

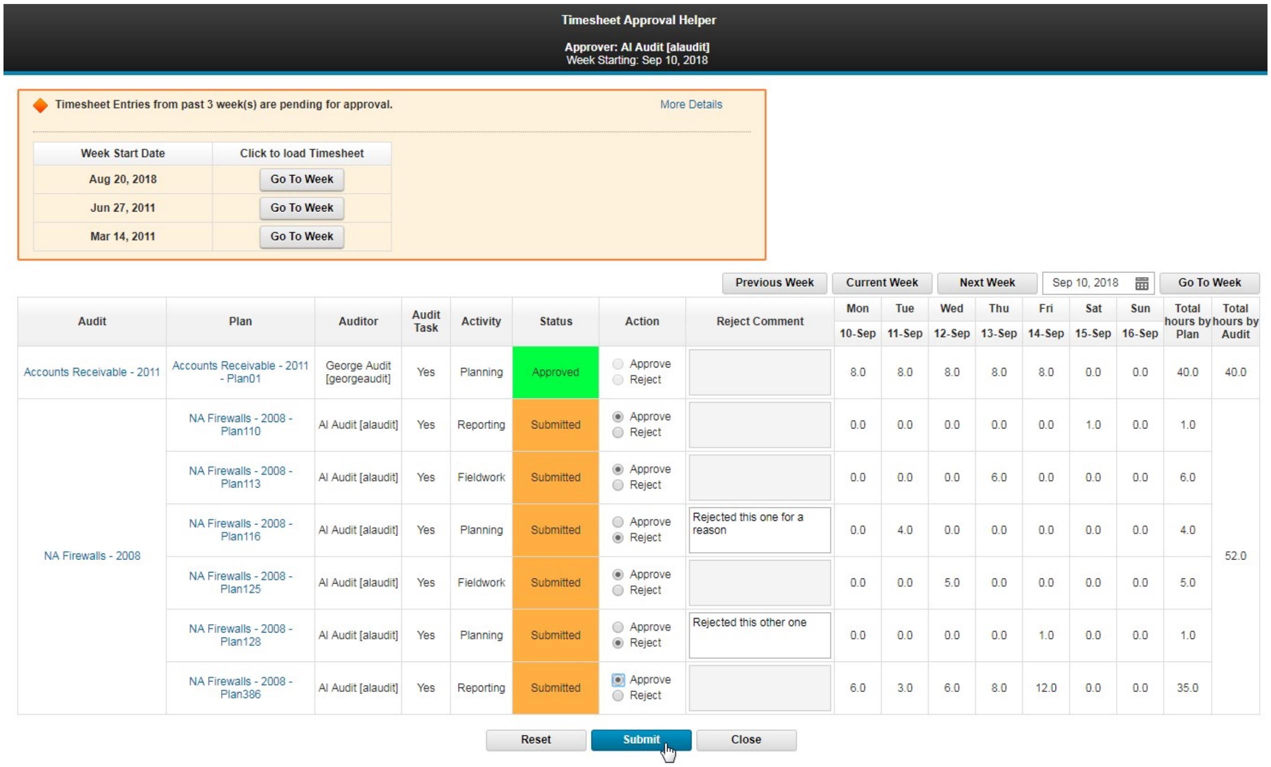


Figure 143. Timesheet Approval Helper with notifications that give easy access to timesheets that are awaiting approval

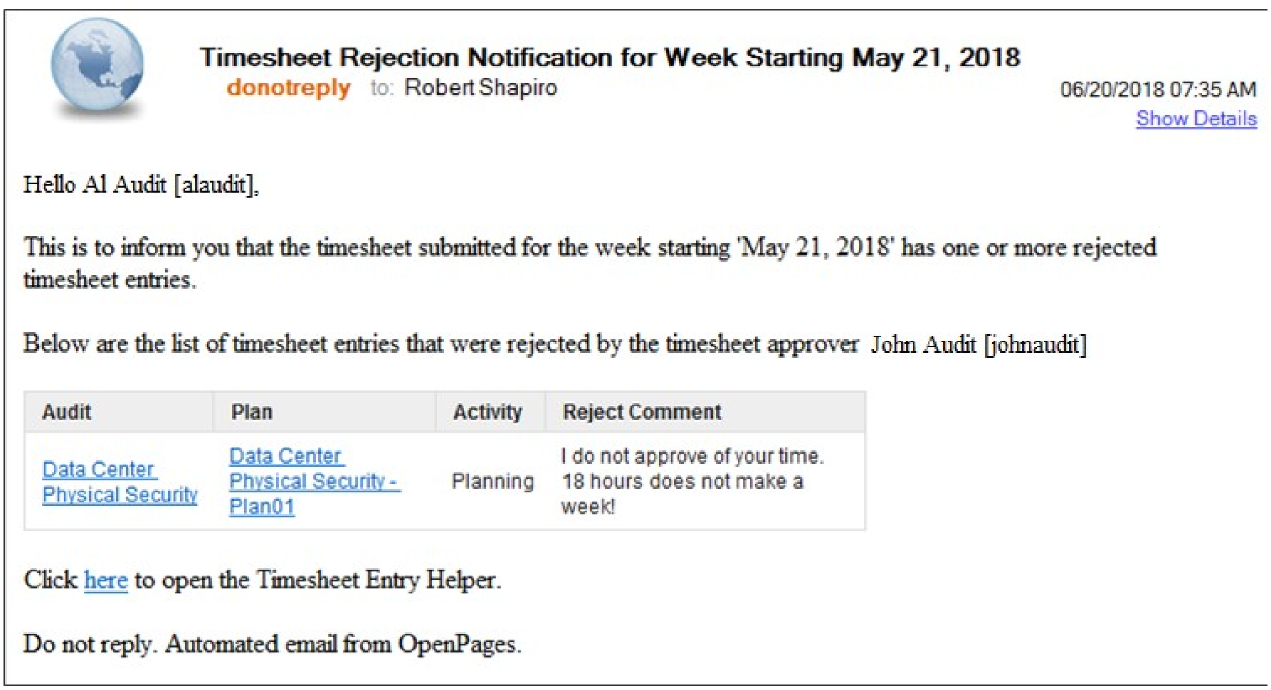


Figure 144. Timesheet Approval Helper: Example email notification of rejected timesheets

Auditor Timesheet Dashboards

Three new dashboards have been added to help you track and manage your audit resources.

The Auditor Timesheet Dashboard shows the status of selected auditors' timesheets for a number of weeks prior to a selected date. The Lead Auditor and Audit Managers can use this dashboard to track auditors not submitting time and to know if resource metrics are up-to-date. Users can drill down to see the details for a week for a particular auditor.

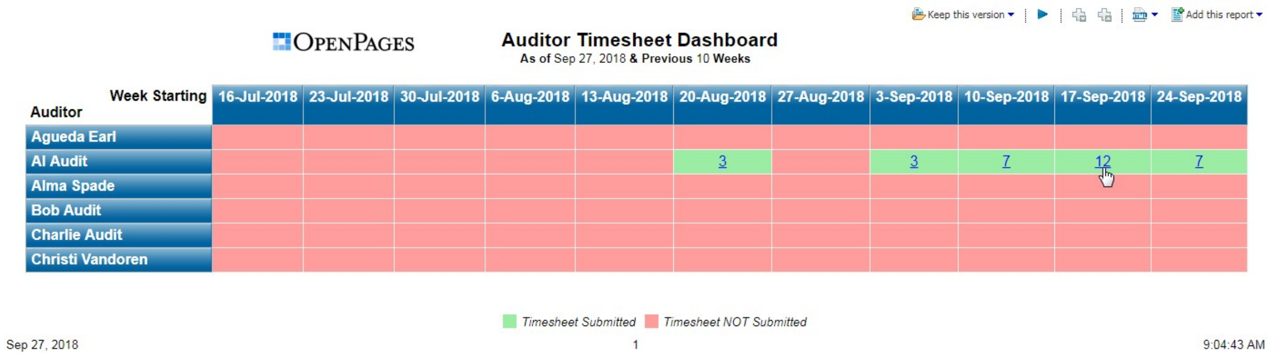


Figure 145. Auditor Timesheet Dashboard

The Pending Timesheet Approvals Dashboard shows timesheets for selected auditors that are waiting approval for a number of weeks prior to a selected date. The Timesheet Approver, Lead Auditor, and Audit Manager use this dashboard to monitor outstanding timesheet entries. They can drill down for further information.

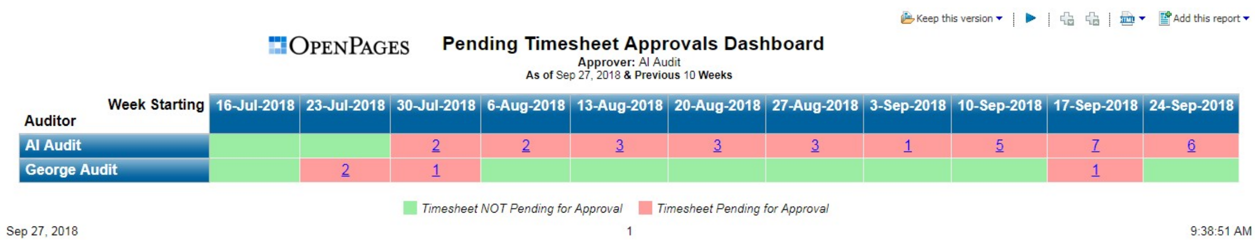


Figure 146. Pending Timesheet Approvals Dashboard

The Auditor Utilization Dashboard shows Auditor utilization for selected Auditors for the selected year. Audit Managers use this dashboard to make sure that they are making good use of their auditor resources, and also to ensure that they are not being overworked.

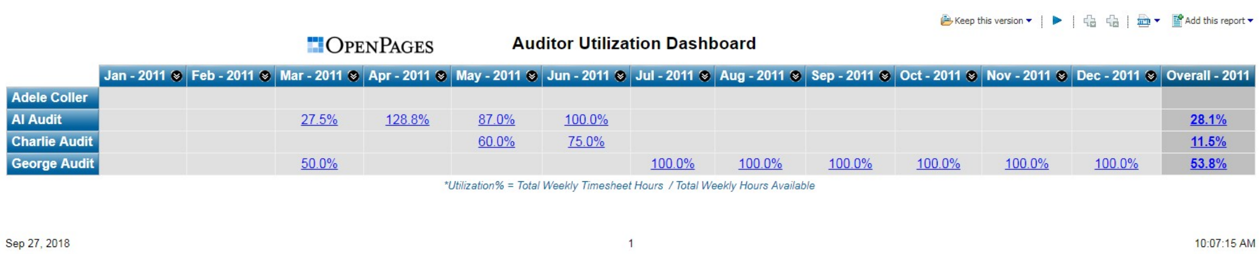


Figure 147. Auditor Utilization Dashboard

The existing Auditor Plan and Auditor Deviation dashboards also help Audit Managers track and manage their Auditor resources.

Administration and serviceability enhancements

Several enhancements have been made to help you administer, maintain, and support IBM OpenPages with Watson.

Mixed Mode LDAP Authentication

IBM OpenPages with Watson can be configured to perform authentication from an LDAP server. But some users (for example, third-party administrators) might not exist in the LDAP server.

The User Provisioning administration interface can be used to configure a user to authenticate against the password stored in OpenPages, instead of the one in the LDAP server. In addition, the feature supports using multiple LDAP servers to authenticate users, in which case you can specify which server to use for each user.

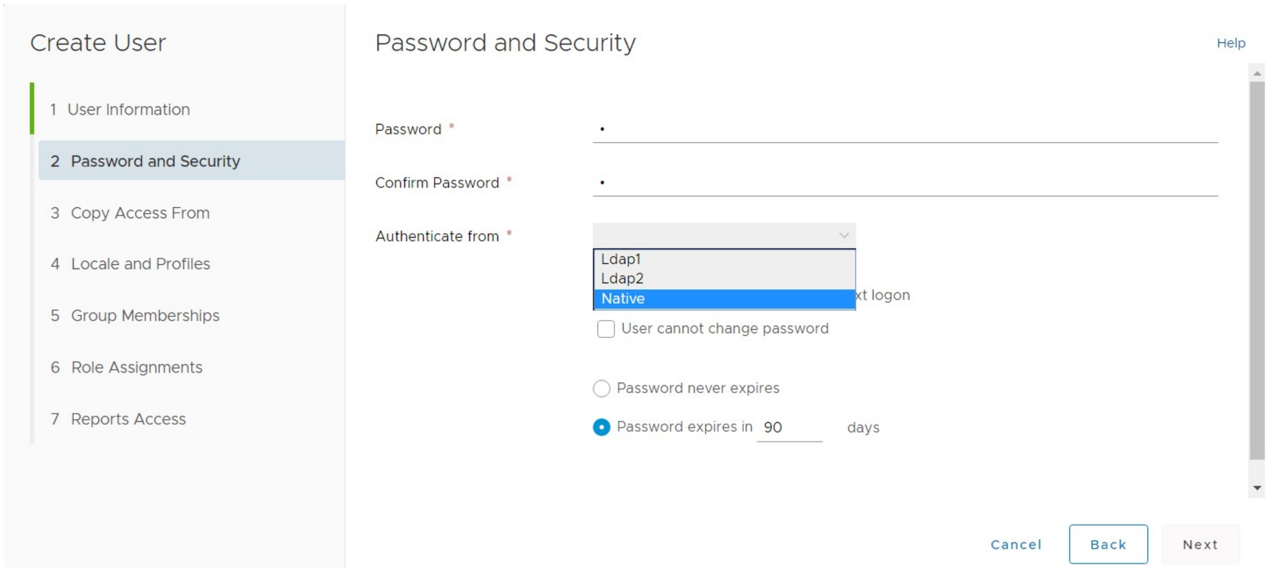


Figure 148. Specify the authentication source for a user

Installation Enhancements

Several enhancements have been made to help you install, deploy, and upgrade IBM OpenPages with Watson.

Installation Server Cards Indicate Operation in Progress

Installation server cards now provide updated information about the operation that is in progress on that server. This feature enables the user to have a more immediate and better understanding of the progress of the install.

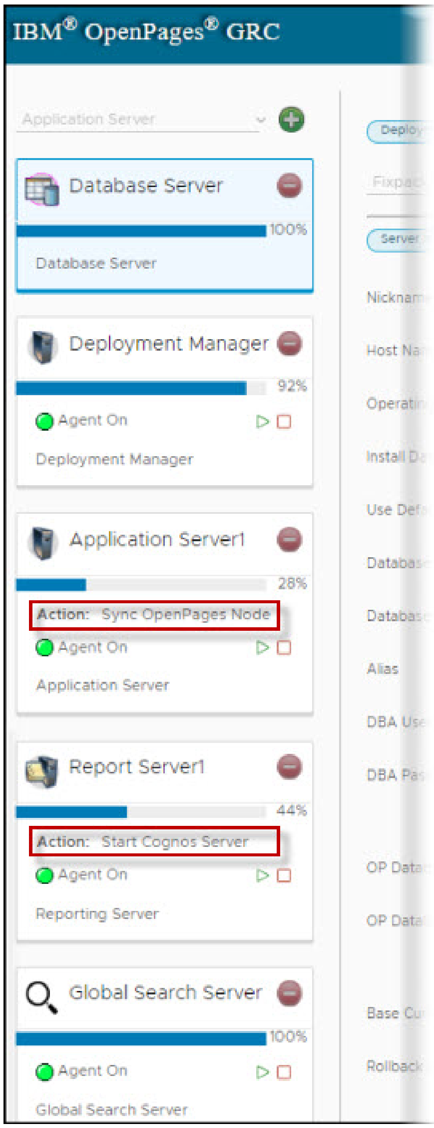


Figure 149. Server cards in the installation app indicate operations that are in progress server

Special Characters in Database Passwords

The set of special characters that can be used in database passwords has been modified to be appropriate for the combination of supported databases and operating systems.

Previously, database validation would fail if the OpenPages schema password contained certain special characters. The following list of special characters is now supported:

. + - [ ] * ~ _ # : ?

Shorten Change Window by Refreshing Data in an Environment

Customers upgrading to IBM OpenPages with Watson 8 and performing UAT in their new environment for several weeks, sometimes need to later refresh their new environment with the latest snapshot of their production data.

This can be done by following new documentation. See Refreshing an 8.0.0.x environment with data from a 7.1.x, 7.2.x, or 7.3.x environment.

OpenPages APIs

There have been some updates to the IBM OpenPages with Watson APIs.

New IBM OpenPages with Watson APIs have been added, documentation of APIs has been improved, and implementers now have the ability to extend the APIs by creating their own custom REST end points.

Anonymize and hard delete APIs

OpenPages maintains a history of GRC objects in previous reporting periods and in the audit trail, even if the data is "deleted" in the current reporting period. GDPR and other regulations and internal data retention and destruction policies might require the "hard" delete of some data. And privacy and confidentiality concerns might require the anonymization of certain free form text data. This release of OpenPages provides capabilities to meet these needs.

Implementers can build a solution in OpenPages to anonymize user attribute data to satisfy the GDPR right to be forgotten, and related compliance and business needs.

Administrators already had the ability to anonymize or delete user attributes such as First name, Last name, Email address (anonymize only), and Description. But these elements would still be present in the audit trail. New Java and REST APIs are added to allow anonymization of these values, including in the audit trail.

Integrate OpenAPI (Swagger) with the Public REST API

REST APIs have shifted to using OpenAPI/Swagger documentation for API specification and to generate user-friendly documentation of APIs.

The Swagger format is becoming more widely adopted, and beyond documentation purposes, can be used to facilitate automated API discovery and interaction.

Extend REST API Services for Custom Behaviors

Implementers can extend the REST services with their own services for custom behaviors that are not provided in the existing app or API services.

This new capability can be leveraged by implementers to meet customer requirements that are not supported by product REST API functionality.

Supported software

IBM OpenPages with Watson 8.0.0.2 adds support for new versions of some software:

OpenPages 8.0.0.2 adds support for Microsoft Windows Server 2016 and for Oracle 12.2.0.1.

OpenPages Internet Explorer support is for Microsoft Internet Explorer version 11 Native Mode. OpenPages now provides the ability to force a session that comes to the application in Compatibility Mode to be rendered in Native Mode.

For more details about supported environments, see the Supported Environments website.

Requests for Enhancement (RFE) Delivered

The following RFEs are delivered in this release.

Note: RFEs requesting user interface enhancements are considered to be delivered if available in the task-focused UI.

You can access each RFE via a URL that starts with `http://www.ibm.com/developerworks/rfe/execute?use_case=viewRfe&CR_ID=` and ends with the RFE ID.

Table 6. Requests for enhancements delivered in 8.0.0.2

ID	Headline	Comment
86050	Password of database cannot contain spaces and special characters.	The set of special characters that can be used in database passwords has been modified to be appropriate for the combination of supported databases and operating systems. See "Special Characters in Database Passwords" on page 163.
100291	Ability to set default sort order and filters on all object Views	Task Focused UI grid views can now have a default filter to display only objects active in workflows. You can also specify default filter criteria in the grid view definition, which overrides the default workflow filter. See "Default Grid View filter" on page 141.
100405	Trigger to automatically create an Issue based on test failure, KCI failure, etc.	Embedded workflow operations can be Java actions. An example action is provided out-of-the box, which can be used to create a new object. See "The GRC Workflow Designer" on page 136.
102574	Ability to limit which parents an object can be created for in the add helper	Task Focused UI Creation views can be configured to include only the desired parent object types.
102575	Format of Default Date in Add Helper Should be Consistent	Task Focused UI Creation views have a consistent date format.
106283	Mixed user handling	User Provisioning includes an ability to select for each user a particular LDAP server for authentication, or to use native authentication. See "Mixed Mode LDAP Authentication" on page 162.
107139	Request for better HTTP URL Management for the various Product features (Consolidate, Make Configurable, Document)	Documentation has been provided for changing the host name of various OpenPages servers. See Update host names.
107884	Add the ability to send messages to users on login	The OpenPages login page includes optional customer specified text. See ."OpenPages Login Page" on page 147.
109122	Ability to create custom Rest API Calls	Customers can extend the REST API calls. See "OpenPages APIs" on page 164.

Table 6. Requests for enhancements delivered in 8.0.0.2 (continued)		
ID	**Headline**	**Comment**
117465	Cannot re-submit a rejected timesheet without making changes to it	A new timesheet module is now included with OpenPages Internal Audit Management. The Timesheet Entry helper can now be configured to allow rejected timesheets to be resubmitted without making changes to them. See "Internal Audit Management Timesheet Module" on page 156.
118830	OpenPages 7.4 - IE 11 Compatibility Mode	OpenPages Internet Explorer support is for IE11 Native Mode. OpenPages now provides the ability to force a session that comes to the application in Compatibility Mode to be rendered in Native Mode. See "Supported software" on page 164.
118922	Privacy Notice on OpenPages login page	The OpenPages login page includes an optional customer specified privacy notice and optional customer specified privacy link. See "OpenPages Login Page" on page 147.
120356	Create Functionality for Basic Trigger Configuration via UI (Notifications, basic workflow, dependent field values)	Embedded workflow provides GRC workflow capabilities, configurable field validations, field setting operations, and email notifications. Task View definitions can specify dependent field behaviors. See "Easily Configured Embedded GRC Workflow" on page 131.
121060	OP 7.4 support on Windows 2016	OpenPages 8.0.0.2 adds support for Windows Server 2016. If using Oracle, this must be with the newly added support for Oracle 12.2.0.1. See "Supported software" on page 164.
126458	New Currency Code VES	A new currency code, VES, has been added to OpenPages. In addition, other new ISO currency codes YN, MRU, STN, and UYW have been added.
115768	Hide/deactivate old reporting periods from drop-down menus in UI	The reporting period dropdown will display only if the customer has created at least one reporting period. This removes distraction for users, and makes more room for other elements in the page header. See "Reporting Period Dropdown" on page 149.

Chapter 12. New features in version 8.0.0.1

The new features in IBM OpenPages with Watson 8.0.0.1 include the following enhancements.

Platform enhancements

Enhancements to functionality are included in this version of IBM OpenPages with Watson.

Task Focused UI

IBM OpenPages GRC Platform 8 introduces a new task focused user interface. The task focused UI represents a continuation of the infrequent end user applications, and a revolutionary combination of power and simplicity, resulting in a great user experience. The Questionnaire, Approval app, and Loss Event Entry app are all focused on a narrow set of use cases, while the new task focused UI is focused on satisfying a broader set of use cases. This user interface is optimized for use by infrequent users in the first line of defense. Any particular user or user group can be assigned the ability to access only the new UI, only the standard UI, or both.

The user interface includes several primary elements:

- Dashboard, a profile-based page that is used to provide access to key reports, and is configured to bring to the user the work that they need to do. From the Home page, the user can easily get to the Grid view.
- Grid view, which is used to show the user a set of information of the same type, and to navigate to the Task view.
- Task view, which includes information about the item in question, and a rich set of configurable contextual information, providing everything the user needs to perform their task. A set of configurable business rules ensures that the correct task view for the task at hand is automatically provided for the user.

Dashboard

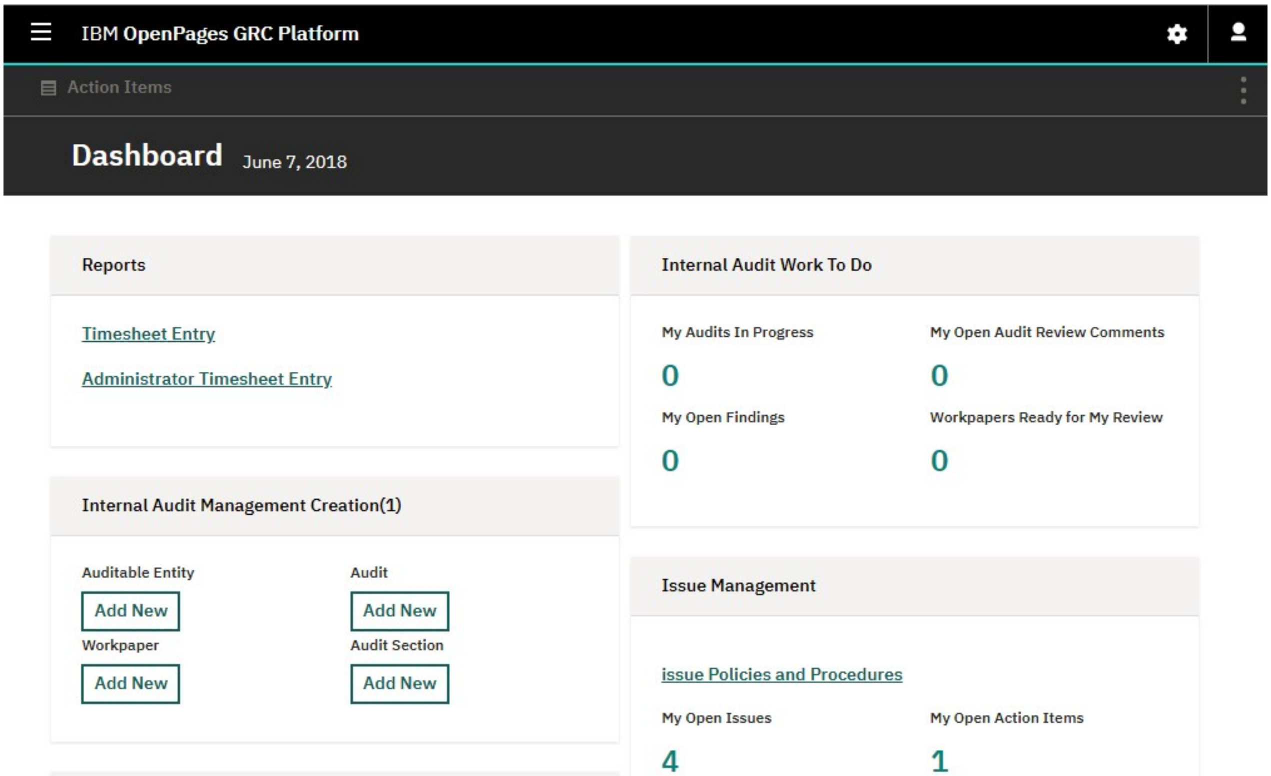


Figure 150. Dashboard brings key information and work to the user

Grid view

The Grid view provides a filtered list of objects of a particular type. The user can easily find the specific set of objects they want by using type-ahead text search, or can apply any of a set of predetermined filters with one click.

Configuration of colors makes it easy to scan the results. A single click on a row brings the user to the appropriate task view for that object that is based on the current state of the object and that user's role on it.

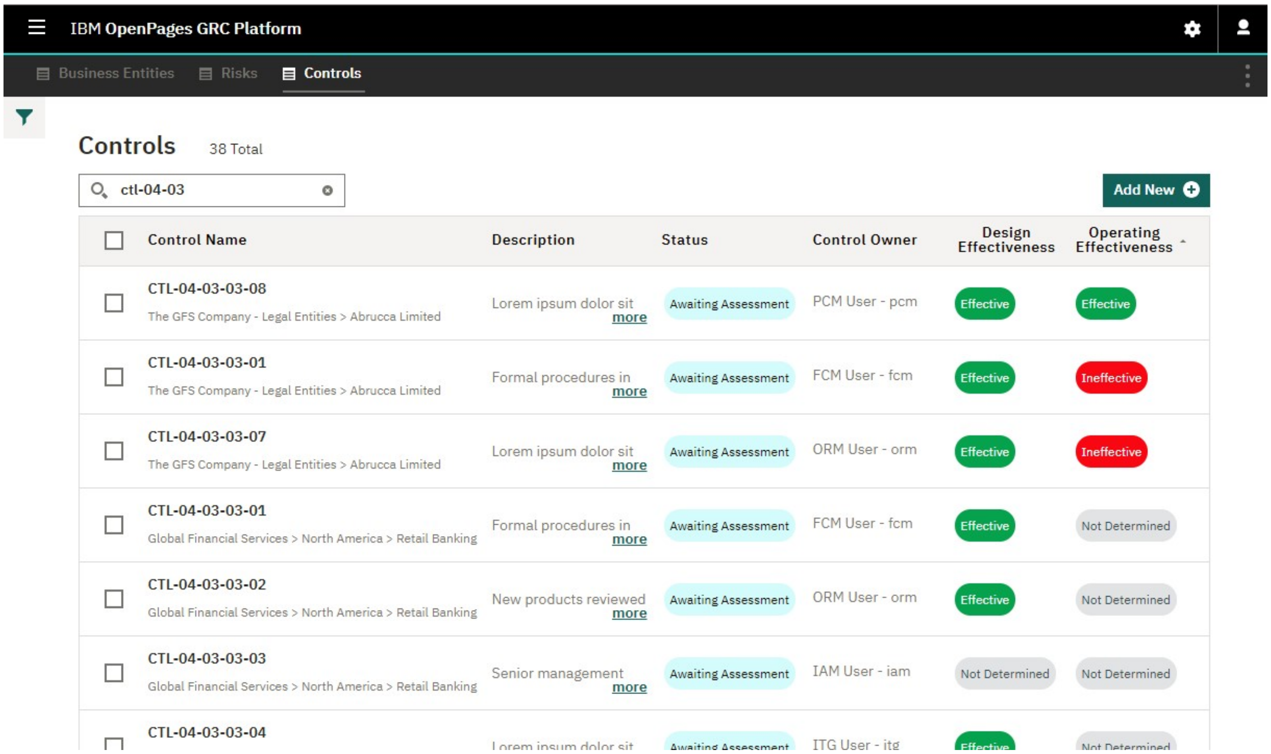


Figure 151. Control Grid view with quick text filter

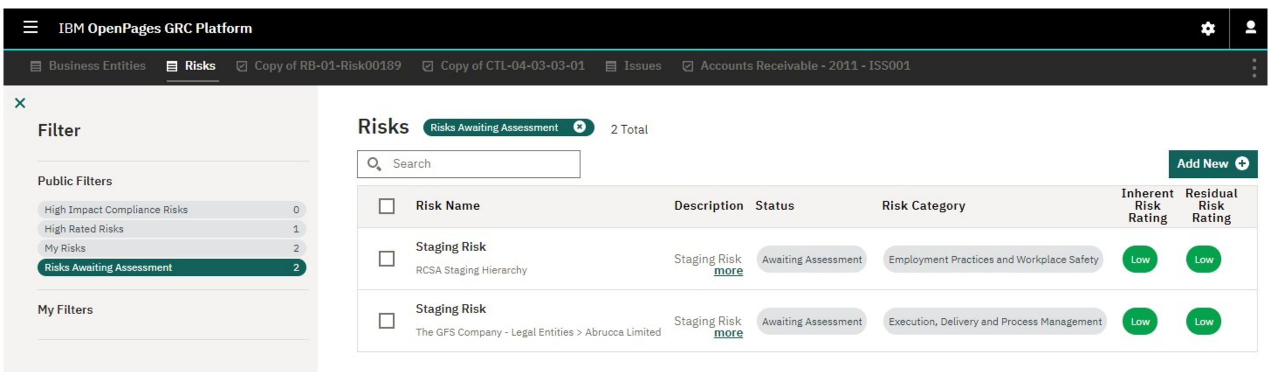


Figure 152. Risk Grid view with advanced filter applied

Task view

A set of default task views is provided and customers can create and configure their own views to reflect their own schema and methodology.

Key configurable elements on a task view include:

- View selection rules/business logic that determines which view is shown when and to whom.
- Field rules/business logic on a field or between fields, such as that the Start Date must be before the End Date and the Actual End Date must be Today or before.
- Task view header bar that contains key information as field values or counts or related objects.
- Primary actions that appear in the task view header and facilitate the user moving the object to the next stage in its lifecycle. These actions come from any set of enumerated field values, or from the configurable lifecycle transitions for the object.
- Secondary actions, which appear in the body of the task view, including buttons to launch helpers, add child objects, associate to other objects and take other object level actions.
- Fields from the object or from any related object, up or down the hierarchy from the selected object.

- A view of information from related objects, which can be rendered as lists, cards, tree diagrams, counts, or charts.
- Customer-specified guidance that helps the user understand the methodology, purpose, and details of the task. The guidance is optionally available at the field level, which is shown inline typically for a section of fields, and in a guidance panel that provides customer-specific help on their methodology for the current task, and an interactive indication of which fields are key for this task.
- Drag and drop multiple files for attachment or update in bulk.
- Ability for the user to easily modify their locale, profile, or password or switch to the standard user interface.

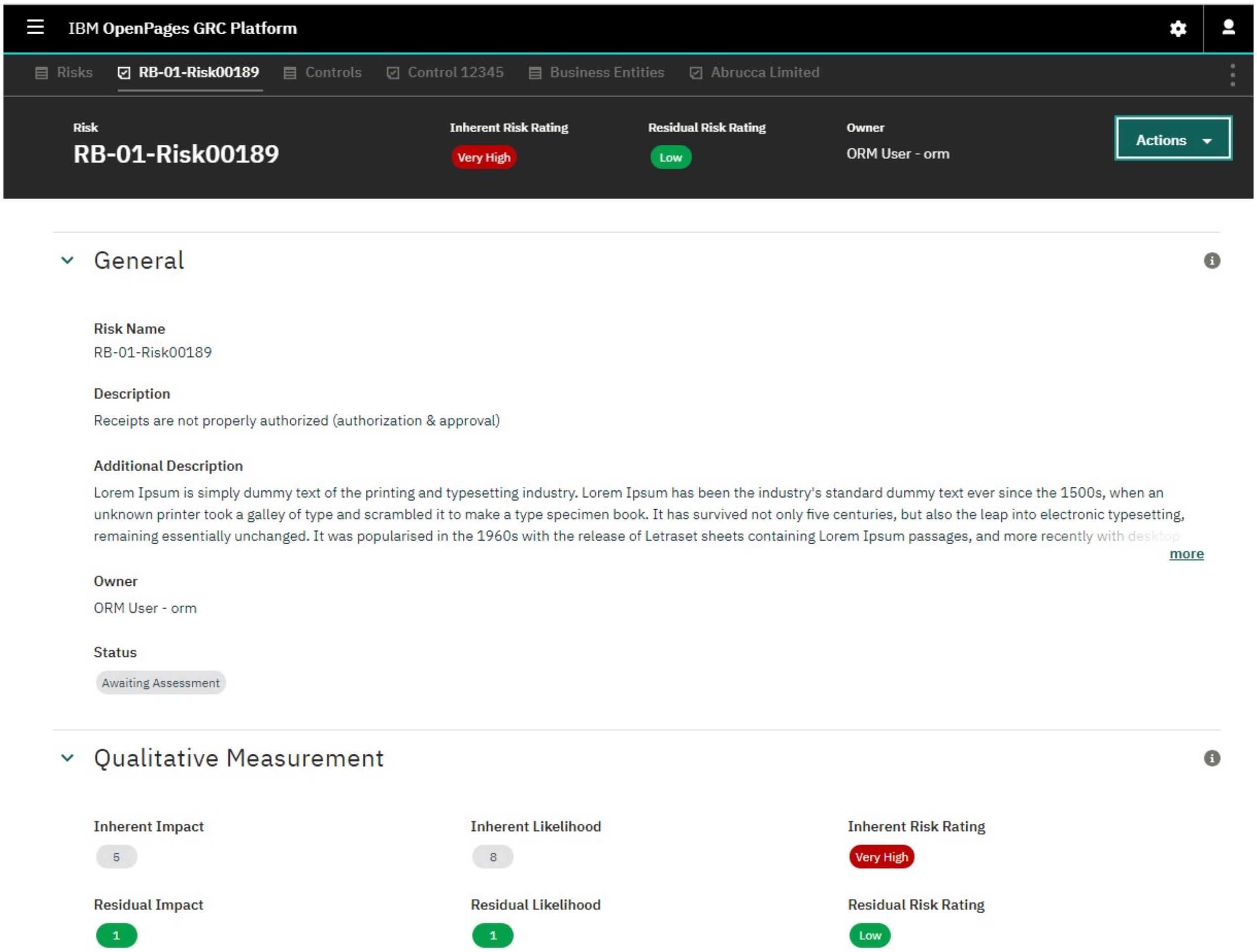


Figure 153. Task views are configured for the current state and task with just the right data and actions

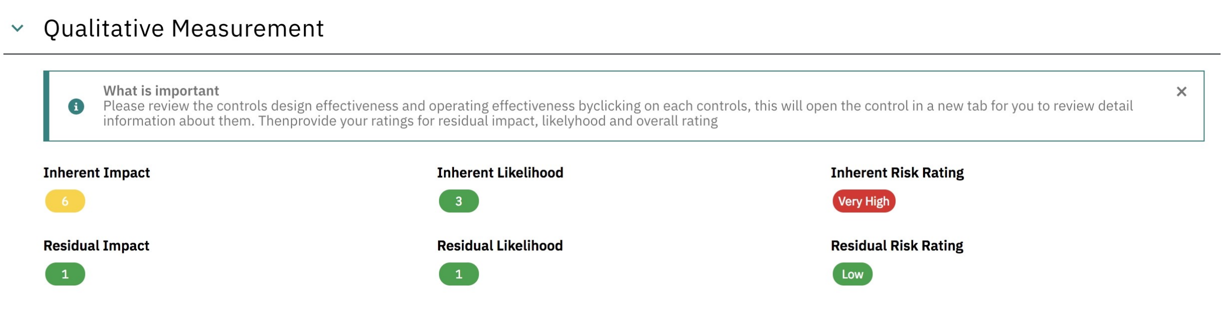


Figure 154. Task view inline guidance helps the user accomplish their task

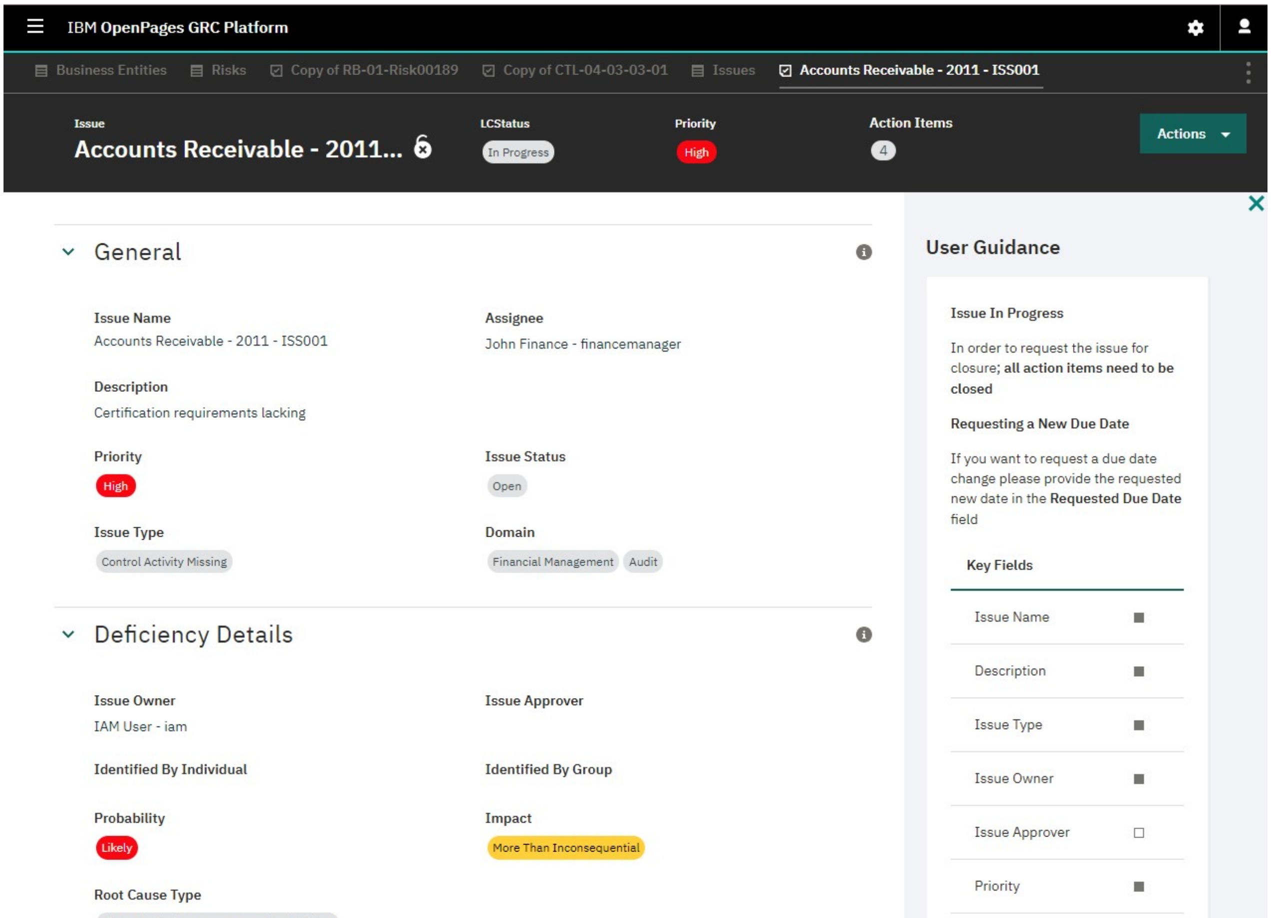


Figure 155. Task view guidance for just in time methodology training and highlight of fields to be worked on

Simplified file upload

IBM OpenPages GRC Platform 8 solves the complexity of file attachments! Upload multiple evidence documents at once using drag and drop. The system automatically figures out if you are uploading a new document, or modifying an existing one. It handles all of the check in, check out, upload and modification for you in the background, making it effortless for the user.

Once uploaded, a single click lets you download or view the document.

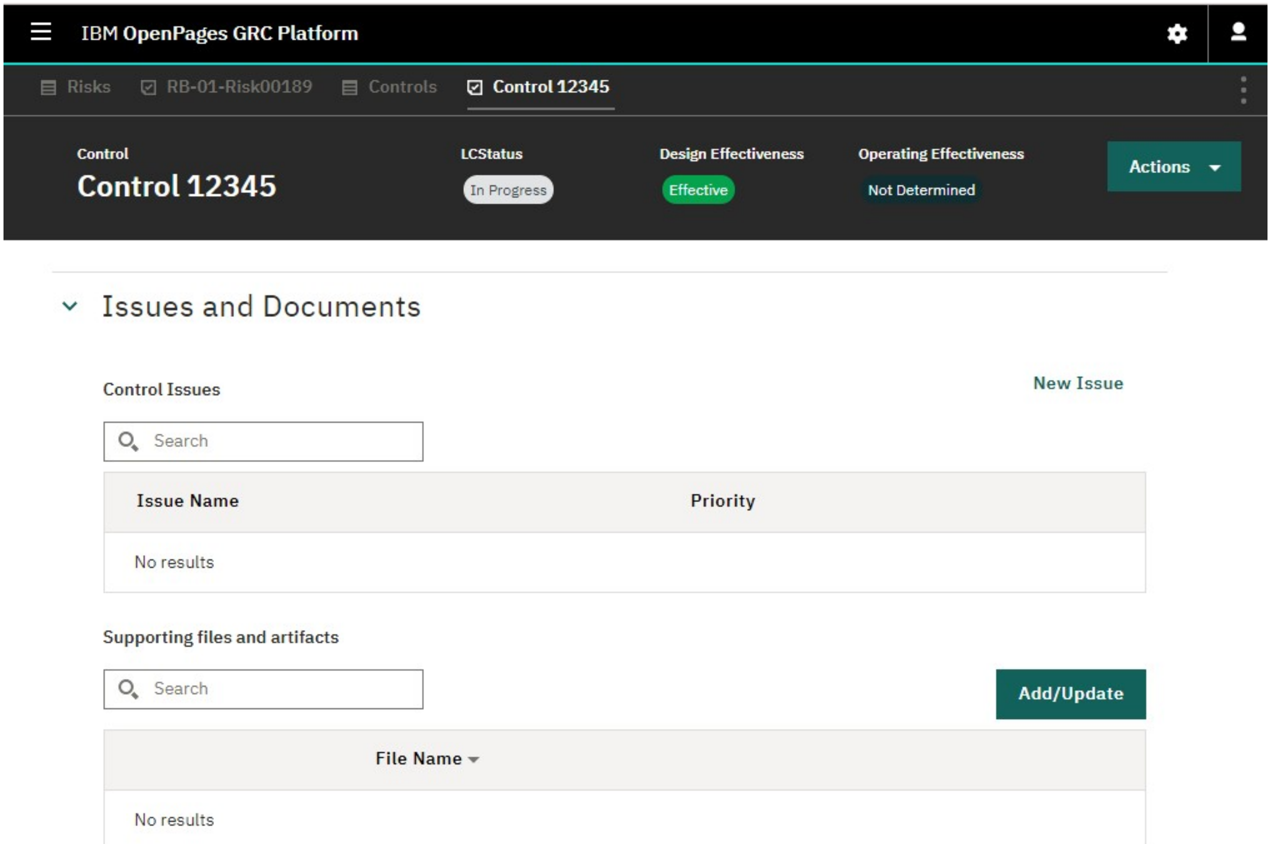


Figure 156. Files configured on a task view for Controls

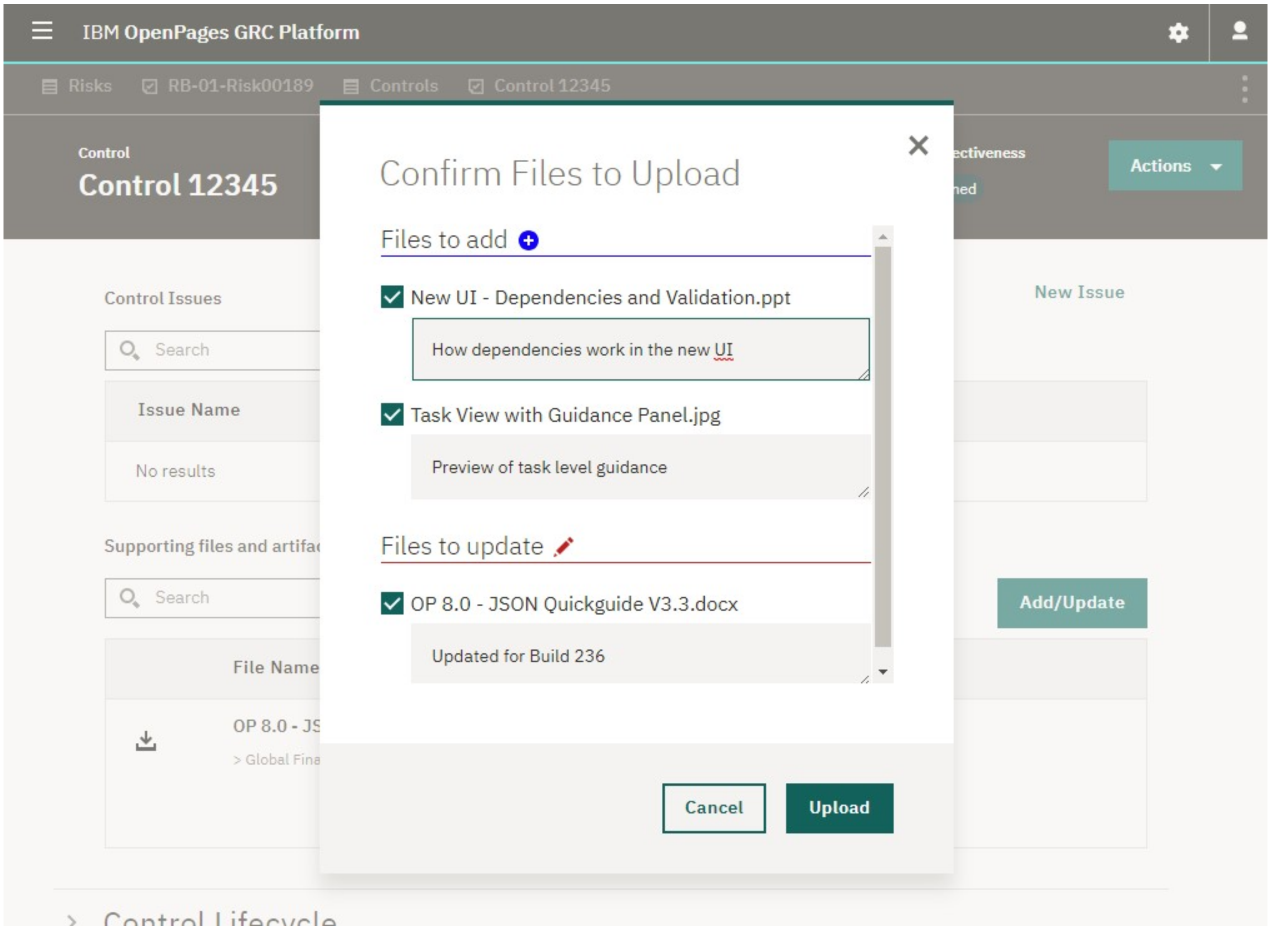


Figure 157. Dragged three files to the upload area; the system is automatically adding two and updating the other

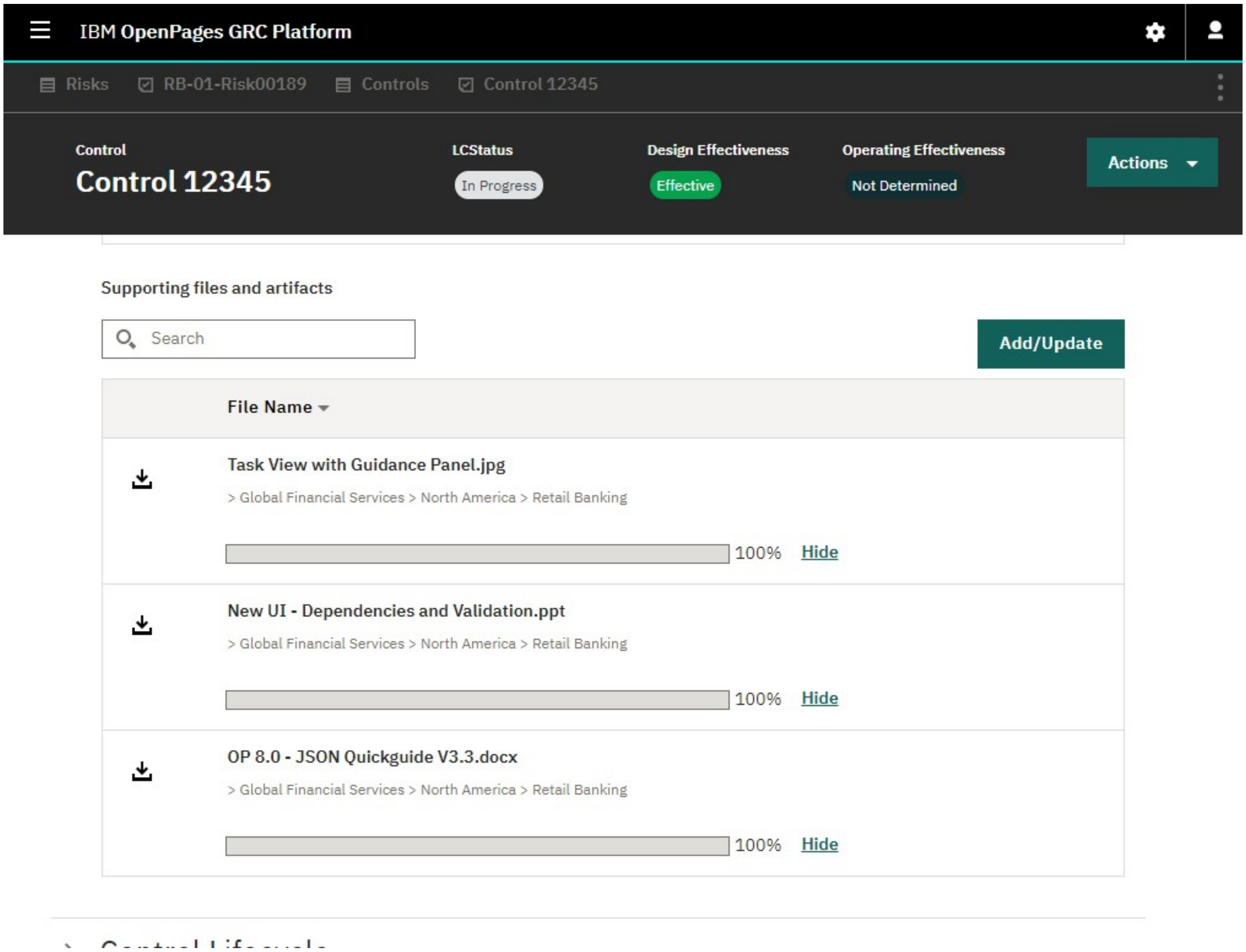


Figure 158. All technical details are hidden from the user as they bulk add or update file attachments

Five ways to view related data

Within a task view, related data can be viewed in five different ways. Configure the best way given the type of data that will be viewed and what insight the user needs to get from the data.

- List, when want to compare status or ratings of objects and select which one to go to.
- Card, when want to display text based information about a series of objects.
- Pie and bar charts, when want to compare the aggregate status or ratings of a number of objects.
- Count, when want to quickly see what needs attention and work on those items.
- Tree, when want to interactively explore the data and its relationship to other data.

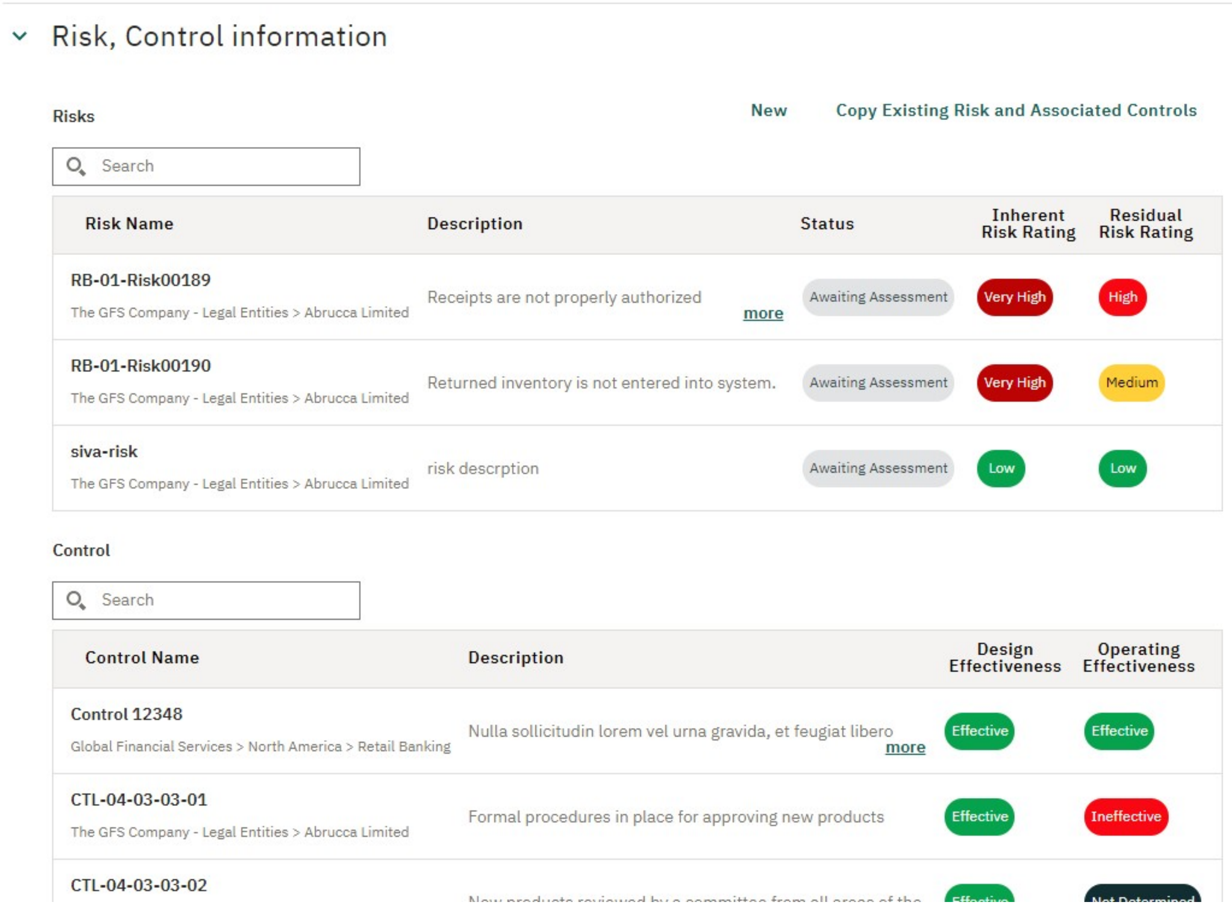


Figure 159. View related data in sortable lists, best for comparing rating information

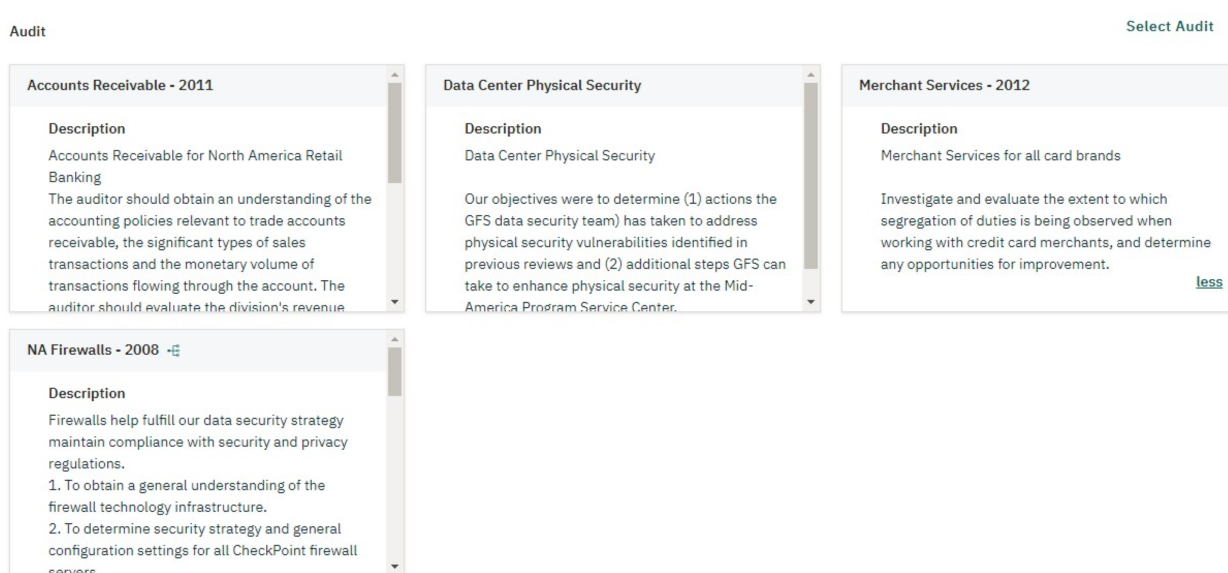


Figure 160. View related data in cards, typically used to display text based information

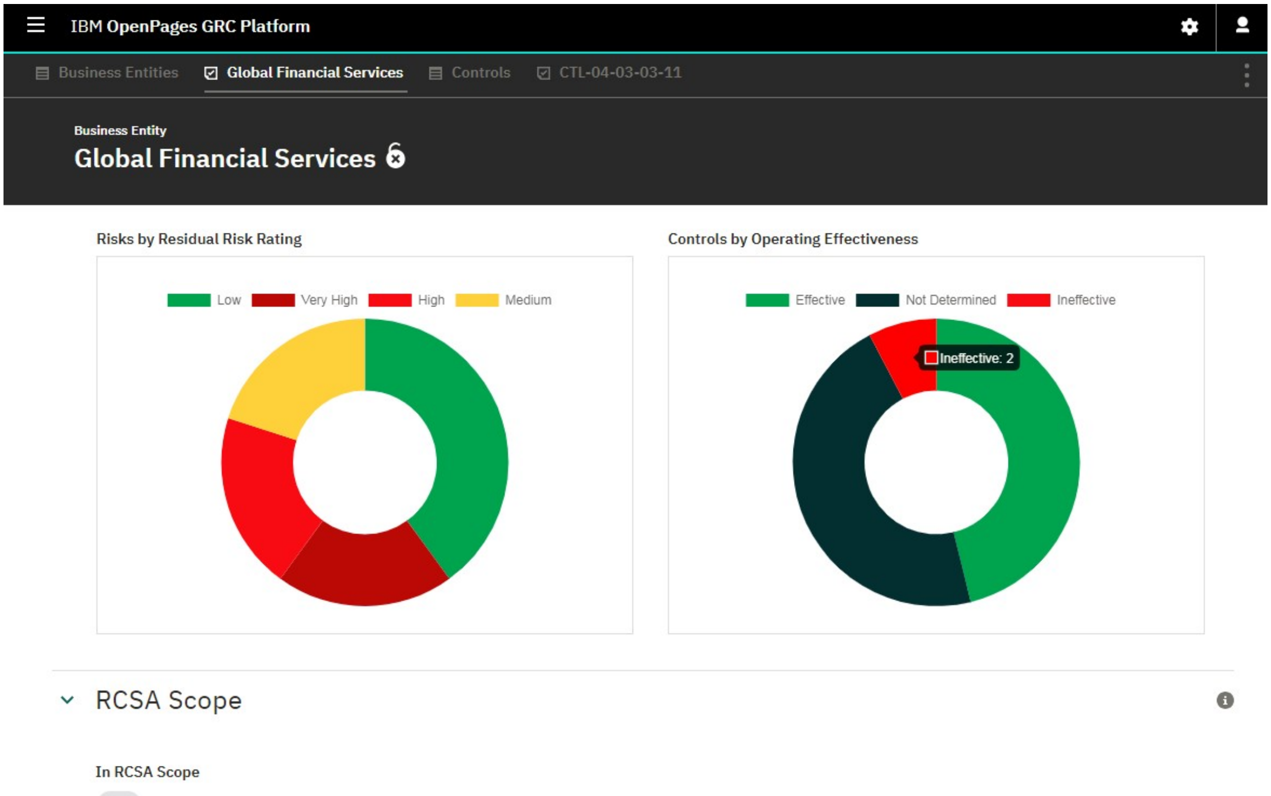


Figure 161. View related data in Charts when aggregate categorized information is being displayed

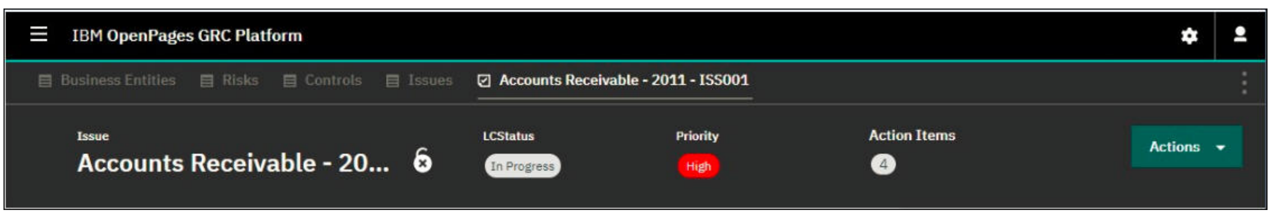


Figure 162. View counts of related data in the task view header

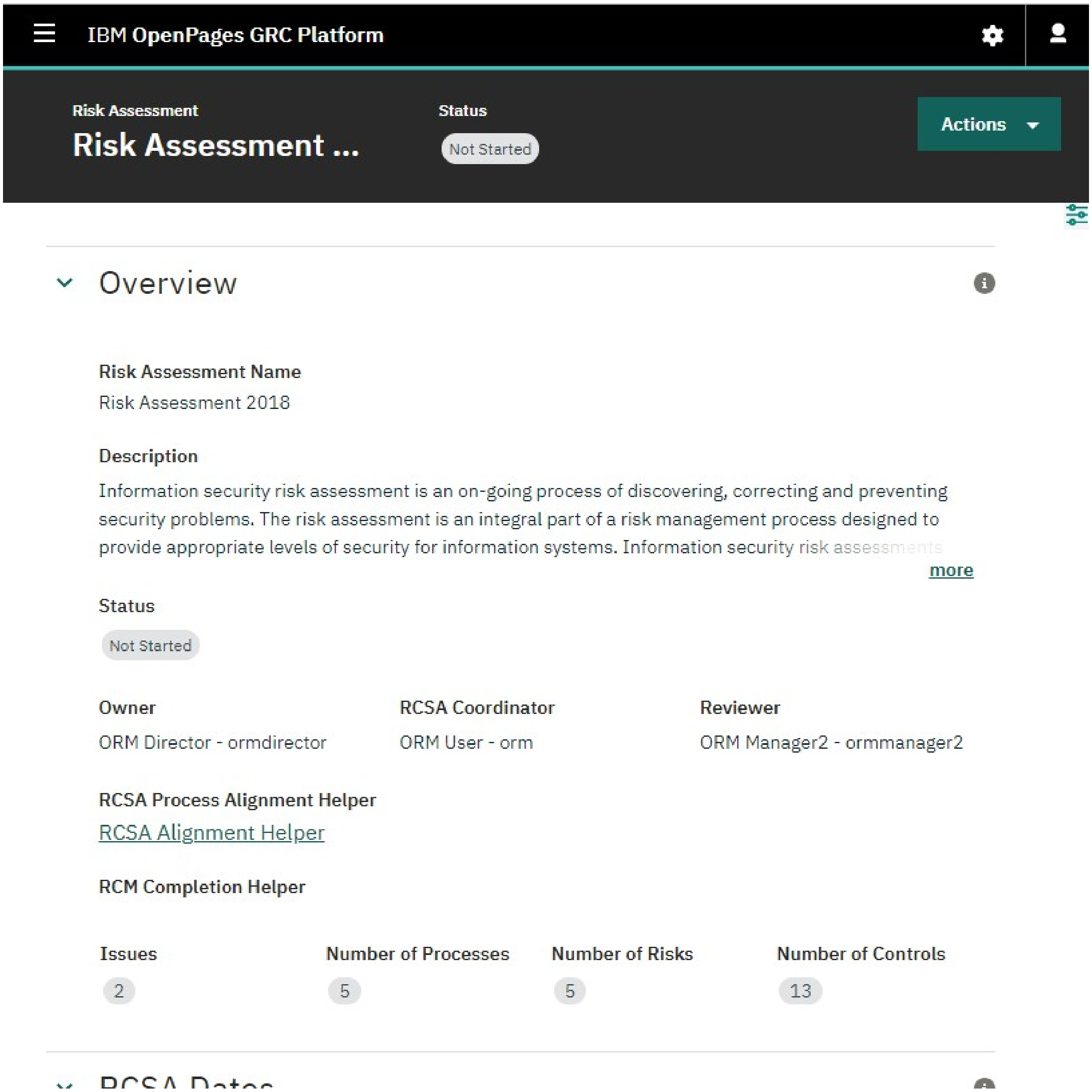


Figure 163. View counts of related data in the body of the task view

Navigation

A primary benefit of the task focused user interface is that there is a greatly reduced need for navigation. But there are a number of ways that the user can easily navigate in the application.

The primary menu (left fly out for object types) is easily accessible but hidden when not needed. Instead of a breadcrumb, an intuitive tabbed interface ensures that the user never loses context when they change focus to another object. A single click on an item in a list or tree view brings the user right to that information, as does a click from a related data list, count, card, chart or tree element.

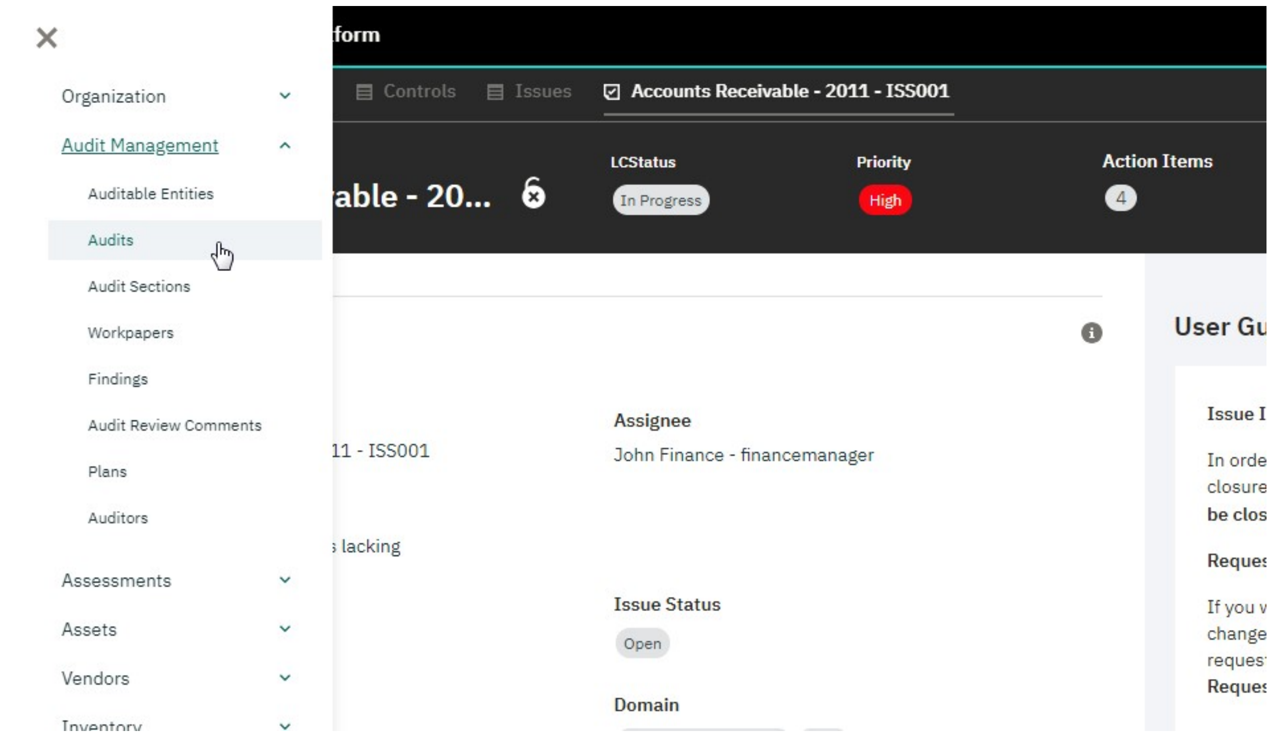


Figure 164. Primary menu to access lists of objects; hidden unless you need it

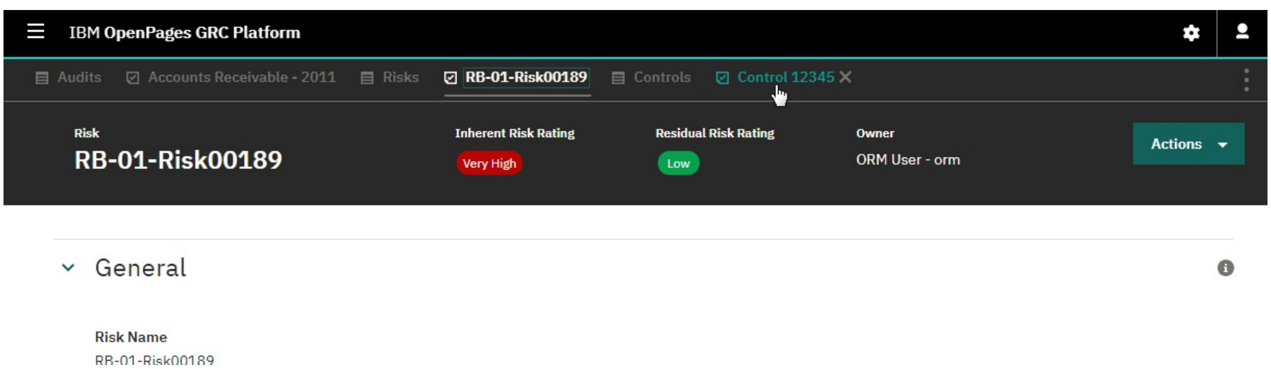


Figure 165. New tab opened for each action preserves context for user

View Administration

IBM OpenPages GRC Platform 8 comes with a comprehensive set of System views. These views are aligned to the latest out of the box schema. If your object model and schema vary, you can easily create new views by using existing views (such as the Detail view) or System views as a starting point.

Home page panels are derived from the users profile dashboard of panels that are locked by administrator, plus any reports configured for their profile home page tabs.

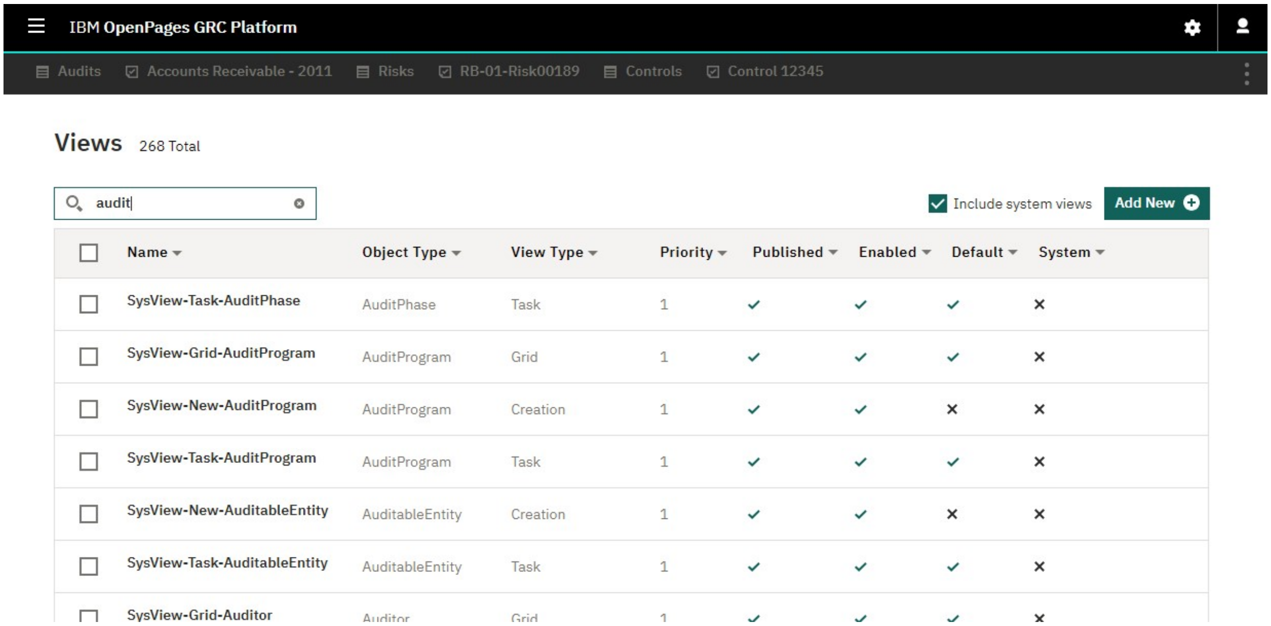


Figure 166. Administrator interface to review and modify views

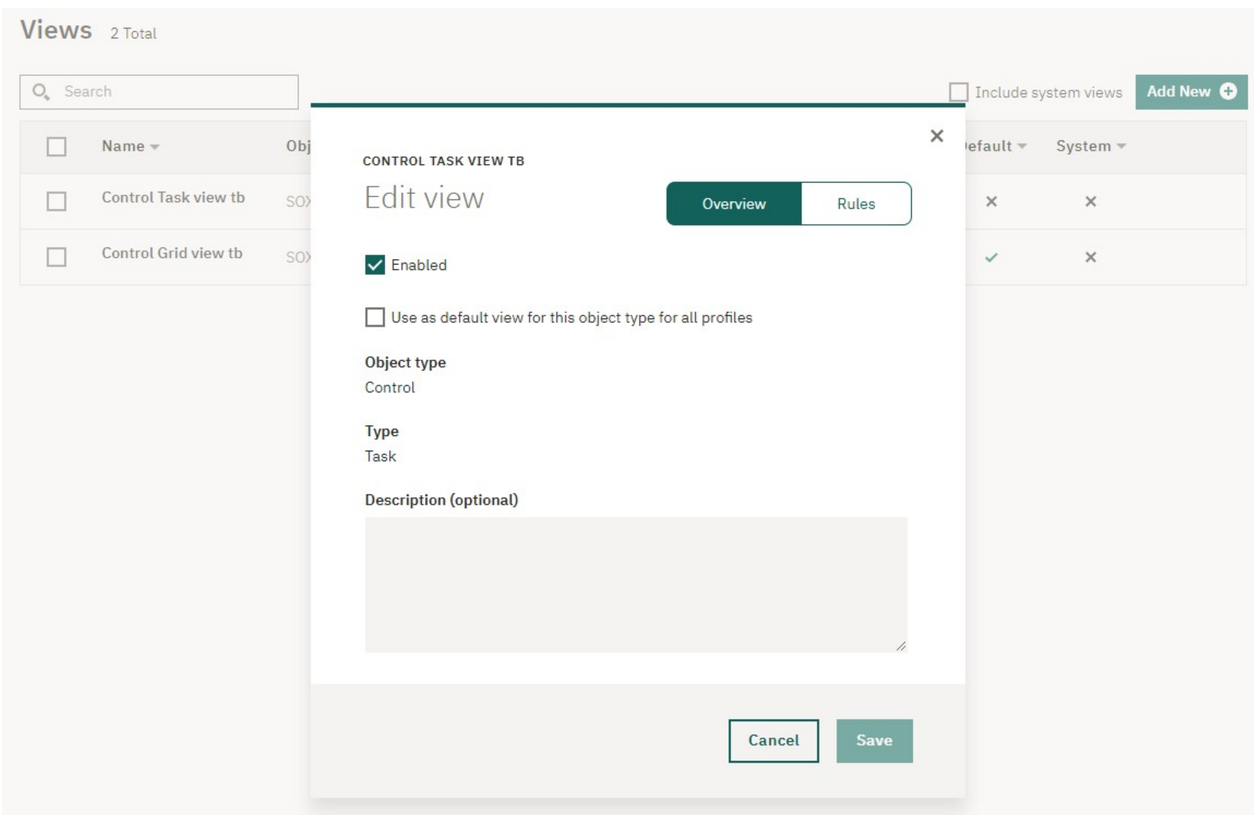


Figure 167. Task view core attributes

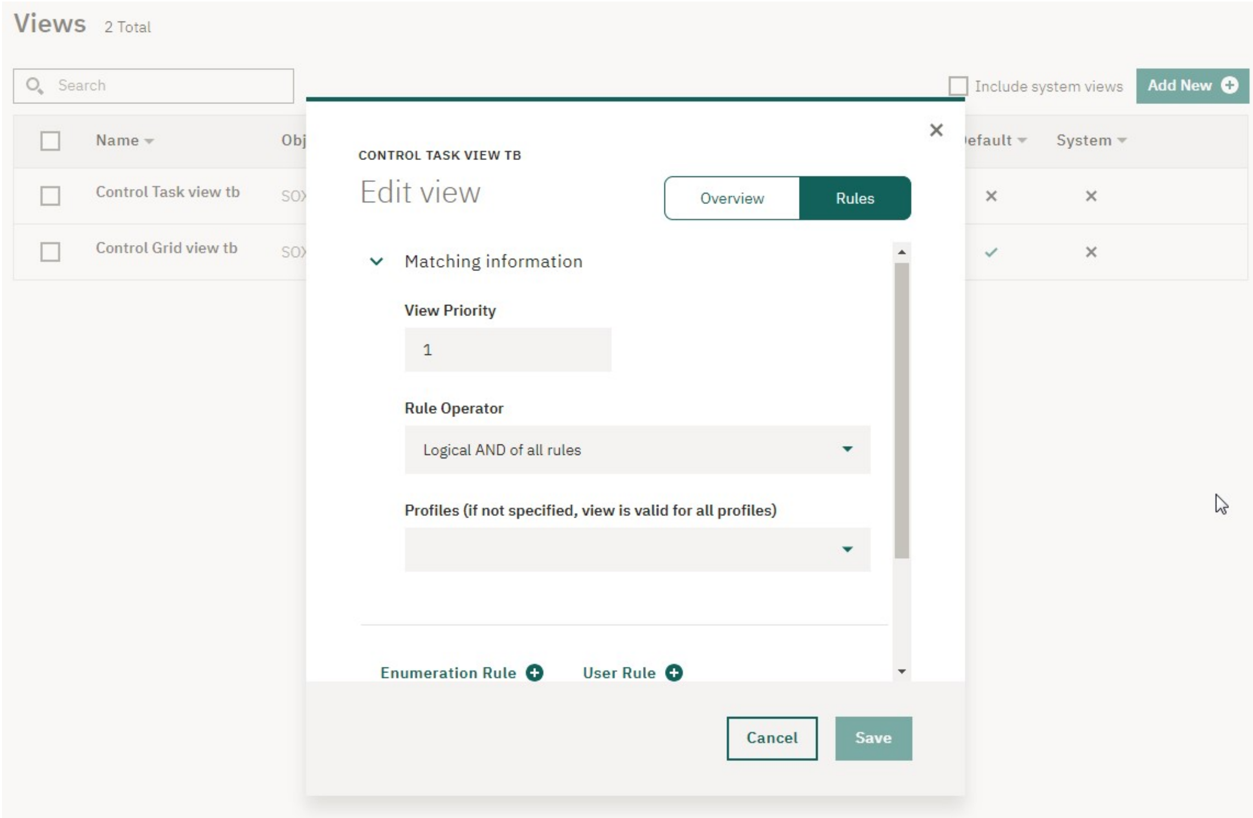


Figure 168. Task view rules automatically bring the right view to the user for their current task

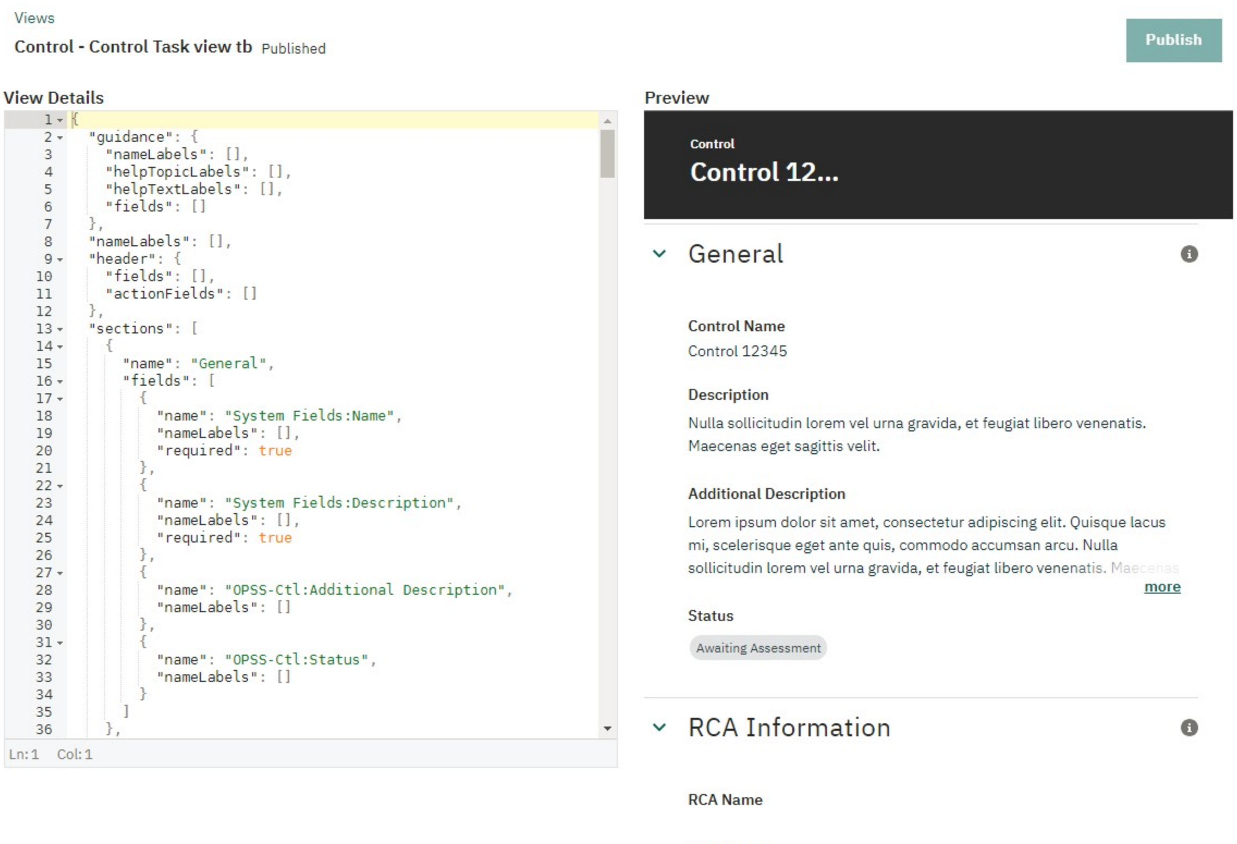


Figure 169. Administrator has complete control over view configuration, and a real time preview

Configurable Lifecycle Enhancements

Configurable lifecycle now supports more capabilities, reducing the need to implement business logic via custom triggers.

Set field values during a transition

Lifecycle can now be configured to set field values during a transition on fields other than the LC fields. These fields can be short or long text, single and multiple enumerated, Boolean, integer, decimal, date, user and user group field types. Depending upon the field type, the field values can be set as an absolute or relative value, as an addition to an existing value in the field, or populated based upon a value in another field.

For example, this could be used to copy the lifecycle Status field value to the “normal” status field, so that existing views, reports and helpers can continue to use that status field value.

Use conditional logic to gate transitions

Lifecycle can now be configured with conditional logic to gate transitions. Boolean logic using field values on the object and on immediate child and parent objects can be used. The logic can include values from text, single and multiple enumerated, Boolean, integer, decimal and date field types.

For example, this could be used to prohibit submitting a Loss Event for approval if it does not have a Recognition Date value. If the conditions are not met, then the transition processing will be stopped and an error will be displayed in the user interface, and recorded in the log.

Exclude fields from the reporting schema

Version 8.0.0.1 adds the ability to exclude fields from the reporting schema for an object type.

For example, if the `SOXIssue` object type has fields that you do not need for reports, you can exclude the fields from the reporting schema.

If you exclude fields from the reporting schema, also exclude them from the reporting framework.

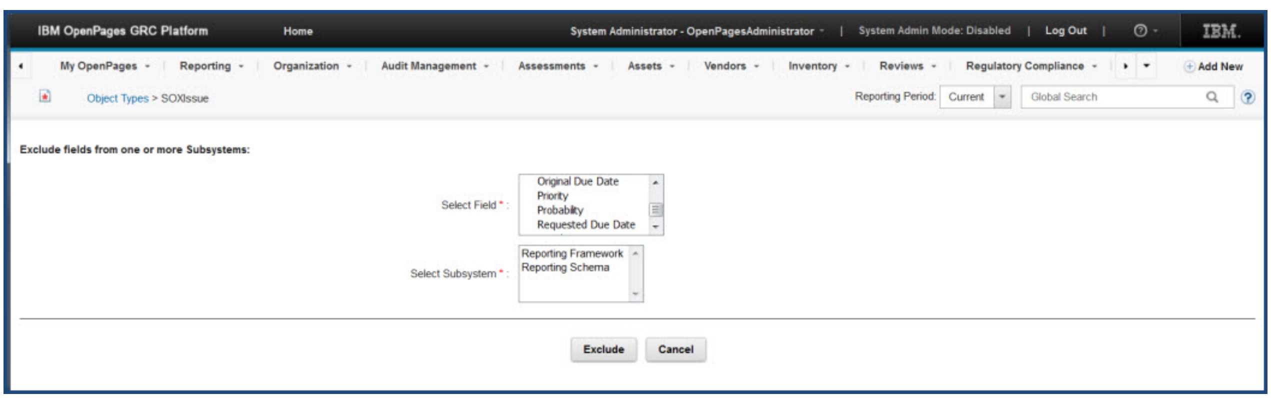


Figure 170. Selecting the fields to exclude

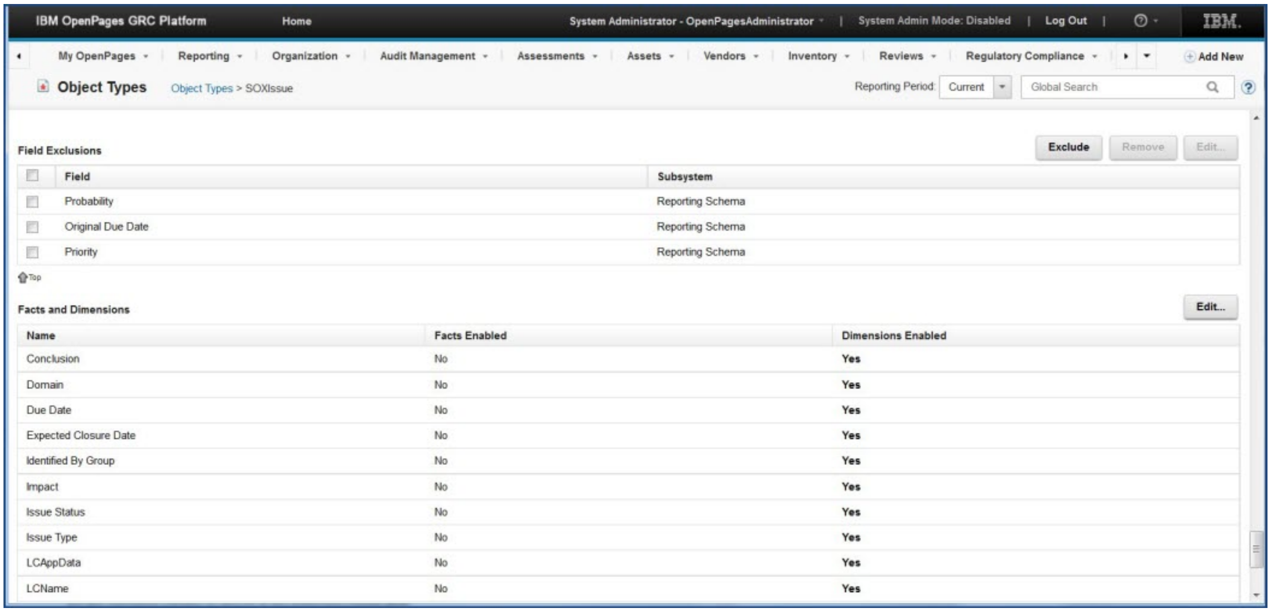


Figure 171. Viewing the updated list of excluded fields

After you exclude fields, re-create the reporting schema and regenerate the framework to implement the changes. You might also need to make updates to reports, filters, and security rules to remove any references to the fields that you excluded.

Solutions enhancements

Task Focused UI System Views

A set of out of the box Grid, Creation and Task views are delivered together with the new task focused UI. These ~300 views use the current OpenPages out of the box object model and schema, and can serve as starting points for your implementation of the task focused UI. These views cannot be modified by customers; customers can copy these views and then modify the copies to suit their needs.

Configurable Lifecycle Update for Issues

Customers often make use of the Issue Status field in reports, triggers and filters. Customers who have adopted configurable lifecycle for Issues use the Issue Lifecycle Status field instead. Customers who migrate from use of the Issue Status field to configurable lifecycle would like to be able to continue to use the Issue Status field for reports and other purposes.

OpenPages configurable lifecycle can now be used to set field values on the object in the lifecycle. For more information, see "Configurable Lifecycle Update for Issues " on page 182. The configurable lifecycle XML for Issues has been modified to take advantage of this new feature and automatically keep the two Status fields synchronized.

Questionnaire enhancements

You can now provide contextual information for the user inside the questionnaire. Three kinds of links can be provided:

1. Static links to reference information.
2. Links to underlying assets such as the detail page of the Risk or Control or Application in question or field values from the underlying asset.
3. Links to Cognos reports with appropriate parameters passed to the reports.

The links can be at a section, a subsection or a question. The links can be used to make sure that the user has all of the relevant information at their fingertips when responding to the questionnaire.

Links will open the target in a new tab or window, depending on browser configuration.

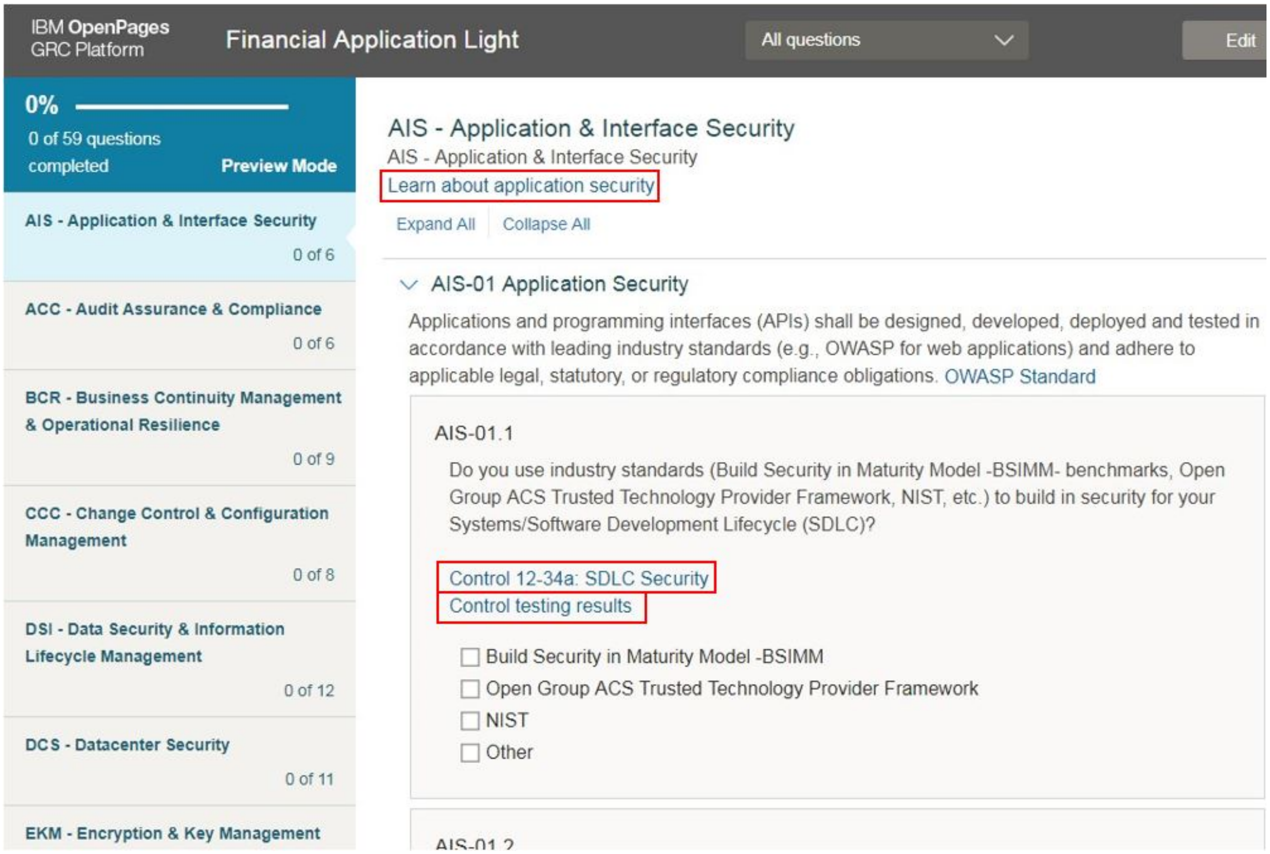


Figure 172. Questionnaire with links to static text, a Control detail page and attributes of the Control

Administration and serviceability enhancements

Several enhancements have been made to help you administer, maintain, and support IBM OpenPages with Watson.

Trigger Configuration Refresh Utility

New or updated trigger XML configuration files can take effect quickly without accessing the file system or restarting services.

Implementers, such as enabled customers, partners, Lab Services, and product developers, often iterate as they develop trigger XML files. Through OPX (and starting in 7.4, through the admin UI), they can check-in and check-out, upload, and download these trigger configuration XML files. Then they must restart services for the changes to take effect. Depending on their environment, this can take a few minutes to many minutes and requires server access.

In this release, we added the ability to add or update trigger configuration XML files and have them take effect without restarting services, and without requiring access to the server. The **Trigger Configuration Refresh Utility** is now available on the **Reporting** menu under **OpenPages V6 - Configuration Utilities**. You must grant users access to the **Configuration Utilities** reports folder after installation or upgrade if you want them to be able to perform this action.

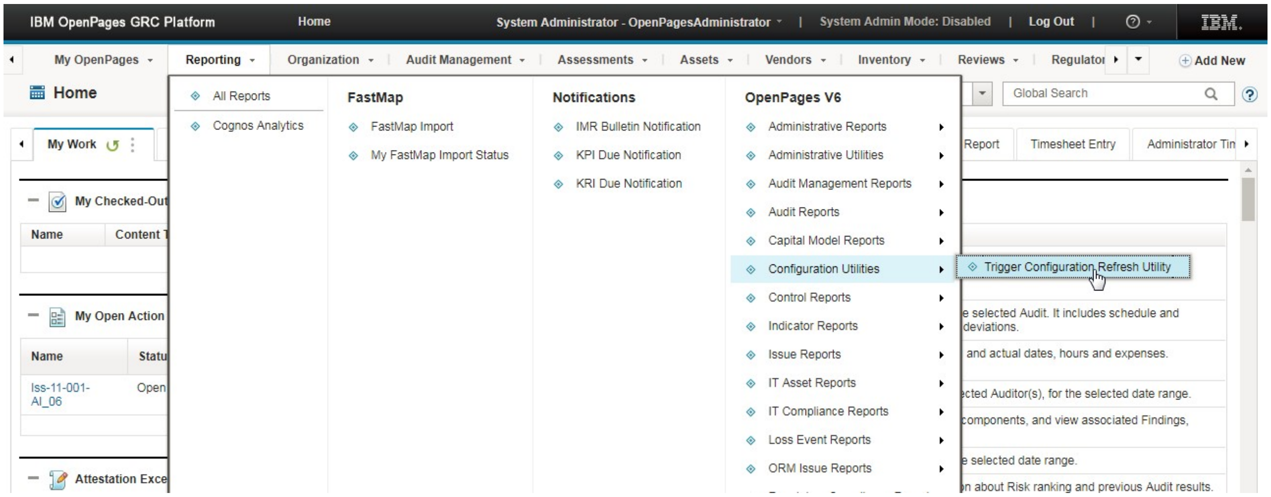


Figure 173. Menu item for the Trigger Configuration Refresh Utility

Running the report refreshes the trigger cache and displays the message "Trigger Configuration refreshed" when complete. The trigger cache is refreshed with any changes to the configuration in the registry or to trigger XML files. Updates to JAR files are ignored by the utility. The application server must be restarted for new JAR files to be loaded.

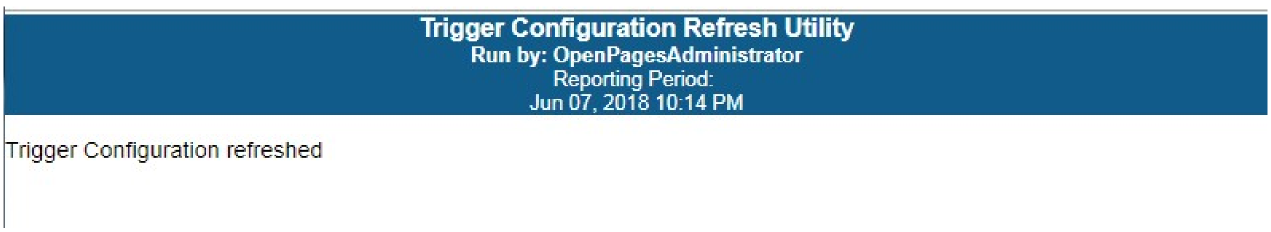


Figure 174. Confirmation after trigger configuration is refreshed

See the *Trigger Developer’s Guide* for more information.

Manual installation

Automated deployment of IBM OpenPages with Watson installer agents requires a level of access to the servers that may conflict with your IT standards. For customers with standards that do not allow providing this level of access to the installer, a method of manually deploying the agents is now documented.

Double entry and validation of passwords has been added to the appropriate installer cards to reduce the likelihood that the installation or upgrade process fails as a result of mistyping a password.

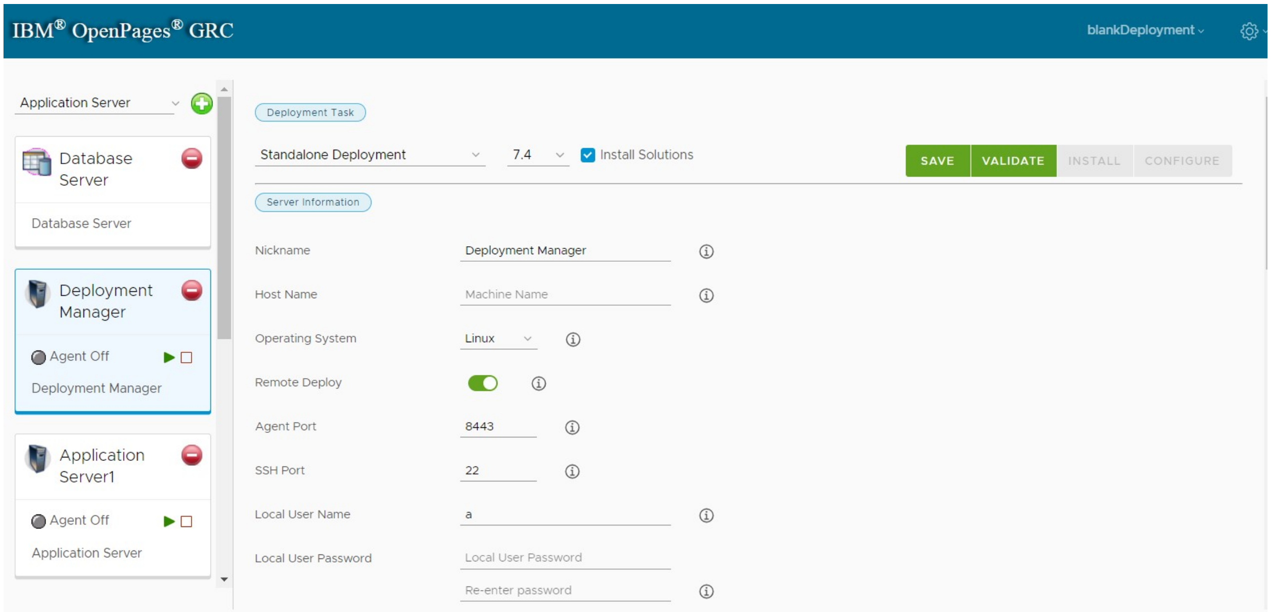


Figure 175. Password confirmation in installation application

Log collector enhancements

Additional queries have been added to the IBM OpenPages with Watson log collector output to provide more detailed environment information. Inclusion of this additional information will help to shorten the amount of time it takes for support or development personnel to assist you when working on a case.

Queries are added that perform the following actions:

- Gather OpenPages user counts, and group distribution and SIDCACHE metrics
- Gather reporting period details
- Extract full security rule definitions
- Extract Top 10 Max versions by object, which identifies if a process is causing a huge number of object updates
- Extract Oracle database initialization parameters

Queries are modified in the following ways:

- Queries against process logs return a max number of rows instead of the last 7 days
- Top SQL queries return more of the SQL statement

Single Sign On mixed mode

A method of achieving mixed mode when SAML or SPNEGO are used for Single Sign On (SSO) is now documented.

You can enable a subset of OpenPages with Watson users (administrators specifically) to use the native authentication of OpenPages when Single Sign-On (SSO) mode is enabled. For these non-SSO administrative users, there might be some limitations on the end user features in OpenPages.

For more information, see How to enable Single Sign-On (SSO) mixed mode for OpenPages GRC Platform.

OpenPages APIs

There have been some updates to the IBM OpenPages with Watson APIs.

Anonymize and hard delete APIs

OpenPages maintains history of GRC objects in previous reporting periods and in the audit trail, even if the data is deleted in the current reporting period. GDPR and other regulations along with internal data retention and destruction policies may require the hard delete of some data. Privacy and confidentiality concerns may require the anonymization of certain free form text data. This release of OpenPages provides the capabilities to meet these needs.

Implementers can build a solution in OpenPages to hard delete and anonymize instance data to satisfy the GDPR right to be forgotten as well as related compliance and business needs.

This is achieved through a series of new JAVA and REST APIs.

Anonymize field instance free form text data
A solution can be created to delete or replace current or soft deleted GRC object instance free form text, leaving no data behind in the system.

Delete object instances
A solution can be created to delete GRC object instances, leaving no data behind in the system.

Find soft deleted object instances
A solution can be created to find soft deleted GRC object instances.

Anonymize free form text Questionnaire responses and comments
A solution can be created to delete or replace questionnaire free form text responses and comments, leaving no data behind in the system.

Support API Authentication using Client Certificate method

Customers have requested the ability to restrict clients that connect to REST API URLs by having a more secure authentication mechanism than username :password. Client Certificate authentication is one standard method provided for in Java EE that meets this requirement.

With client authentication, the web server authenticates the client by using the client’s public key certificate. Client authentication is a more secure method of authentication than either basic (username:password) or form-based authentication. It uses HTTP over SSL (HTTPS), in which the server authenticates the client using the client’s public key certificate. SSL technology provides data encryption, server authentication, message integrity, and optional client authentication for a TCP/IP connection. You can think of a public key certificate as the digital equivalent of a passport. The certificate is issued by a trusted organization, a certificate authority (CA), and provides identification for the bearer.

In this release, we enable the Client-Certificate method of authentication for the API using existing WebSphere support for this J2EE authentication mechanism.

For more information, see the *IBM OpenPages GRC API Guide*.

Supported software

IBM OpenPages with Watson 8.0.0.1 requires new versions of some software.

For more details about supported environments, see the Supported Environments website.

Requests for Enhancement (RFEs) Delivered

The following RFEs are delivered in this release.

Note: RFEs requesting user interface enhancements are considered to be delivered if available in the task-focused UI.

You can access each RFE via a URL that starts with `http://www.ibm.com/developerworks/rfe/execute?use_case=viewRfe&CR_ID=` and ends with the RFE ID.

Table 7. Requests for enhancements delivered in 8.0.0.1

ID	Headline	Comment
63984	Provide more granular control of actions - i.e. Add New, Copy, Edit	Task views can be configured for each object type to include only the desired actions (Copy, Associate, Add New). In Task views, Copy can be configured to copy all or only selected parts of the hierarchy. Each task view can be configured with only the desired fields editable.
68676	Ability to upload multiple files	Task views can be configured to include Files. When Files are included, the user can drag and drop multiple files at a time, whether new files or updates to existing files.
69000	ADMIN: Filter List View - ability to create paging when record count is large	The task-focused UI Grid view is paged.
76839	Auto-naming child objects	Task views can be configured to include Copy operations that re-autoname all the way down the hierarchy of copied objects.
77451	Automatically distribute columns to entire available window space in an initial filtered list view in version 7	The task-focused UI Grid view automatically distributes columns to fill the available window space.
80484	Warning before user session expires	The task-focused UI provides a warning prior to session expiration.
80487	Implement a "floating" Save button that users can click periodically	The task-focused UI provides a Save button, which is available at the top of the screen regardless of the scroll position.
80635	Copying Risks creates controls with duplicate IDs	Task views can be configured to include Copy operations that re-autoname all the way down the hierarchy of copied objects. This can be used to avoid creation of objects, such as Controls, with duplicate IDs.
84501	Upload multiple files	Task views can be configured to include Files. When files are included, the user can drag and drop multiple files at a time, whether new files or updates to existing files.
86045	Need document which describes procedure of changing middleware	A document has been provided that describes the process of changing middleware.
86048	As user needs to do lots of manual operations in applying FixPack, please improve this.	The fix pack installation process has been standardized and simplified. There will still be manual optional post install steps which depend upon the customer configuration.

Table 7. Requests for enhancements delivered in 8.0.0.1 (continued)

ID	Headline	Comment
92411	OpenPages -- Scrollbars in Read-only mode	Task views show the first several lines of text fields. The user can use the **more** and **less** links to see more or less of the field content. This achieves the goal of making it easier to view the fields in both Read Only and Edit modes.
92732	Improved user selector behavior	Single user selectors in Task views do not require an extra click to accept the user after selecting them.
94627	Add New wizard registry setting to set tabbing behavior	In Task views, field level guidance is accessed for a section at a time, meaning that tabbing through the fields does not use an extra tab for each field guidance. Also in Task views, tabbing through field types such as actor and date does not require an additional tab to get to or past the actor selector or date picker.
96039	Single tab for all File object fields when using the Add New wizard	In the task-focused UI, the Creation view is not a tabbed interface. All fields for Files and all other object types are located on the same page without additional tabs.
97849	Add validation on Detection vs. Occurrence/Creation Dates	Task views can be configured to include various field rule validations, including comparison of a date field to another date field.
98903	Ability to configure extra fields in the Add New wizard object search	When selecting associated objects in Creation views (and Task views) in the task-focused UI, fields configured to be shown in the selection interface are available for searching.
98925	Activity Views 2nd level object list to have their sort order and default object configured	Task views (which are the replacement for Activity views in the task-focused UI) can be configured for default sort order for all relationship fields. In addition, they are configured to be able to show all relationship fields at once, with no need to choose which second level (or any level) object should be seen by default.
102551	Expanding Business Entity Selector functionality to more objects	Task views have adopted Business Entity Selector functionality for the selection of all ascendant and descendent objects.
102552	Allow a multi select option on Business Entity Selector	Task views provide Business Entity Selector functionality with the ability to configure each one to be multi select or single select.

Table 7. Requests for enhancements delivered in 8.0.0.1 (continued)		
ID	**Headline**	**Comment**
102555	Task orientated hyperlinks configurable to open in the current window	The purpose of the request was to support helping the user get to the correct activity view for the state of the object, without introducing the complexity of additional windows. In the task-focused UI, customer controlled business logic automatically displays the correct Task view to the user, with no additional windows or tabs.
102870	Ability to create Activity Views looking up the association path	Task views (which are the replacement for Activity views in the task focused UI) can be configured to include both children and other descendants and also parents and other ascendants.
103665	Accessibility - Full Keyboard Access	Keyboard accessibility was added as requested in specific places in the standard UI.
103666	Accessibility - Standard Fonts	The font size was increased as requested in specific places in the standard UI. Italics were replaced with plain text as requested in specific places in the standard UI.
104919	Give users the ability to customize their List Views like they can with Filtered List Views	Users can sort by any column of persisted data with a single click in Grid views and relationship grids in the task-focused UI.
104921	Provide an option to go directly into an object's Detail View from the List View	Selecting an object from a Grid view or from a relationship grid in the task-focused UI brings the user to the appropriate task view for that object, according to the task view rules.
105400	Show multiple columns in non-global search dialogue and make it configurable	Fields that appear in Grid views and relationship grids in Task views in the task-focused UI are configurable and can be part of the search criteria.
107182	Non-Global Search Dialogue is difficult to use for BE	Fields that appear in Grid views and relationship grids in Task views in the task-focused UI (for all object types including Business Entity) are configurable and can be part of the search criteria.
109200	Ability to turn off Lifecycle Actions Dropdown on Questionnaire Assessment Detail Page (or other objects)	Task views can be configured to include the Lifecycle Actions as an Action button field in the header, or not.
109779	Questionnaire - Delete comments	APIs provide a mechanism to hard delete or anonymize Questionnaire comments.
110462	Add New wizard to display more Description field details	Creation views in the task-focused UI display the beginning portion of the Description (and other text fields) content by default. The user can see the full content by clicking the **more** link.

ID	Headline	Comment
113206	Questionnaire - Ability to Show Information about the Object the user is certifying to	The Questionnaire authoring interface has been enhanced to be able to configure the display of additional information specific to each Question or Section. The information can include field values from the object being certified, static links, and the launching of Cognos reports.
113407	Copy Options	Copy of related objects from a Task view can be configured to include or exclude specific descendent object types. Copy on Task views can also be configured to show the desired fields on the "to be copied" object – it is not limited to the Name and Description fields.
115122	Hard Delete of Data from OpenPages	APIs have been added to provide the ability to find soft deleted objects, to hard delete an object, to anonymize free text field values, and to anonymize text values in Questionnaires.
123603	Setting to restrict Copy Options to NOT copy children	Copy of related objects from a Task view can be configured to include or exclude specific descendent object types. Copy on Task views can also be configured to apply a filter to the objects that are available to be copied.
125476	DevOps Automation in OpenPages 8.0.0.1 upgrade	The upgrade to OpenPages 8.0.0.1 can be accomplished in a fully automated manner. Depending upon the nature of any optional post install steps, these may also be able to be automated.
126491	Action Menu - remove Copy option	Task views can be configured for each object type to include Copy only when desired. In Task views, Copy can be configured to copy all or only selected parts of the hierarchy to be copied. And in Task views, Copy can be configured to re-autoname all descendent objects.
126492	Configure the Action Menu to hide COPY for certain objects	Task views can be configured for each object type to include Copy only when desired. In Task views, Copy can be configured to copy all or only selected parts of the hierarchy to be copied. And in Task views, Copy can be configured to re-autoname all descendent objects.

Table 7. Requests for enhancements delivered in 8.0.0.1 (continued)

Chapter 13. New features in version 7.4

The new features in IBM OpenPages with Watson 7.4 include the following enhancements.

Platform enhancements

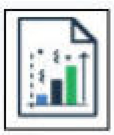
Enhancements to functionality are included in this version of IBM OpenPages with Watson.

Cognos Analytics 11 integration

Cognos Analytics integrates reporting, modeling, analysis, dashboards, stories, and event management so you can understand your organization's data, and make effective business decisions. Cognos Analytics reporting and dashboarding features help virtually anyone help virtually anyone can use to create informative, engaging visualizations without needing help from IT.

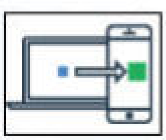
Experience IBM Cognos Analytics, an interactive way for virtually anyone to find, explore, and share data-driven insights in a governed environment. Find precise and timely answers from your data or from content built by others. Create compelling reports and dashboards, which you can easily distribute throughout your company. Use automated alerts to monitor changes to key findings. And confidently and quickly take actions to improve your business.

Key benefits of Cognos Analytics include



integrated solution for data discovery and reporting

guided experience to access data and to create dashboards or reports



consistent web-based experience on all devices, online or offline

proven governed platform for performance and scalability

Reporting and visualization features include

- a contextualized smart search
- an intuitive interface that helps all users quickly author content
- dashboards that can be created using drag-and-drop on a mobile device or the desktop
- a tool to automatically recommend the best visualizations to be used for particular data
- templates and styles (which will let you format reports instantly)
- on-demand menus that provide access to full capabilities over a clean workspace
- a single interface for creating ad hoc or pixel-perfect reports, freeing up IT skilled resources

Integration with Cognos Analytics, together with the reporting framework enhancements, combine to form a powerful capability for end users to create their own reports. In addition, a new application permission allows you to control end-user access to a single Cognos Analytics reporting menu item.

Framework enhancements for self-service reporting

OpenPages reporting framework has been enhanced. It now supports multiple framework models, including both Compatible Query Mode (CQM) and Dynamic Query Mode (DQM) for Cognos query engines. It also supports a new basic format optimized for business users.

Multiple framework model support provides

- any number of models to be defined
- smaller models, which are easier to use, faster to generate, produce faster reports
- target models to solutions or roles
- faster and parallel generation
- the ability to generate only models that have changed
- migrate easily to multiple models at your own pace (by grouping namespaces)

Figure 176. An example of multiple framework models

A business user can create a loss event dashboard in minutes, using a framework model focused on loss event reporting.

Figure 177. Loss event dashboard

Support for CQM and DQM provides several advantages:

- DQM is the IBM Cognos 64 bit query engine. It is more scalable and provides better performance for some reports.
- CQM greatly reduces the need to remediate existing reports.
- Many new IBM Cognos Analytics 11 features require and benefit from DQM models.
- Each framework model can support either the CQM or DQM query engine.

The basic framework format is optimized for business users:

- provides a direct view of GRC objects, removing folders for query subjects and data items.
- simplifies the view of business entity and other recursive object types
- reduces data items to typically one per field, providing only base amounts for currency fields and only localized values for enumerated fields
- filters fields by profile (also for standard formats) to give a consistent view of an object
- supports drag-and-drop access to issues and other secondary object types
- completely backwards compatible; standard format is still available

A simplified basic format provides drag-and-drop access to secondary objects like issues (highlighted by the red stars in Figure 178 on page 193). Users can then include them in their reports.

Figure 178. Simplified basic format

You can also specify the profile and format for each framework model, providing a simplified, consistent view of an object.

Figure 179. Profile and format for each framework model

Other framework enhancements include the following:

- the ability to specify sorting locale for a report author
- token-based authentication requiring no regeneration of the framework when changing the superuser password
- performance optimizations on enumerated field joins

The simplified framework in combination with IBM Cognos Analytics 11 makes creating visualizations simple.

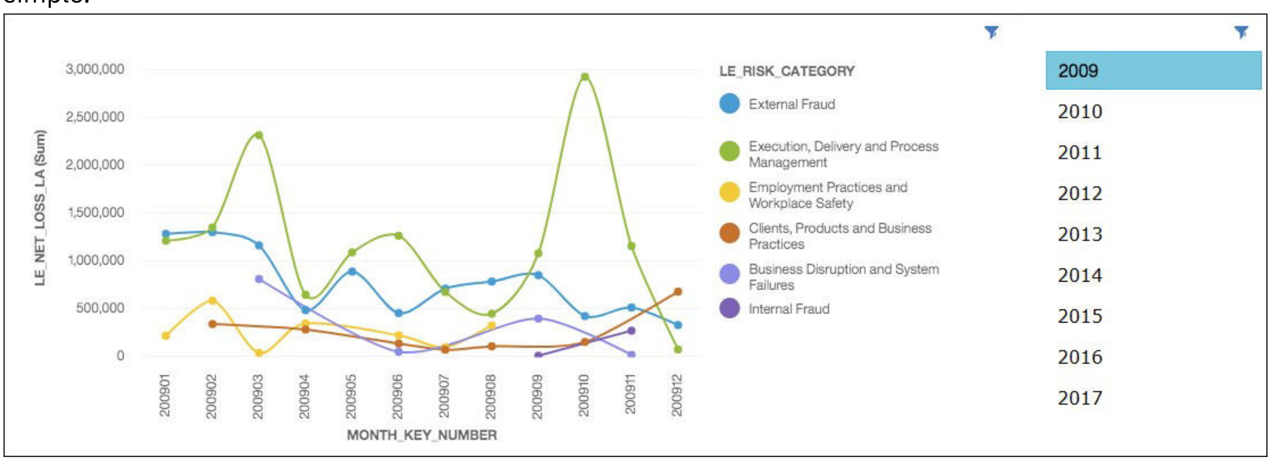


Figure 180. Example of a visualization

Table 8. Benefits of Cognos Analytics 11 and the enhanced reporting framework

Feature	Helps with
IBM Cognos Analytics 11	• innovative next generation business intelligence and data exploration, self-service reporting, and easy-to-build powerful dashboards
Multiple framework models	• run-time and framework generation performance • enhanced focus for self-service reporting by business users because having multiple models allows each model to be smaller

Table 8. Benefits of Cognos Analytics 11 and the enhanced reporting framework (continued)	
Feature	**Helps with**
DQM	• improved 64-bit IBM Cognos engine and performance • maintenance of CQM support to minimize remediation of existing reports
Basic framework format	• a simpler data model and simplified business entity format for easier self-service reporting by business users
Profile filtering in framework	• consistent view of data across application and in reporting

Enhancements to creating new framework model definitions

New framework model configuration can be confusing, error-prone, and time-consuming because it requires the administrator to create many new registry entries in a very specific structure. This is currently done by working with ObjectManager XML or by manually adding the entries through the administration user interface.

To simplify this experience, you can use the Template_Model framework model to quickly create new framework models and namespaces. The template model contains default values for settings and one namespace, TEMPLATE_NAMESPACE. To use it, you make a copy of the Template_Model folder and modify the settings to meet your needs. You can give the folder a name that is meaningful to you.

Template model registry entries are contained in the folder **Settings** > **Platform** > **Reporting Framework V6** > **Models** > **Template_Model**. During the copy operation, you can rename Template_Model, and the folder will have all of the settings that were present in Template_Model.

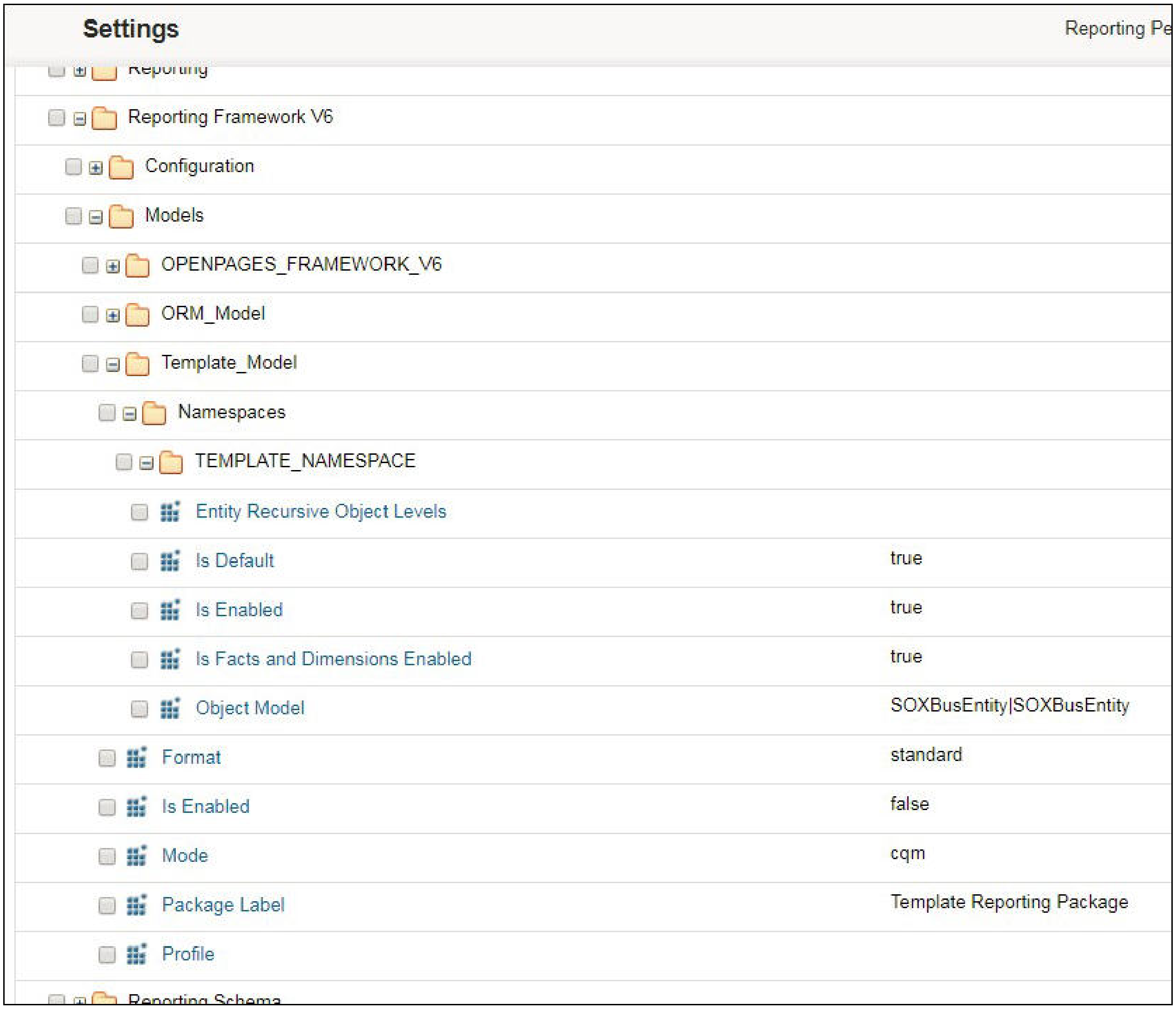


Figure 181. Settings provided under the Template_Model framework model

Loading ObjectManager XML Files in the Admin UI

In previous versions of IBM OpenPages with Watson, ObjectManager would be run from the command line to load any configuration changes. This required server access and full OpenPages JVM initialization. A privileged user can now load ObjectManager XML files directly using the administration user interface, without needing file system level access.

Previously, **Import Configuration** accepted ObjectManager files, but only in a JAR package with a manifest file. ObjectManager XML files can now be directly imported, enabling quicker loading of files without a requirement to have file system access. New information types can now be loaded that were not previously supported by **Import Configuration**.

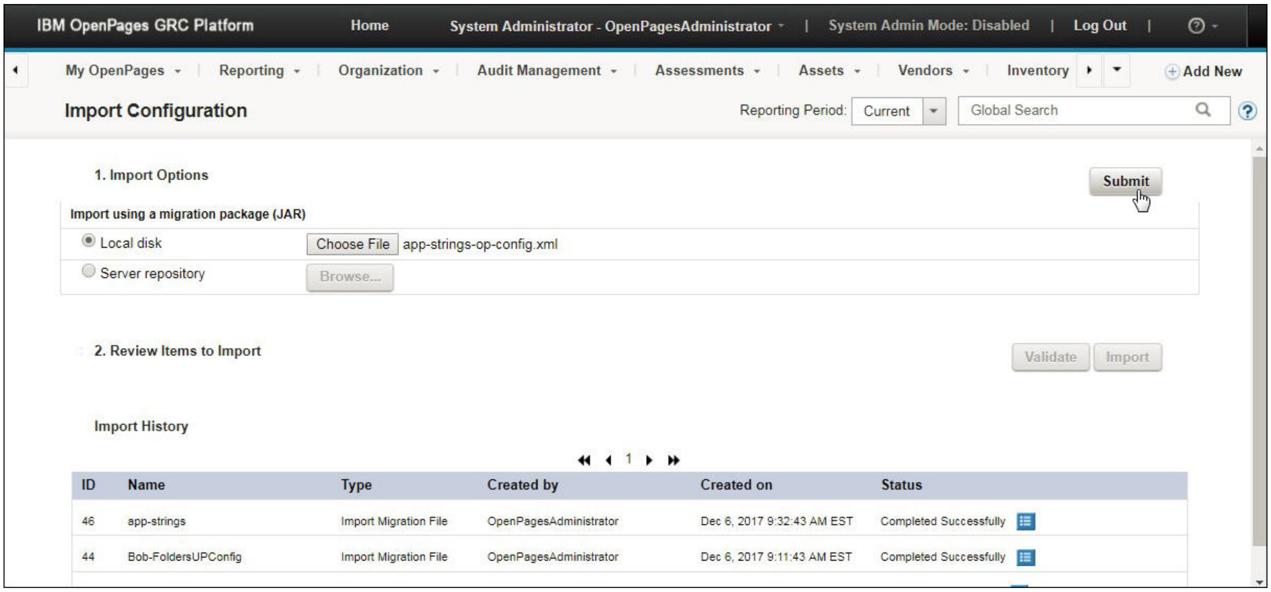


Figure 182. New import functionality on the Import Configuration page

Information types that can be loaded through ObjectManager but were not previously supported by **Import Configuration** include:

System data (typically loaded during install)

- file types (for example, ppt, xls, doc)
- application permissions
- currencies
- channels
- locales

User-related information

- users and user groups
- group memberships
- user associations to profiles
- user preferences
- role templates
- role assignments
- delegated administrators

Instance data

- instance data (for example, risk and control objects and field values)
- parent and child relationships

Other

- currency exchange rates

For example, you could use **Import Configuration** to import the following XML file that creates or updates an application text key and its value. The XML file name must end in `op-config.xml`.

```
<?xml version="1.0" encoding="UTF-8"?>
<openpagesConfiguration xmlFormatVersion="1.24">
    <applicationStringKeys>
    <applicationStringKey name="sample.test.string1" description="" enabled="true"
       category="Titles" value="Test String 1
       Loaded Value" suppliedByVendor="true" overriddenByUser="false" />
    </applicationStringKeys>
```

```
</openpagesConfiguration>
```

The ability to import ObjectManager XML files through **Import Configuration** is disabled by default. To enable this feature, set the registry entry at `/OpenPages/Applications/GRCM/Environment Migration/Allow ObjectManager XML` to `true`.

Expanding the number of fields available to object types

The number of fields that can be associated with any one object type has been doubled. The previous limit was approximately 200 but was heavily dependent on factors such as type of field and length of field name. Once this limit was reached, it was a complex manual operation to remediate.

Use this expanded capability sparingly; consider the complexity of asking your users to fill in or review many more fields of information.

Improving lifecycle initialization

Lifecycle initialization can now be configured to include an email notification, including its content and attributes. This allows different lifecycles to have different initial assignees, which was not the case in prior releases.

For example, in a vendor risk management use case, if there are two different types of questionnaires, each will need to be answered by different assignees. In this case,

- the internal vendor classification questionnaire would be sent to the vendor owner:
  - assignee for the initial stage: vendor owner
- the vendor self-assessment questionnaire would be sent to the contact at the vendor: assignee for the initial stage: vendor contact
  - assignee for the initial stage: vendor contact

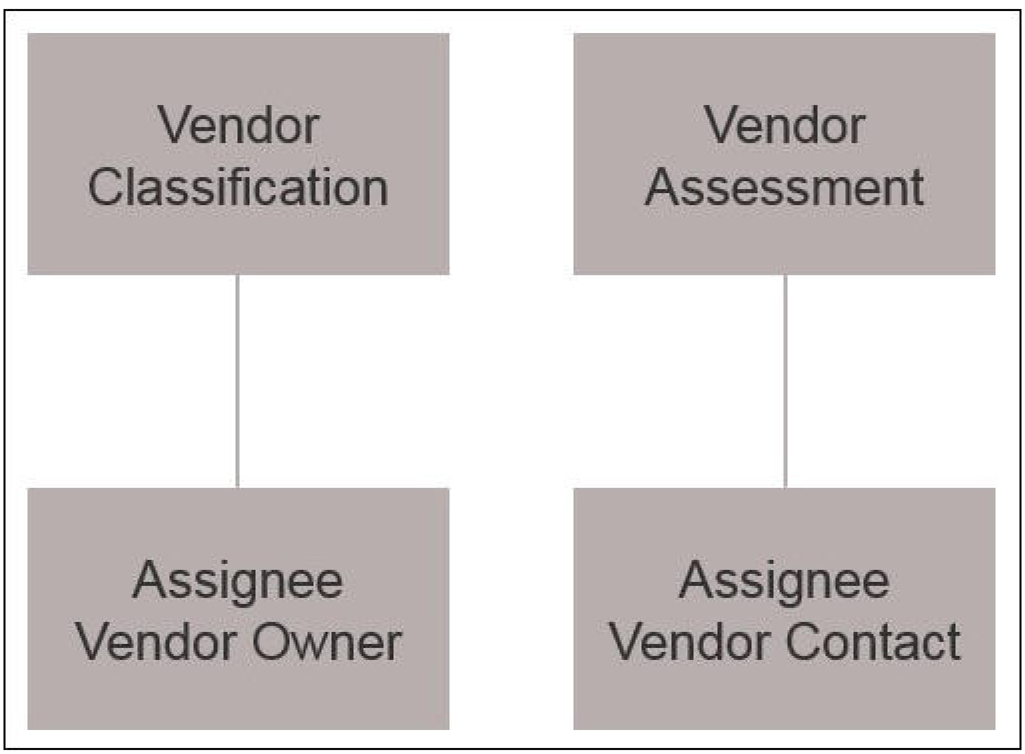


Figure 183. Vendor-Assignee relationships

For more enhancements to the questionnaire capability, see "Rate controls based on questionnaire responses" on page 200.

Maintaining personalizations

Recently Used information for actor pickers (user and user group selectors) now persists in the database. Previously, this information persisted in the browser.

Clearing browser information or switching browsers or devices will not affect the personalization of recent selections made to users or user groups.

Solutions enhancements

Enhancements have been made to the IBM OpenPages IT Governance solution and to the questionnaire capability. In addition, a configured Docker image of OpenPages is provided, which will allow you to have a fully functional OpenPages 7.4 environment up and running in under an hour, and which can be used to learn about new product capabilities.

New vulnerability object in IBM OpenPages IT Governance

A vulnerability object is now available for the IBM OpenPages IT Governance solution. This can be used to capture weaknesses or vulnerabilities related to resources, such as penetration testing results, automated asset vulnerability scans, and automated configuration scans. And it provides a way to track each of these to closure.

The default configuration includes fields that support the Common Vulnerability Scoring System (CVSS). CVSScan capture the principal characteristics of a vulnerability and produce a numerical score. This helps to prepare you for integration with third-party solutions. For example, you could build or use existing SDI connectors that pull severe vulnerabilities from your IT operational systems that have not met targeted timeframes.

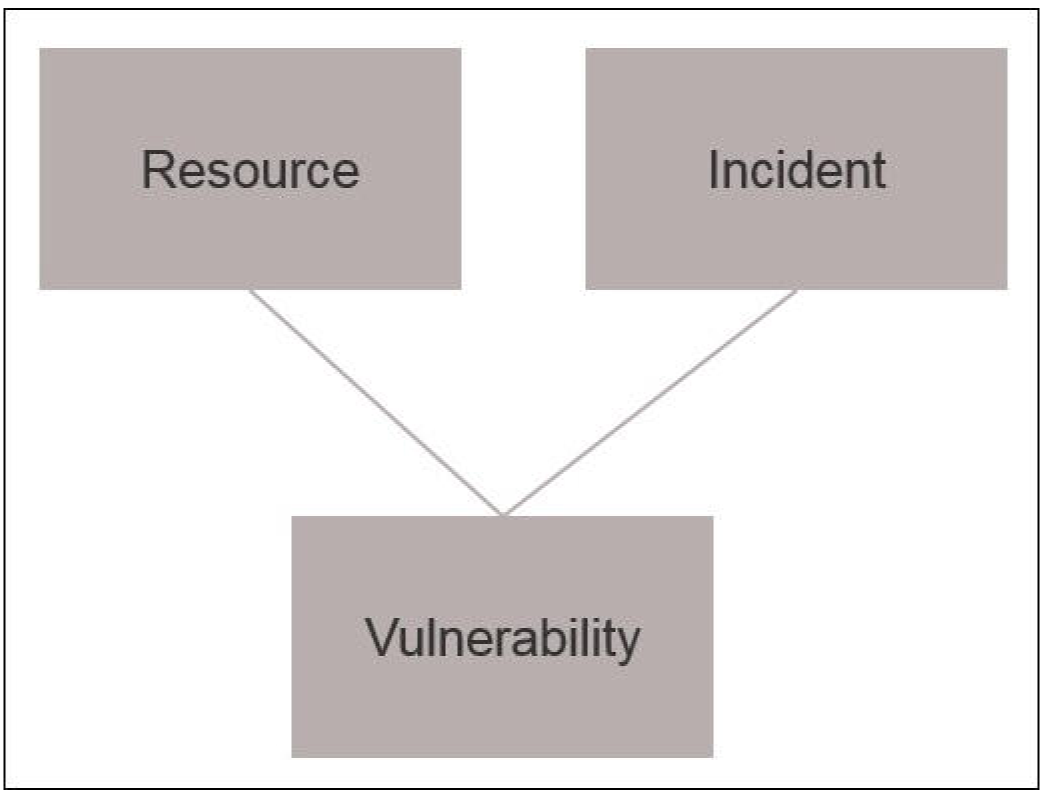


Figure 184. Vulnerabilities can be captured against resources and IT incidents

Rate controls based on questionnaire responses

New association functionality now allows you to map one or more question templates to specific controls. This gives you the ability to automatically rate controls, or report on controls, by aggregating the question and answer scores at the control level.

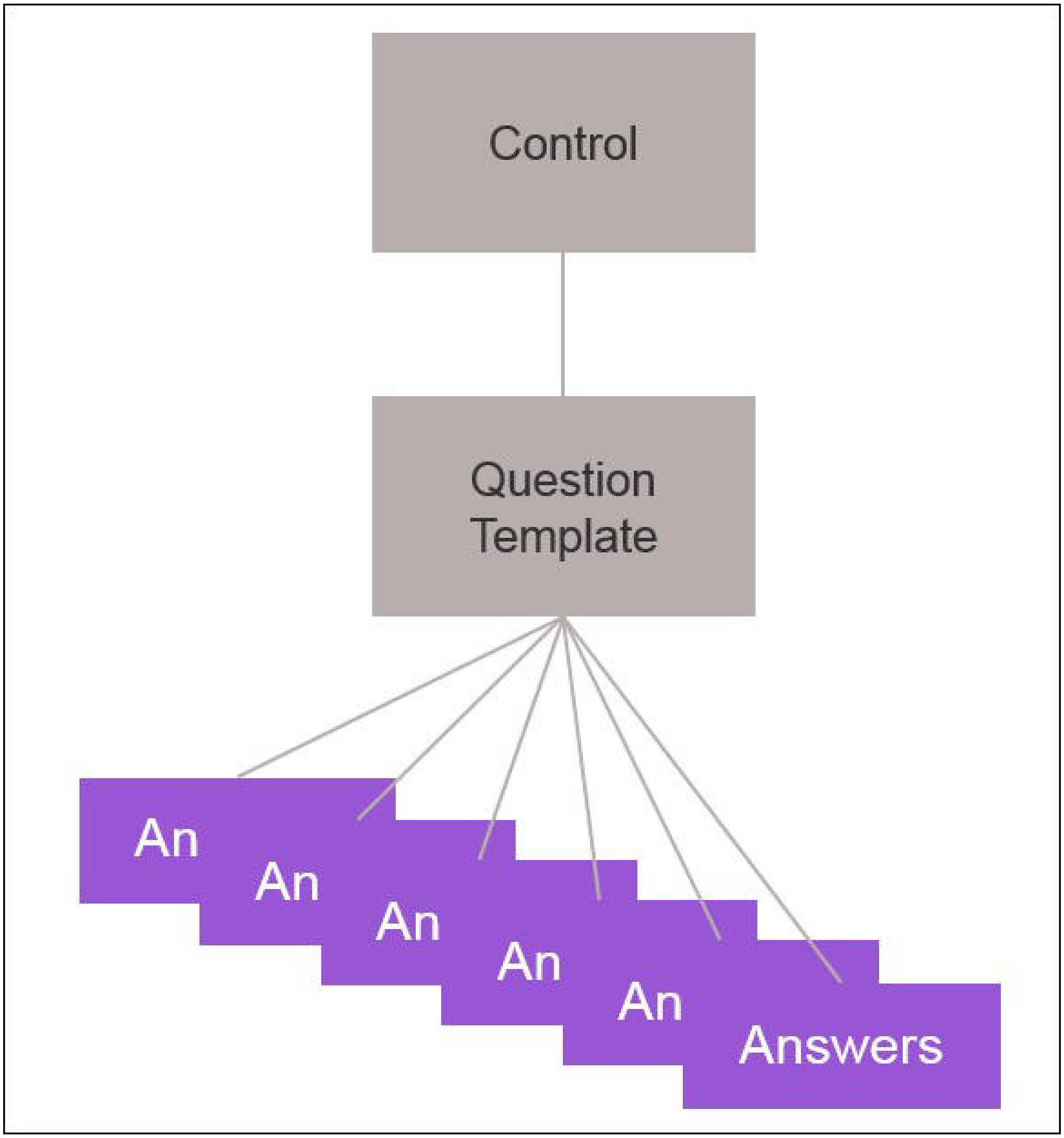


Figure 185. Associating a question template with a control allows the control status to be based upon aggregated responses

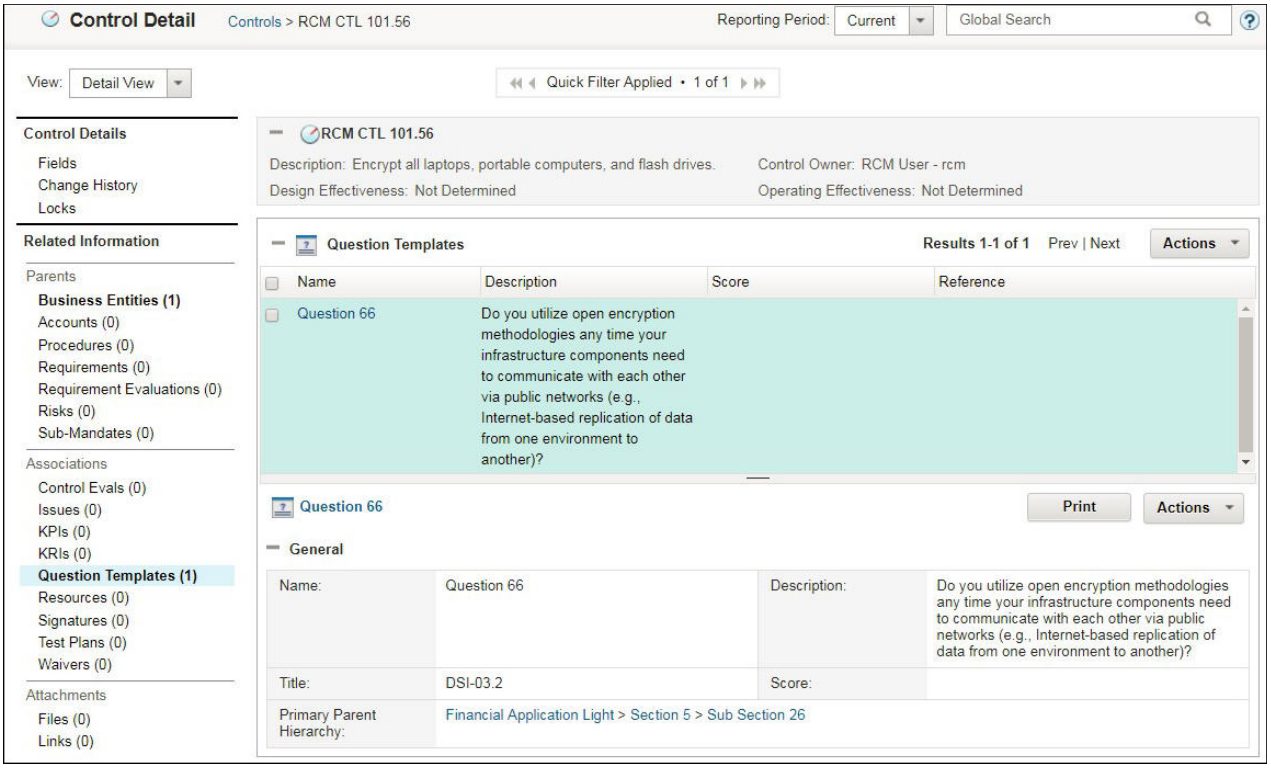


Figure 186. Encryption question template associated with an encryption control

The enhancements to a configurable lifecycle allow for greater control over the lifecycle of questionnaires. For more information, see "Improving lifecycle initialization " on page 198.

Fully configured OpenPages Docker image

A fully configured OpenPages Docker image is provided with IBM OpenPages with Watson 7.4.0. A user can deploy an OpenPages 7.4.0 environment to get familiar with new product capabilities in under an hour.

Why Dockerize OpenPages?

- rapid deployment of a fully functioning OpenPages environment within 30 minutes
- accelerated release and feature evaluation and adoption
- simplified maintenance: Docker image reduces effort and the risk of problems with application dependencies
- flexible deployment with portability across machines: laptop, VM on a single stack, multistack, and hosted infrastructure
- easy artifacts (Dockerfile, scripts) sharing

Capabilities provided by OpenPages Docker image

- platform and all solutions and all major components (IBM WebSphere Application Server [WAS], IBM Cognos, IBM DB2, global search, and IBM Business Process Manager [BPM]) with up-to-date conformance
- configured for secure connections (https on application, and SSL for database access) and close to reality setup (for instance, removed "/openpages" from the application URL)
- single and two host (database on a separate host) deployment options that enable the flexibility of the database server in various ways (such as a physically installed database, a containerized database, or database as a PaaS service)

- includes a script to commit OpenPages Docker containers as images. This is to record the state of each of the containers as new Docker images, enabling later re-use or distribution to other users
- includes database content, openpages-storage content, solution triggers, helper JSP files, and other content
- includes sample users and sample instance data
- for non-production environments, uses a development environment license

Administration and serviceability enhancements

Several enhancements have been made to help you administer, maintain, and support IBM OpenPages with Watson.

Managing system files

In previous releases, system files were managed in the OPX administrative interface. In OpenPages 7.4.0, these functions are moving to the primary administration user interface.

When you add a system file type (for example, SysXMLDocument or MigrationJAR) to the profile of a user who has administrative privileges, the user sees that system file type in the Administration menu.

A new ready-to-use profile, OpenPages Platform 3, includes all of the system file types. Using this profile, an administrator will have the menu items and will use the Detail, Folder and Filtered List views to manage the object types. Add this profile to the list of available profiles for your administrators who manage system files. You won't be able to view or manage these system file object types unless you are using a profile which includes them.

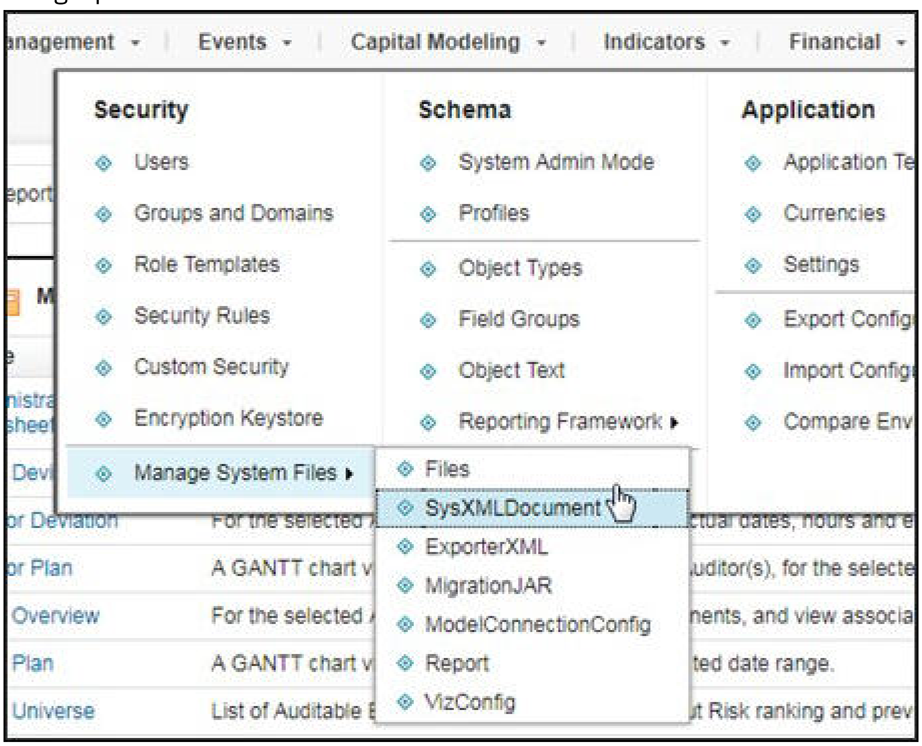


Figure 187. Accessing system files from the administration user interface

Finally, a new registry setting allows you to temporarily enable management of system files in the existing OPX interface.

Enhancements to user provisioning

The provisioning of users in OpenPages has been reimagined. An administrator can now easily find and manage a user, including their attributes and permissions, in one place. In addition, an administrator can create a user in seconds, without manually entering values.

A new Administration menu item provides access to a user-provisioning landing page. This is used for finding and modifying existing users and their permissions and for creating new users.

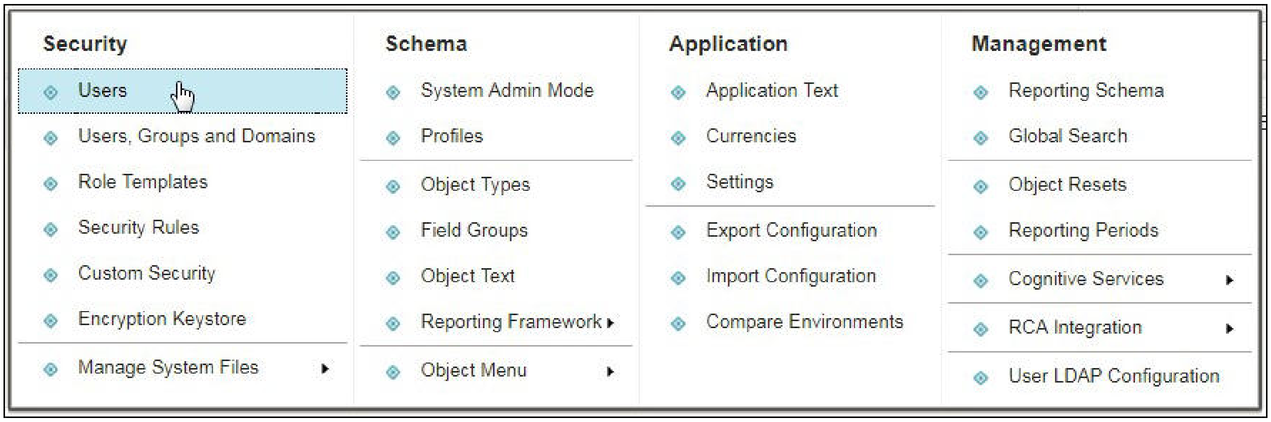


Figure 188. Users menu item on the Administration menu

Figure 189. User provisioning landing page

Creating new users

Creating a new user in OpenPages is now a simple task. To help reduce errors, you can now auto populate user information from your LDAP server, and you can copy information from an existing user or a template user to a new user.

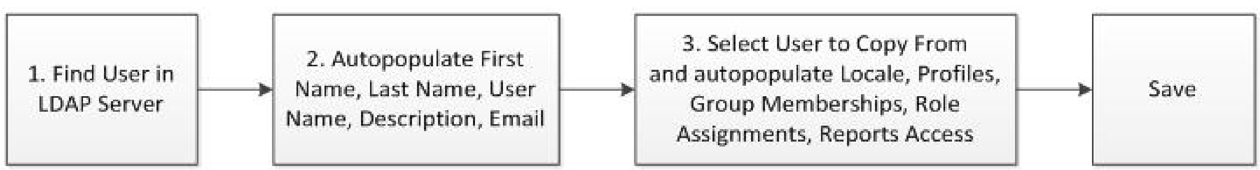


Figure 190. Process flow for creating a new user

Figure 191. Step 1 - Find the user on the LDAP server.

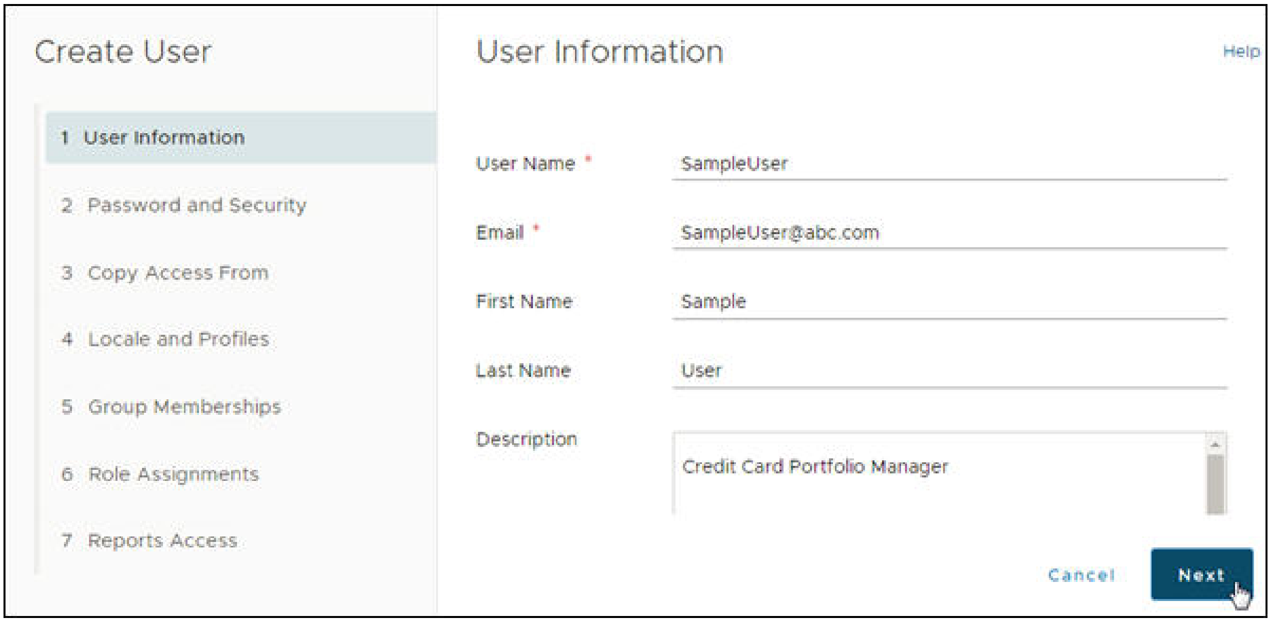


Figure 192. Step 2 - Autopopulate names, description, and email.

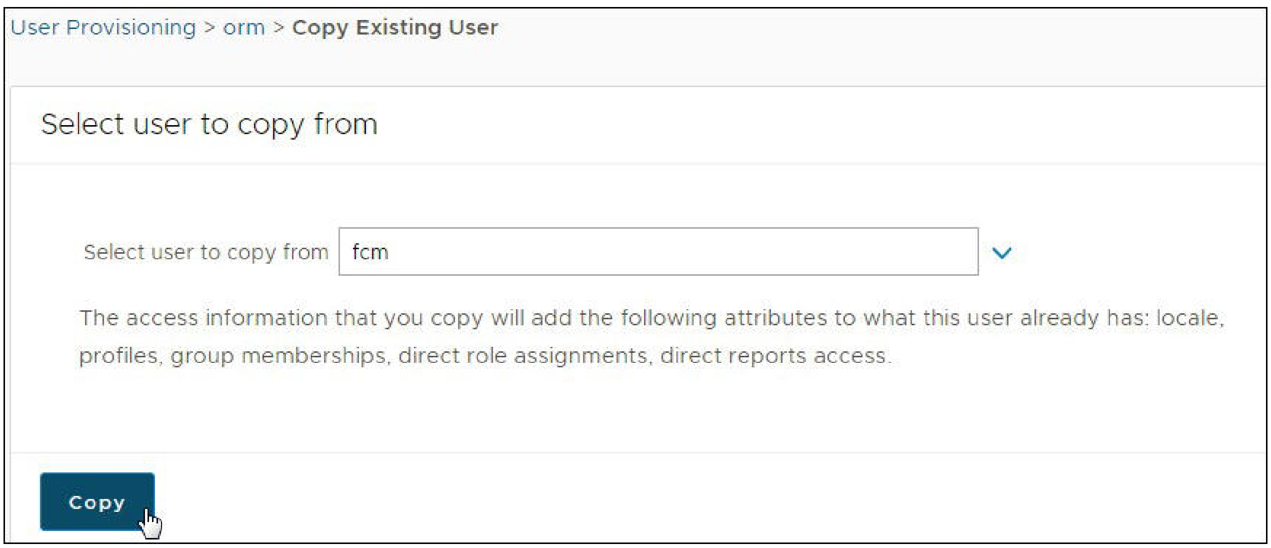


Figure 193. Step 3 - Select a user to copy from and auto-populate locale, profiles, group memberships, role assignments, and reports access.

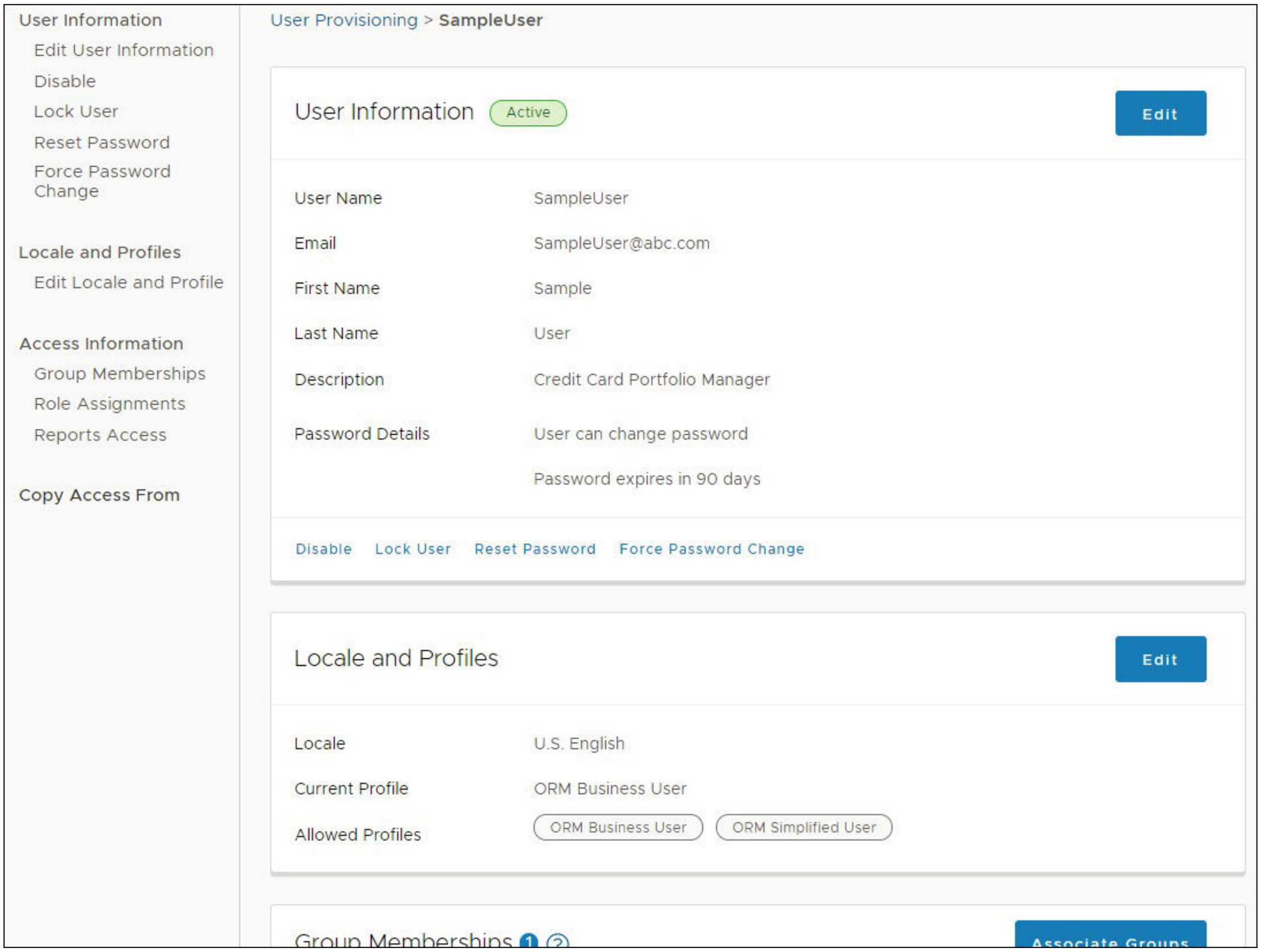


Figure 194. Step 4 - Save the user. The user is created and the user detail page appears.

Copying access from one user to another

Have you ever wanted to create or update a user to have the same permissions as another user? A powerful new feature in OpenPages provides this capability. **Copy Access From** can be configured to allow copying user information such as Locale, Profiles, Group Memberships, Role Assignments and Reports Access from an existing user or from a template user to an existing user or to a new user.

You can configure the types of information copied, the users to be copied from, and whether the copied information adds to or replaces existing attributes of the user.

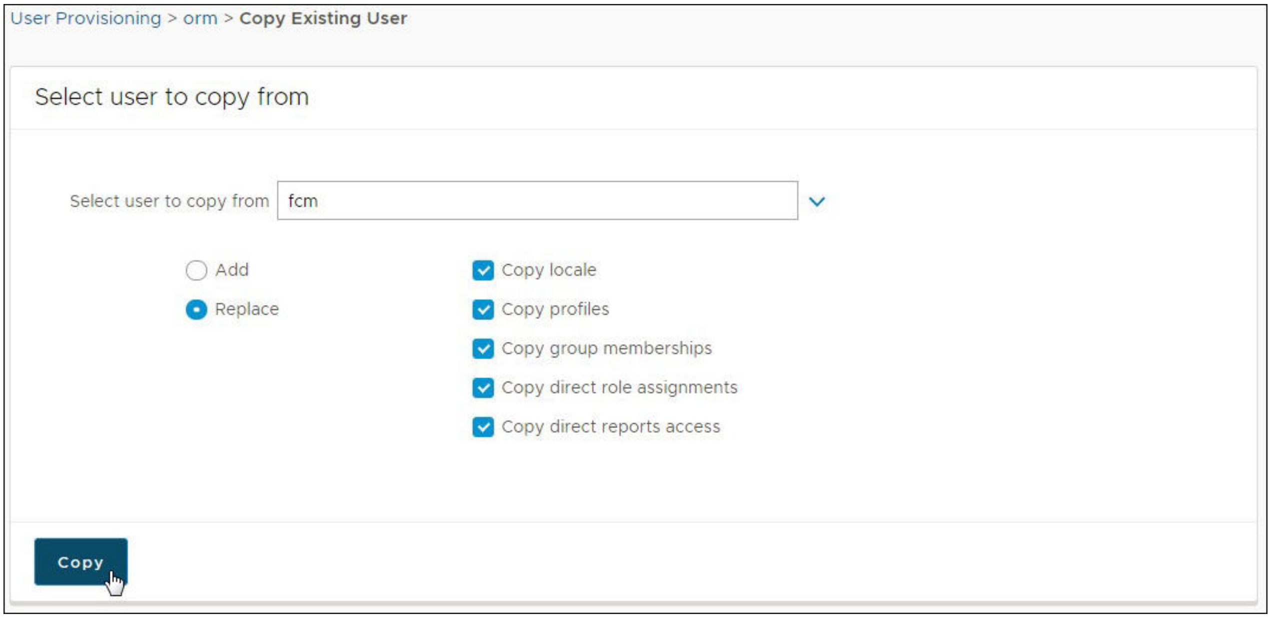


Figure 195. Selecting an existing user to copy access from, with a choice of which attributes to copy.

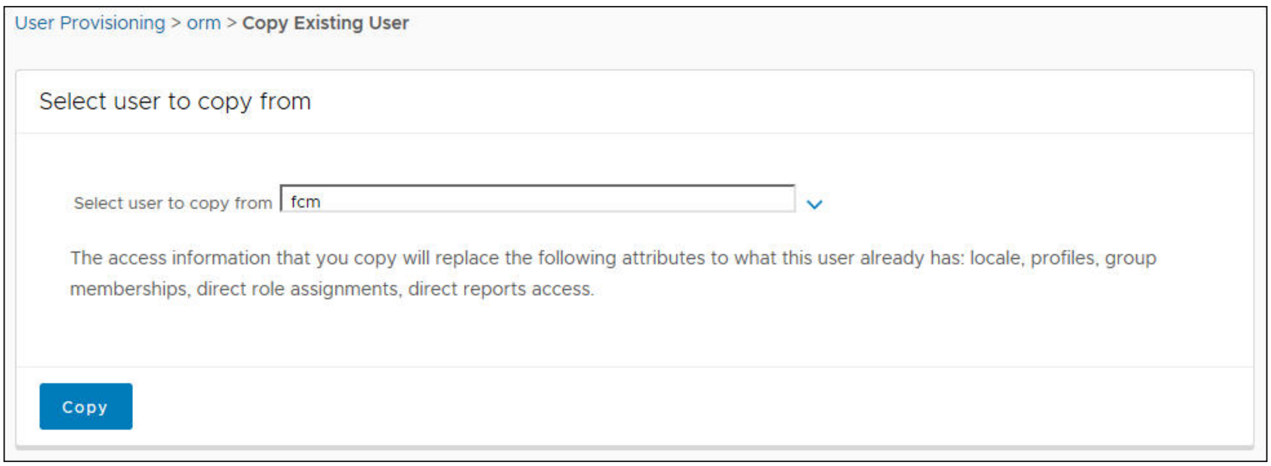


Figure 196. Selecting an existing user to copy access from. The attributes to copy are preset by configuration settings.

Managing existing users from a single page

To manage existing users, you can now search for the user and select the one you want to view or modify.

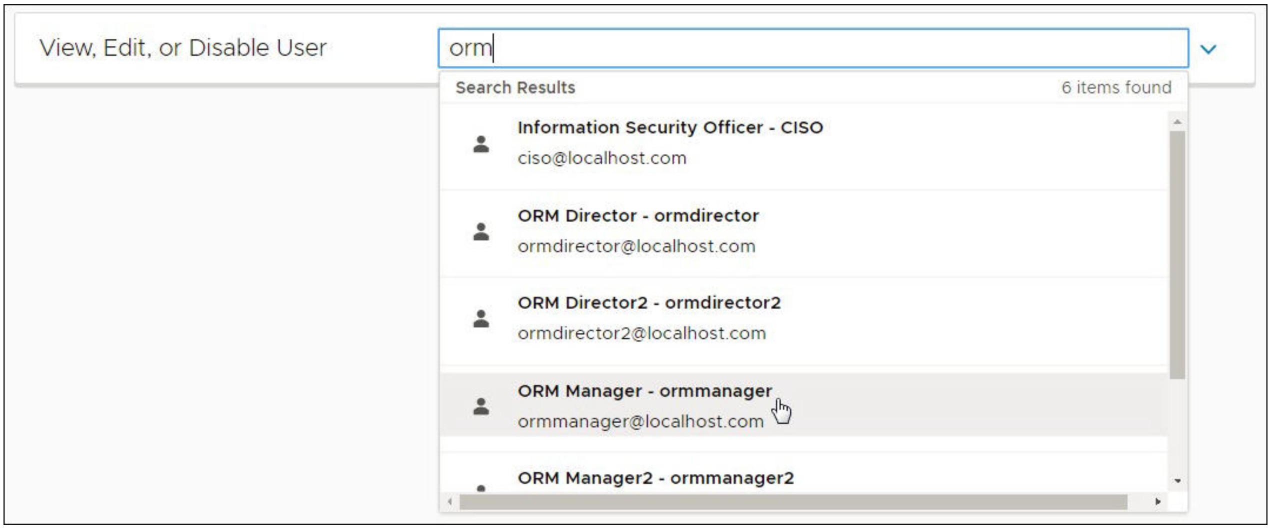


Figure 197. Incremental (type ahead) search for an existing OpenPages user

A single page will appear, from which you can perform all user administration functions for that user. You can view and modify the details of an existing user account, such as the user's locale, profile and group memberships, role assignments, and reports access. You can also disable and lock users, and manage their passwords.

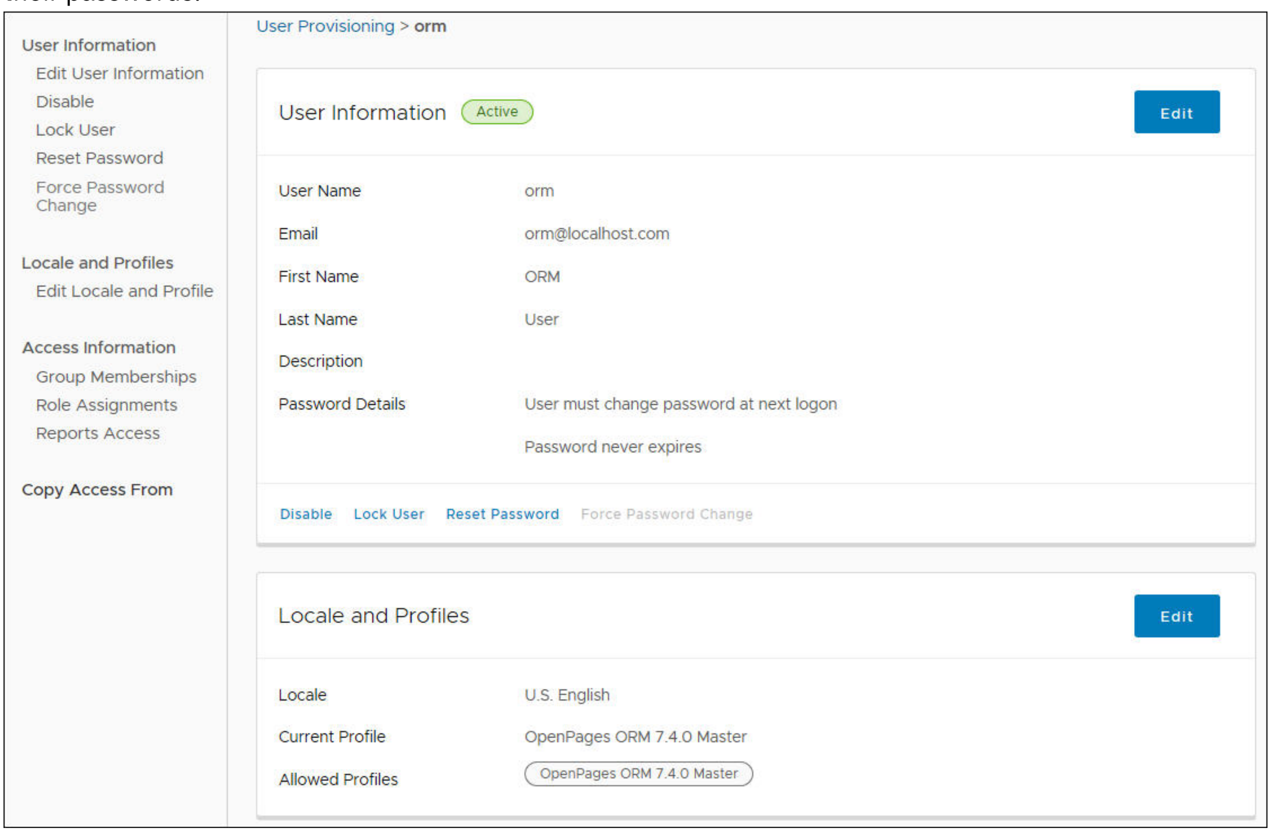


Figure 198. Single page user administration

New LDAP server integration functionality for creating new users

You can now configure integration of user provisioning with your LDAP server. When creating new users in OpenPages, you no longer have to manually enter detailed information such as user names and email. Administrators can search your company's LDAP servers for a list of people who meet the search criteria.

When a user is selected from the list, the information fields in the OpenPages Create User wizard will be pre-populated with the selected user's information from the LDAP server.

Set up the LDAP Server integration via the new configuration UI built for this purpose, which is accessible from the Administration menu.

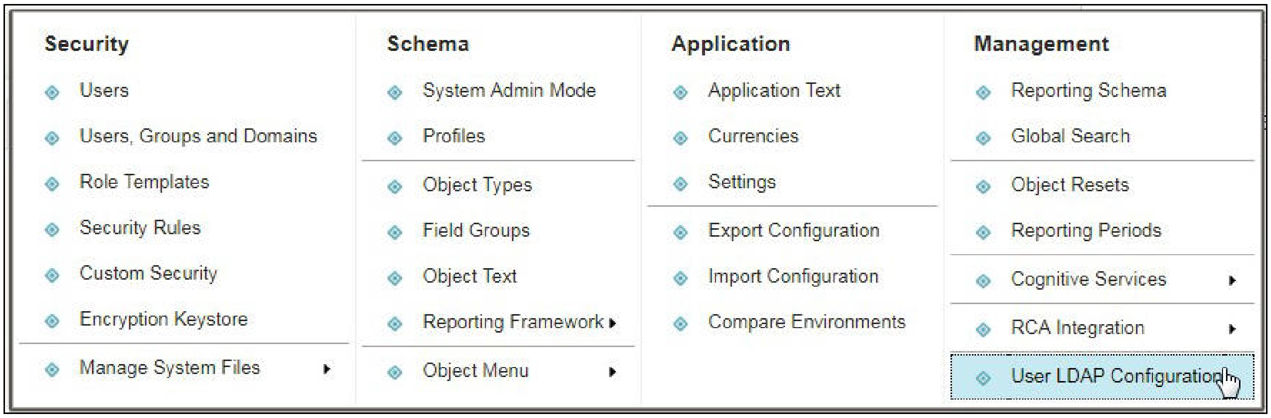


Figure 199. Administration menu access to LDAP Server Configuration

To access one or more of your LDAP servers, enter the fields in the Connection Properties section. Also, provide the information required to map the fields in your LDAP server to the fields in the OpenPages user record.

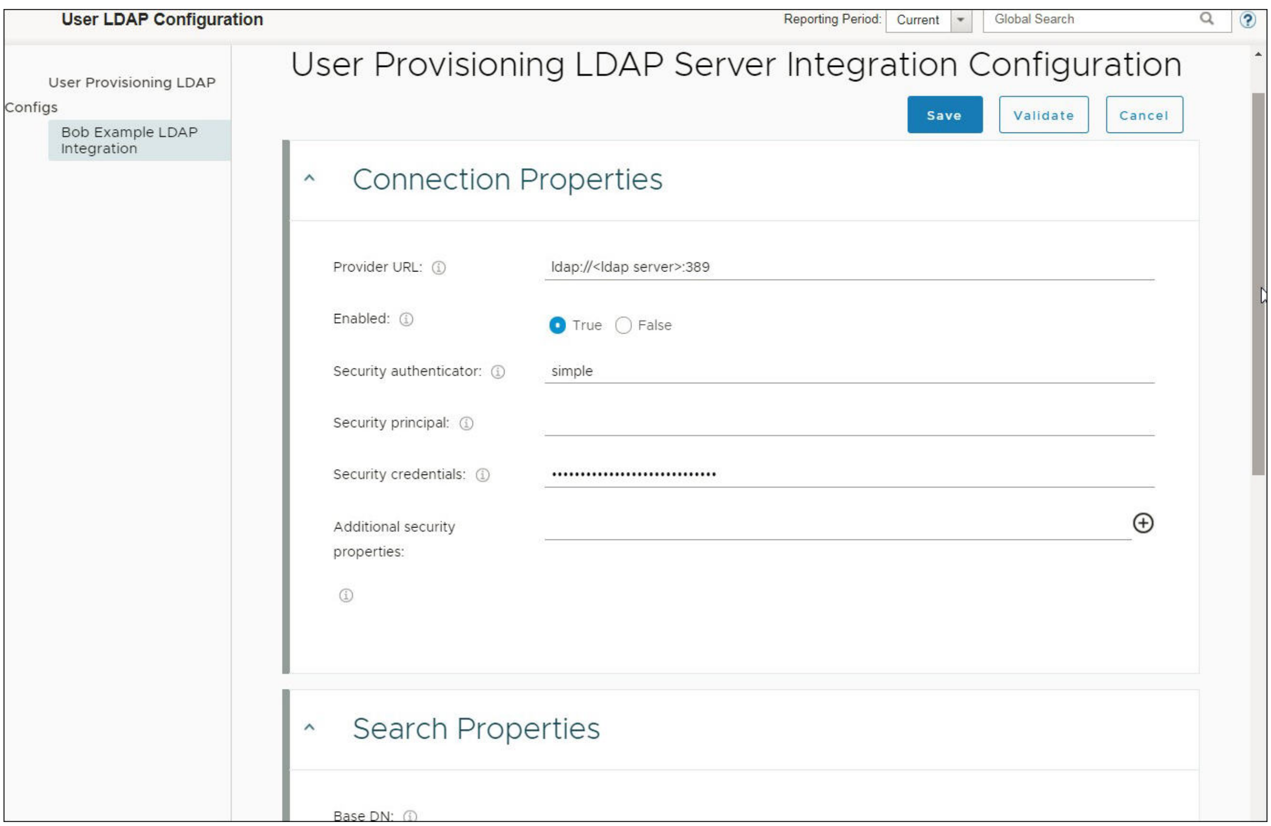


Figure 200. Configuration of LDAP server integration

Installation enhancements

Several enhancements have been made to help you install, deploy, and upgrade IBM OpenPages with Watson.

Reimagined interface for installation and upgrade

The installation server user interface is now a single screen, featuring a clean modern design and a focus on the most critical information. It provides a view of the immediate status of all elements of the deployment. Silent installation is still available and can be used with the existing topology to set up new environments. In addition, the new installation server user interface is card-based and is simple and easy to use.

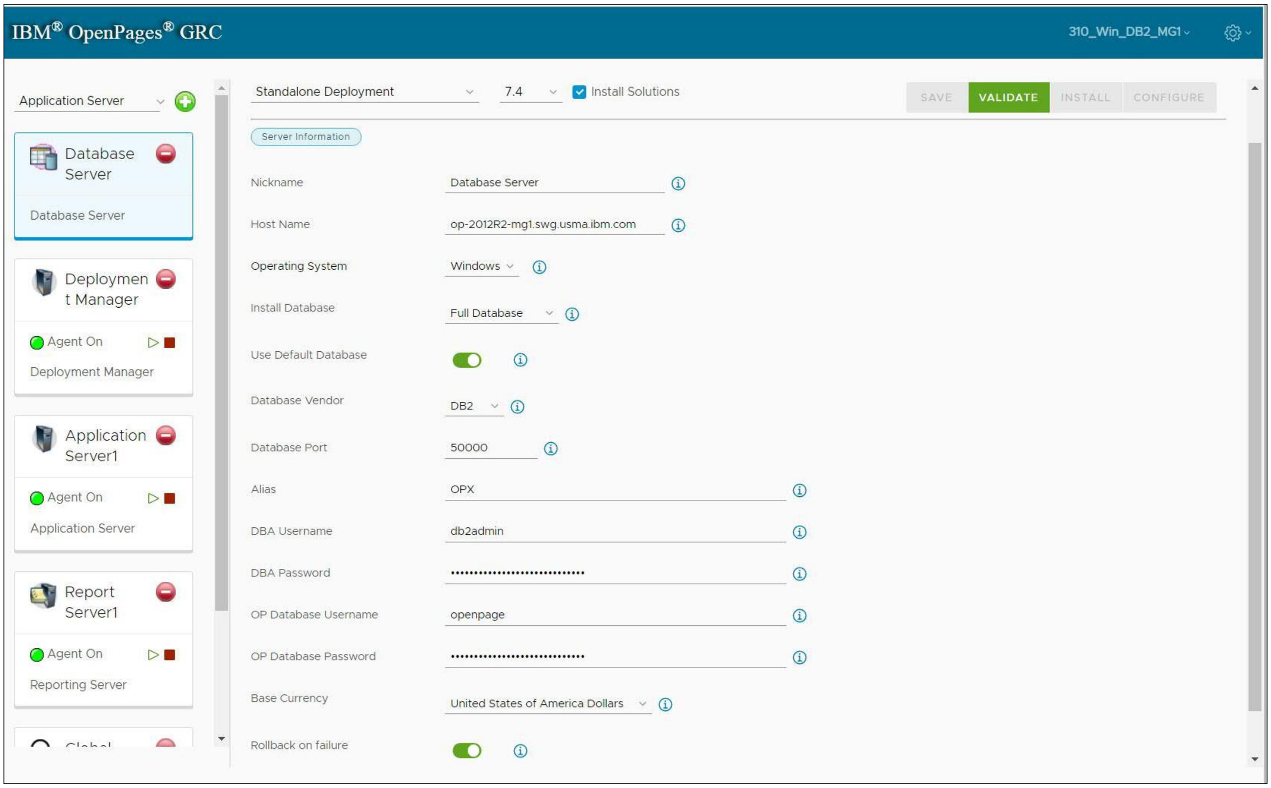


Figure 201. New installation server user interface

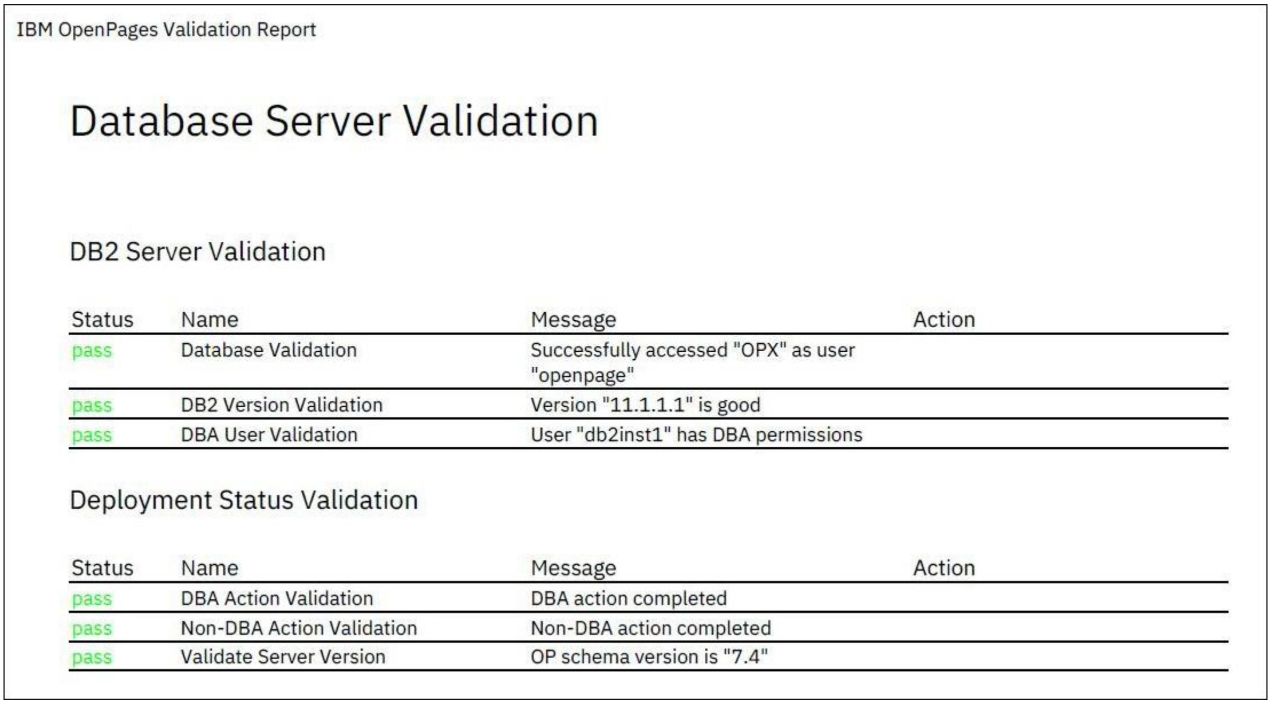
Enhancements to the installation and upgrade process

The installation and upgrade process for OpenPages has been completely re-imagined. You can now control all of your deployments from a single new installation server. The new process is simpler, faster, and more reliable, and the documentation has been streamlined.

The new process reduces deployment time by

- transferring only relevant assets to servers
- providing parallel deployment across multiple servers
- increasing automation and reducing the number of manual steps.

In addition, an enhanced logging mechanism now provides a clear folder structure, meaningful log file names, and human-readable content.


IBM OpenPages Validation Report

Database Server Validation

DB2 Server Validation

Status	Name	Message	Action
pass	Database Validation	Successfully accessed "OPX" as user "openpage"	
pass	DB2 Version Validation	Version "11.1.1.1" is good	
pass	DBA User Validation	User "db2inst1" has DBA permissions	

Deployment Status Validation

Status	Name	Message	Action
pass	DBA Action Validation	DBA action completed	
pass	Non-DBA Action Validation	Non-DBA action completed	
pass	Validate Server Version	OP schema version is "7.4"	

Figure 202. Validation report

The installation process has been improved by separating validation, installation, and configuration steps, and by providing clear messaging during both pre- and post-validation. Self-patching capability is available if an installation needs to be updated. Application uninstallation is also available.

A new consistent methodology has been created for upgrades, whether deploying on an existing host or a new host. The enhanced upgrade begins with a fresh installation of the latest OpenPages version, followed by a restoration of the database backup and custom files. Installation agents are pushed to each server automatically to process deployment tasks. If the installation encounters an error, options are available to debug the problem without restarting the process.

Finally, for maintenance releases (fix packs and interim fixes), you simply place a zip file into a maintenance folder, and the installer and agents will apply the content.

Added deployment flexibility

To allow you to deploy OpenPages according to your IT standards, additional deployment flexibility has been provided. Deployment flexibility has been added in the following areas:

- WebSphere cell and node names
- deployment into pre-existing cells
- separation of DBA and non-DBA operations
- control over tablespace names
- Oracle TDE encryption support

API enhancements

Updates to IBM OpenPages with Watson APIs improve and extend the development of OpenPages applications.

New OpenPages Java and REST APIs

New Java and REST APIs have been added to enable monitoring and termination of processes that use the long running process framework (LRPF).

The new APIs provides the ability to

- find available LRPF process types
- find LRPF process instances for a process type, filterable by state, start-date/end-date range, process owner, and parent process ID
- find LRPF process logs for an LRPF process
- terminate an LRPF process instance

Examples of LRPF processes are reporting schema operations, reporting framework operations, FastMap loads, program launch, and large copy and associate operations.

Two new application permissions control access to the monitoring and terminating of LRPF processes. All super users will have access to all processes and logs and will have the ability to terminate processes without regard to new application permissions.

For more information on supported Java methods, see *IBM OpenPages GRC API Javadoc*. For more information on supported REST resources, see *IBM OpenPages GRC REST API Reference Guide*.

Supported software

IBM OpenPages with Watson 7.4.0 requires new versions of some software:

- Red Hat Enterprise Linux (RHEL) 7.0 and 6.6 (and higher minor releases and updates). RHEL 6.5 is no longer supported.
- AIX 7.1 (or a higher fix pack). AIX 6.1 is no longer supported.
- IBM WebSphere Application Server 9.0.0.3 (or a higher fix pack). WebSphere 8.5.5.x is no longer supported.
- IBM DB2® ESE 11.1.0.0 (or a higher edition or fix pack) or DB2 ESE 11.1.1.1 (or a higher edition or fix pack.
- Oracle SE 12.1.0.2 (or higher edition or fix pack) is required. Oracle 11g is no longer supported.
- IBM Java SDK/JRE 8.0.4.1 (or a higher fix pack). Java 1.7 is no longer supported.
- Client browsers using Chrome or Internet Explorer 11 in native mode. Internet Explorer 9 and 10 and Internet Explorer compatibility mode are no longer supported.
- Cognos Analytics 11.0.7 Interim Fix 1001 (and higher 11.0.x continuous releases). Cognos 10.2.2.x is no longer supported.

IBM OpenPages with Watson 7.4.0 does not support the datamart reporting schema or the Fujitsu advanced workflow engine.

For more details about supported environments, see IBM OpenPages GRC Platform Supported Environments (http://www.ibm.com/support/docview.wss?uid=swg27039467).

Chapter 14. New features in version 7.3.0.2

The new features in IBM OpenPages with Watson 7.3.0.2 include the following enhancements.

Platform enhancements

Enhancements to functionality are included in this version of IBM OpenPages with Watson.

Object association suggestions using cognitive classifications

You can now use the IBM Watson Natural Language Classifier service when you associate parent and child objects. This enhancement is an expansion to the cognitive classification feature that was added to OpenPages in 7.3.0.1.

You can improve the quality of object associations and reduce the amount of time spent correcting associations made in error. You can configure a Natural Language Classifier service to make object association suggestions for any objects in OpenPages. It can make either parent or child object associations. For example, you can use it to support users when they create an Issue object and associate it to a parent Control object. The text description that a user enters is used as input to a Natural Language Classifier service that was trained by your domain specialists. The service returns a list of suggestions together with a confidence score.

The following example illustrates how you can use cognitive technology to support users when they associate objects.

A user creates an issue and enters a description.

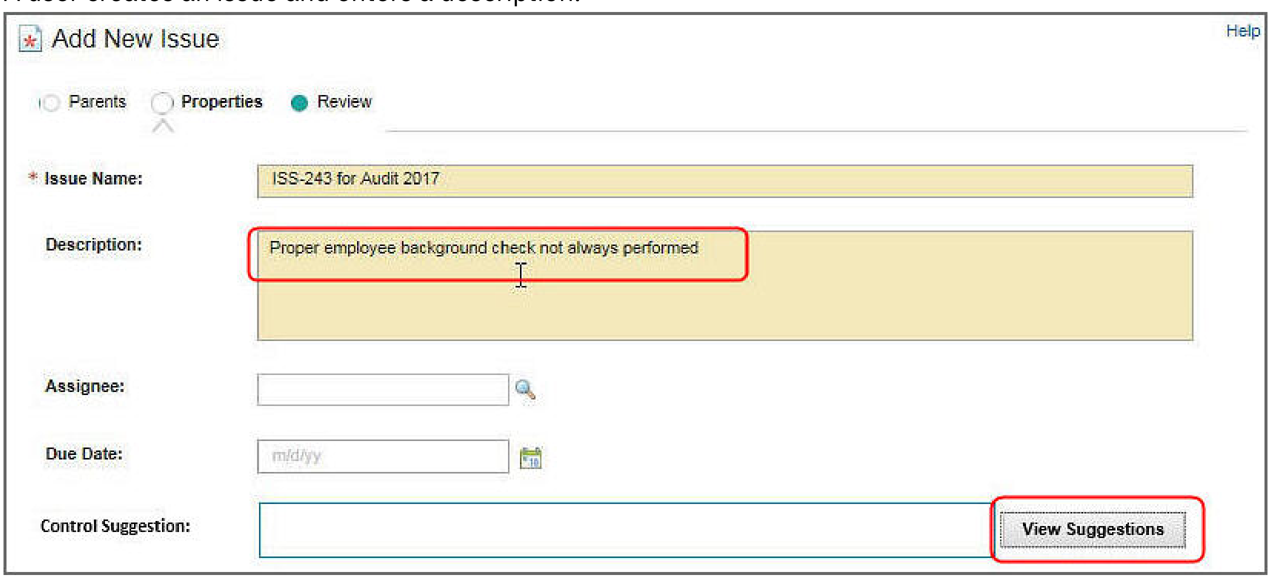


Figure 203. Example of a user creating an Issue

The **View Suggestions** button is activated and the user clicks it.

The Natural Language Classifier service returns up to 10 suggestions together with a confidence score.

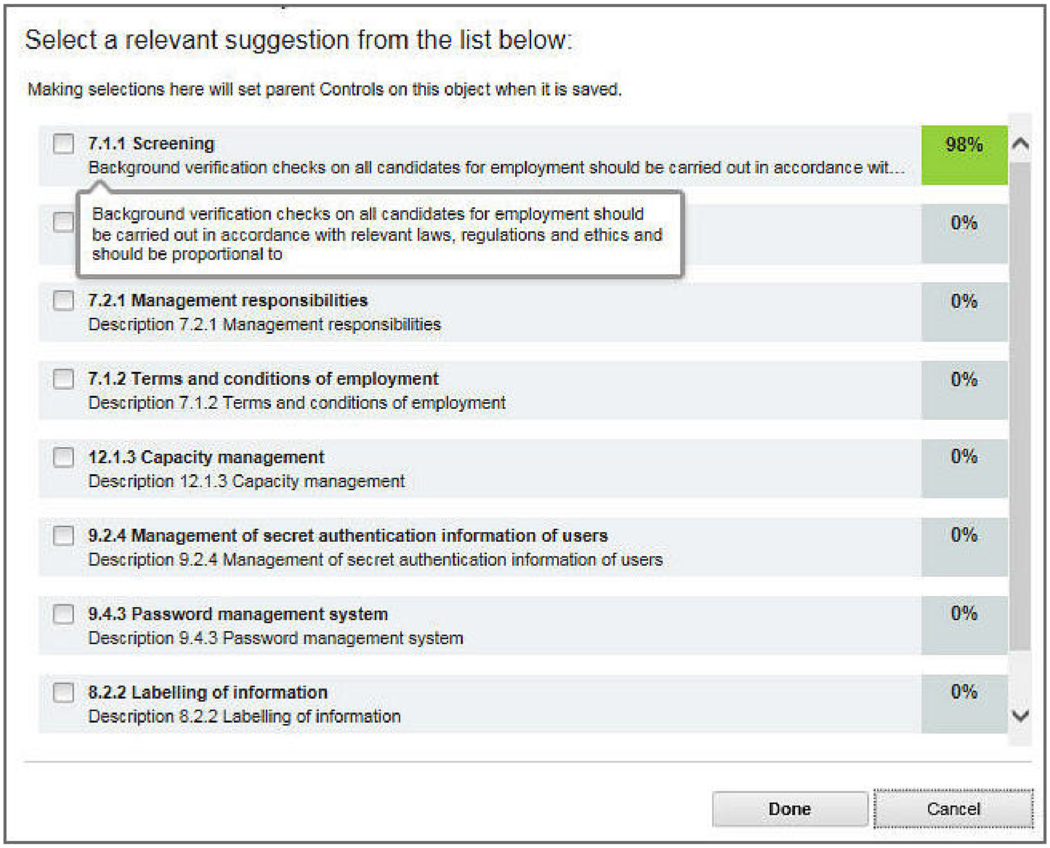


Figure 204. Suggestion window shows suggestions and confidence scores

The user chooses the suggestion with a 98% confidence score. The parent object is associated to the object based on the choice that the user makes.

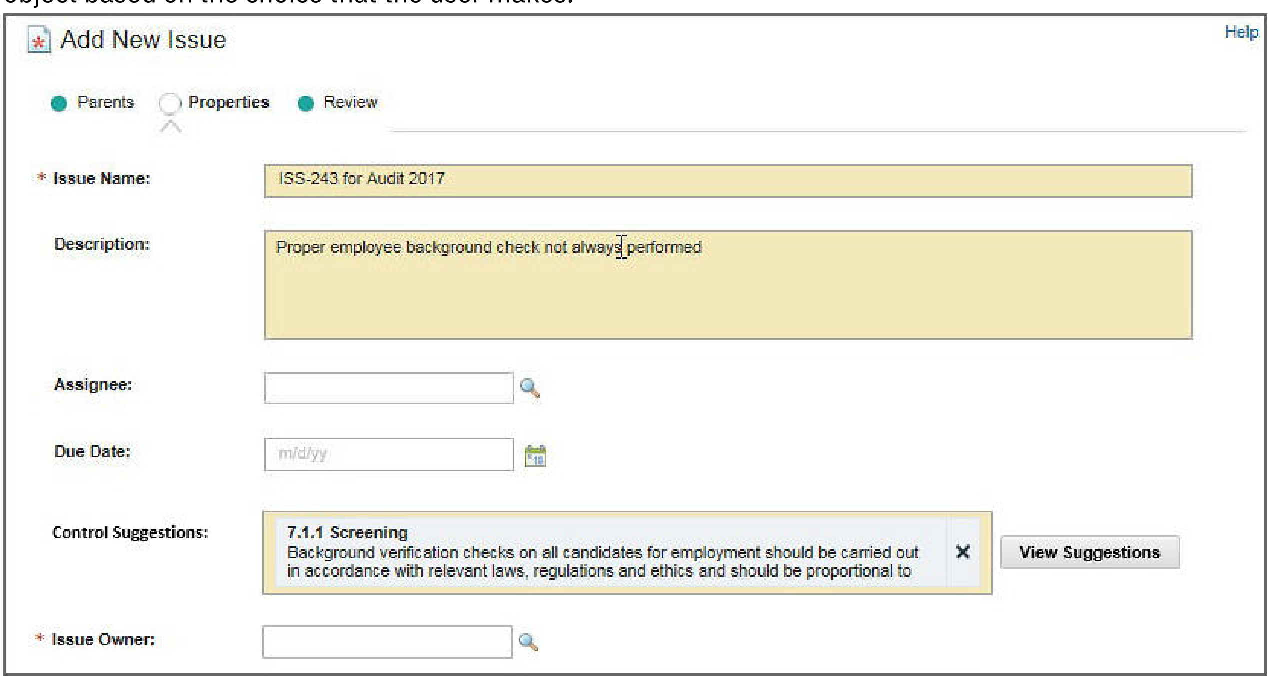


Figure 205. Parent object association is made

The user can now click the **Parents** tab and see the association that they just made. The system synchronizes object associations made on a classifier field with those made on the **Parent** tab or children association tabs.

For setup information, see *Configuring cognitive services* in the *IBM OpenPages with Watson Administrator's Guide*. For information about associating parent and child objects, see *Adding an object instance with the Add New wizard* and *Editing objects in Detail View* in the *IBM OpenPages with Watson User Guide*.

Integration with IBM Regulatory Compliance Analytics

The integration of IBM Regulatory Compliance Analytics with IBM OpenPages with Watson helps you to better understand how new and changed regulatory requirements impact your GRC processes. You can now import data from RCA into OpenPages.

RCA is an integrated governance, risk, and compliance platform that enables companies to manage risk and regulatory challenges across the enterprise. In addition to its cognitive capabilities, RCA also provides a common platform to house regulatory documents and their associated obligations across multiple jurisdictions, sectors, and regulators.

You can use RCA data that you import into OpenPages to assess the impact of new, changed, and deprecated requirements on your GRC policies and procedures, training and awareness, monitoring and testing, and risk assessments.

At the object-type level, documents, obligations, and controls in RCA are mapped, respectively, to Mandates, Requirements, and Controls in OpenPages, as shown in the following illustration:

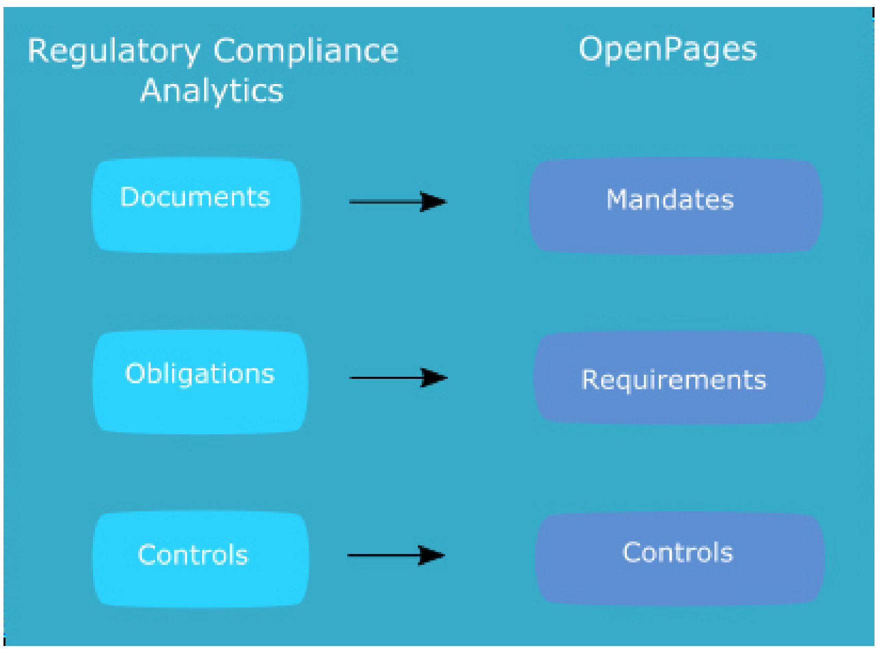


Figure 206. RCA to OpenPages object type mapping

For each object type, you can configure the field-by-field mapping.

When you import RCA data, matching Mandate, Requirement, and Control objects in OpenPages are created or updated. The fields that you configured are populated with RCA data, and the associations between objects are automatically imported. You can reimport data if it changes in RCA.

The categorization and tag information in RCA is also imported into OpenPages. Categorizations provide information about compliance activity, geography, lines of business, products, and so on. After this information is in OpenPages, you can use it in many ways. For example, you can use it as search criteria, to group requirements together, or to organize requirements by themes. This valuable content is now in OpenPages and available for you to use as you require.

You can also partner the RCA data with the new capability in OpenPages to use an IBM Watson Natural Language Classifier service when you associate parent and child objects. For example, you can import RCA obligations into OpenPages and then use a Natural Language Classifier service to link them to the most appropriate controls in your library.

For setup information, see *Importing IBM Regulatory Compliance Analytics data* in the *IBM OpenPages with Watson Administrator's Guide*.

Configuring URL link names by using the rich text display type for simple strings

You can use the rich text display type to display a user-friendly link name as a field's default value. This feature is an alternative to using the URL display type, which can display only URL internet addresses.

In the following example, the **Triage Guidance** field is displayed on the Add New view for Incidents. The default value for the **Triage Guidance** field is an anchor tag that specifies a URL to company-internal documentation, a user-friendly link name, and a font style, color, and size.

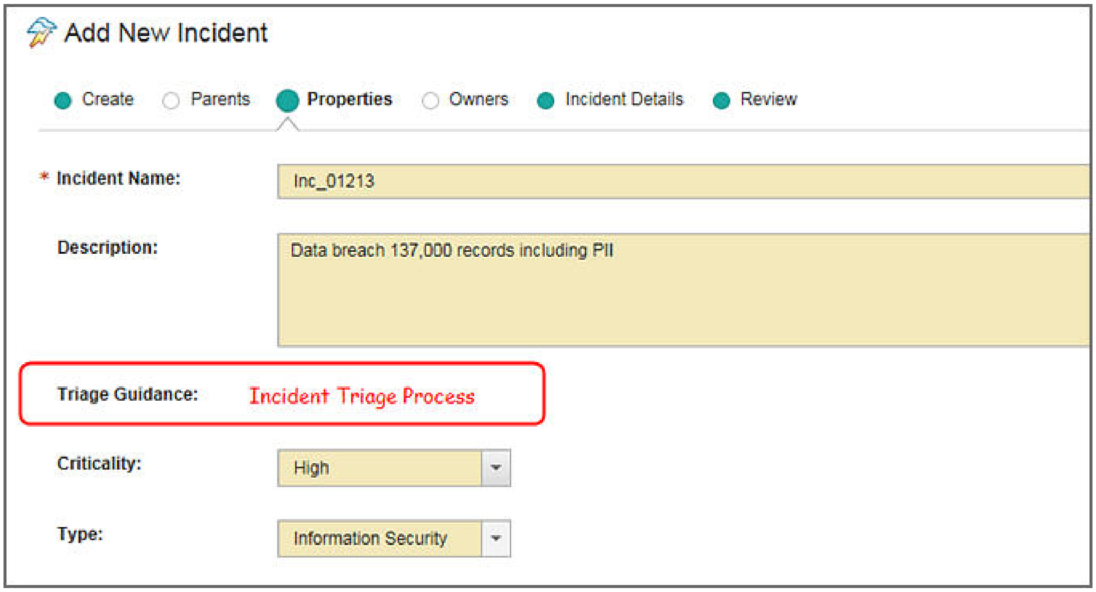


Figure 207. Example of a user-friendly link name

When the user clicks **Incident Triage Process**, the URL opens in a new window.

This existing feature is described in the new topic, *Configuring URL link names by using the rich text display type for simple strings*, in the *IBM OpenPages with Watson Administrator's Guide*.

Copy views to profiles

Administrators can now copy Object Views (which include the Detail View and Activity Views) and Creation Views from one profile to one or more other profiles. This makes it easier to keep views synchronized between profiles, and it makes profile management activities more efficient and less prone to errors.

On the Profile page for any object, **Copy** is now available as an action for any existing Object Views and Creation Views.

The following example illustrates how you can copy the Activity View for the Business Entity object from the OpenPages Modules 7.3.0 Master profile to several other profiles.

Object Views

Add New... | Update Order

Name	Description	Default	Enabled	Order	Actions
Audit Planning	Allows for entry of Schedule Dates and Estimated Hours and T&E for each audit.	false	true	1	Disable | Make Default | Delete | Copy
Detail	Object Details	true	true	2	Copy
Mandate Controls	For the selected Mandate, see all of the associated Controls in the IT Operating Environment. Provides corporate wide view of Control Effectiveness for a given Mandate.	false	true	3	Disable | Make Default | Delete | Copy
UCF Mandates	Shows all of the Requirements driven from each Mandate supplied by UCF.	false	true	4	Disable | Make Default | Delete | Copy
Activity View		false	true	5	Disable | Make Default | Delete | Copy

Creation Views

Add New... | Update Order

Name	Description	Default	Enabled	Order	Actions
Regulator		true	true	1	Disable | Delete | Copy

Figure 208. Example of the Copy action for Object Views and Creation Views

When you click **Copy** from the **Actions** menu for the Activity View, the Copy window opens and you can select the profiles that you want to copy the Business Entity Activity View to.

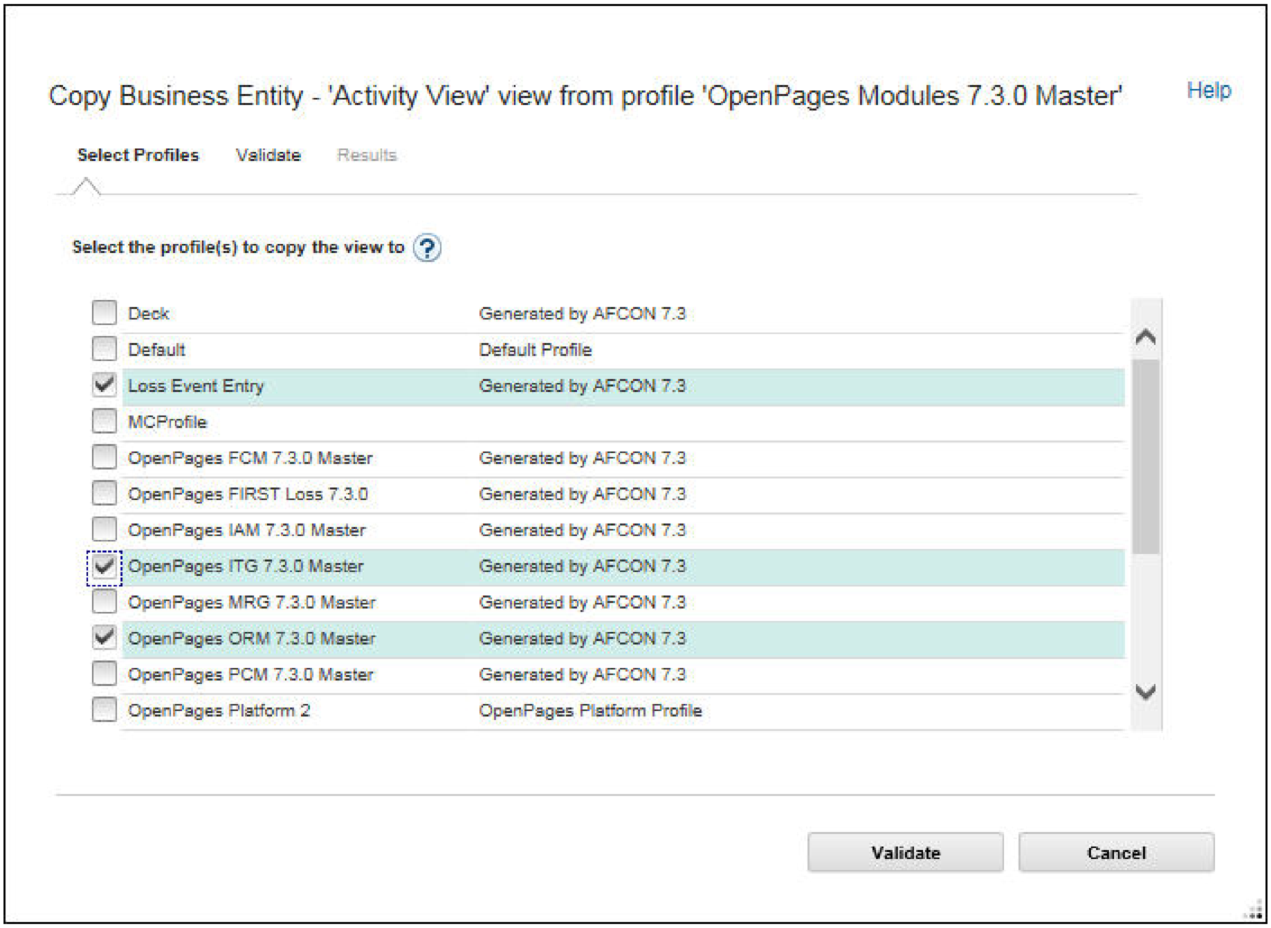


Figure 209. Example of the Select Profiles tab

When you click **Validate**, information messages, warnings, and errors are displayed. Based on the results of the validation operation, you can decide whether to proceed with the copy operation.

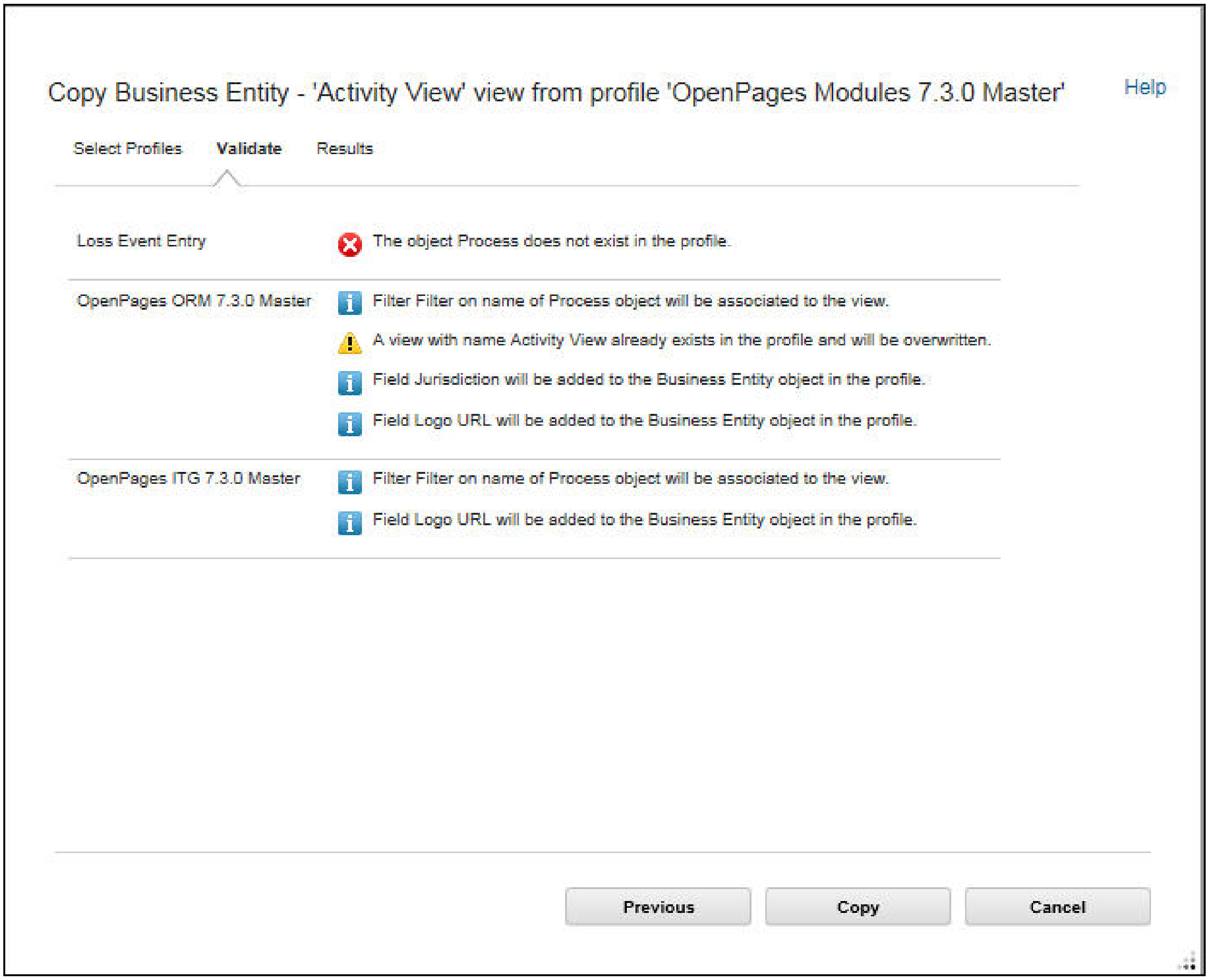


Figure 210. Example of the Validate tab

In this case, there is one reported error because the Business Entity object does not exist in the Loss Event Entry profile. You review the warnings and information messages related to the other two profiles, and determine that there is no issue in proceeding. After you click **Copy**, the Results tab indicates that the Business Entity Activity View was copied successfully from OpenPages Modules 7.3.0 Master to two of the profiles that you selected. It was not copied to the Loss Event Entry profile.

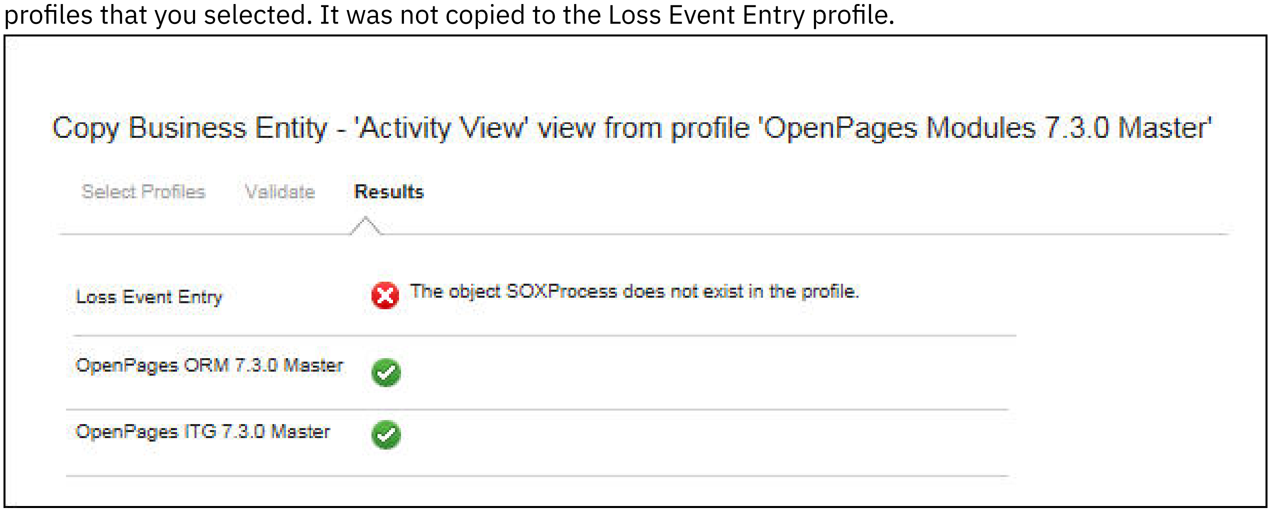


Figure 211. Example of the Results tab

For more information about this feature, see *Copy views for an object from one profile to one or more other profiles* in the *IBM OpenPages with Watson Administrator's Guide*.

Administration and serviceability enhancements

An enhancement has been made to help you administer, maintain, and support IBM OpenPages with Watson.

Compare environments

You can find differences between two environment configuration XML files by using the new **Compare Environments** feature. Use Compare Environments to identify and resolve issues before you migrate configurations from one environment to another.

Compare Environments compares XML files that you generate in each environment. You can generate the XML files by using Export Configuration or by using ObjectManager. Compare Environments looks at the XML files and identifies any differences in the files. Compare Environments also uses validation rules to check the XML files for any errors and for changes that might cause issues during a migration.

For example, you can compare the profiles that exist in two environments.

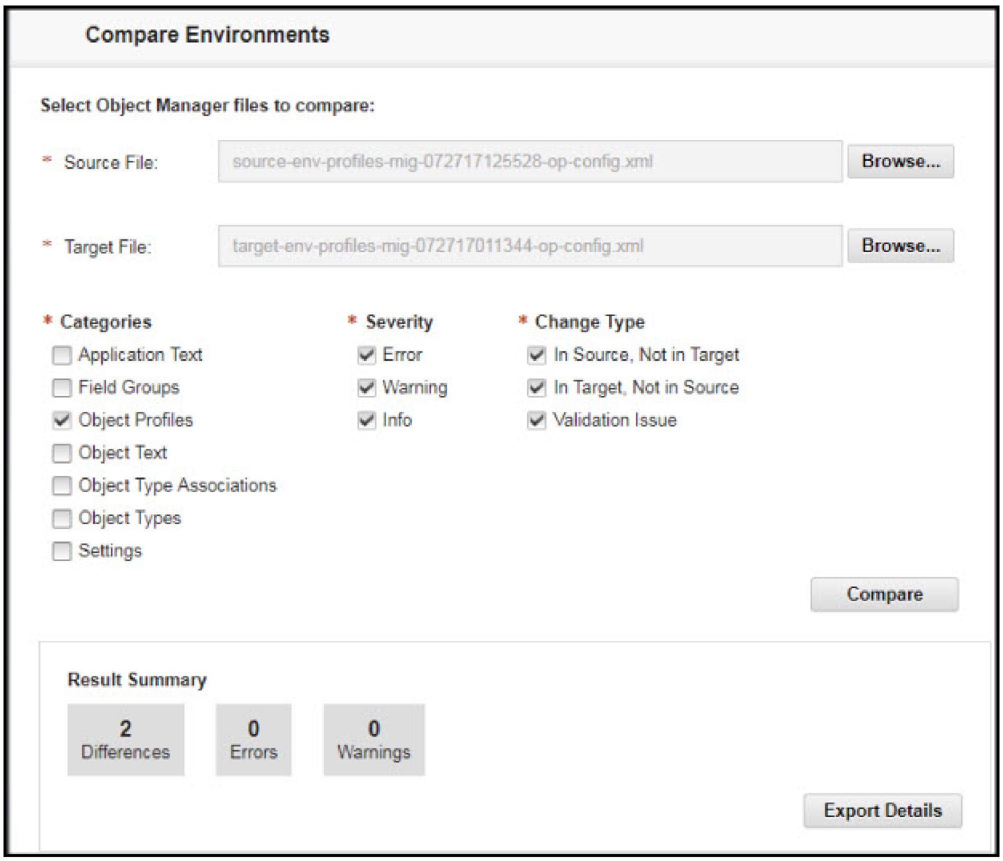
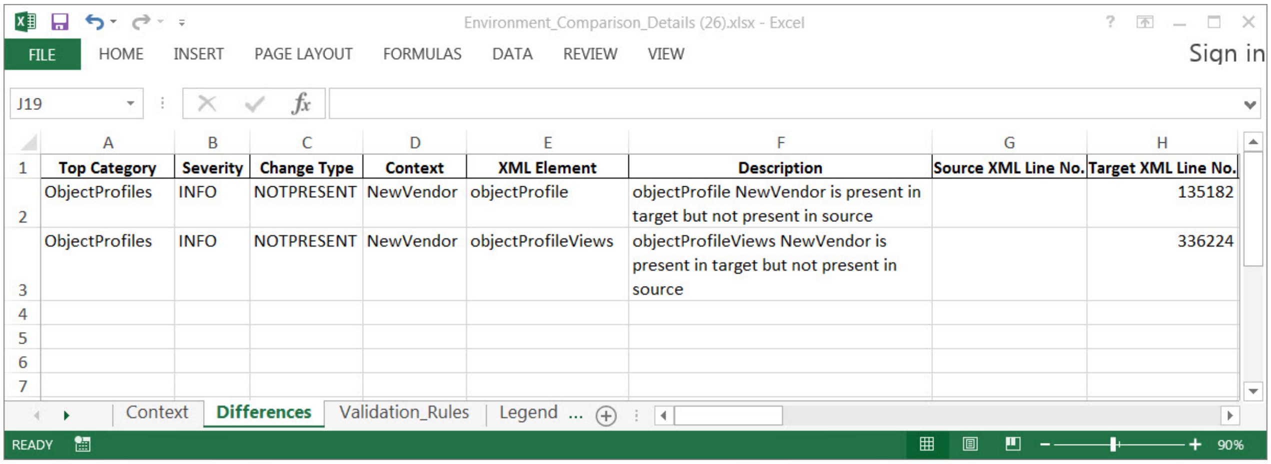


Figure 212. Comparing profiles in a source and target environment

You can export the results to see details about the differences. In this example, a profile that is called NewVendor exists in the target environment but not in the source environment.



Top Category	Severity	Change Type	Context	XML Element	Description	Source XML Line No.	Target XML Line No.
ObjectProfiles	INFO	NOTPRESENT	NewVendor	objectProfile	objectProfile NewVendor is present in target but not present in source		135182
ObjectProfiles	INFO	NOTPRESENT	NewVendor	objectProfileViews	objectProfileViews NewVendor is present in target but not present in source		336224

Figure 213. Results of the comparison: A profile does not exist in the source environment

The source and target files can be from environments that are running different versions of IBM OpenPages with Watson. Further, you can run Compare Environments on a system that is running a version that is different from both the source and target environments.

For more information, see *Comparing IBM OpenPages with Watson environments* in the *IBM OpenPages GRC Administrator's Guide*.

Chapter 15. New features in version 7.3.0.1

The new features in IBM OpenPages with Watson 7.3.0.1 include the following enhancements.

IBM OpenPages GRC on Cloud update

IBM OpenPages GRC on Cloud has been updated to version 7.3.0.1.

Some features and functions might not be available in OpenPages GRC on Cloud. For example, OpenPages GRC on Cloud does not include integration with IBM Business Process Manager and certain administrative functions.

If you have any questions about the functionality available in the product version that you are using, contact IBM OpenPages Support via the IBM Support Portal (http://www.ibm.com/support).

Platform enhancements

Enhancements to functionality are included in this version of IBM OpenPages with Watson.

Taxonomy suggestions using cognitive classifications

You can now use the IBM Watson Natural Language Classifier service to build cognitive technology that brings expertise to users' fingertips. It can support human decision making and interact naturally with users when they classify information that they create. The Natural Language Classifier understands the intent behind text and returns corresponding suggested classifications together with a confidence score.

With training data that you design when you create a Natural Language Classifier service, you can share the knowledge and expertise of a few domain specialists with a large pool of users. You can improve the quality of classifications and reduce the amount of time spent reclassifying objects. You can support users in assigning the correct classifications even if they do not have extensive knowledge or training in the domain.

You can use a Natural Language Classifier service for any objects in OpenPages but it is most typically used for loss events, waivers, issues, and incidents. For example, you can use it to support user decision making when they classify a loss event to the correct Basel II categorization. You can also use it to support user decision making when they classify waivers as exceptions to regulatory compliance. The text description that a user enters is used as input to a Natural Language Classifier service that was trained with knowledge from your domain specialists.

Using a Natural Language Classifier service is best suited to situations where users are generating a high volume of objects, hundreds or even thousands per year. Cognitive computing adds value when it is scaled to a large data set and to a large group of users. You can link OpenPages to one or more Natural Language Classifier services in IBM Cloud.

The following example illustrates how you can use cognitive technology to support users when they enter incidents.

First, a user creates an incident and enters a description.

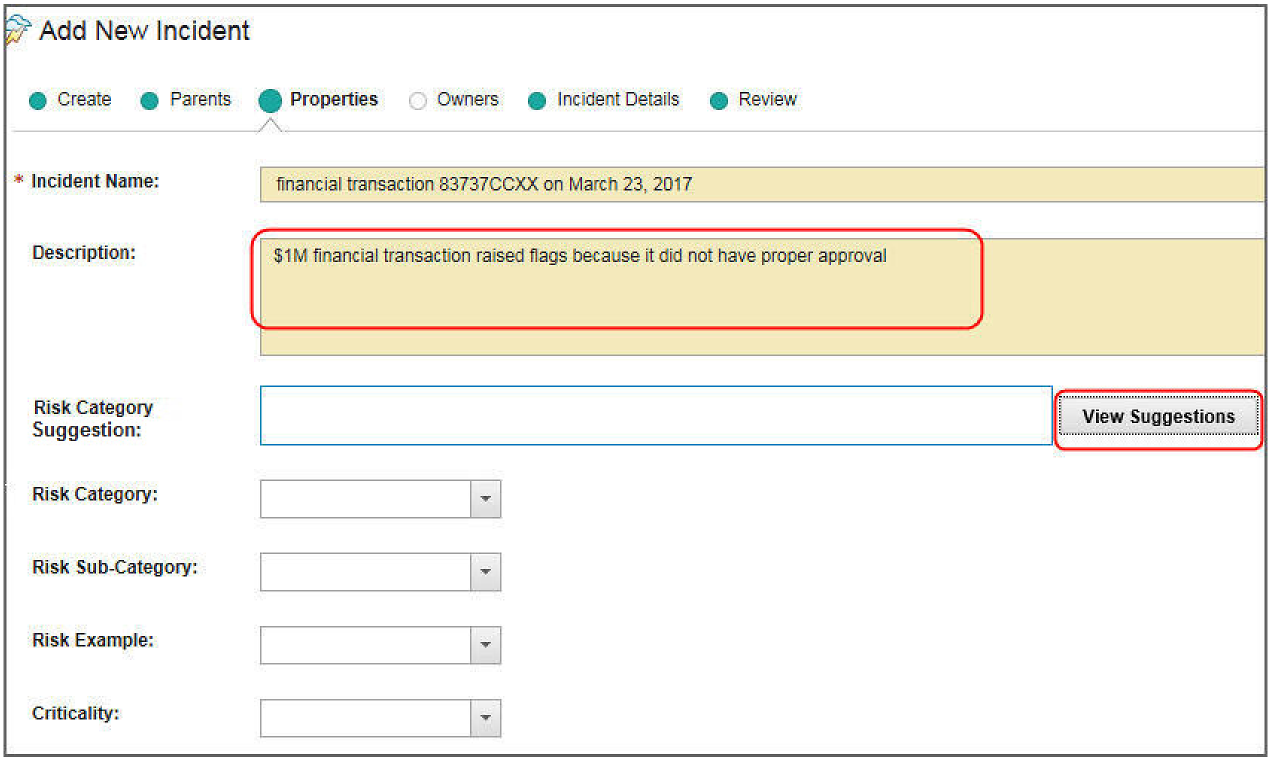


Figure 214. Example of a user entering an incident

The **View Suggestions** button is activated and the user clicks it.

The Natural Language Classifier service returns up to 10 suggestions together with a confidence score.

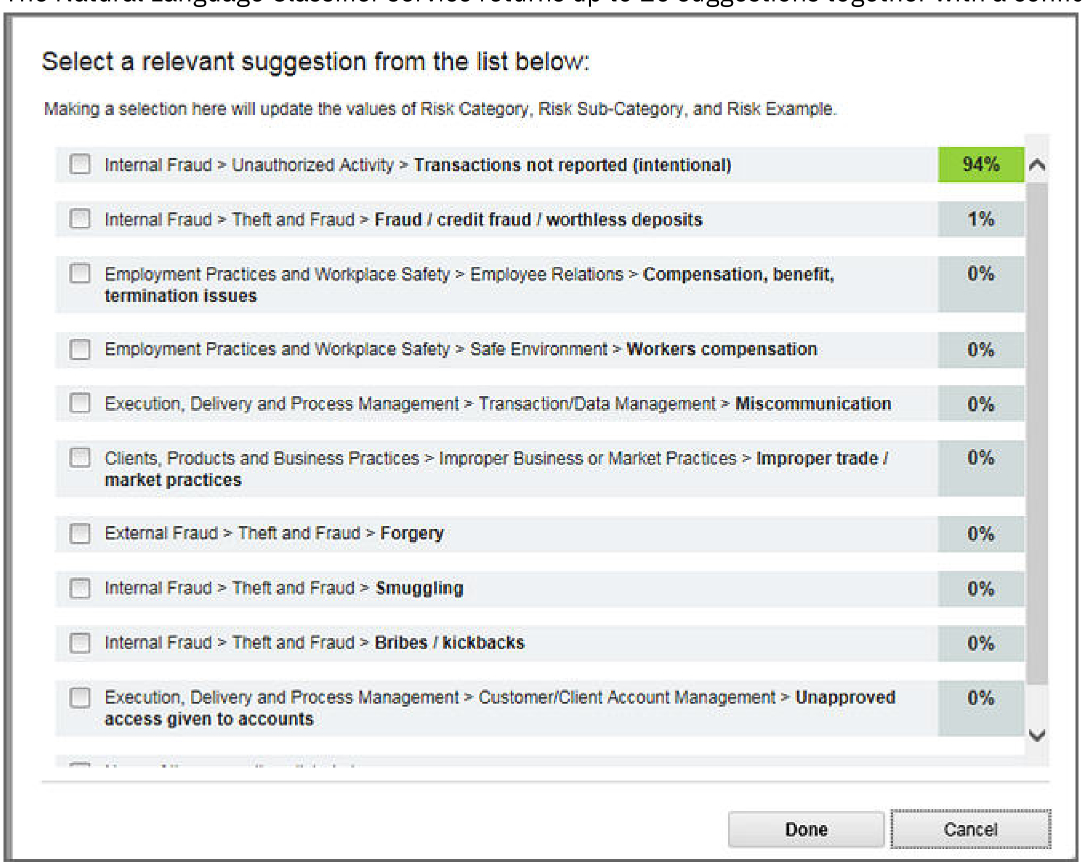


Figure 215. Suggestions and confidence score

The user chooses the suggestion with a 94% confidence score. The **Risk Category**, **Risk Sub-Category**, and **Risk Example** fields are automatically filled based on the choice that the user made.

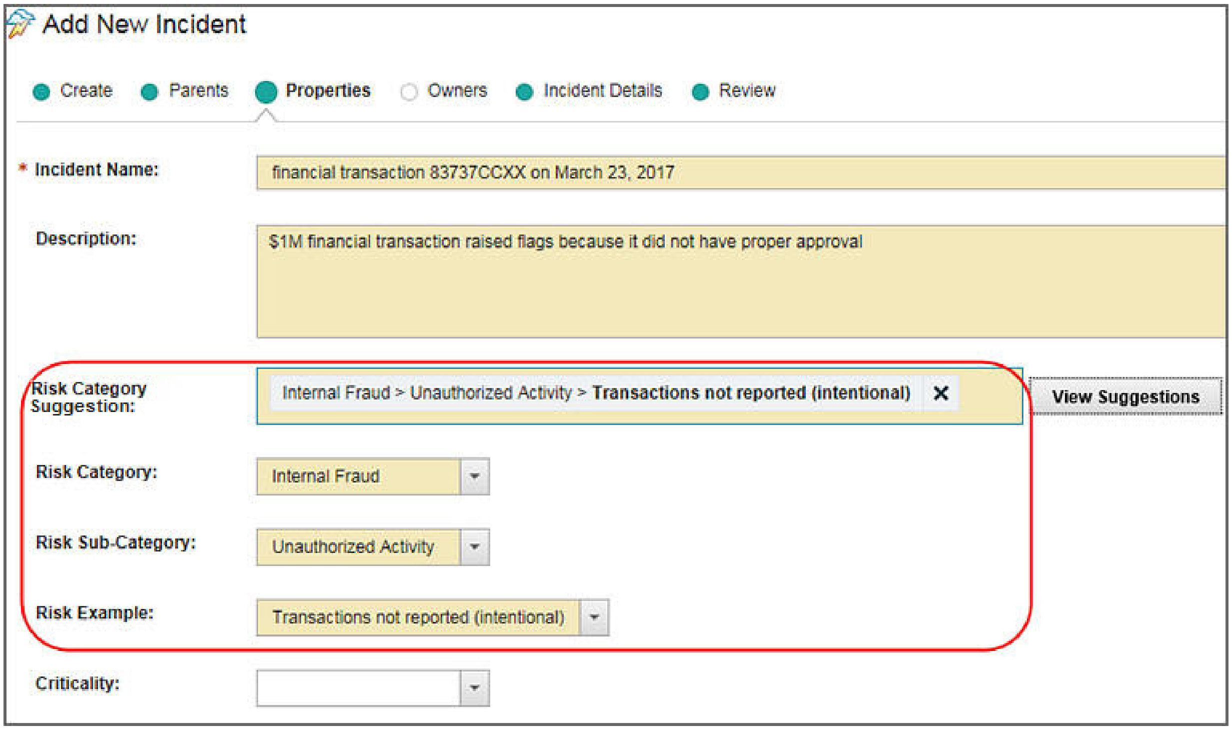


Figure 216. Classifier target fields are automatically filled

For setup information, see *Configuring cognitive services* in the *IBM OpenPages with Watson Administrator's Guide*. For information about classifying a new object and editing classifier information for an existing object, see *Adding an object instance with the Add New wizard* and *Editing objects in Detail View* in the *IBM OpenPages with Watson User Guide*.

Integration with IBM Business Process Manager

Enhancements were made to the integration of IBM OpenPages with Watson with IBM Business Process Manager.

The following enhancements were made:

- Added the OPLaunchChildProcesses integration service. You can use it in a hierarchical process that involves a large number, even hundreds, of child action items without compromising server performance. The new advanced hierarchical process example illustrates how you can use it.
- Added the OPPerformRESTGet integration service. You can use it if no integration service meets your requirements but a REST API does.
- Changed the `fields` input parameter on the OPHierarchicalQuery integration service so that it can retrieve the resource ID or the system fields rather than the explicit field name format. You can specify it to use one of the following new keywords: `Id` for only the resource ID or `System Fields` for all the system fields from the child type. Minimizing the number of fields brought back from the query results reduces memory usage and can improve process performance.
- Added a `start` input parameter to the OPHierarchicalQuery integration service.
- Added a `start` input parameter to the OPHierarchicalAssigneeQuery integration service.
- Removed the 64 character limitation for field names. In version 7.3.0.0, the maximum length of OpenPages field names in IBM Business Process Manager was 64 characters. This restriction no longer applies.

Questionnaire assessments

Several enhancements have been made to questionnaire assessments.

Pre-fill answers on questionnaire assessments

When you launch a program, you can now pre-fill answers from previous programs for the same asset and the same question. For example, this year you can send out questionnaire assessments that are the same or similar to ones you sent last year, and you can include last year's answers. The recipients receive questionnaire assessments where some or all of the questions have pre-filled answers, therefore, saving them time and effort. You can choose to also copy comments and attachments.

The following example shows how a pre-filled answer to a question is displayed. The first two chooses are selected, without the recipient having to take action, and the questionnaire assessment where the answer came from is displayed if you click **Details**. The respondent can keep the answer or change it.

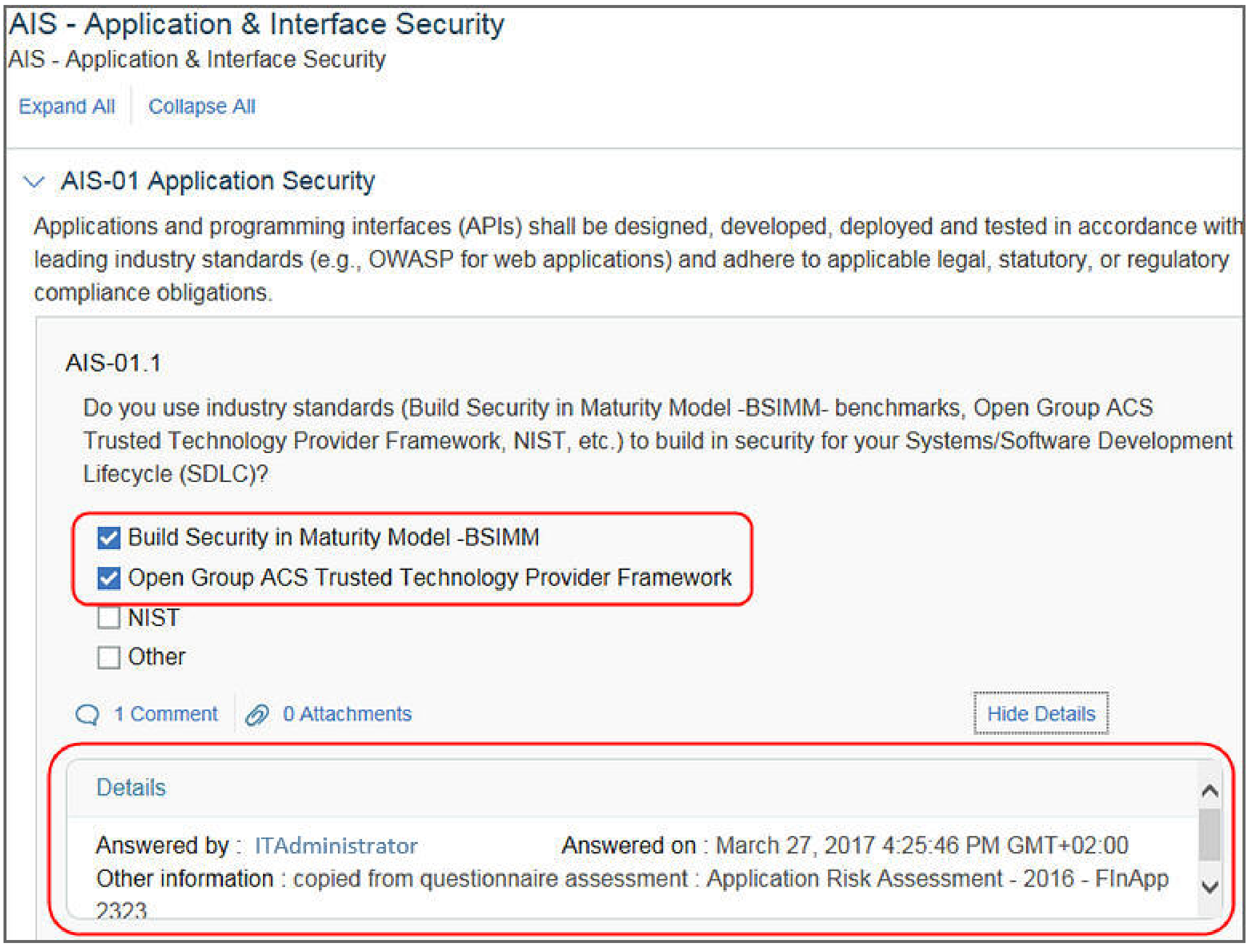


Figure 217. Example of a pre-filled answer on a questionnaire assessment

Questionnaire templates support table-style answers

You can use the new question type, Table Answer, to add table-style answers to questionnaire templates. Use it to build a grid format, where the columns are fixed and the rows vary, when you need an open but structured approach to the information you need to gather. A table-style answer can have up to 15 columns. On a questionnaire assessment, a respondent can add up to 30 rows and write up to 50 characters per cell. If the question is required, the respondent must enter one row of information. The questions can be dynamic questions but they cannot be control questions. For reporting purposes, table answers are persisted in CSV format with the pipe bar as a delimiter.

The following example illustrates how you can build a table-style answer so that you collect consistent information for contacts.

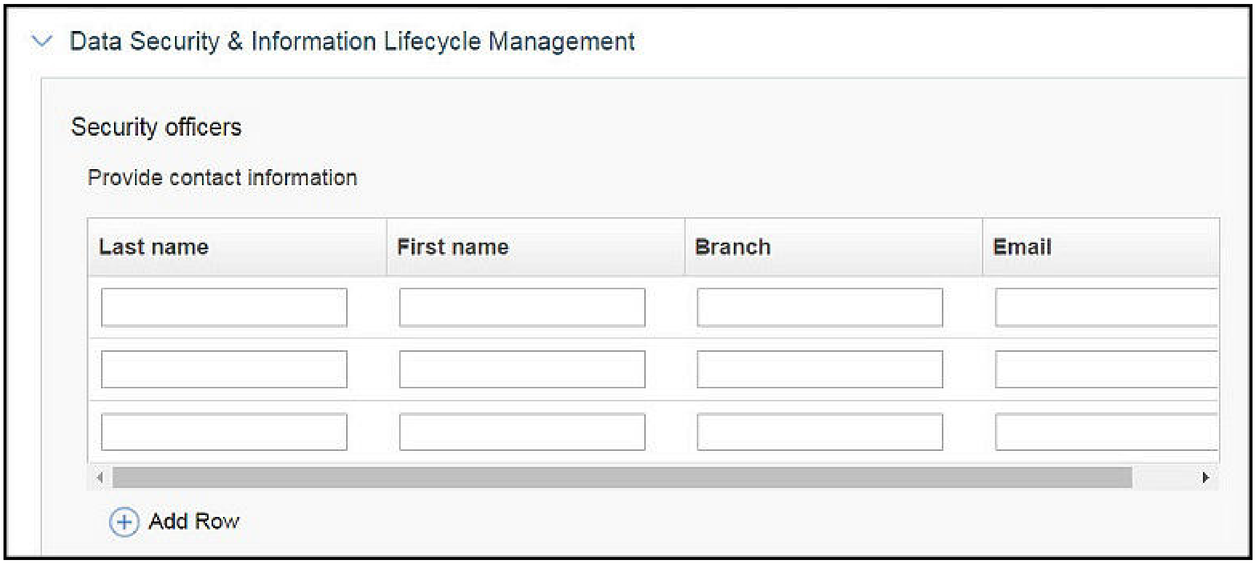


Figure 218. Example of a table-style answer on a questionnaire assessment

Dynamic questions support multiple answers in control questions

In a dynamic question, in **Has been answered**, you designate a control question's answer that makes the dynamic question display. Previously, you could select only one answer. Now you can select multiple answers. When a respondent selects any of the answers that are given in **Has been answered**, the dynamic question displays.

IBM OpenPages GRC SDI Connector for UCF Common Controls Hub

A new connector is available, IBM OpenPages SDI Connector for UCF Common Controls Hub.

Use IBM OpenPages SDI Connector for UCF Common Controls Hub to import data from UCF Common Controls Hub into IBM OpenPages with Watson.

IBM OpenPages SDI Connector for UCF Common Controls Hub connects to a UCF Common Controls Hub subscription account and to IBM OpenPages with Watson through the REST API.

The connector includes pre-packaged IBM Tivoli Directory Integrator assembly lines that you can import and configure in IBM Tivoli Directory Integrator. You can run the assembly lines to import authority documents, citations, and controls from UCF into OpenPages as mandates, submandates, and requirements.

To use the IBM OpenPages SDI Connector for UCF Common Controls Hub, you need a license for the connector and you need a UCF Common Controls Hub Basic Subscription with the API Access add-on.

Note: IBM Security Directory Integrator is the latest name for IBM Tivoli Directory Integrator. You might see TDI and SDI used interchangeably in the documentation.

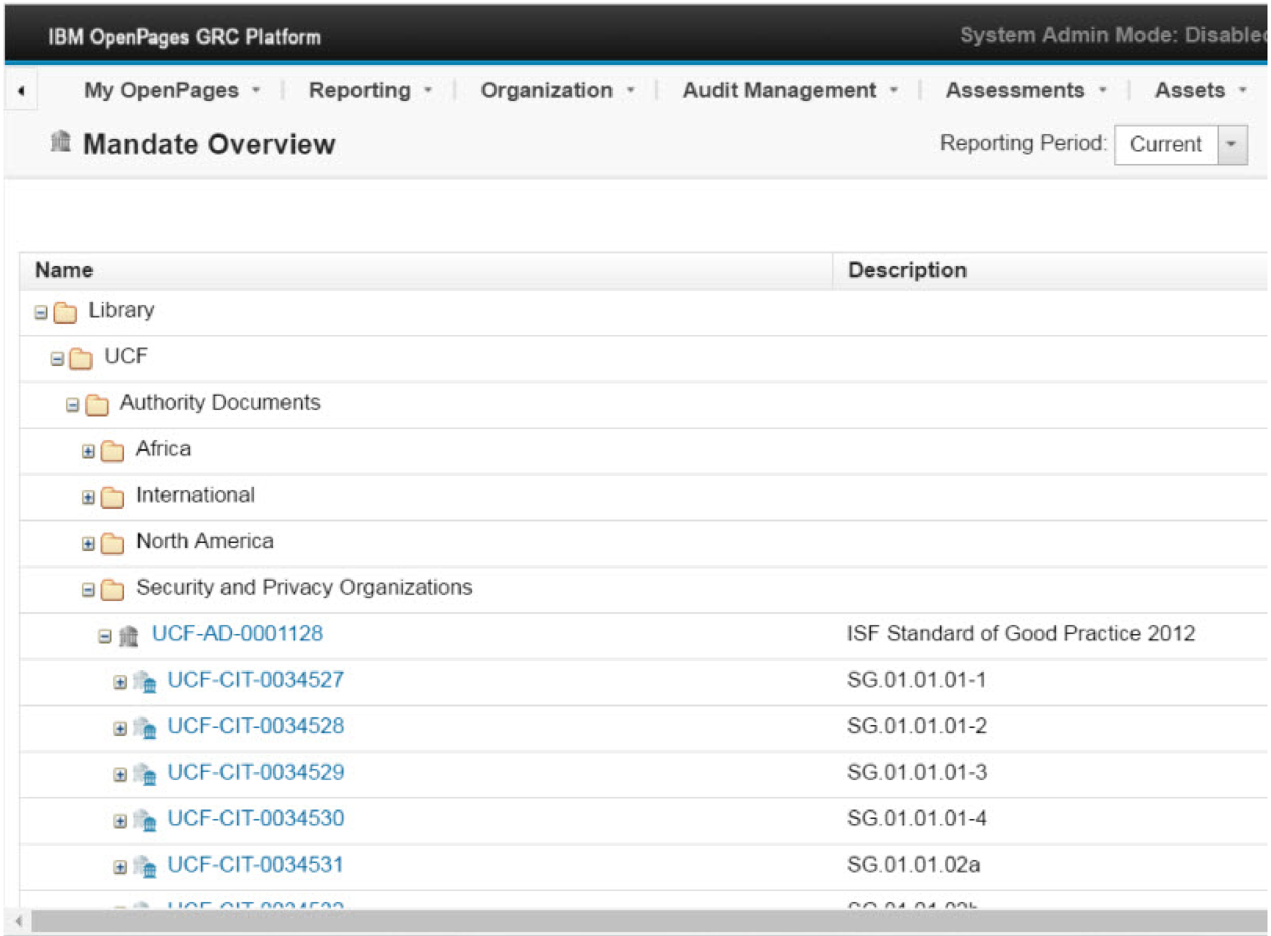


Figure 219. Example of an authority document that was imported from UCF

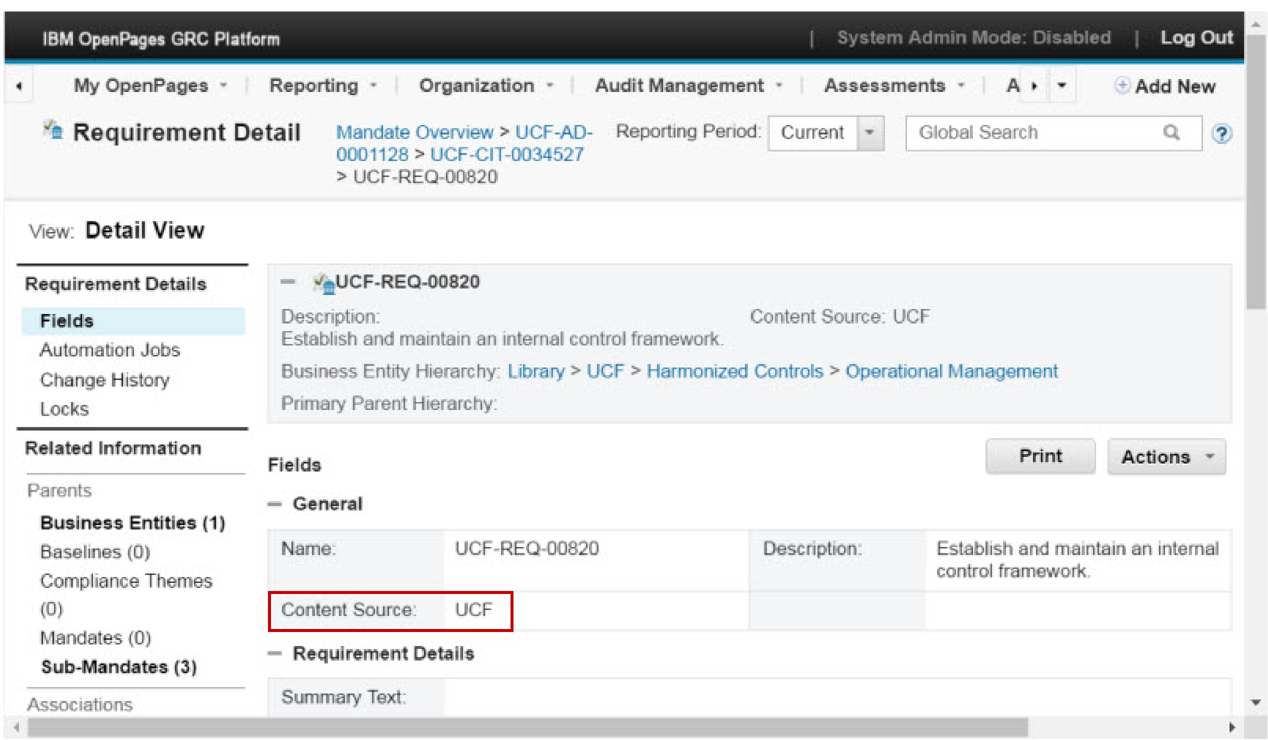


Figure 220. Detail view of a requirement that was imported from UCF

You must have a UCF Common Controls Hub account to use this feature.

For information about setting up IBM OpenPages SDI Connector for UCF Common Controls Hub, see the *IBM OpenPages with Watson Installation and Deployment Guide*. For information about using the connector, see the *IBM OpenPages with Watson Administrator's Guide*.

Solution enhancements

Enhancements to solutions are included in this version of IBM OpenPages with Watson.

IBM OpenPages Regulatory Compliance Management Theme Deployer

The RCM Theme Deployer is a tool that users can use to lay the foundation for business entities to complete regulatory compliance assessments.

The RCM Theme Deployer distributes regulatory requirements (organized into themes) and creates associations to controls for business entities to assess. When users select a theme to deploy to business entities, the structure is created, including the compliance plan, compliance theme, and the relevant requirement evaluation records beneath the theme, linked to the relevant control objects.

The RCM Theme Deployer enables organizations to:

- Deploy and assess similar regulatory requirements, based on a consistent methodology
- Quickly access all regulatory requirements that are related to a theme in one object
- View all of the controls that are in place (or that are missing and should be in place) that satisfy the requirements
- Assess how well the organization is satisfying one or many similar regulations by using regulatory compliance assessments

Users can deploy a theme to multiple business entities.

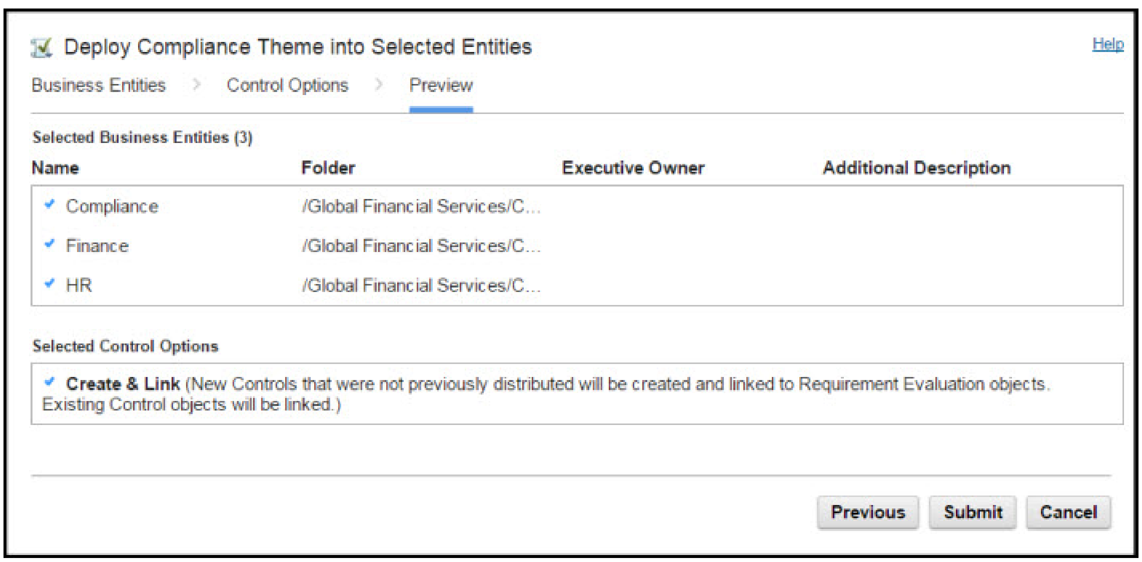


Figure 221. Deploying a theme to multiple business entities

Users can also deploy multiple themes to single business entity.

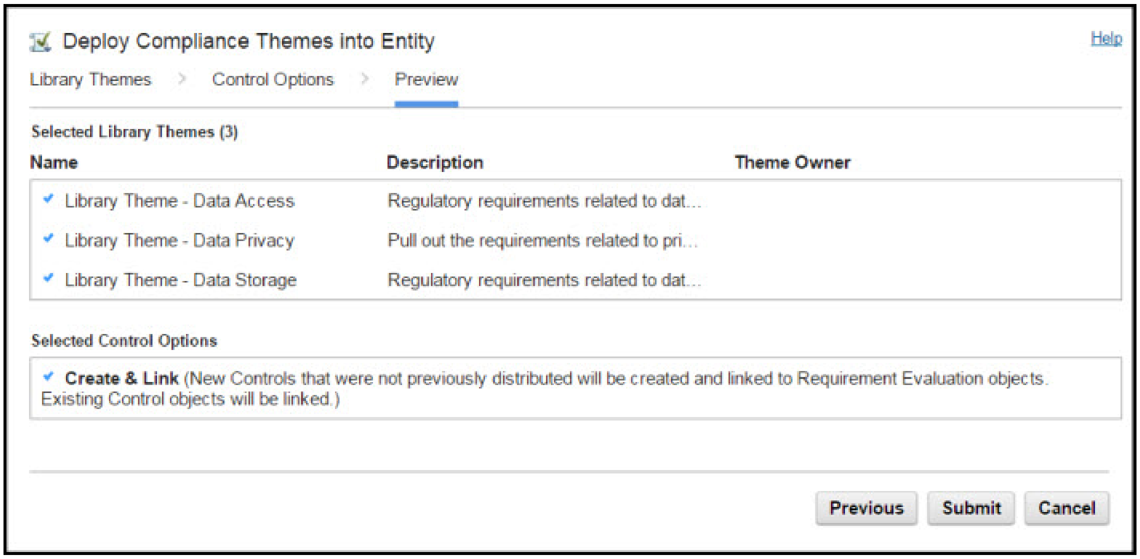


Figure 222. Deploying multiple themes to a business entity

Administrators can configure the RCM Theme Deployer by using the new IBM OpenPages Regulatory Compliance Management configuration tool.

For information about setting up the RCM Theme Deployer, see the *IBM OpenPages with Watson Administrator's Guide*. For information about using the RCM Theme Deployer, see the *IBM OpenPages GRC User Guide*.

IBM OpenPages Regulatory Compliance Management configuration tool

A configuration user interface is now available for IBM OpenPages Regulatory Compliance Management. Administrators can use the tool to configure IBM OpenPages Regulatory Compliance Management. For example, administrators can configure the RCM Theme Deployer.

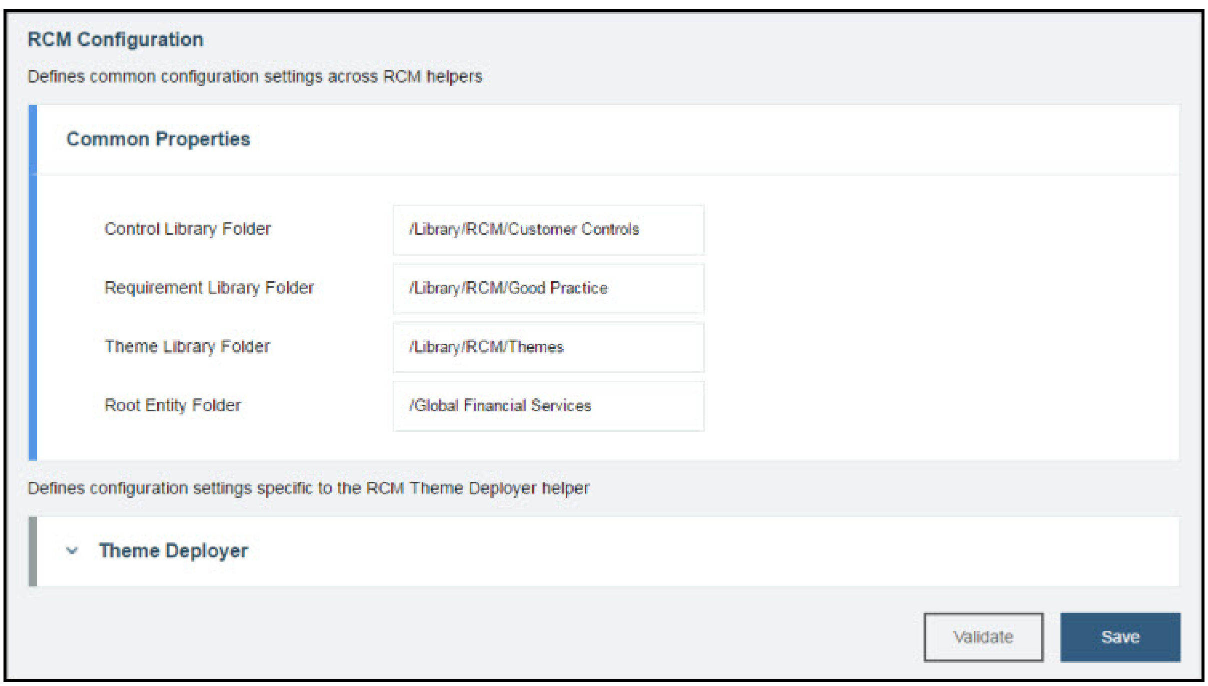


Figure 223. RCM configuration tool

For information about using the RCM configuration tool, see the *IBM OpenPages with Watson Administrator's Guide*.

Solution loader for OpenPages Third Party Risk Management

The OpenPages Third Party Risk Management solution was added in version 7.3.0.0. Customers who performed a fresh installation of version 7.3.0.0 and who licensed the solution were able to use the OpenPages Third Party Risk Management.

Fix pack 7.3.0.1 includes a solution loader for the OpenPages Third Party Risk Management. The solution loader enables customers who upgraded from a fresh 7.2 installation to version 7.3.0.1 to load the objects, relationships, and profiles to use the OpenPages Third Party Risk Management solution.

You must have a OpenPages Third Party Risk Management license to use the solution.

If you had a fresh installation of IBM OpenPages with Watson version 7.2 with solutions and then upgraded to version 7.3.0.1 or later, use the solutions loader to install OpenPages Third Party Risk Management. You must have the 7.2 solutions schema in your environment.

For more information, see the *IBM OpenPages with Watson Installation and Deployment Guide*.

Administration and serviceability enhancements

Several enhancements have been made to help you administer, maintain, and support IBM OpenPages with Watson.

New X-XSS-Protection response header setting

The new X-XSS-Protection setting enables XSS filtering on server responses. Using this setting is preferred to using the IE XSS Filter setting. If there is a conflict between the IE XSS Filter and X-XSS-Protection settings, the one that enables the header is used.

For more information, see the *IBM OpenPages with Watson Administrator's Guide*.

Chapter 16. New features in version 7.3

The new features in IBM OpenPages GRC Platform 7.3 include the following enhancements.

Platform enhancements

Enhancements to functionality are included in this version of IBM OpenPages with Watson.

Integration with IBM Business Process Manager

The integration of IBM OpenPages with Watson with IBM Business Process Manager gives you access to an enhanced level of GRC process automation. IBM Business Process Manager is an industry-leading process automation system that is both scalable and highly configurable.

Process authors can develop workflow solutions that align specifically with their requirements. They can also configure custom coach views that show object information in a form that uniquely meets the needs of the user task. Additionally, process authors can use a set of integration toolkits. These toolkits align directly with IBM OpenPages with Watson APIs and leverage the existing data and configuration in the system.

Process authors use the Process Designer to define business processes. For example, the following figure shows a simple risk assessment process in the Process Designer.

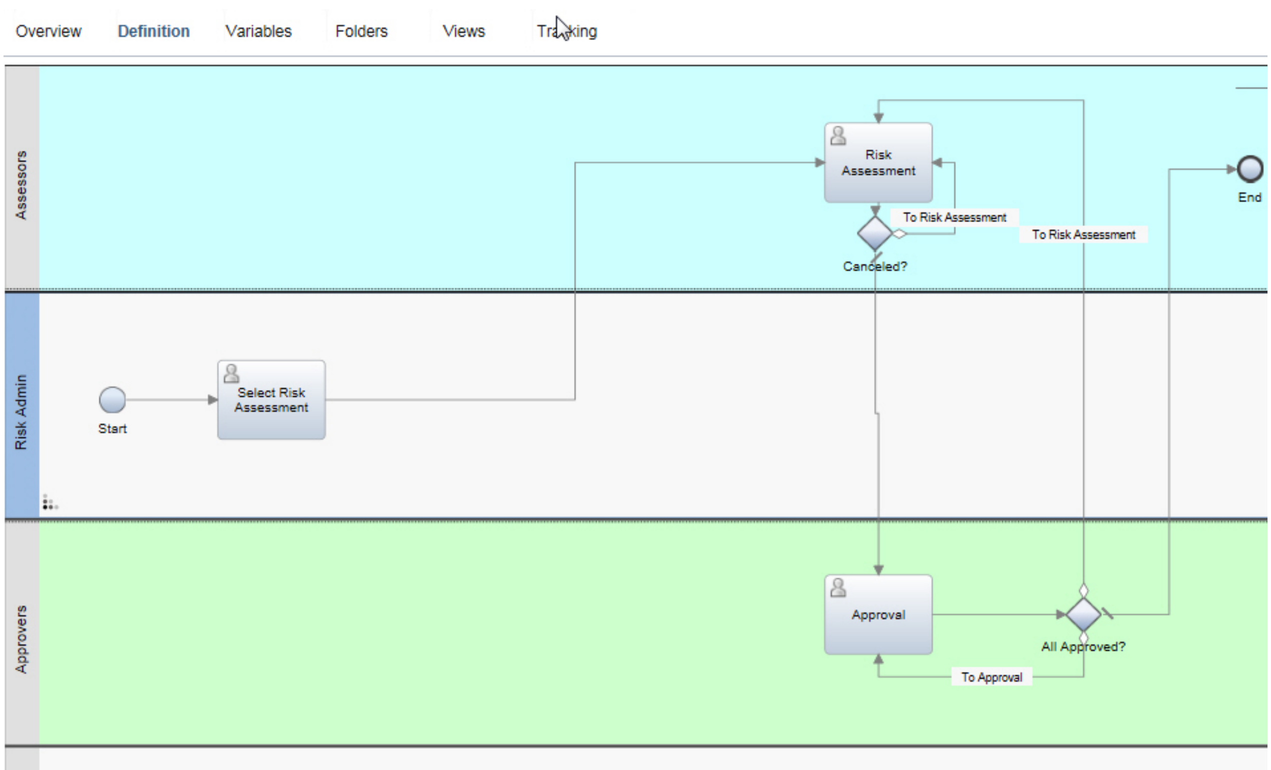


Figure 224. Example of the Process Designer

Process authors can design coach UIs and embed them into business processes. When a business process reaches a point where it calls a coach UI, the user must complete information on the screen in order for the business process to continue.

The following example shows a coach UI for a risk assessment process. In this example, the user can set an inherent likelihood.

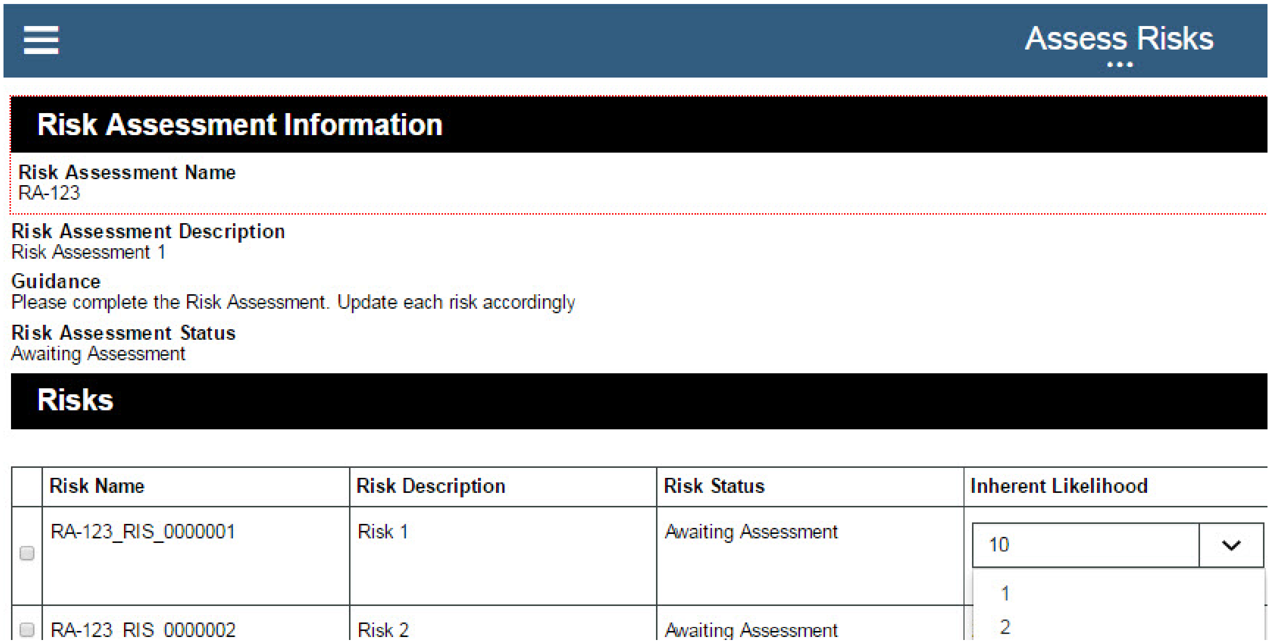


Figure 225. Example of a coach UI

Users can launch and work on GRC processes by working with the embedded IBM BPM **Process Portal**. The **Process Portal** is a new tab on the Home page. When you click it, the system opens the IBM BPM Process Portal.

You can use the **Process Portal** to:

- Launch processes
- Claim and participate in tasks
- Track task progress with a dedicated swimlane diagram
- Use the BPM collaboration services and get in touch with "experts" and frequent process participants

The following example shows how the information in the **Process Portal** can appear. It shows the due dates and priorities of the tasks that are assigned to the user.

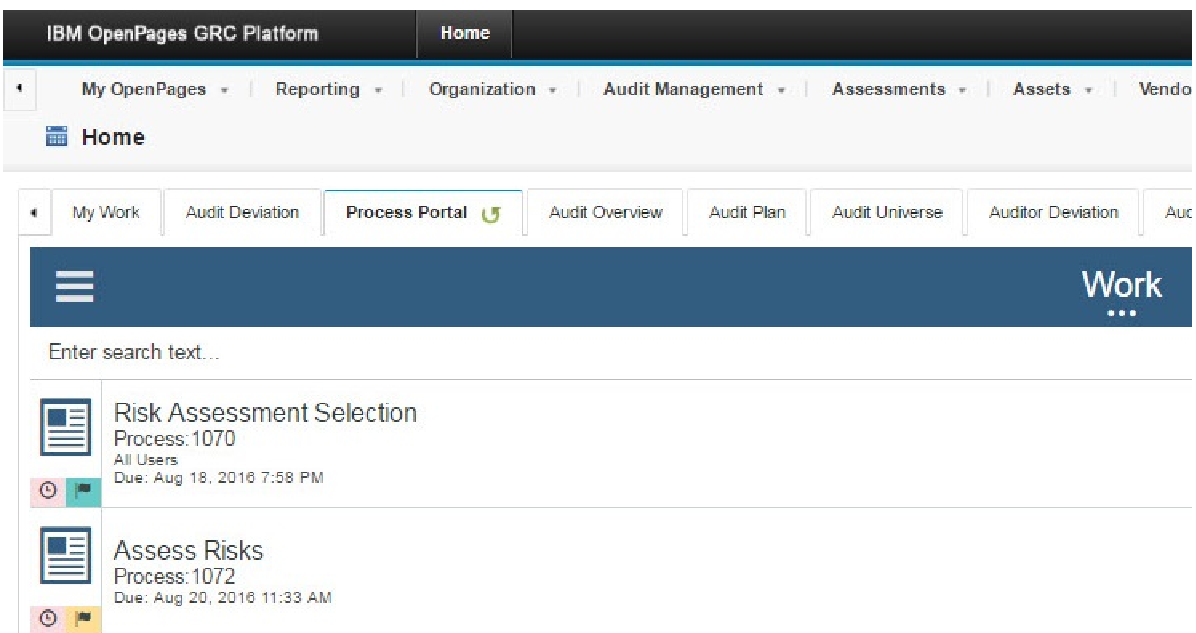


Figure 226. Example of the Process Portal on the Home page

From a task, you can identify where your task is at in the overall process. The current stage is highlighted in yellow. In the following example, the process is at the risk assessment stage.

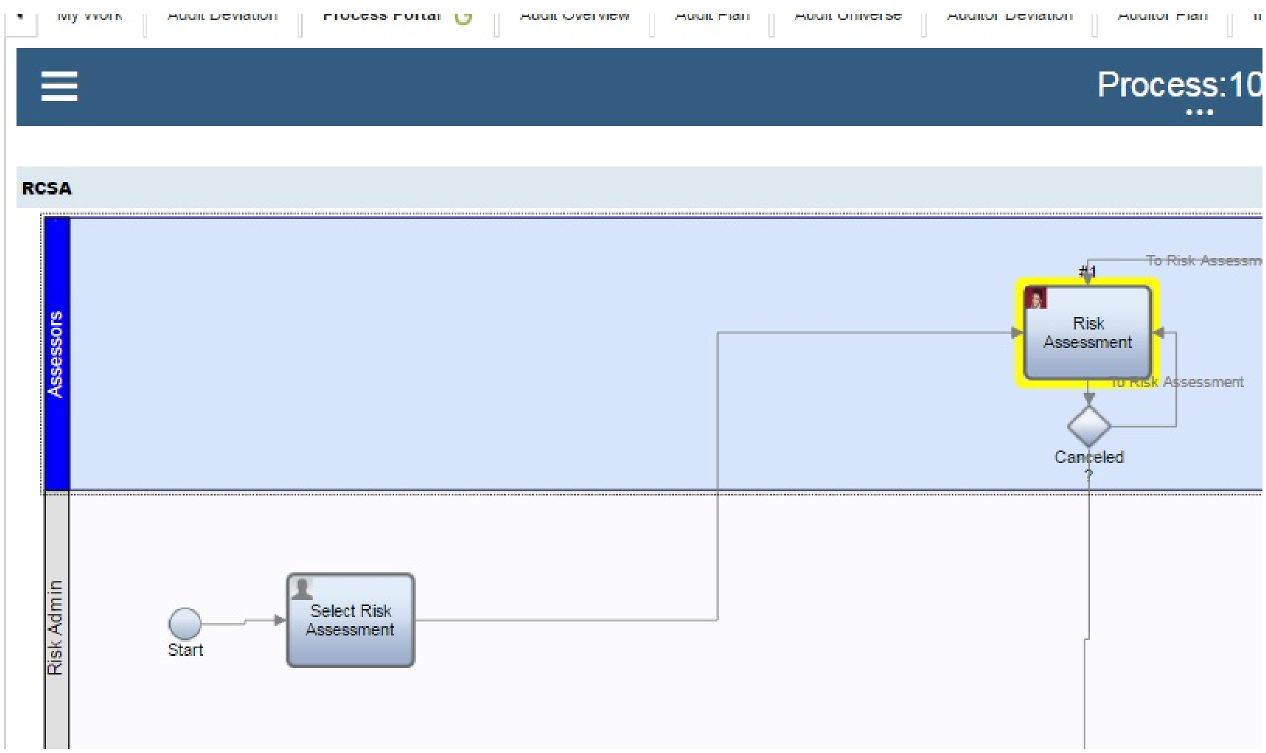


Figure 227. Example of reviewing stage ownership in a business process

For more information, see the *IBM OpenPages with Watson Business Process Author's Guide*.

Global search enhancements

Global search has been enhanced.

- You can refine search results by users, folders, and dates
- You can search the text content of file attachments
- Administrators can configure an additional field to display in global search results sets

Refine search results by date, user, and folder

In IBM OpenPages version 7.2, global search results could be refined by object type. Now you can also refine search results by Dates, Users, and Folders.

Date

You can use **Date** to limit search results to a combination of **Creation Date**, **Last Modified Date**, or **Other Dates** on the object.

For example, you can refine the search results to display objects created between January 2016 and November 04, 2016, modified within the last three months, and a specific date on the object must be October 29, 2016.

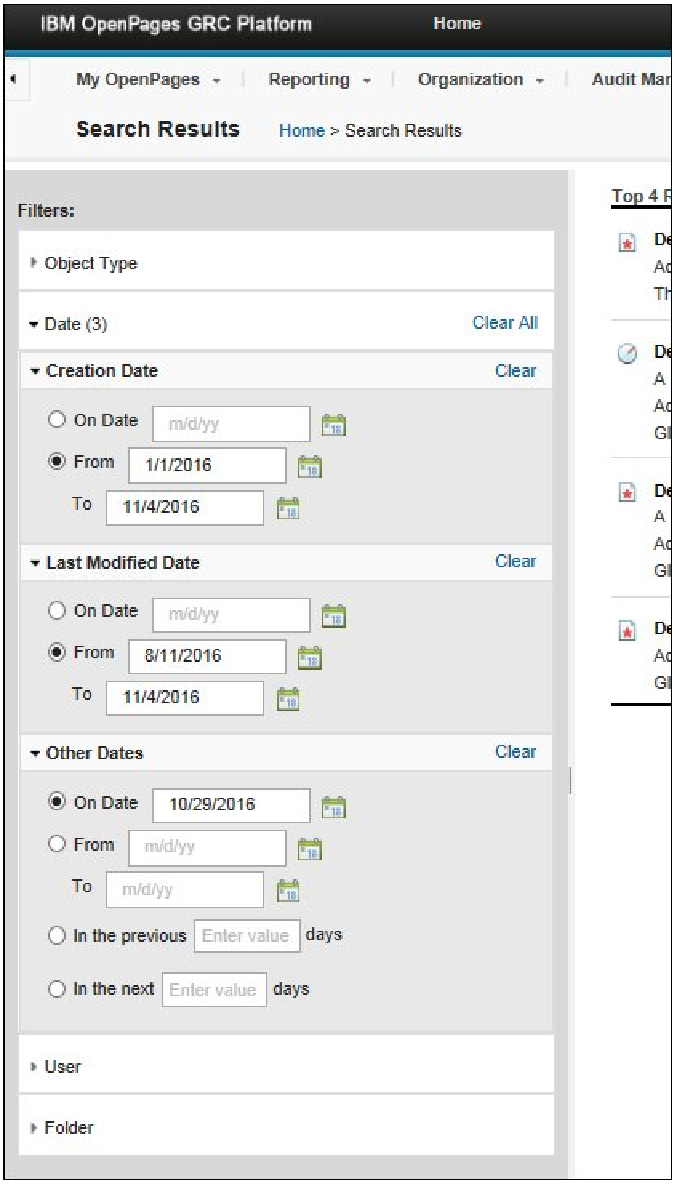


Figure 228. The Date facet for global search

User

You can refine search results based on the user who created or modified the object, or based on a user named in a user selector field on the object.

For example, you can refine the search results to display objects that were created by you and last modified by Jim Smith.

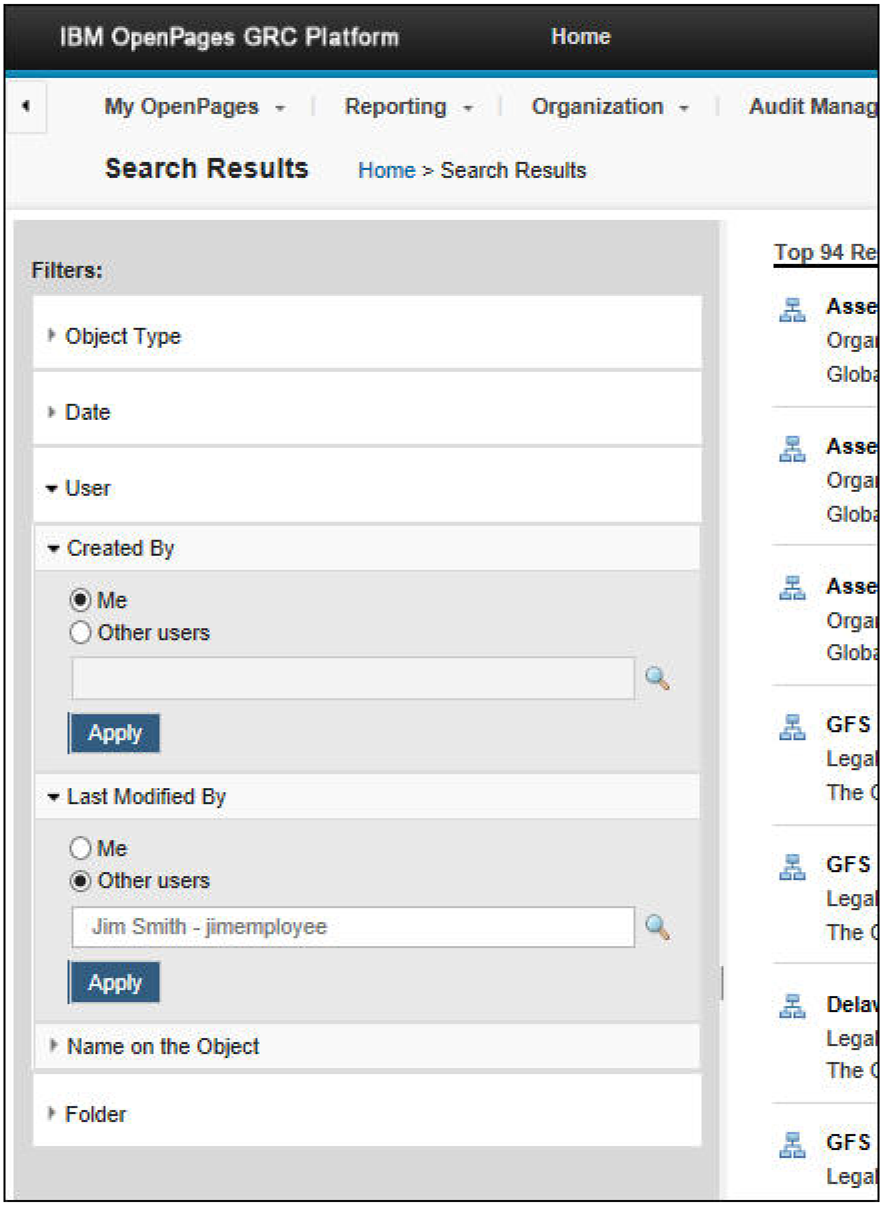


Figure 229. The User facet for global search

Folder

You can refine search results to objects that match the value in full or in part that you enter.

For example, if you enter `Internal Audit / ITAud`, objects that include in their path "Internal Audit / ITAud" are returned.

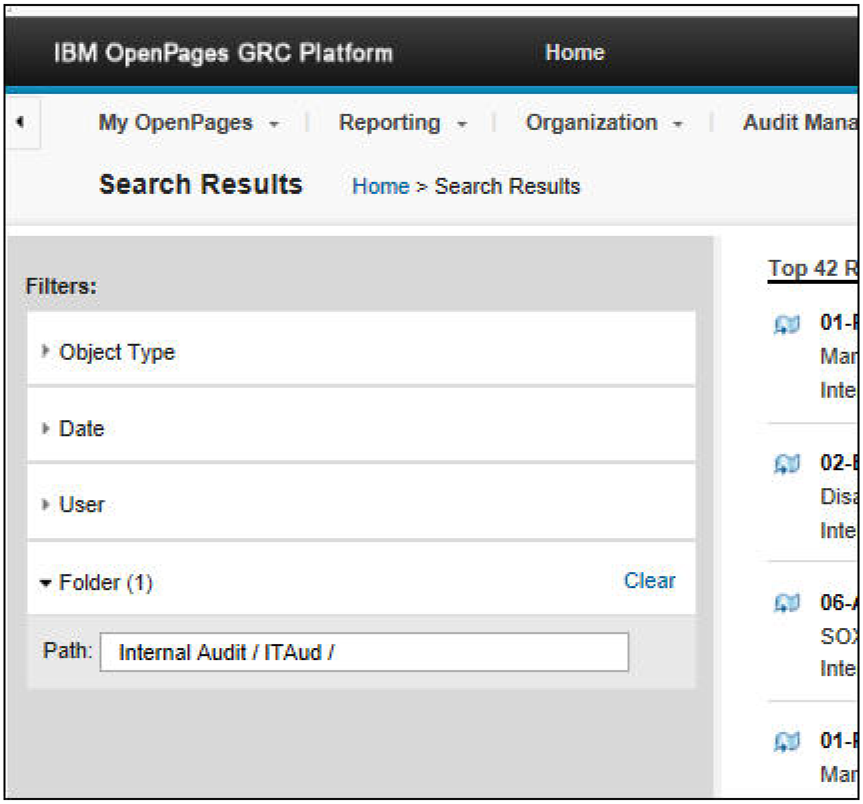


Figure 230. The Folder facet for global search

Search within file attachments

Administrators can now configure global search to not only search on the fields of objects, but also on the contents of any text-based file attachments.

All global search results on SOXDocument object types now include a link to view the contents of the file attachment without leaving the search results page. This is true whether the result comes from matching field data or matching file attachment contents.

The search results returned for files and file attachments include a **View file** link that provides immediate access to the file or file attachment itself. The **Name** field link takes you to the default view for the object type.

Administrators can configure which file types to include for search, such as `.docx`, `.xlsx`, `.pptx`, and `.pdf`.

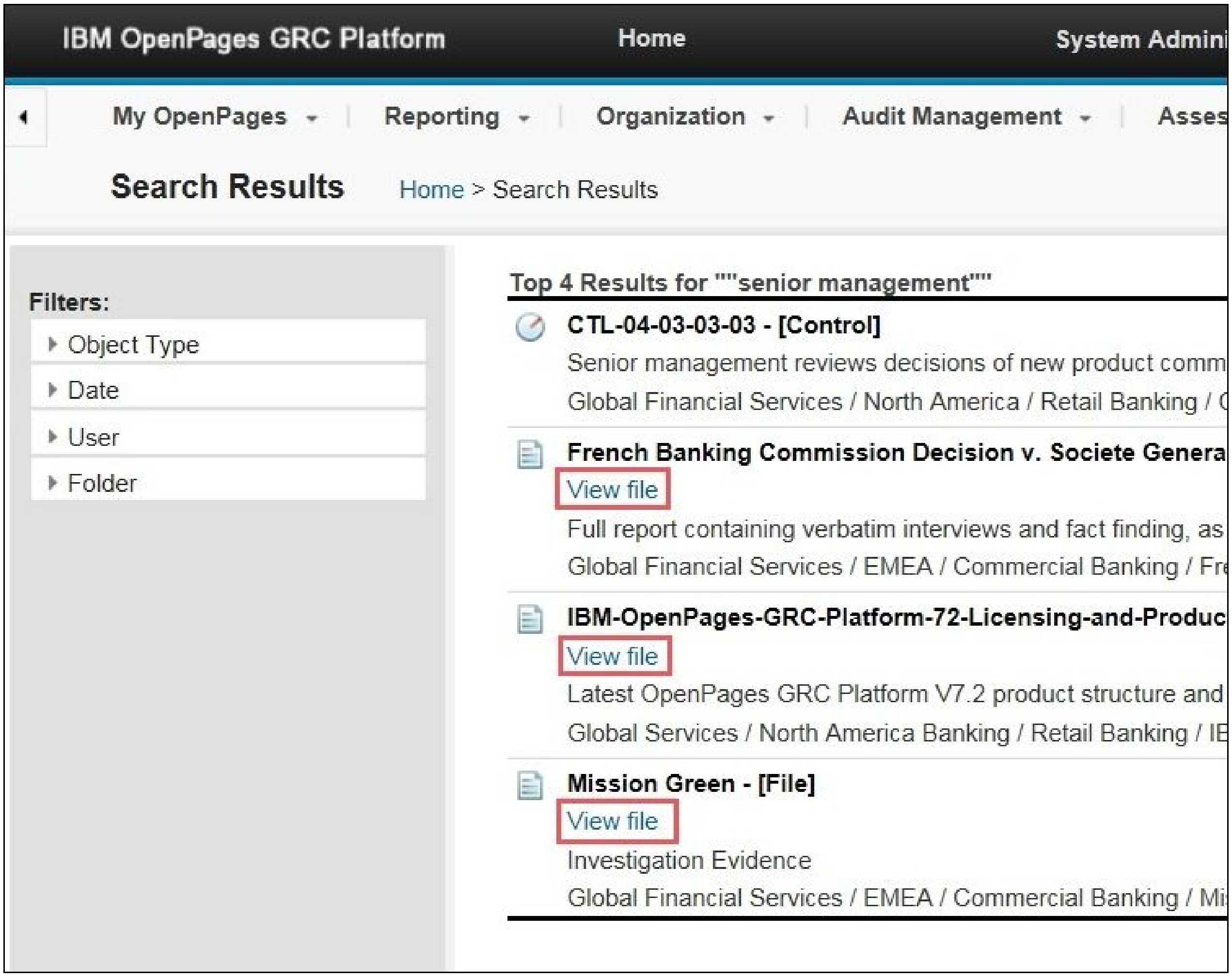


Figure 231. Search results that include files and the ability to directly view their attachments

Include an additional field in results sets

Administrators can configure an additional field to display in global search results sets.

The inclusion of this additional field value in the results allows the user to better tell if the result is one that they want to work with or not.

In addition to the information provided in earlier versions (Object Type, Name, Description, and Path), administrators can now configure an additional field for each object type. The additional field is configured globally across profiles.

The additional field supports text area and text box display types.

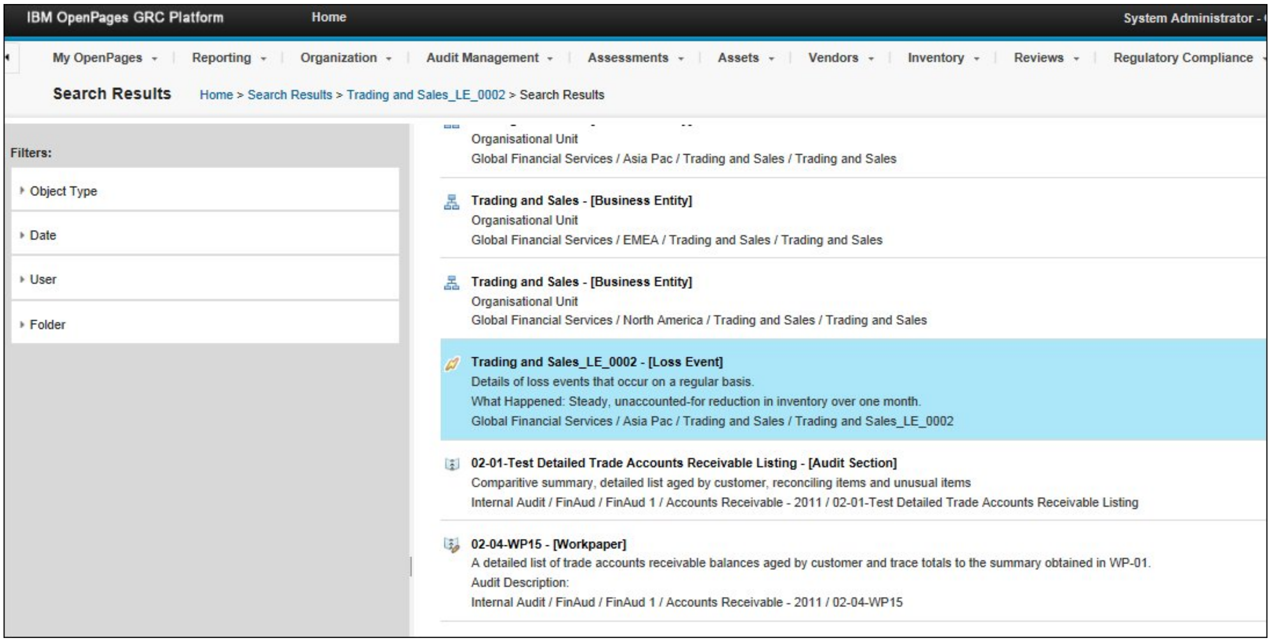


Figure 232. The loss event object in these search results includes an additional field, 'What Happened', with a brief description.

New Dashboard tab on the Home Page

The Dashboard tab allows users to create their own dashboard for the Home Page. Users can now work more efficiently by creating quick access to the tasks and information that they use most often. Users can tailor their dashboards to suit the way that they work. Clicking the **Home** button in the global header returns the user to the Home Page tab that they used most recently.

For example, a user might choose to customize the Dashboard tab to show how many Questionnaire Assessments are assigned to him or her, and how many are in review and in approval states. In addition, a user might choose to add a panel with links to frequently used websites. In some panels, a user might include an **Add New** button that is preconfigured for a particular object type or global search links that are preconfigured for specific objects, such as Vendor.

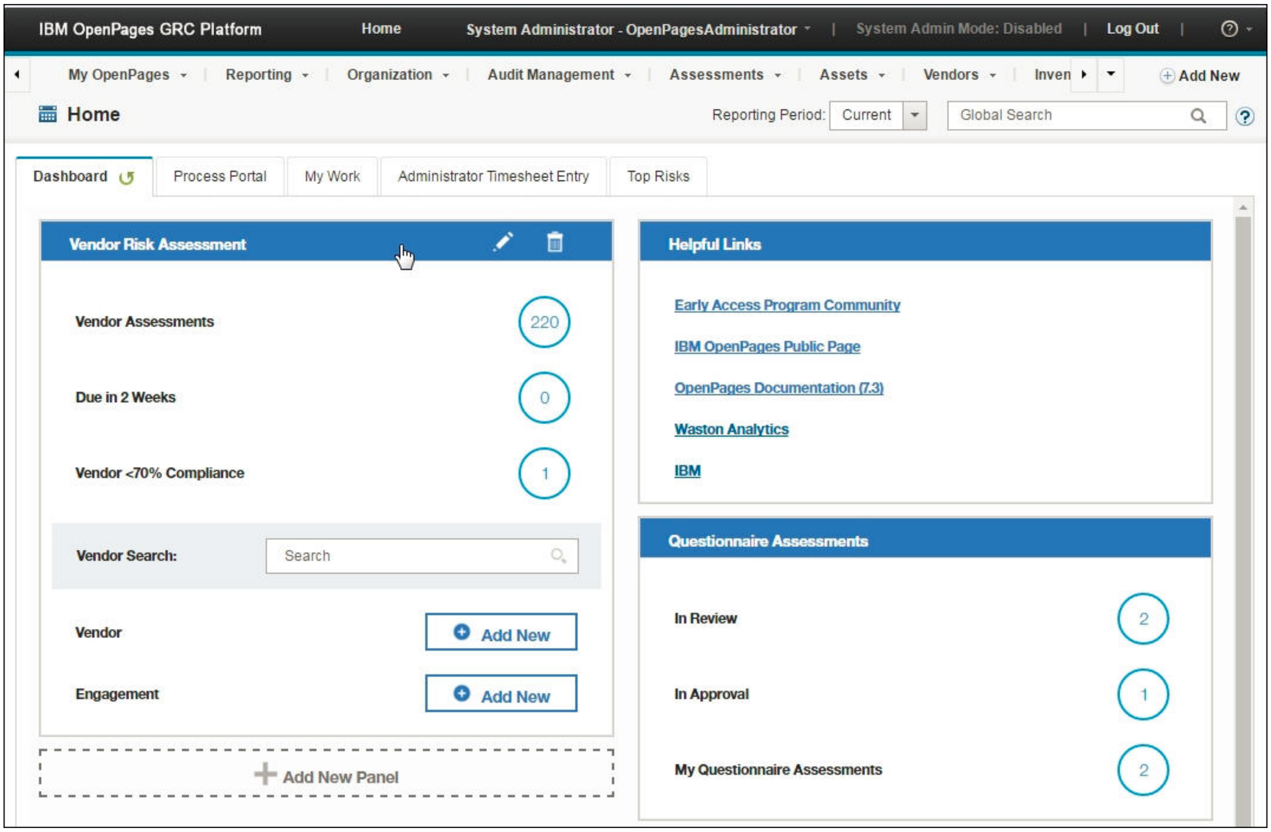


Figure 233. Example of a Home page Dashboard

Users and administrators can add as many of the following types of widgets as needed to the Dashboard tab:

- Filter Count widget, for example, you can create a widget to display the number of Questionnaire Assessments assigned to you
- Object Global Search widget, to perform a search on a specific object type
- Static Web Link widget, to provide a link to a URL, for example to give you quick access to reference information or to a related application
- Add New widget, to provide an **Add New** button that is preconfigured for a specific object type

For each profile, the administrator can provide the initial content and required content for the Dashboard, so that every user of the profile has these elements available to them. Each user can then take ownership of their own dashboard and tailor it to their needs. For example, users can add elements that are specific to their needs.

Administrators can export the configuration of a default Dashboard tab in JSON format. This feature is useful when migrating from one environment to another. This feature also enables administrators to export an existing Dashboard configuration and use it with another profile.

Multiple profiles

Administrators can configure multiple profiles for end users. Users with multiple profiles can change from one profile to another easily, without the need to log off.

Multiple profiles are beneficial to end users who have more than one function in an organization and require a different profile for each function.

Multiple profiles are also beneficial to administrators and implementers because they can create a smaller set of more task-focused profiles, reducing the effort to maintain profiles.

For example, suppose that you are both a control tester and an auditor. Your administrator can assign the profile for both of these functions to you, and you can switch back and forth between the two, as required.

You can switch to a different profile by clicking the User menu in the global header, and selecting the profile you want from the **My Profiles** list.

Figure 234. My Profiles list from the user menu

Compound search on first and last names in the actor picker

It's now easier to search for users. The search feature in the actor picker now looks for matches in the combination of the first and last names.

In previous versions, the search feature looked for matches in the first name, last name, email address, and user name, but did not look for matches using the first and last name combined.

For example, if you enter `Al Audit` as a search term, two names that returned zero results in previous versions, you now get a list of results.

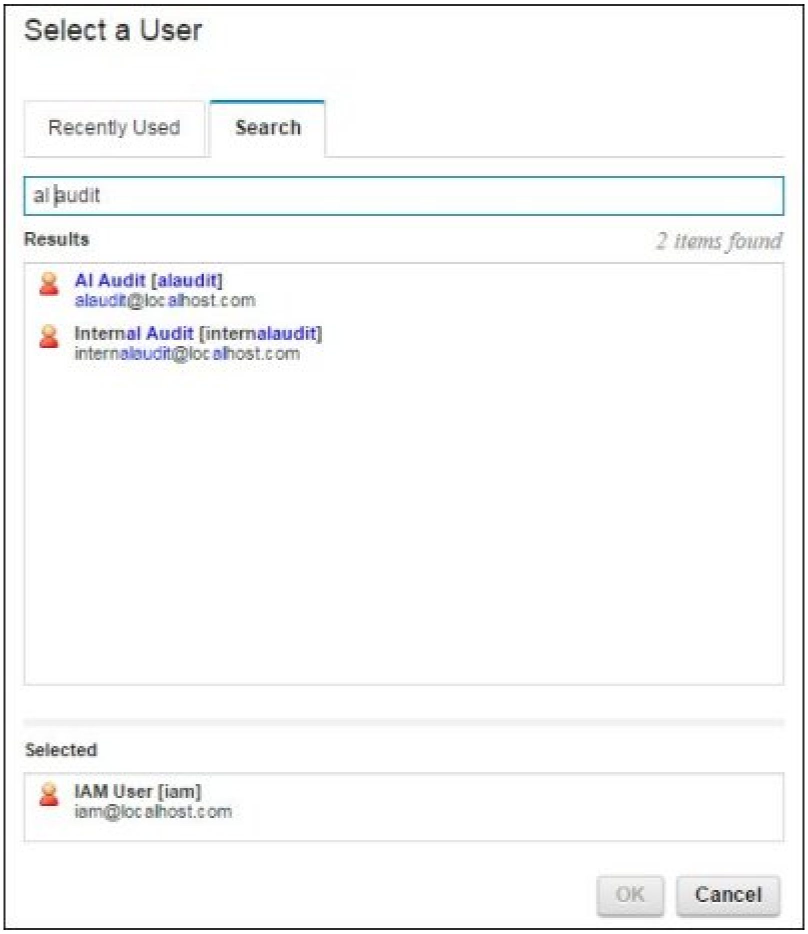


Figure 235. Results of a search on `Al Audit`

Enhancements to the Filtered List View and Grid View

Several enhancements have been made to the Filtered List View and the Grid View.

Users can now perform Copy and Associate operations from the Grid View. Users can also include File object types in Grid Views and Activity Views. These new capabilities enable users to complete more tasks without having to leave one of these task-focused views. This reduces navigation and makes it easier to get the job done.

View file attachments and file information in Grid Views and Activity Views

You can use the Administration user interface to configure files in Grid Views and Activity Views, just as you would any other object type.

The following graphic shows files at the third level of the Grid View. Files can be configured at any of the three levels. You can also view file attachments and file information in Activity Views.

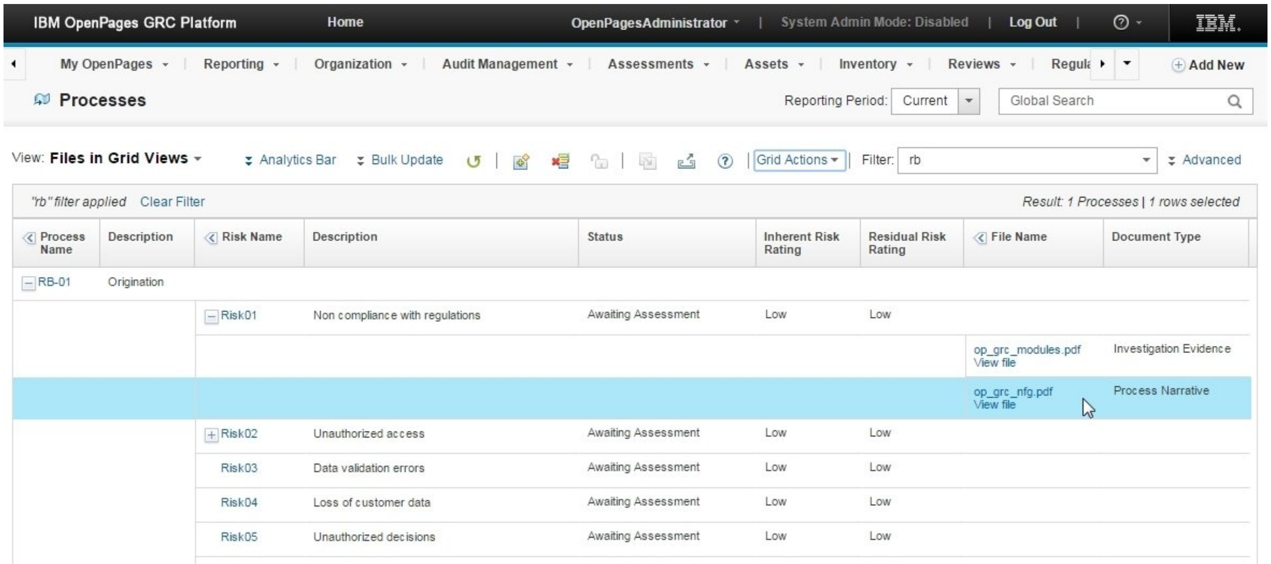


Figure 236. Files at the third level of the Grid View

Enhanced interface for Copy and Associate operations

You can now copy and associate objects from the Detail View and Activity View using a new interface.

In previous versions, the filtered list view interface was used to copy and associate objects. The new interface is consistent with the Add New wizard and other existing wizards in the product.

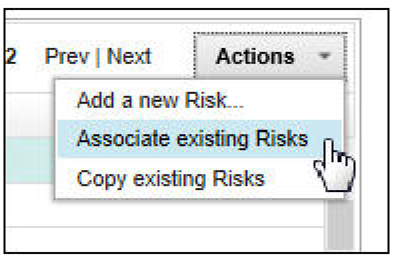


Figure 237. The Actions menu

You can use a registry setting to revert to using the legacy copy and associate features in Activity Views and Detail Views only. This is to allow time to ensure that the new implementation meets your needs before you retire the old implementation. The interface that is used for copy and for associate tasks from Grid Views is always the new interface.

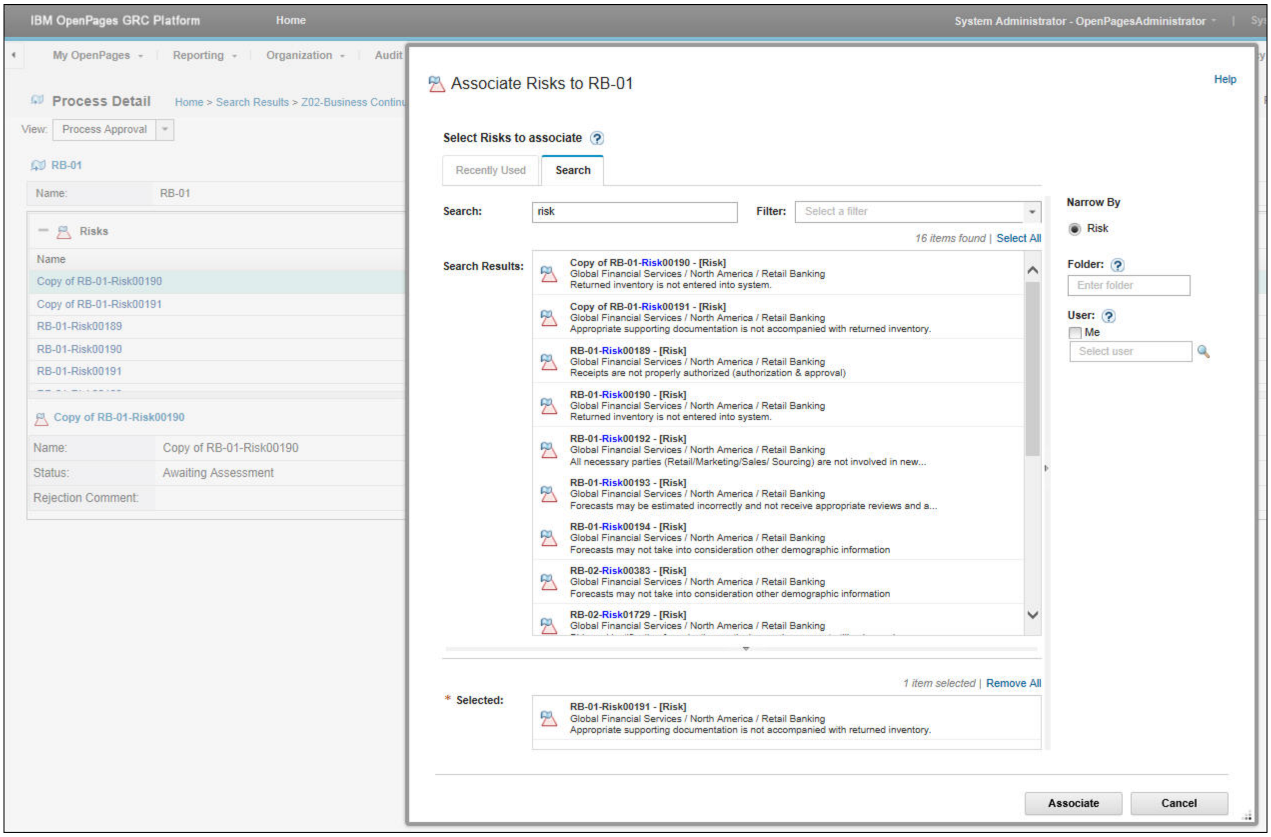


Figure 238. The Associate wizard

To find the items that you want to select for the operation, you can choose from recently used objects, or use searches, or use saved filters:

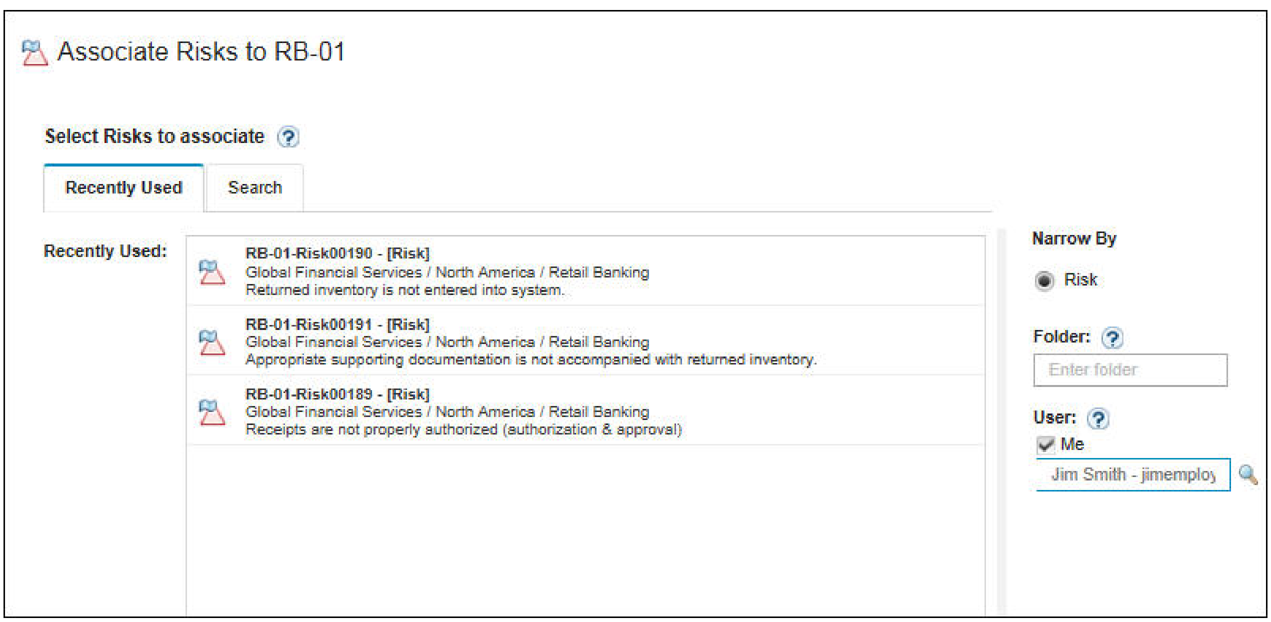


Figure 239. Recently used or saved filters used to find items

The Copy wizard interface is similar, with an extra page for more copy options. You can copy an object and its descendants, or only the top object. For example, if you want to copy a risk, but do not want to copy the dozens of controls, test plans, test results, and issues underneath it, you can now click **Copy selected objects only** .

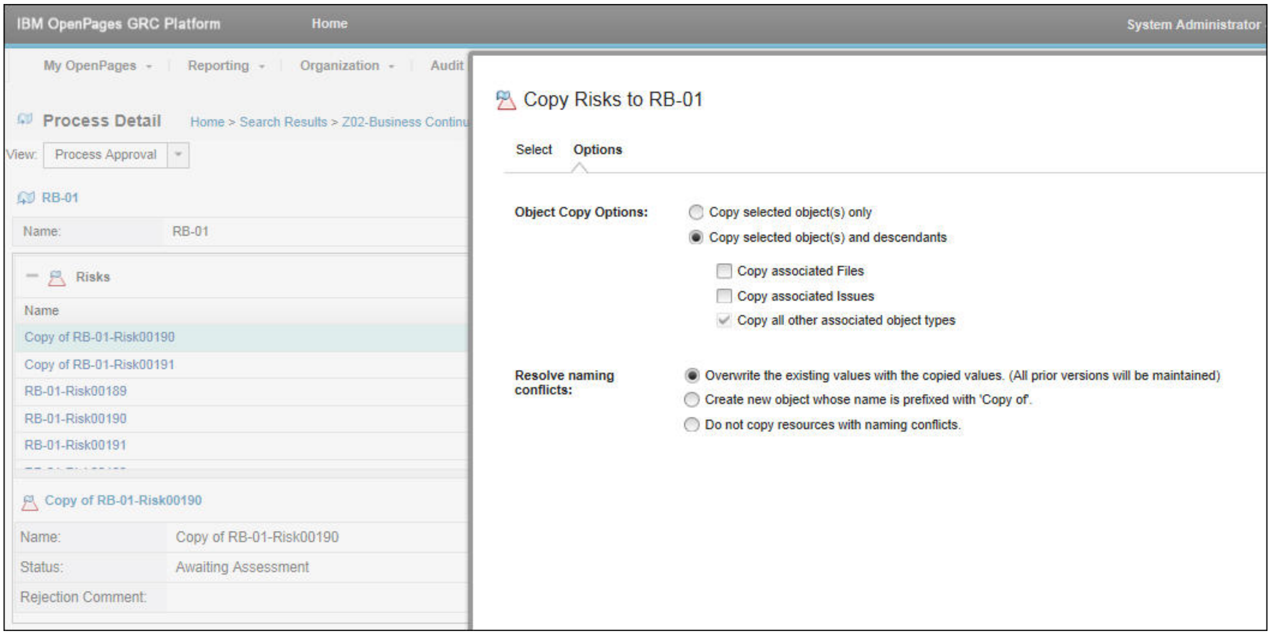


Figure 240. The Copy Options page

Copy and associate objects in the Grid View

You can now copy and associate objects from rows in a Grid View, so you can complete your task without leaving the view.

In previous versions, you could not copy and associate objects from Grid Views at all. The new interface uses a right-click menu, and is consistent with the Add New wizard and other existing wizards in the product.

Figure 241. The right-click menu in the Grid View

You can associate only object types that are in the view. For example, in a Grid View showing processes, risks, and controls, you can copy or associate risks under a process, and you can copy or associate controls under a risk.

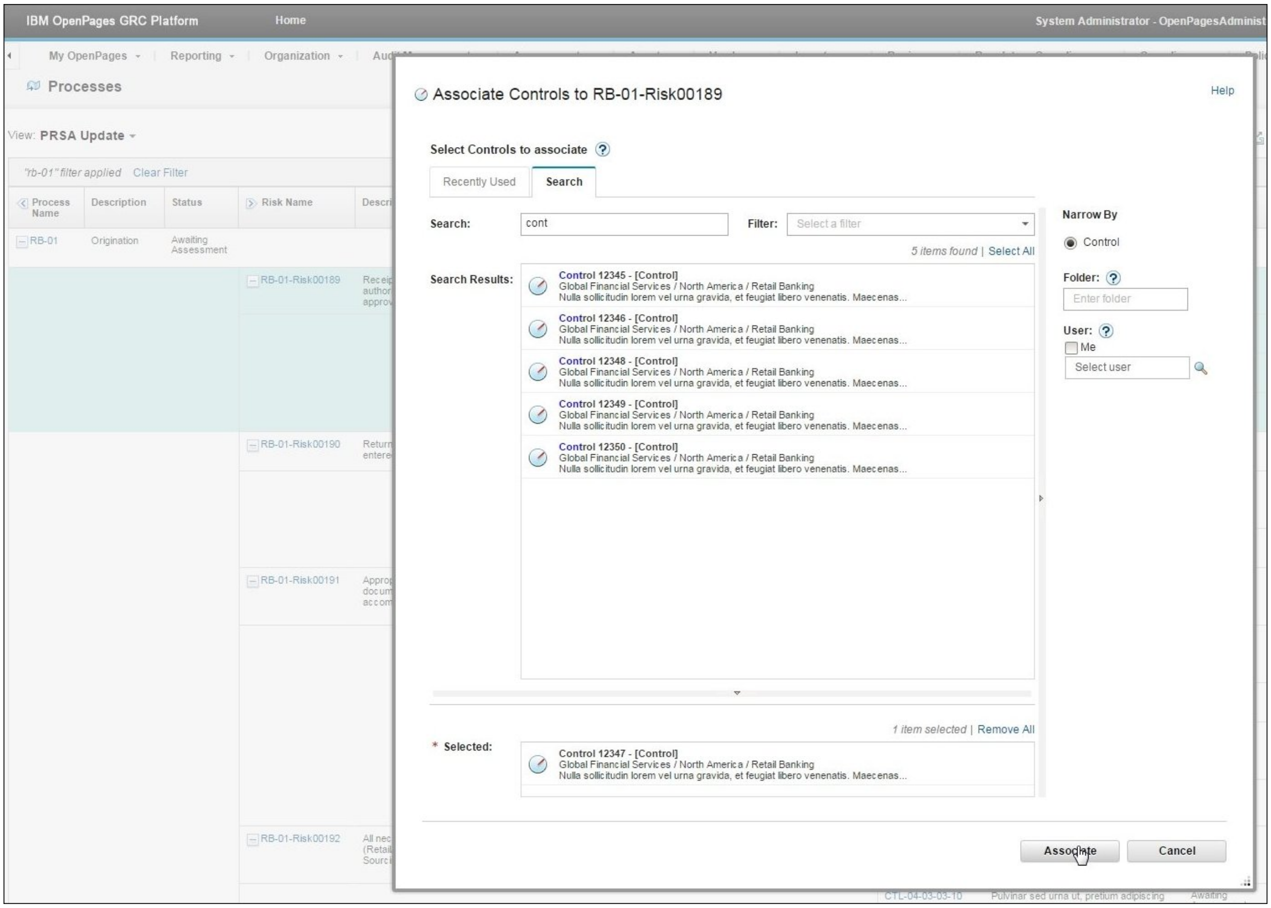


Figure 242. The Associate wizard in the Grid View

To find the items you want to select for the operation, you can choose from recently used objects, or use searches, or use saved filters:

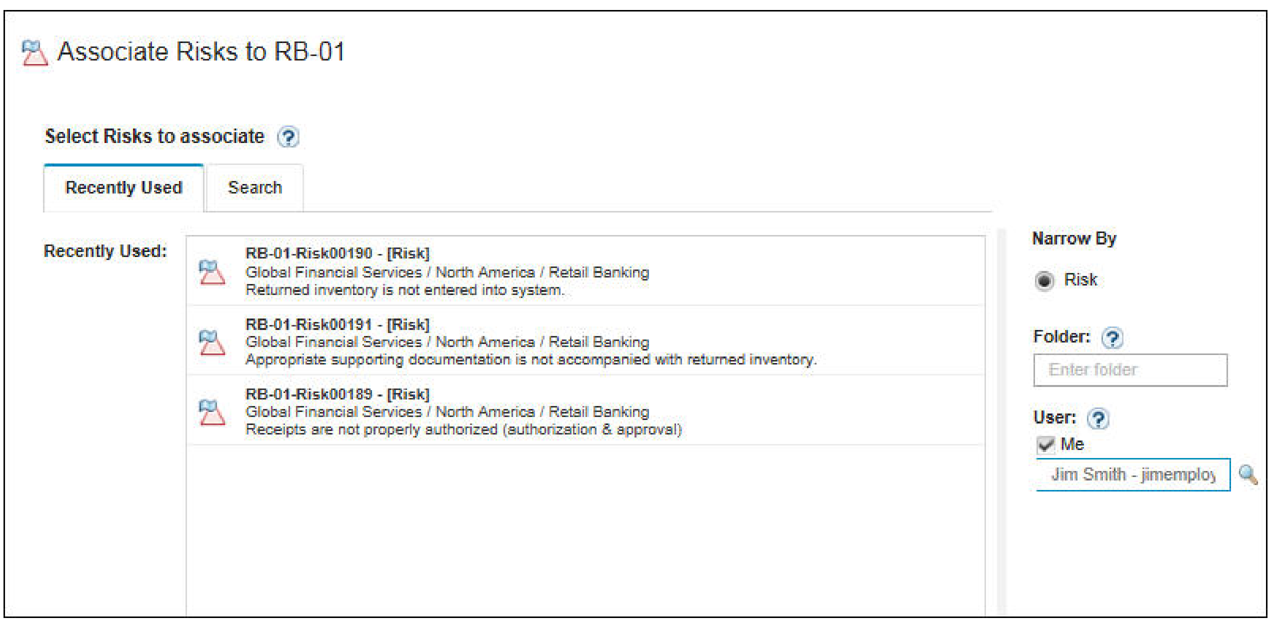


Figure 243. Recently used or saved filters used to find items

The Copy wizard interface is similar, with an extra page for more copy options. You can copy only the top object. For example, if you want to copy a risk, but do not want to copy the dozens of Controls, Test Plans, Test Results, and Issues underneath it, you can now click **Copy selected objects only** .

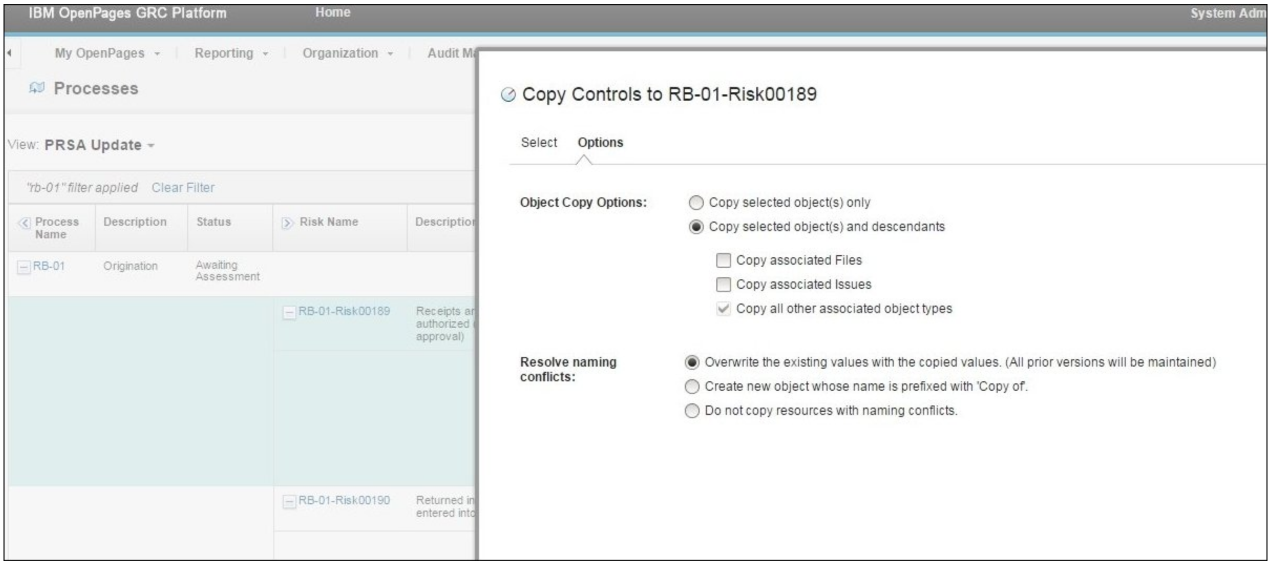


Figure 244. The Copy Options page in the Grid View

Include parent criteria in Analytics bar filters

When you use a Filtered List View or Grid View for an object type, you can view filters in the Analytics bar. You can now create filters based on parent information criteria. These filters can be saved and used as filters on your Home Page dashboard.

You can choose to filter based on the parent type alone.

You can also filter by the attributes of the parent type by choosing the field name and defining the value to filter for (similar to existing filters).

For example, you can now:

- Search on Control Issues only (that is, on issues that have a control as a parent).
- Search on Critical Control Issues only (that is, on issues that have a control of high criticality as a parent attribute).

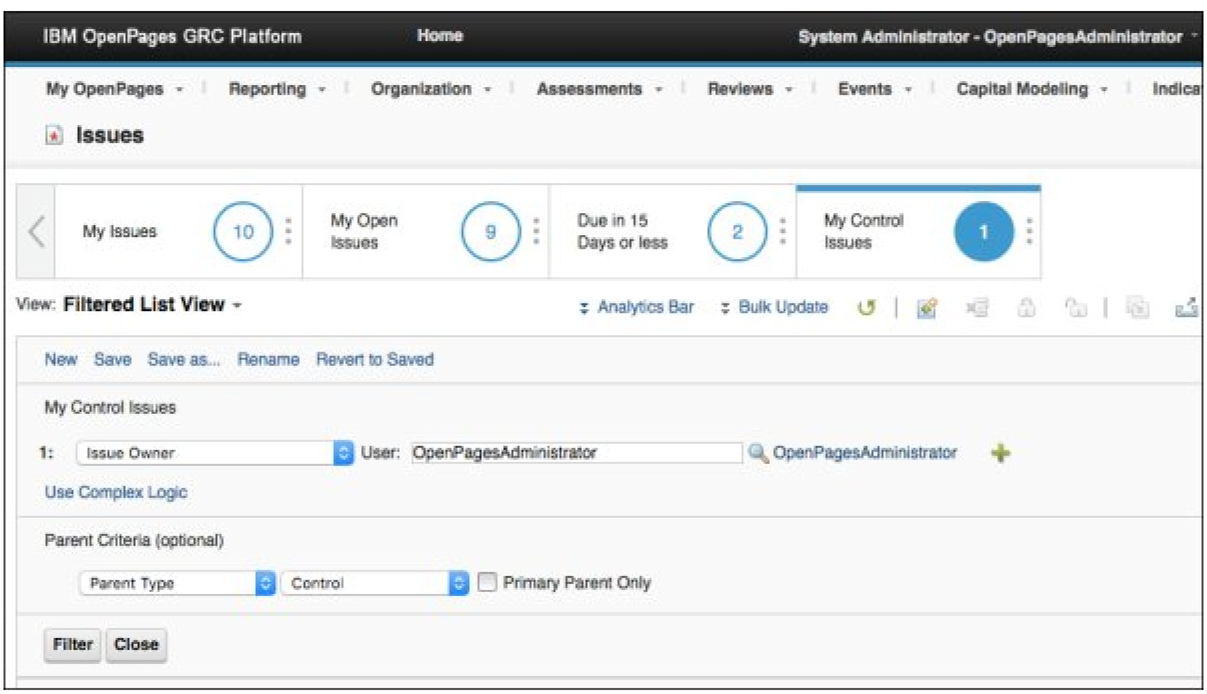


Figure 245. Filter on parent type

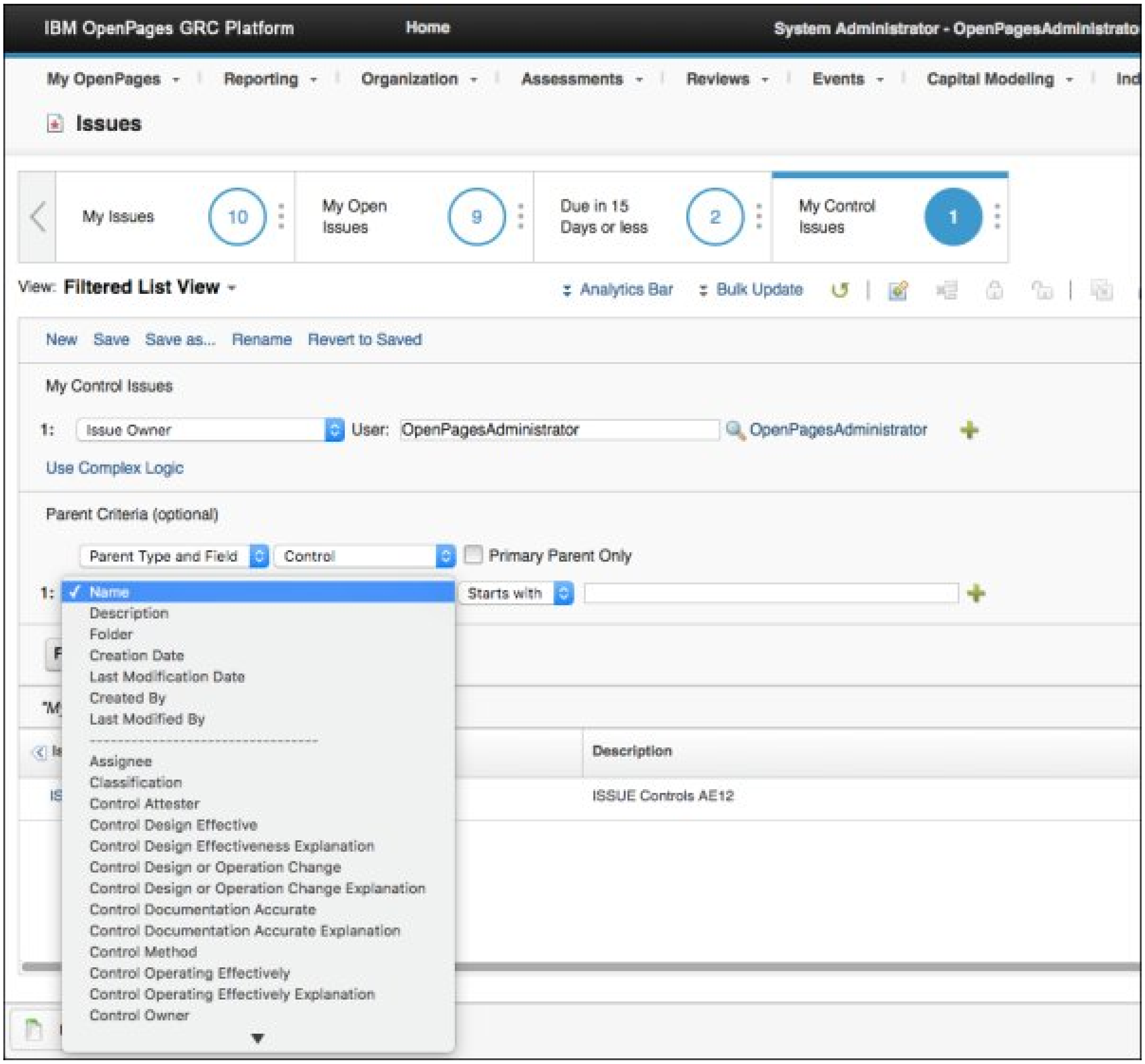


Figure 246. Filter on parent attributes

Attention:

- Filters can be built on one parent object type only.
- This feature is available only to end users. The user interface for administrators does not support this feature.

More options when exporting data

Users can now choose the fields and object types that are exported.

Users can choose to export only the fields that are configured in the Filtered List View or Grid View, rather than exporting all fields. As well, users can choose which object type and how many levels of object types to export. Depending on the configuration, users can export up to two levels of object types beyond the types configured in the view.

Users can export just the fields they want, providing a more focused view of their data. Users can choose to export multiple object types in one operation, simplifying the process of exporting the data, and allowing them to break the limitation of three levels of objects in a grid view.

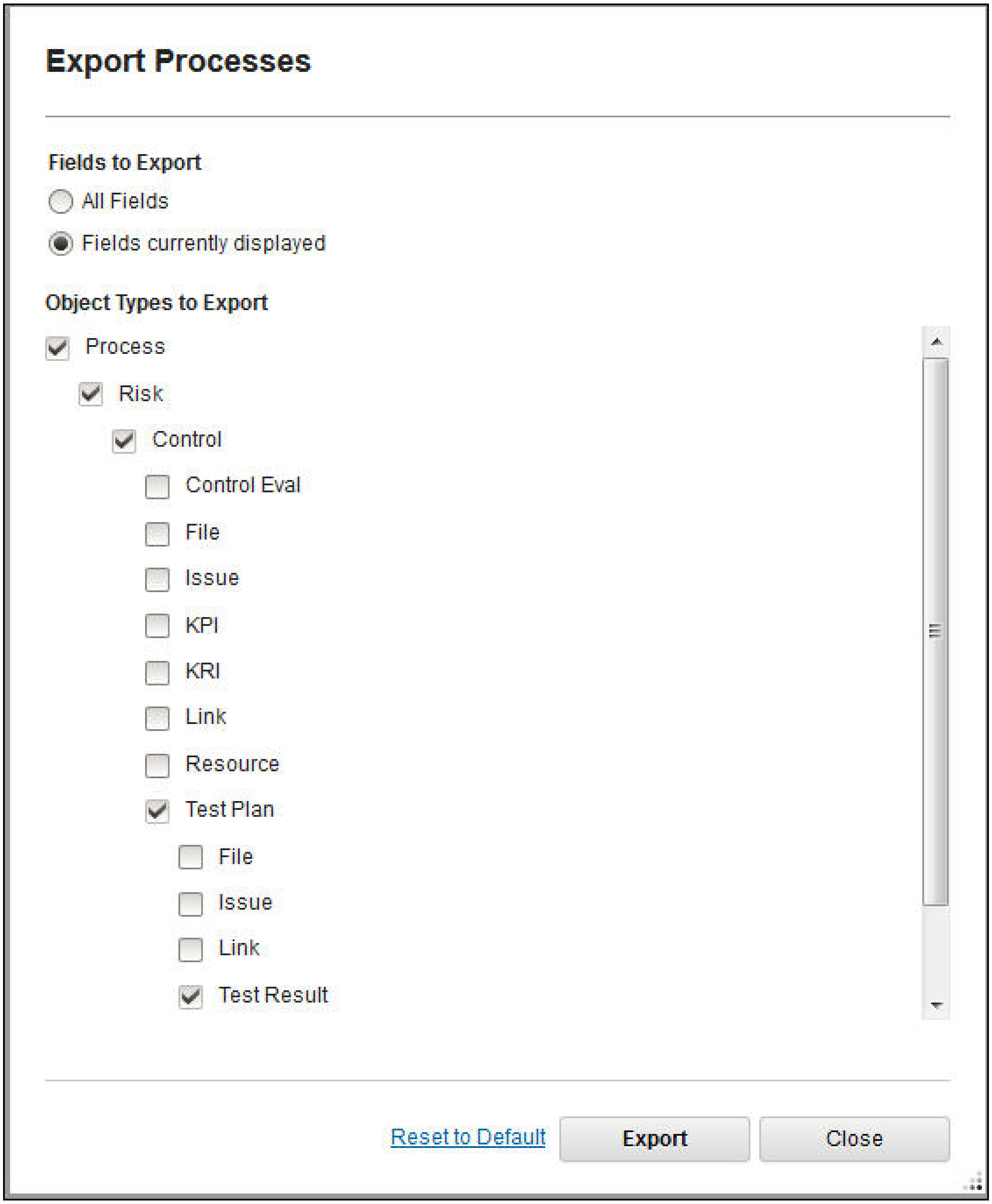


Figure 247. Export dialog box

Enhancements to the Detail View and Activity View

Enhancements have been made to the Detail View and to the Activity View.

Configure file object types in Activity Views

You can now view file attachments and file information in the Activity View.

Collapse and expand sections

You can now collapse and expand the sections in the Detail View and Activity View.

To expand a section, click the plus sign beside the section label. To collapse a section, click the minus sign.

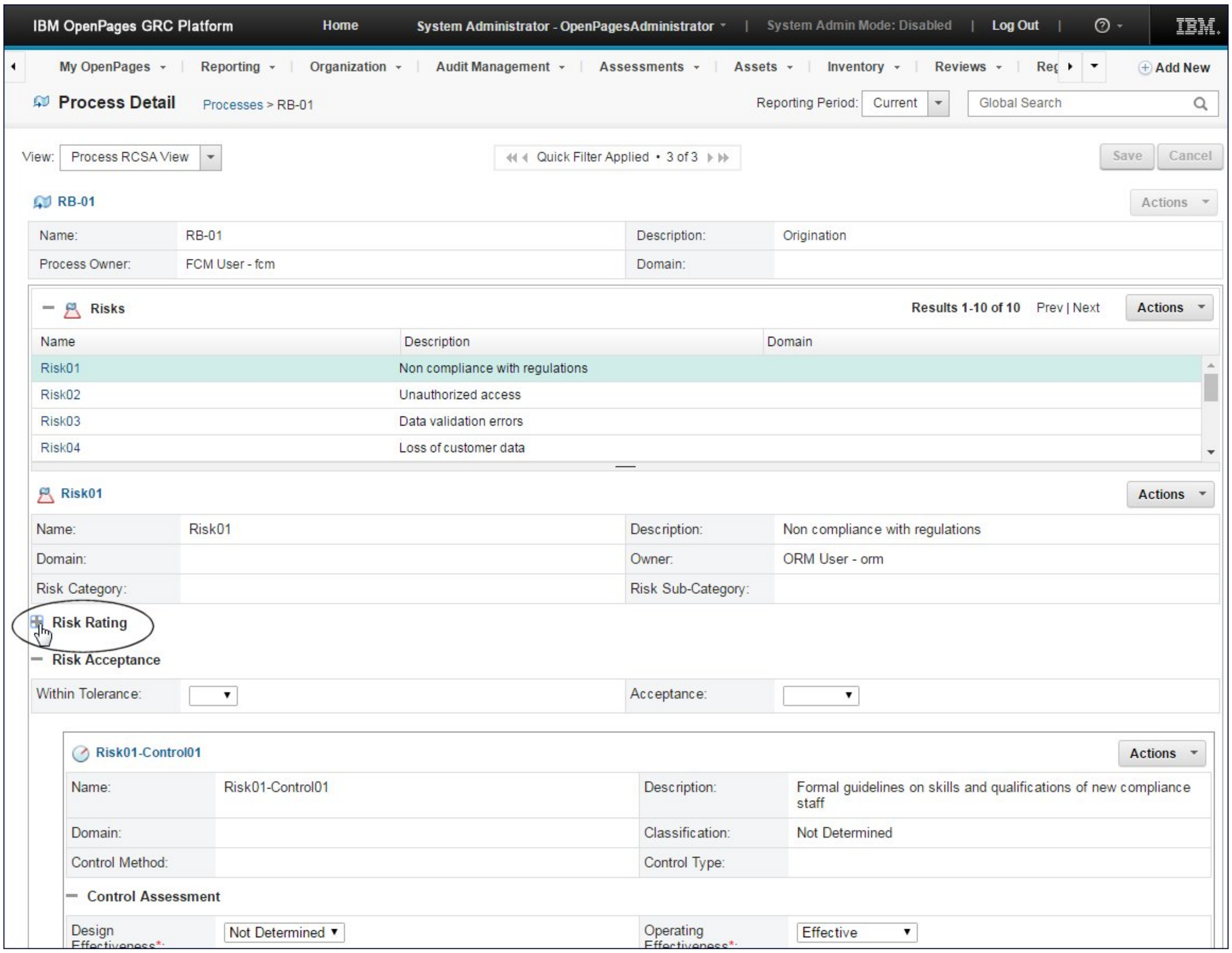


Figure 248. Expanding the section named Risk Rating

View the first item in a child list automatically

More information is now displayed when you go to an Activity View. When an activity view has two or more levels, the first object in the second level is highlighted and opened automatically.

In earlier versions, a list of second-level objects was displayed. To view the details for an object, you had to click the object to open it, and then click again to expand to another level of detail. Now, the first object in the list is opened automatically. This enhancement provides more information and reduces the number of clicks you must perform to view the details.

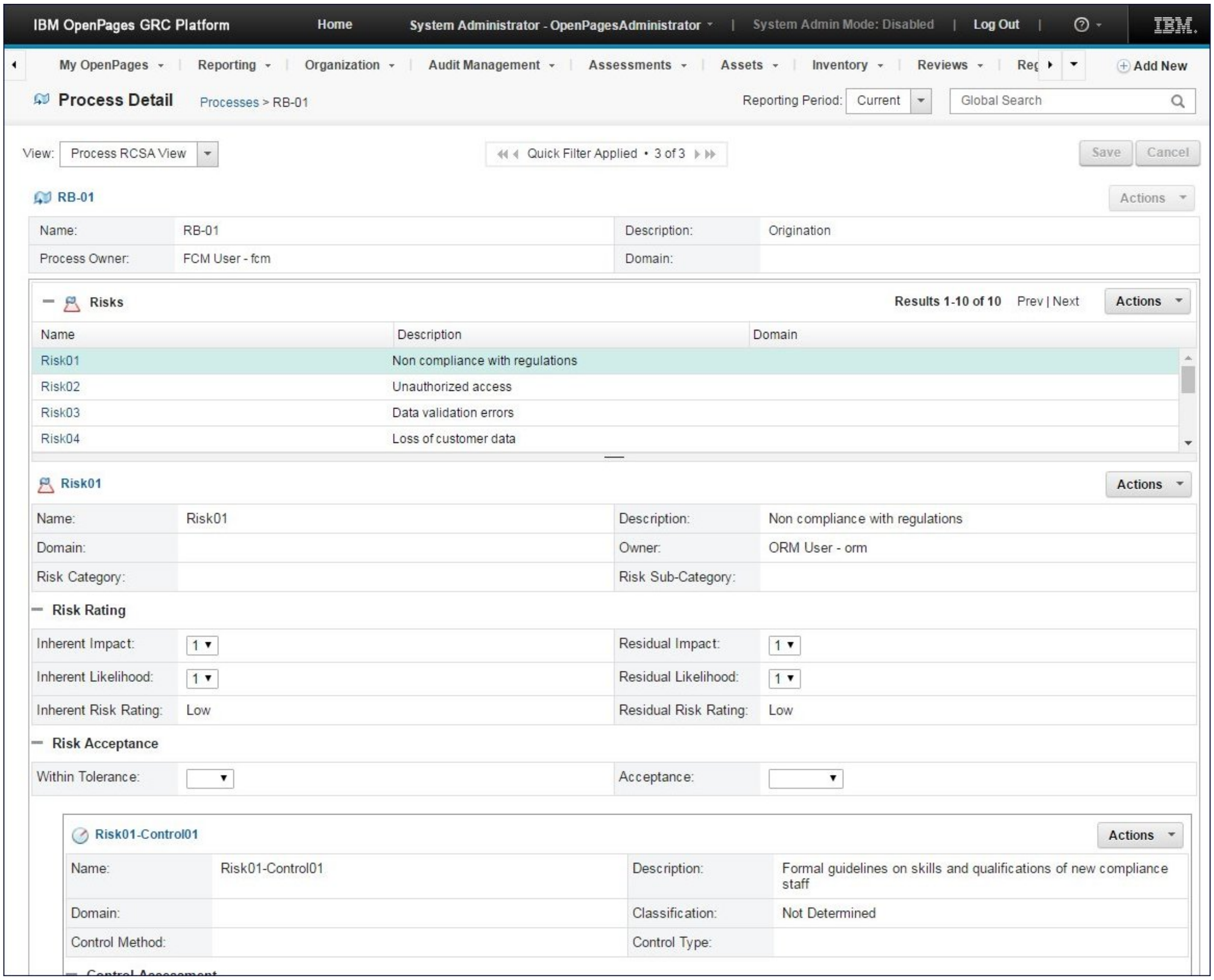


Figure 249. View with the first item highlighted and opened

Solution enhancements

A new solution, OpenPages Third Party Risk Management is now available. In addition, enhancements have been made to IBM OpenPages Operational Risk Management.

IBM OpenPages Vendor Risk Management

The new OpenPages Third Party Risk Management solution supports firms in assessing and analyzing risks that are associated with the vendors they do business with.

OpenPages Third Party Risk Management brings transparency into operational and security activities for vendors and the subcontractors they hire. It provides a scalable way to manage third-party compliance and risk. Firms can use it to more clearly understand how individual vendors or engagements relate to business processes.

OpenPages Third Party Risk Management allows firms to complete the following tasks:

- Create, maintain, and document all vendors and engagements
- Classify or "tier" vendors as low, medium, or high criticality
- Manage contracts with third-party vendors
- Understand how third-party engagements support your business
- Use standard risk assessments to identify and mitigate risk in a specific way for individual vendors

- Leverage the questionnaire assessment capability to conduct vendor or engagement tiering using information that you gather with risk or compliance questionnaire assessments
- Collect and store evidence in a central location
- Remediate and mitigate risks after they are identified
- Build key performance and key risk indicators
- Monitor and report risks on an ongoing basis

The following figure shows a questionnaire assessment that is used to collect information about a vendor.

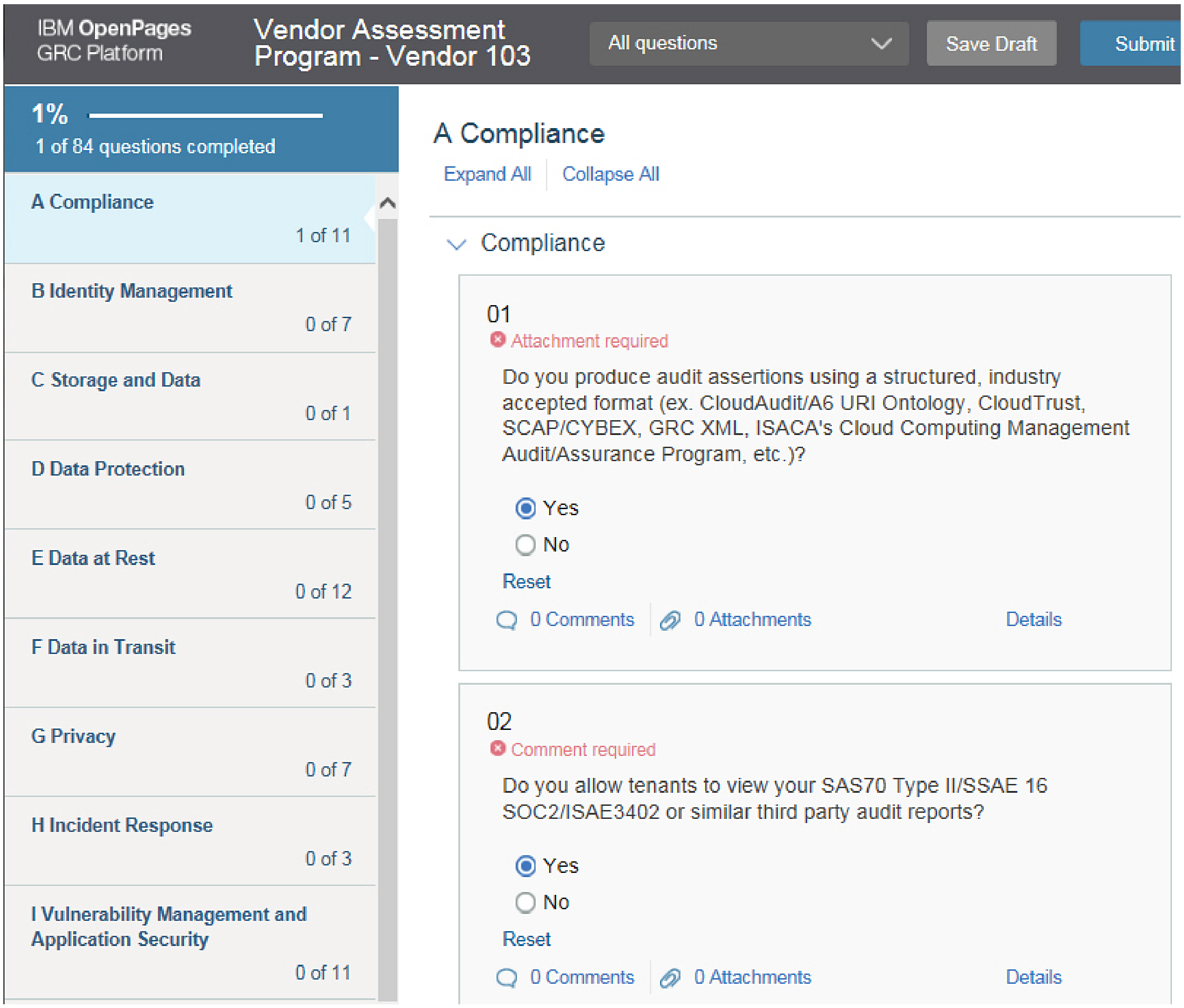


Figure 250. Example of a questionnaire assessment

IBM OpenPages Operational Risk Management

Enhancements to Scenario Analysis allow firms to collect scenario data that can be used both qualitatively and directly as an input into the operational risk capital model.

When you create a Scenario Analysis, on the Scenario Analysis Assessment tab, you must now define the **Number of Buckets**. For each bucket, you can provide the financial impact in **Severity Bucket** and the estimated number of losses in one year in **Frequency Bucket**.

The following example shows how you use the new fields to create a Scenario Analysis with the Add New wizard.

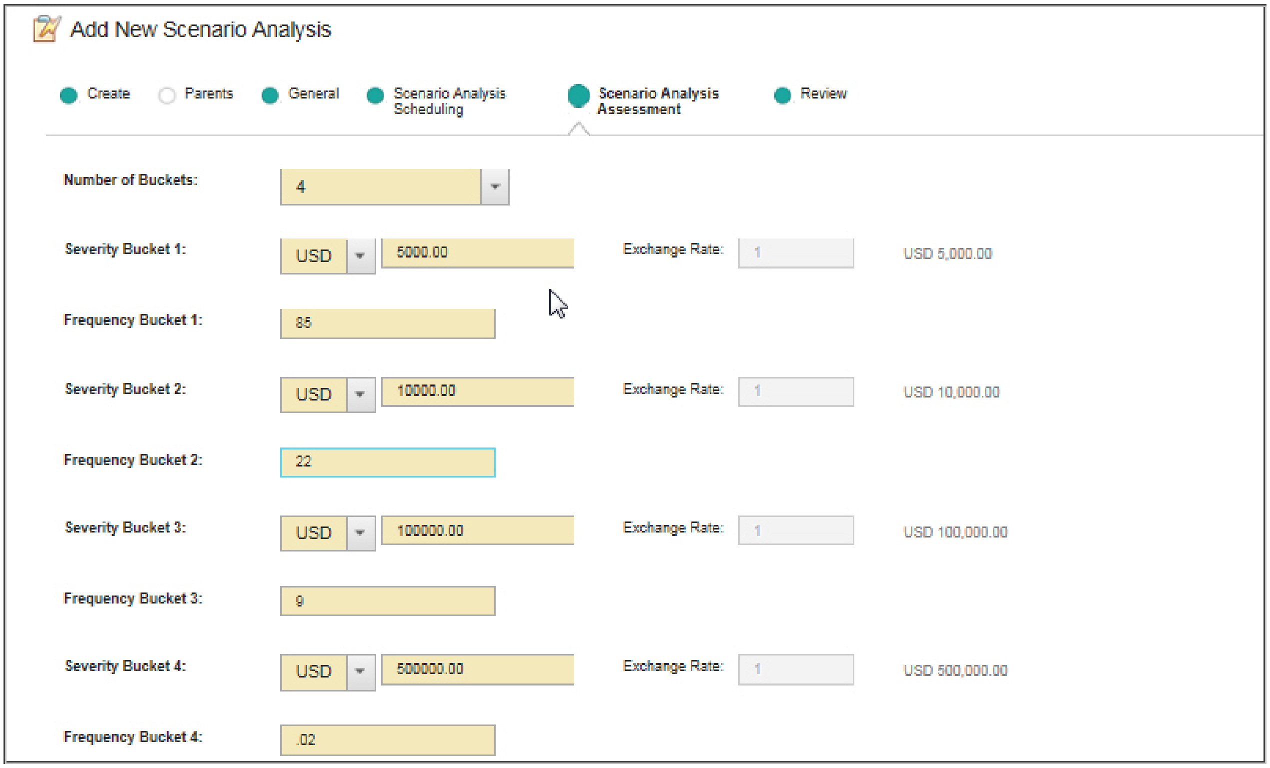


Figure 251. Example of creating a Scenario Analysis

When the Scenario Completion Helper is run, the buckets are populated in the child Scenario Result object. A reporting fragment is created to display the bucket ranges in tabular format for the Scenario Analysis Detail View, which is shown in the following example.

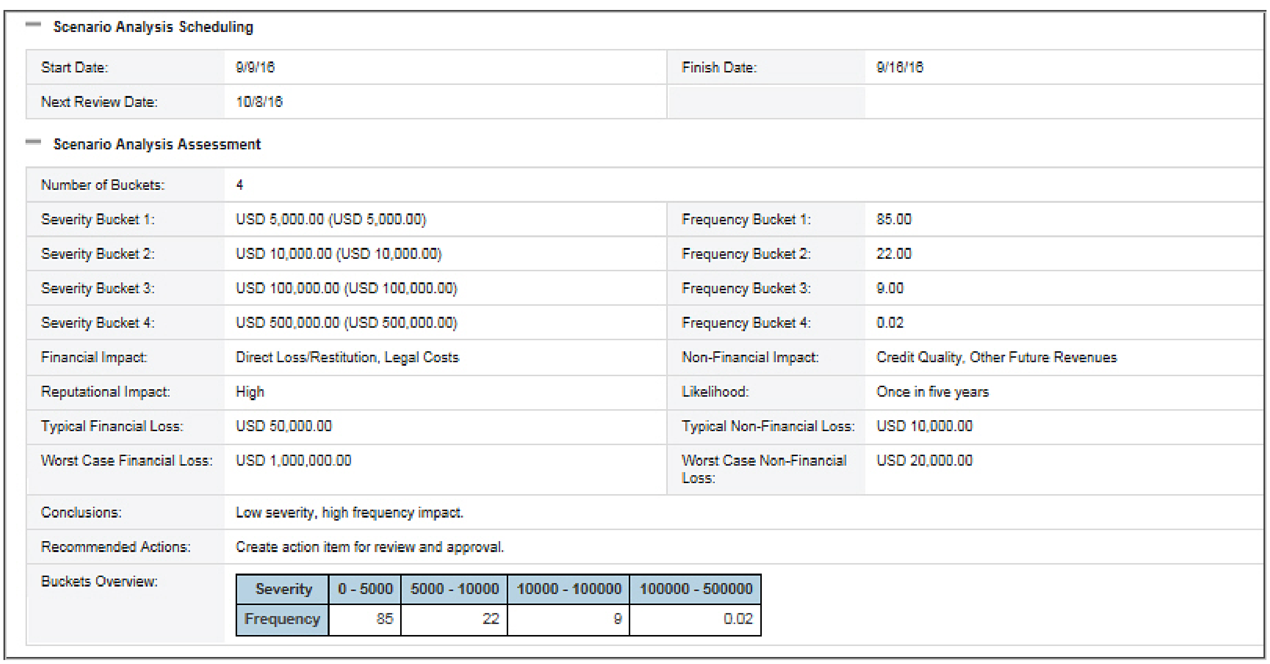


Figure 252. Example of the reporting fragment that displays the frequency and severity estimates

Administration and serviceability enhancements

Several enhancements have been made to help you administer, maintain, and support IBM OpenPages with Watson.

IBM OpenPages GRC SDI Connector for UCF Common Controls Hub

Maintaining personalizations

Some personalizations to OpenPages are now maintained when you clear your browser cache or switch to another browser or device. For example, if you rearrange the panels on your Home Page dashboard and then switch to another browser, your dashboard looks the same in the new browser window. The changes that you made to the panels are preserved. Previously, personalizations were lost because they were stored in the browser.

In version 7.3, the following personalizations are stored in the database:

- The homepage tab that was last selected: **My Work** or **Dashboard**
- **My Work** tab
  - Hidden and shown panels
  - Collapsed and expanded panels
  - Panel sequence
- **Dashboard** tab
  - Hidden and shown panels
  - Panel sequence
  - Widgets added and removed from the dashboard
- Analytics bar:
  - The default filter
  - The filters that are displayed on the analytics bar
  - The order of the filters
  - The expanded or collapsed state of the analytics bar
- Grid views
  - Column widths
  - Sequence of fields
  - Compact mode or full mode, and the fields shown or hidden for each mode

FastMap import performance improvements

The performance of FastMap imports has been improved by a significant amount. The improved performance applies to objects being created or updated.

Note: The total time it takes to modify objects with a FastMap import can be affected by the time it takes for the triggers to operate. The improvements made to FastMap import performance do not impact the portion of time spent evaluating and executing the triggers.

Collect and view logs

Version 7.3 provides a new LogCollector tool.

The LogCollector tool provides a command-line interface that you can use to collect log files and diagnostic data from the IBM OpenPages with Watson environment.

With the LogCollector tool, you can collect log and diagnostic files from the IBM OpenPages with Watson environment and from the IBM OpenPages with Watson database.

Supported software

The software requirements for IBM OpenPages GRC Platform have changed.

IBM OpenPages GRC Platform now supports Red Hat Enterprise Linux (RHEL) 7.0 (and higher minor releases and updates). Red Hat Enterprise Linux (RHEL) 6.5 (and higher minor releases and updates) is also supported.

OpenPages with Watson requires new versions of some software.

- IBM WebSphere Application Server 8.5.5.9
- If you are using IBM DB2, version 11.1 is required. IBM DB2 version 10.5 is no longer supported.
- If you are using IBM DB2, IBM Cognos Business Intelligence (BI) version 10.2.2.6 or later is required.

For details about supported environments, see the Supported Environments website.

OpenPages APIs

Updates to IBM OpenPages with Watson APIs improve and extend the development of OpenPages applications. This section lists the new, changed, and deprecated features within the OpenPages APIs.

OpenPages Java API

Updates to the IBM OpenPages with Watson Java API include:

1. The Query Syntax has been enhanced to support indirect joins using the ANCESTOR keyword. For more information, refer to indirect (hierarchical) join descriptions in the OpenPages javadocs, as well as the related QueryTestJSP sample.
2. Enhancements to creating, getting, updating, and deleting GRC objects were implemented to improve performance. For more information, see the **`ISecurityService`** interface and the new **`getGroup(groupName,options)`** method.
3. The **`IConfigurationService`** interface has been expanded to support users with multiple profiles.
4. The **`DateFacetParam`**, **`SearchFacetOptions`**, and **`UserFacetParam`** classes have been added to support searching object facets.
5. The *IBM OpenPages with Watson Trigger Developer Guide* now indicates that a copied object's ResourceID is available in the POST phase.

For more information on supported Java methods, see the *IBM OpenPages with Watson API Javadoc*.

OpenPages REST API

Updates to the IBM OpenPages with Watson REST API include:

1. Enhancements to creating, getting, updating, and deleting GRC objects were implemented to improve performance.
2. The AnonLossEventFormREST sample was updated to remove dependencies on `Juno.jar`. The sample now uses Jackson as the JSON library.
3. The **`/workflow`** URL resource is now deprecated. A replacement workflow integration solution will be added in a future OpenPages release.
4. A new **`/grc/api/contents/{contentId}/report/{fieldName}`** URL resource was added. The URL returns the Report Fragment output of a specified field.
5. A new **`/grc/api/configuration/text`** URL resource was added. The URL returns all the application text for a user's locale.

6. Examples for **`/group`** URLs have been modified to demonstrate the use of multiple profiles, where a user may have more than one defined profile.
7. Optional **`/search`** parameters (fot, fur, fdt, ffp) to support searching facets have been added. The **`types`** parameter has been deprecated; use **`fot`** instead.
8. The **`UserType`** attribute `emailAdress` was deprecated. Use `emailAddress` instead.

For more information on supported REST resources, see the *IBM OpenPages with Watson GRC REST API Guide*.

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