IBM Business Automation Workflow

Proof-of-Technology

Lab Guide

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1 Introduction

IBM Business Automation Workflow (BAW) digitizes your workflows, focuses on the orchestration or sequencing of activities required to operate a business, whether as a straight-through or human-assisted process, or as case management. Digitized workflows enable business professionals to participate directly in designing business solutions, rather than forcing them to write requirements and hand those requirements over to IT.

IBM Business Automation Workflow is an enterprise-grade platform to create workflow applications to improve productivity, orchestrate processes that are both straight-through and requiring human-in-the-loop validations.

Workflow applications coordinate work between tasks performed by humans and automated tasks to improve daily business operations. Workflow applications have four main components:

- An authoring environment to create and configure the application.
- Frameworks or models for sequencing and delegating work. With Business Automation Workflow, the models can be either structured processes or unstructured cases. You can choose your model based on the pattern of your workflow and not be limited to a case or a process.
- A user experience for interacting with the application. To provide consistent user experiences, standardized workflows can be reused across the organization.
- Administrative tools for optimizing how the application runs, deploying new versions and managing security.

Case Management capability of BAW: Case management is a critical function for virtually every business. The ability to efficiently process cases has impact on both top and bottom lines, could have regulatory implications, and most importantly, is critical to maintaining customer satisfaction and loyalty. Effectively implementing a case management solution requires a broad platform that brings together a range of capabilities, including content management, business process management, business rules, collaboration, and analytics. The solution needs to integrate seamlessly with existing infrastructure, using those assets to provide complete, consistent context to case workers in a user interface that is tailored to how and where they work.

1.1 About this hands-on lab

The lab offers a walkthrough of a case management solution and its underlying workflows created in IBM Business Automation Workflow.

In business environments filled with diverse forms of content, continually changing and complex business processes, and an array of different line-of-business interfaces, companies are looking for ways to gain operational efficiencies, reduce risk, and improve quality through exception management and end-to-end process visibility.

In our example of a simple Retail Banking Case solution, a client walks into a Bank Branch Office to open a New Bank Account.

Actors in the Retail Banking Solution:

Actor	**Description**
New Account Specialist (Carly)	New account specialists understand the Bank’s procedures and methodologies to review, approve, and establish new accounts. Carly has overall responsibility related to the processing of new account applications.
Customer Service Specialist (Sue)	Customer service specialists assist customers over the phone with the various financial products and services.
Client	A new client opening a bank account.

In the first section of the lab, you will explore the solution from business user perspective:

- New case creation with multiple activities (workflows) starting automatically for it
- Integrations between workflow (BAW) and document management (FileNet) capabilities
- Different activity types available in BAW - mandatory, optional, discretionary, and checklists
- Walk through the main user interfaces in Business Automation Workflow - Case Client and Process Portal
- Explore Case and Work Details, Case History, and visualization options

Then, you will learn how the solution was built and deployed using Workflow Center, Case Builder, and Process Designer interfaces. Some of these tools can be used by business analysts to design workflow and case solutions with limited involvement of IT personnel.

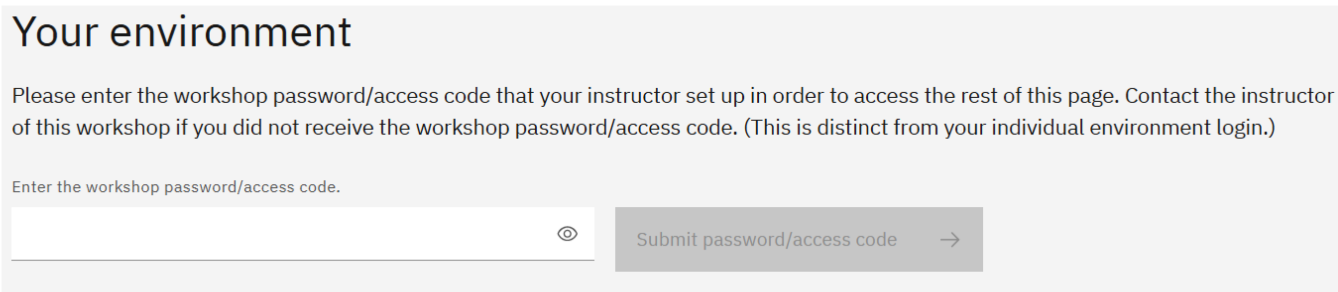
By the end of the lab, you will be equipped to leverage capabilities offered by IBM Business Automation Workflow to design and build your enterprise workflows and case management solutions.

2 Getting Started

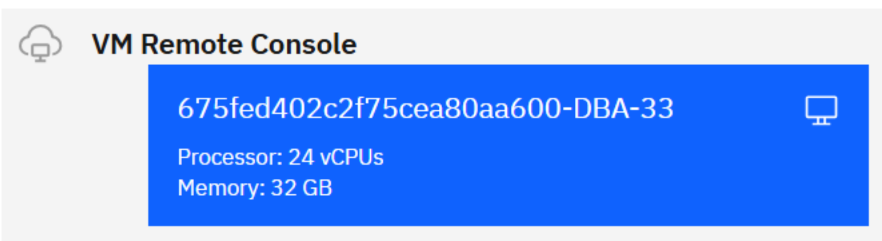
You will access the lab environment using the IBM Technology Zone URL provided by your instructor. Enter it in the browser of your choice.

You will need to authenticate using IBM ID that you have previously created.

Once you login, you'll be presented with the screen to enter the password to access your environment. The password will be provided by the lab instructor. Enter the password and click Submit password/access code.

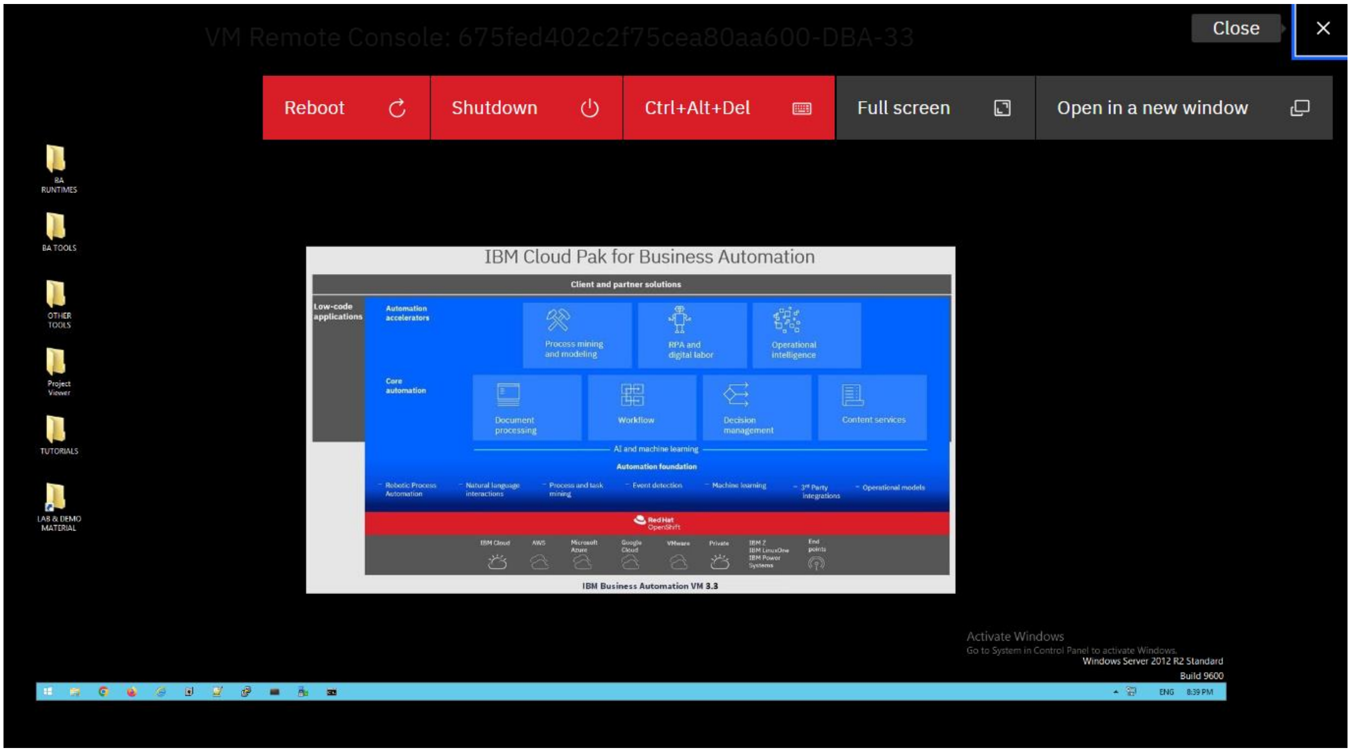


Scroll down to the bottom of the page and click on the blue button under the VM Remote Console section as in screenshot below:

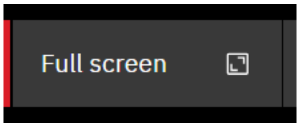


You may need to wait a few minutes before the environment loads. Do not close the console!

Wait until you see a similar window as below. If the screen remains black for extended time, just click on it.



For best experience, click on **Full screen** button to switch to full screen view. You can always exit it by pressing **ESC** button on the keyboard.



You're ready to complete the lab now!

Proceed to the next section.

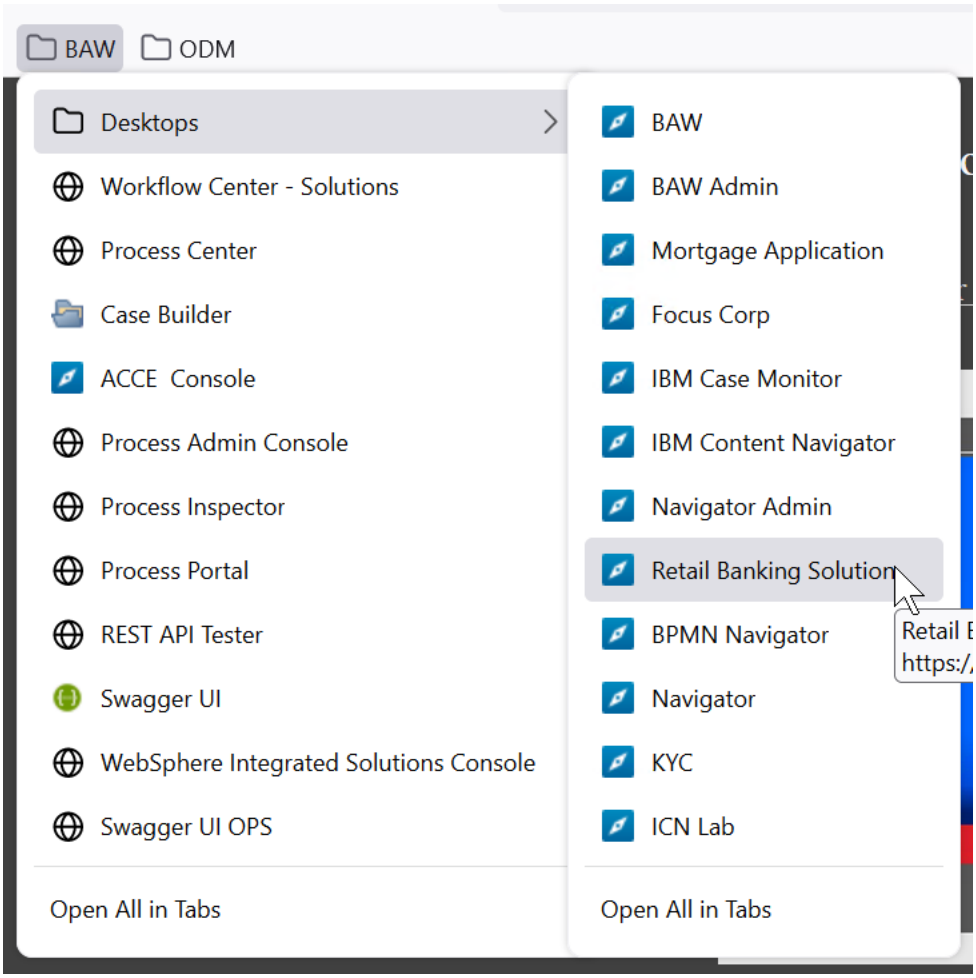
3 Retail Banking Solution

1. A customer Susan Sample applies for new bank account.
2. Cary Hall is the new account specialist focusing on new clients. She will use IBM BAW to open a new account for Susan by creating a Case to collect all relevant information and managing the collaboration between different actors.
3. After the Case is created, a work item will be routed to a Banker for review before the account is opened.

3.1 Submit a New Account Application

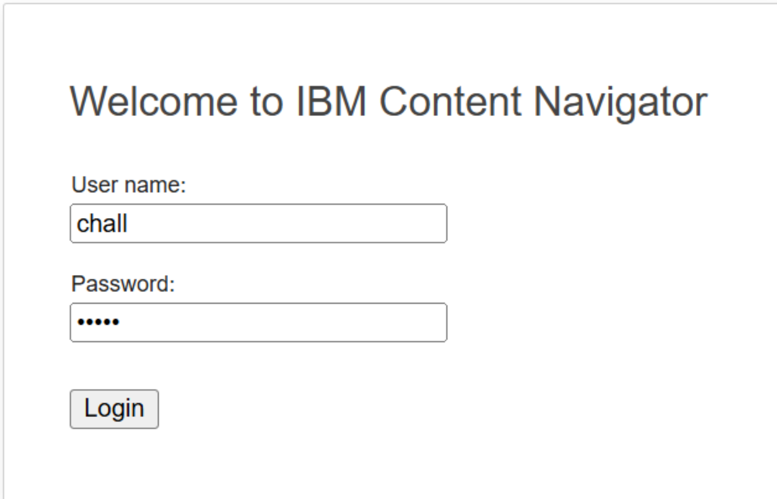
1. Open Firefox browser by click on icon in taskbar or Windows desktop.

2. In the bookmarks menu, select BAW → Desktops → Retail Banking Solution.

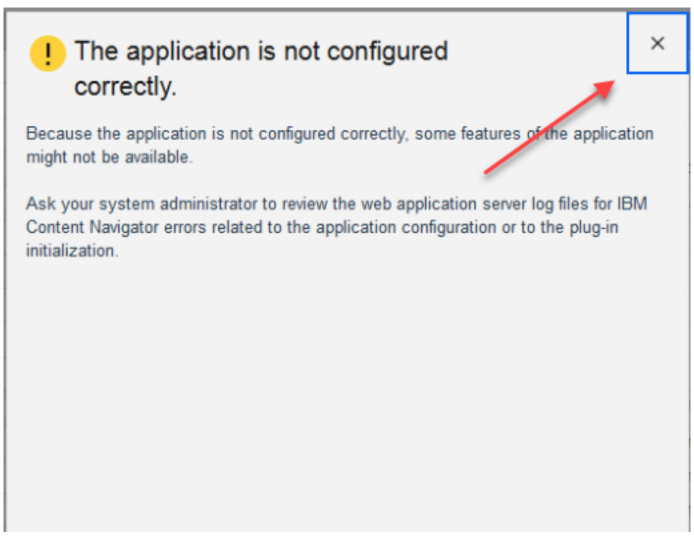


The solution desktop will open.

3. Login to Case Manager client by entering *chall* as **username** and *chall* as **password**. Click Log in.

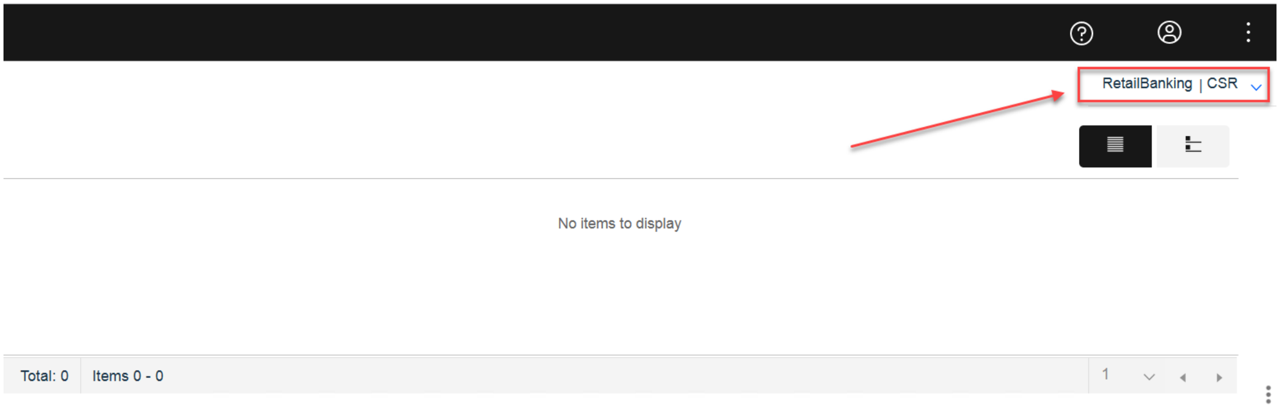


- Ignore any browser warnings, if displayed (just click on X).

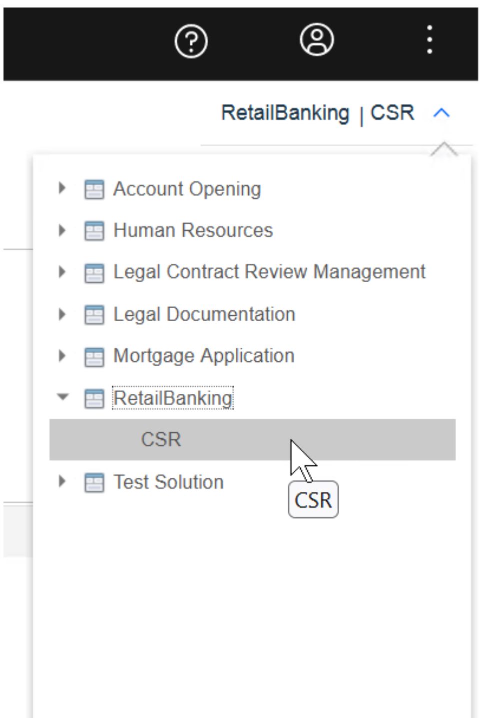


4. Carly's landing page is called Solutions Page in IBM BAW client. On this page Carly can manually add a new Case, search for existing Cases, and even view work items assigned to her. We will come back to searching for Cases and processing work items later in the lab. But first, validate that the proper role is selected by Carly:

    a. In the top right corner of the BAW client, make sure that **"RetailBanking | CSR"** role is displayed.



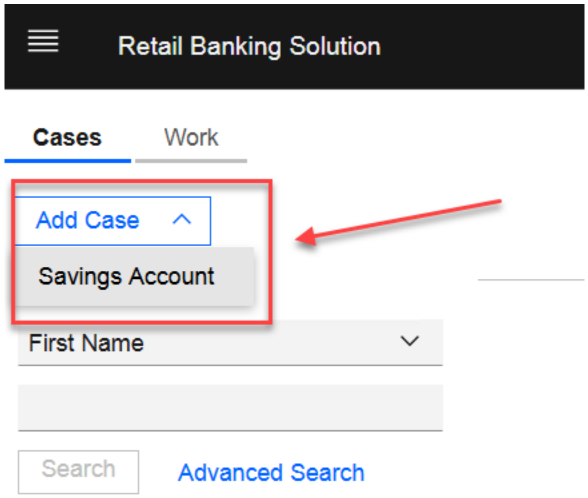
b. If not, click on the dropdown, expand **RetalBanking**, and select **CSR** from the list.



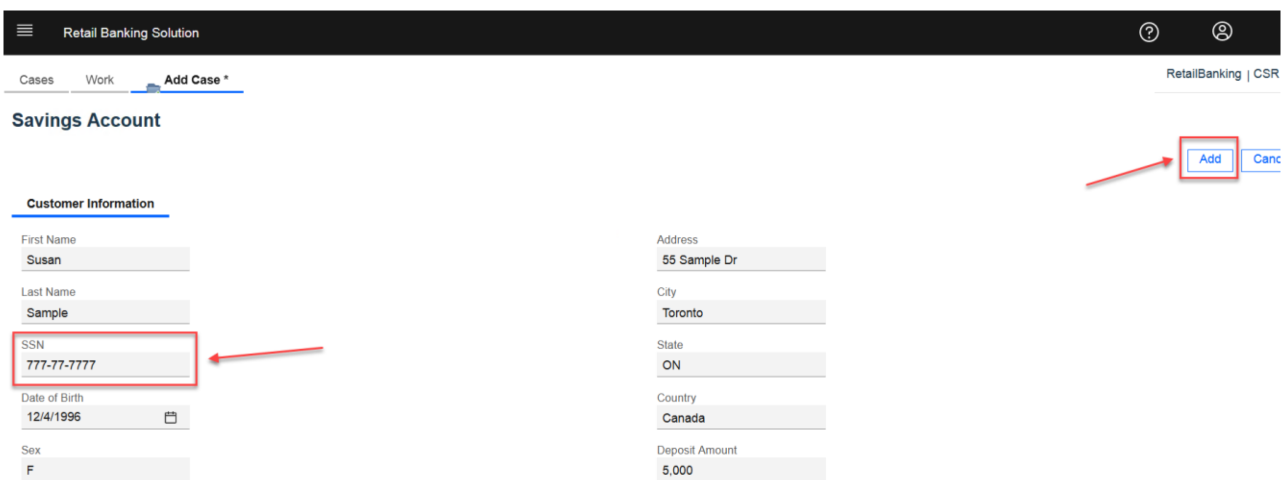
i	IBM Business Automation Workflow allows users to switch between roles in the Case Client interface. A single unified inbasket can be configured for users instead if required.

5. In BAW, there are many ways to add new workflows and cases. You can use FileNet to store a document and automatically trigger a workflow/case. A new workflow/case can also be created using an external application or a service. In our scenario, Carly will manually create a new Case.

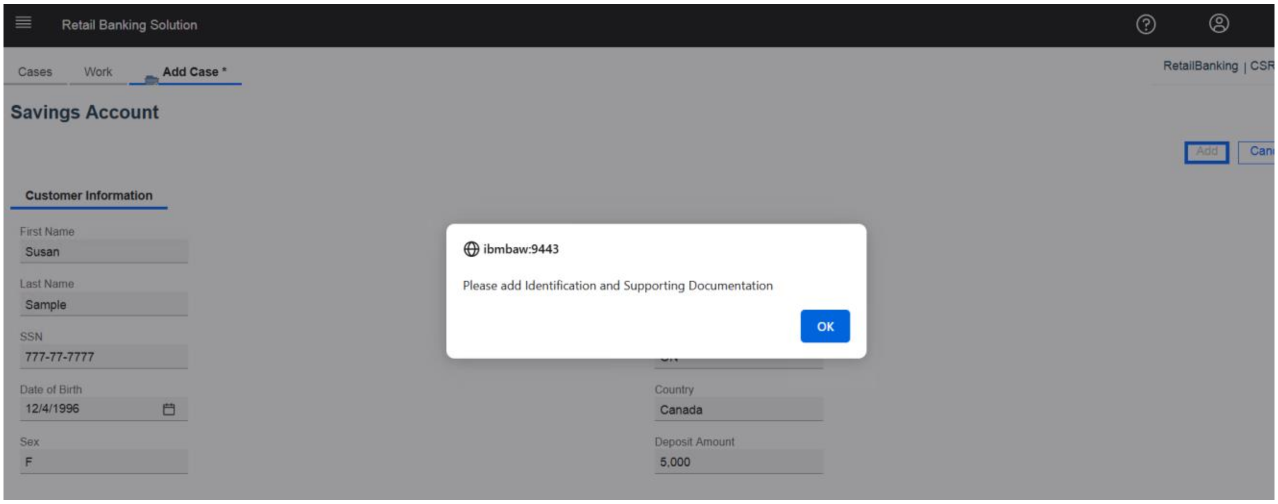
   a. Click on Add Case, and select Savings Account from the dropdown.



6. Carly is greeted with Add Case Page. On this Page, Carly can capture all the properties needed to open a new account in the bank.
    - Feel free to test the expression validation of the SSN property by specifying a non-compliant format.
    - Once all the properties have been added, click on Add button to create a new Case.

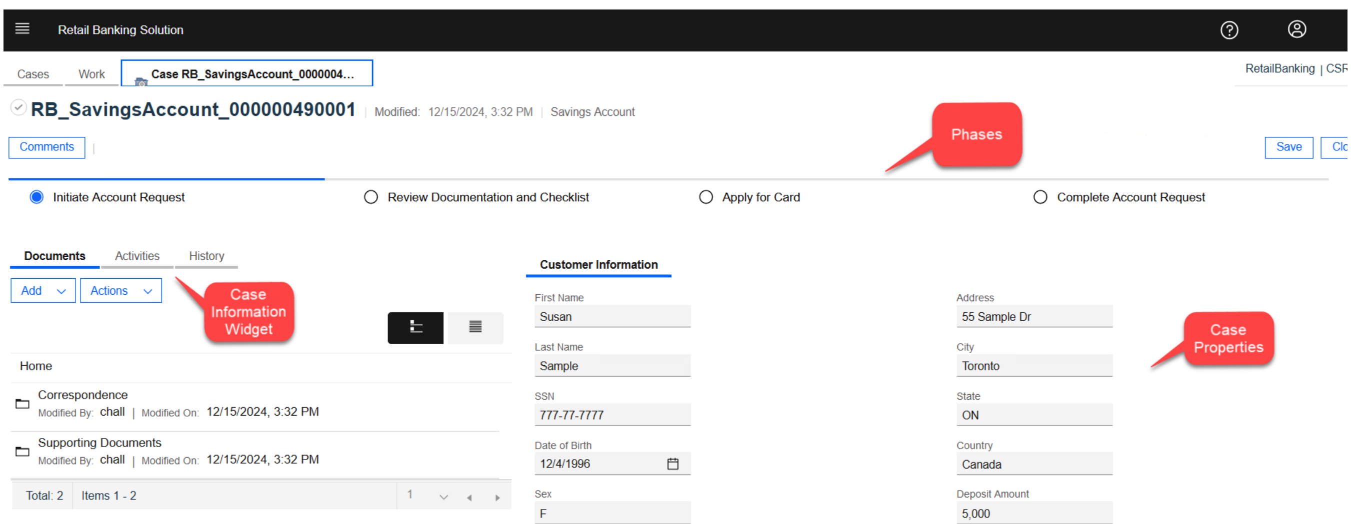


7. Cary is now greeted with a dialog box to add supporting documentation to the Case Details Page.



3.2 CSR – Case View

The Case Details Page is a single unified page to add and view all the new account case information. Let's spend some observing the different facets of the Case Details Page.



Case Details Page: Case Details pages include pages that case workers use to interact with specific cases. These are personalized and purpose-built pages to help workers access all relevant data. In addition to the data, Case Details Page provides toolbar for performing different types of operations on the aggregated data. The data could be coming from your Case and Workflow database or external systems.

1. **Case Stages:** Stages are used to define the lifecycle of a case. The stages show the progression of a case beginning with the first stage, which starts automatically when the case is created. As one stage completes, the next stage automatically begins until all stages are completed. In this solution, we have defined 4 stages:

    a. Initiate Account Request

b. Review Documentation and Checklist

c. Apply for Card

d. Complete Account Request

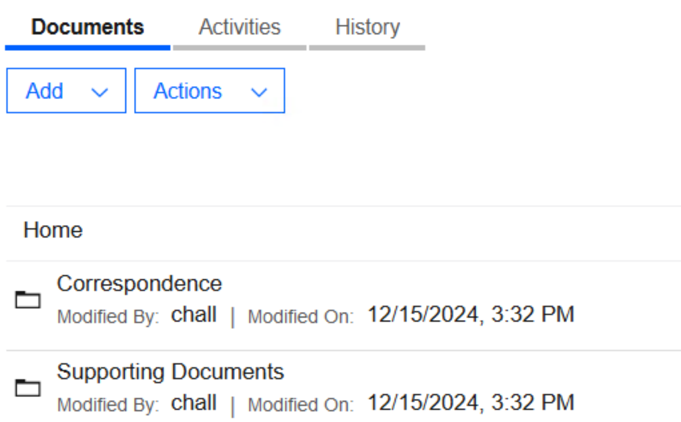
We are at the ***Initiate Account Request State***:

Case stages not only provide quick graphical view into the Lifecyle of the case, they also are used as a data-point to determine the overall health of your cases.

	You can hover over your mouse over each stage to get more information on how stages progress.

2. **Case Information Widget:** Case Information widget displays an overview of a case to workers. The Case Information widget can display up to four views: summary, documents, activities, and history. In our solution, we are displaying Documents, Activities and History.

   a. **Documents View:** Case Information widget provides case workers with a list of the documents that are associated with the case. The Documents view includes a toolbar that contains by default an Add button, an Open button, and an Actions button. The view also provides a pop-up menu that can be used to perform actions on selected documents or folders.



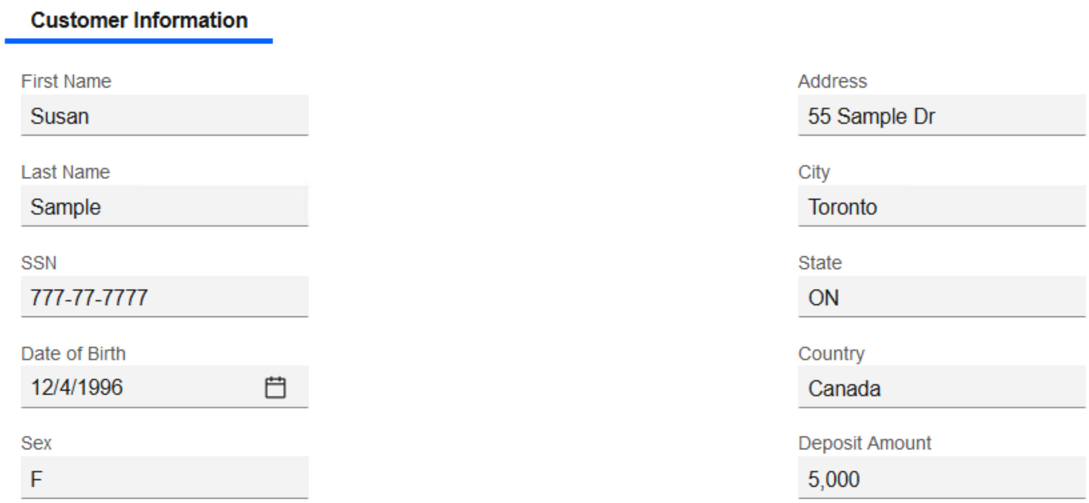
   b. We will come back to Activities and History View in the next Step.

3. **Case Properties View**: This view displays all the properties that were captured while creating the Case. Depending upon your business requirements, these properties can be:

   a. Editable, Read-Only

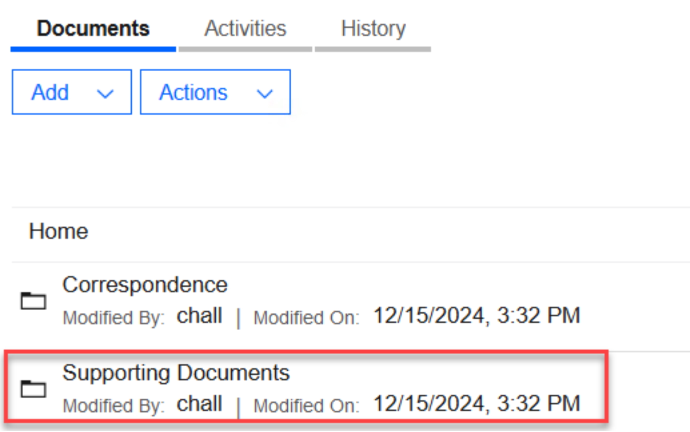
   b. Single or Multi Value

c. Have Choice Lists

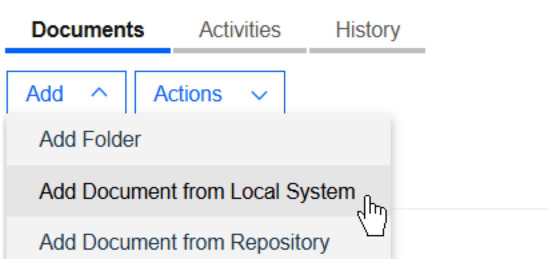


4. Now that we have reviewed different parts of the Case Details page, let's continue with our Account Opening Process. In addition to the application data, Cary needs photo identification from Susan. Let's assume that Susan has emailed Caryn her Driver's License.

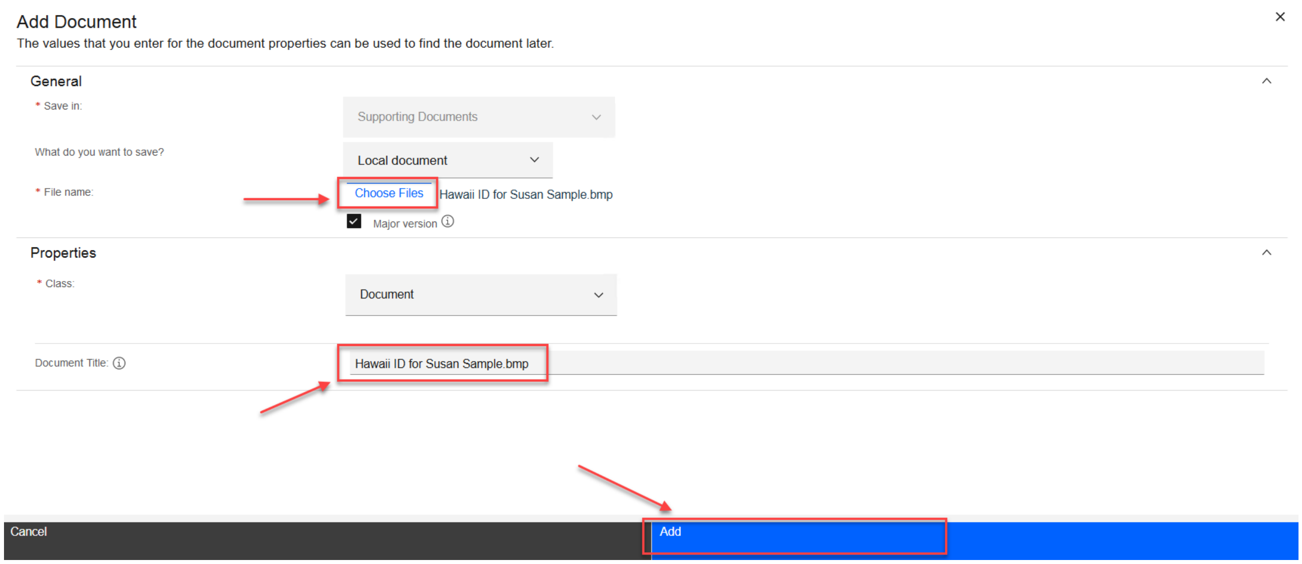
5. Click on the **Supporting Documents** Folder in the Document View of the Case Information Widget.



6. Click on **Add Button** and select **Add Document from Local System**.



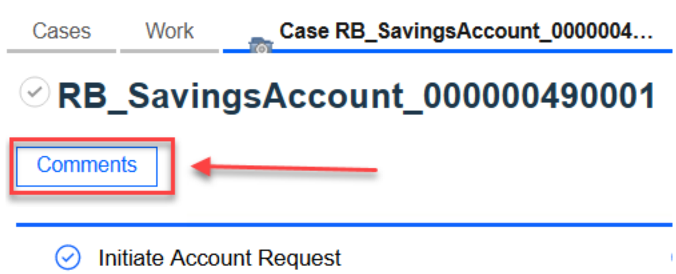
7. Click on **(1) Choose files** to go to folder **C:\Artifacts\Workflow\RetailBanking** and select **(2) Hawaii ID for Susan Sample.bmp**. Click on **(3) Add** button to add document.



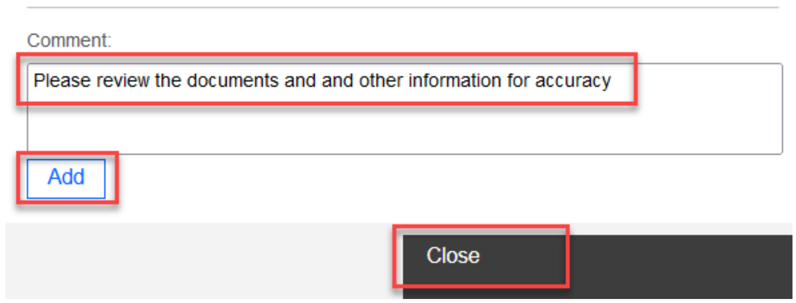
All the content that you upload to cases and workflows is stored in IBM FileNet that can be embedded or external to IBM Business Automation Workflow.

Susan's drivers license has been added in the Supporting Documents as a Case artifact. Next Cary is going to add a Comment to the Case. Comments is a very effective way to document and collaborate between different case workers. All the comments are saved as part of the Case History.

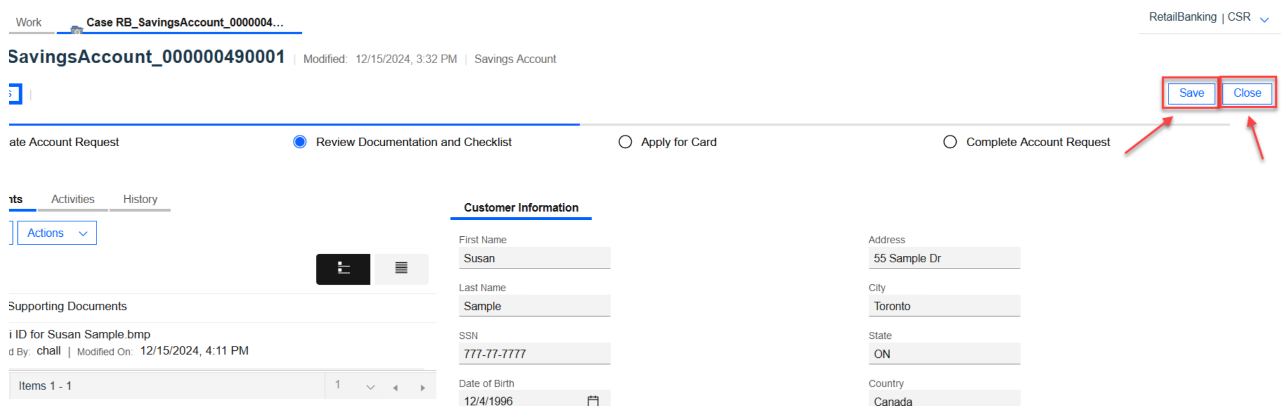
8. Click on the **Comments** button.



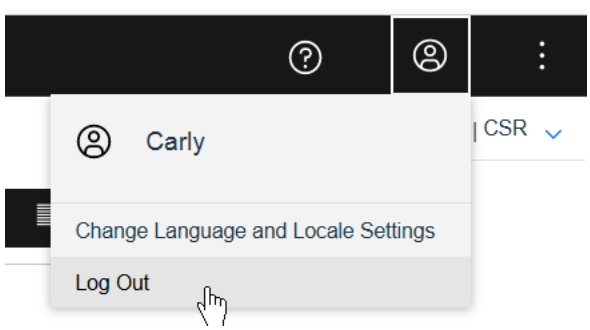
9. Add the following Comment: ***Please review the documents and other information for accuracy***. Click on **Add** and then **Close**.



10. At this point we have added a new Case, attached identification documentation, and documented a Comment. Let's go ahead and click on **Save** button followed by **Close**.



11. Log out as Carly Hall by clicking **Account icon** in the toolbar on the right, and then **Log Out**.



Congratulations on completing this section of the lab!

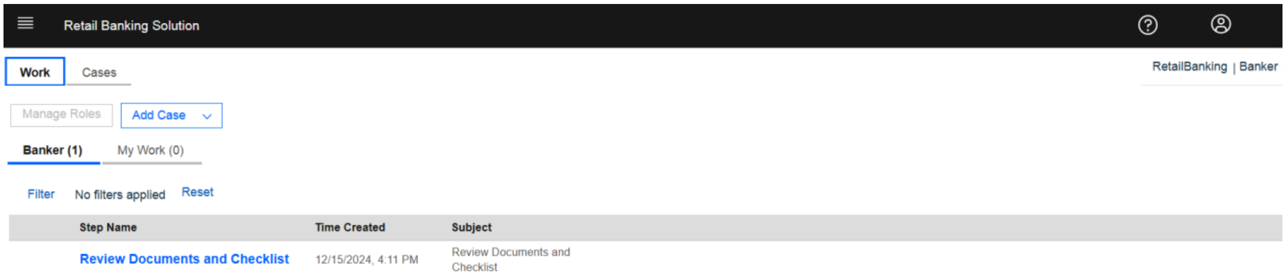
3.3 Banker – Work Item View and Discretionary Activities

The next step in our lab is for the Banker Sue to review the account information for accuracy and completeness and then decide on the account opening case. Sue can also offer additional products and services to the client during this step.

1. Log into the Retail Banking Solution as:

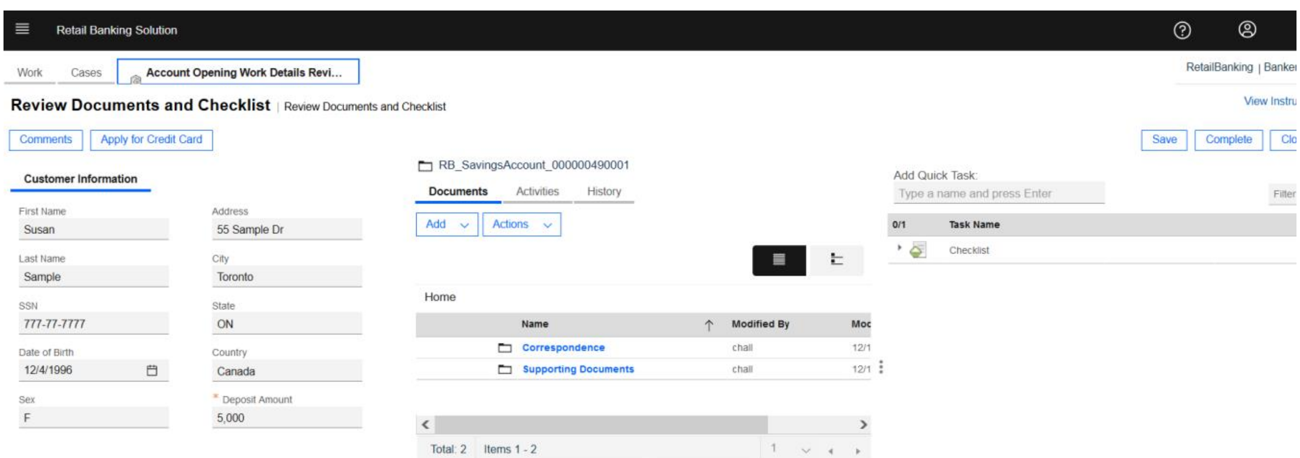
- Username: **sryan**
- Password: **sryan**

2. Sue views the work items in her **Work** Tab. The Work page contains in-basket widgets that display the work items or workflow steps that case workers have to review and process.



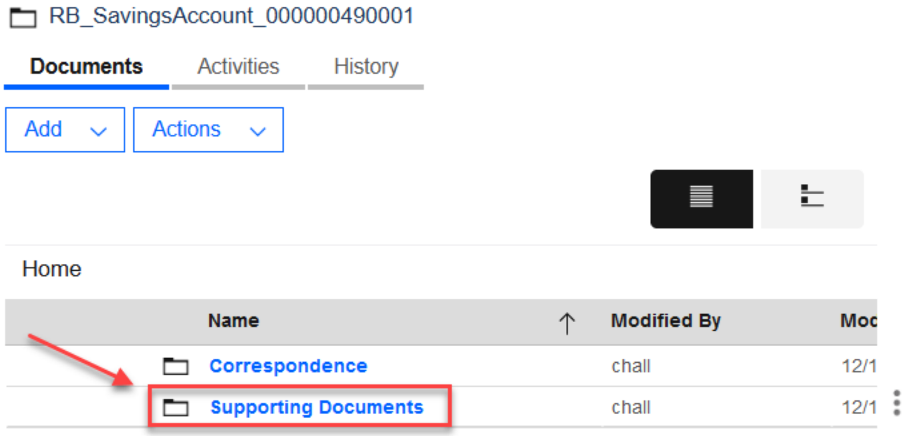
	Inbasket view is fully customizable. Inbasket filters can be created and added to inbaskets if required.

3. Click on **Review Documents and Checklist** work item in the inbasket. If there are several work items in the inbox with the same name, select the one that has just been created in the previous section of this lab. The Details view of the work item will open.

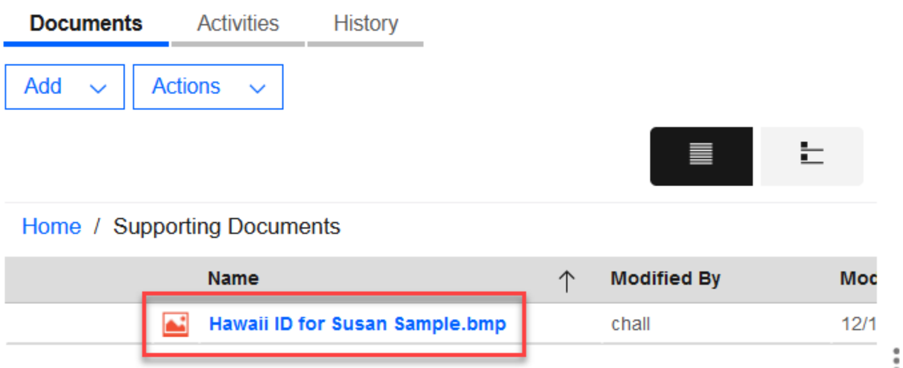


	Instructions can be added to workflow steps to help business users completing their work in BAW client.

4. Navigate to the **Supporting Documents** Folder in the Case Information Widget.

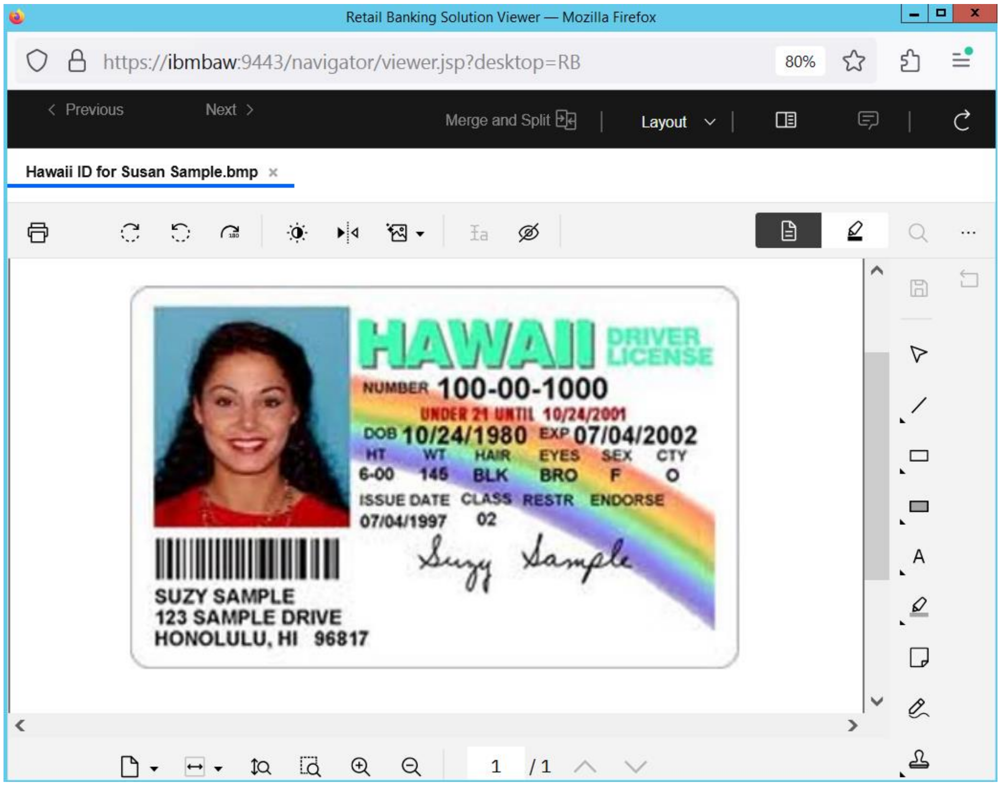


5. Validate that you can see Susan's ID is in the Supporting Documents folder.



6. Open the ID by clicking on it.

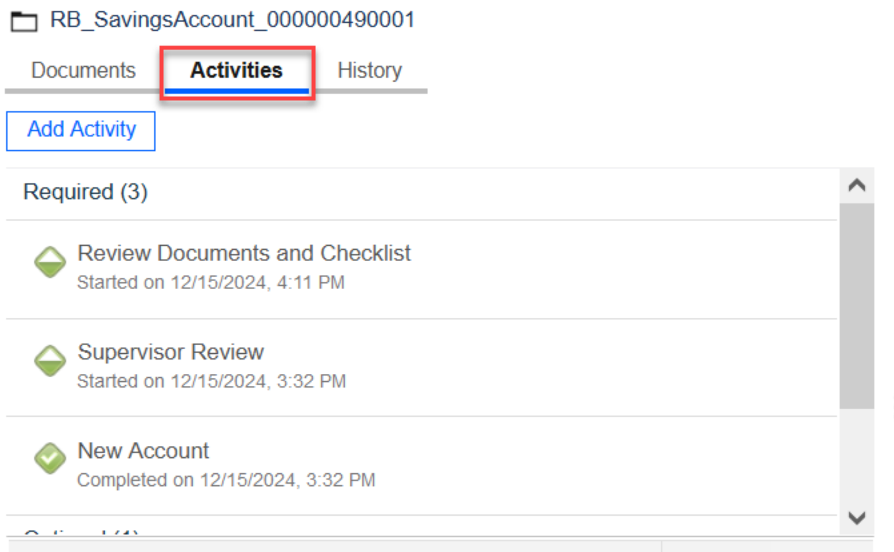
   IBM BAW uses an embedded Daeja Viewer that can be used to view hundreds of different types of documents. Depending upon the case worker's permissions, they can comment, annotate, redact etc., within the viewer.



BAW Case Client is based on IBM Content Navigator and uses the same Daeja Viewer available for IBM FileNet and other IBM Business Automation capabilities.

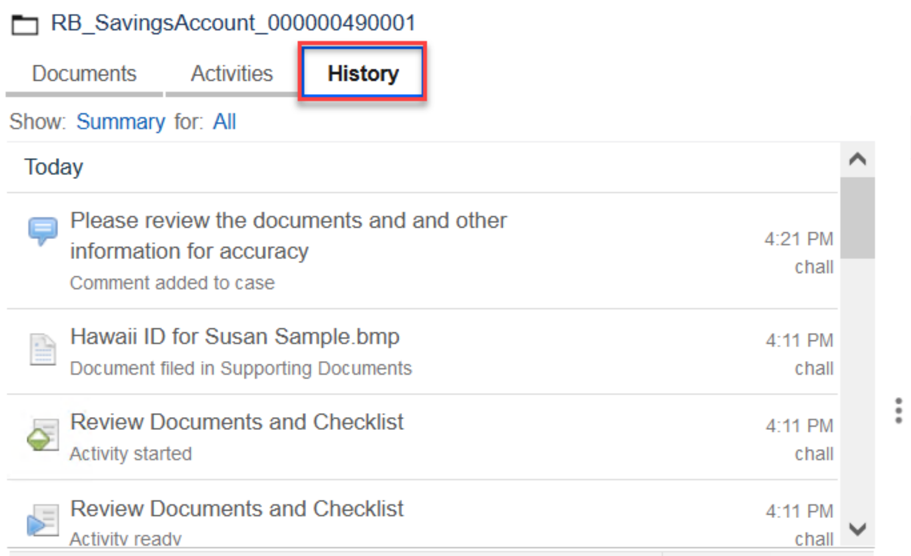
7. Close the Viewer windows and select the **Activities** Tab.

   A case contains Activities (workflows). An Activity has one or more steps that must be completed in order to complete the task. Activities are key aspects of a case. The activities dictate how a case is processed. A typical case will have a collection of automatic and manual activities. A subset of these activities will be required and must complete before the case can be closed.

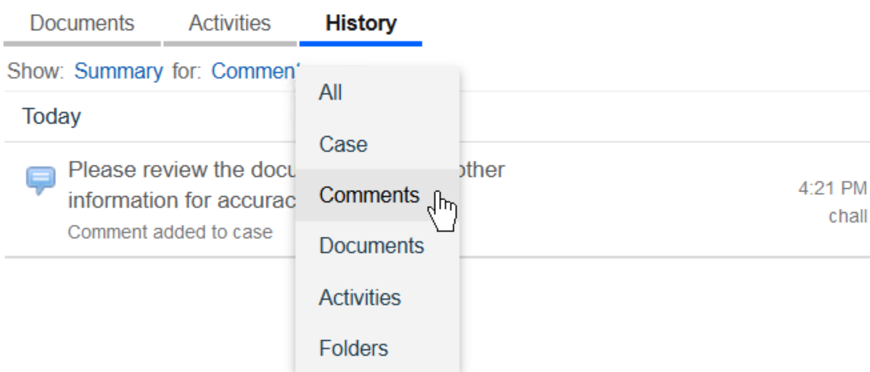


8. Select the **History** tab.

   The case information provides case workers with a history of events that occurred for the case. On the History page, a case worker can find relevant case events. A case worker can also select whether detailed information or summary information is to be displayed for each case. The amount of information that is displayed depends upon the type of event. The history displays as a timeline view with the most recent events first. Each entry provides a type, title, description, time stamp, and username for the event. The history can be filtered based on categories of events.



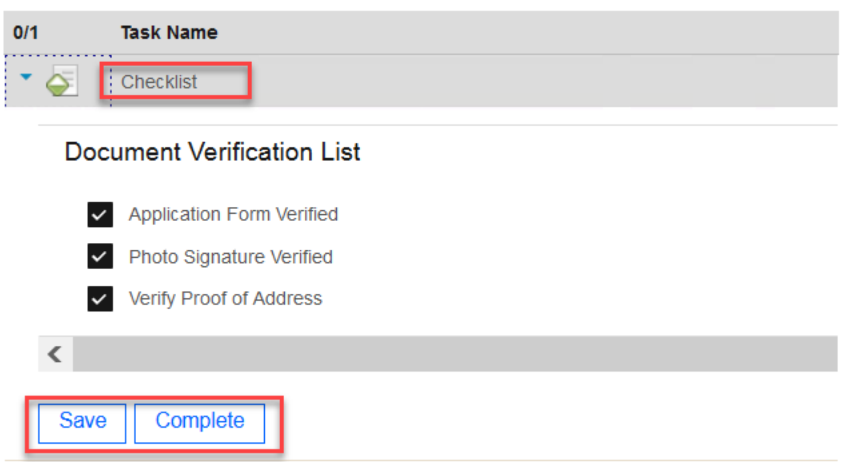
9. Select **All** to access the filter dropdown. Then select **Comments**. Observe the comment added by Carly.



10. Next Sue will navigate to the To-Do Activities Widget. Expand the **Checklist** Activity by clicking on the arrow to the left.

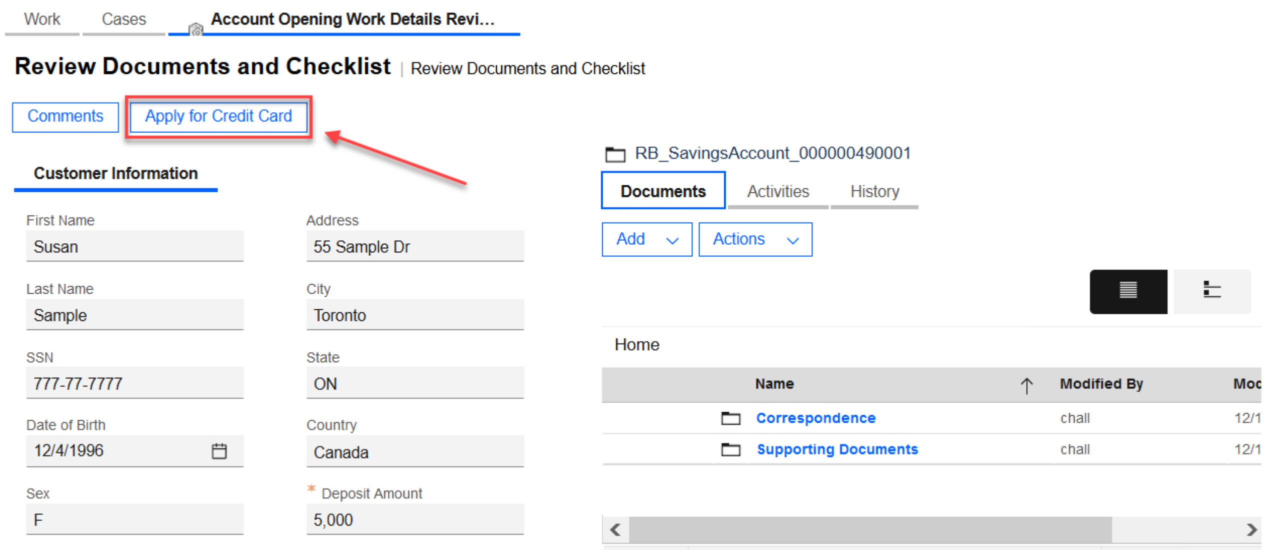
    A to-do activity represents a simple activity that does not have workflow steps. To-do activities provide a checklist of activities that must be done or information that must be collected for a case type. Checklist is a very effective way to help the case worker ensure the completeness of requested information.

    After checking the all the to-do activities, click on **Save** and **Complete**.



At this point Sue has reviewed and checked all the data provided. But based on Susan's customer profile, Sue decides to offer her a credit card promotion from the bank.

11. Click on the **Apply for Credit Card** Button.



12. This launches the Apply for Credit Card Workflow Activity. This Activity provides Sue with a Launch Activity Page where she can review existing information of Susan and also capture new data needed for processing a credit card request.

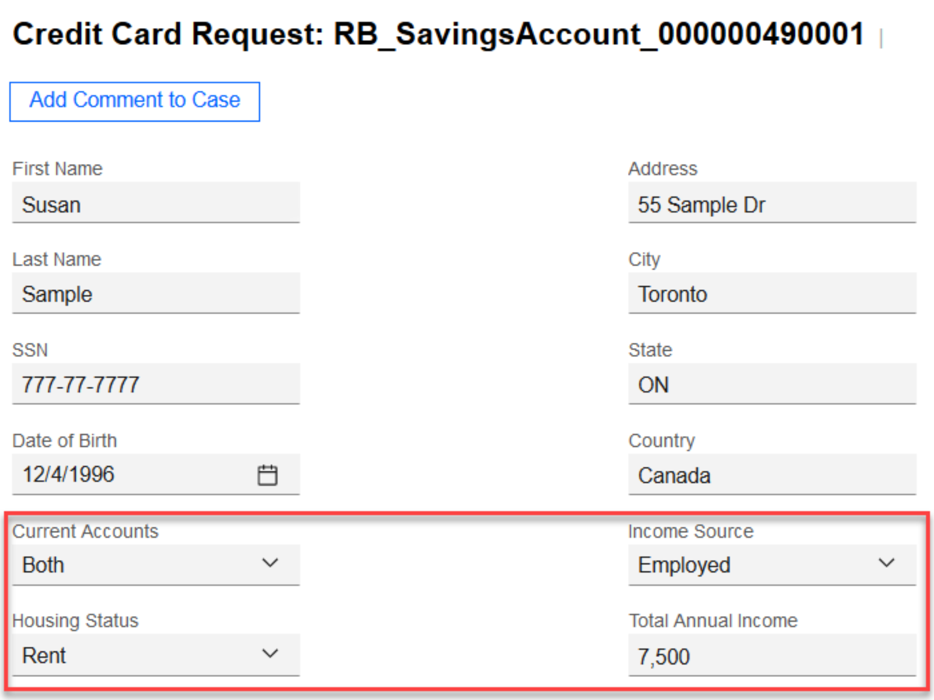
    Fill out the following four fields to complete the Credit Card Request Activity:

    a. Current Accounts

    b. Housing Status

    c. Income Source

    d. Annual Household Income

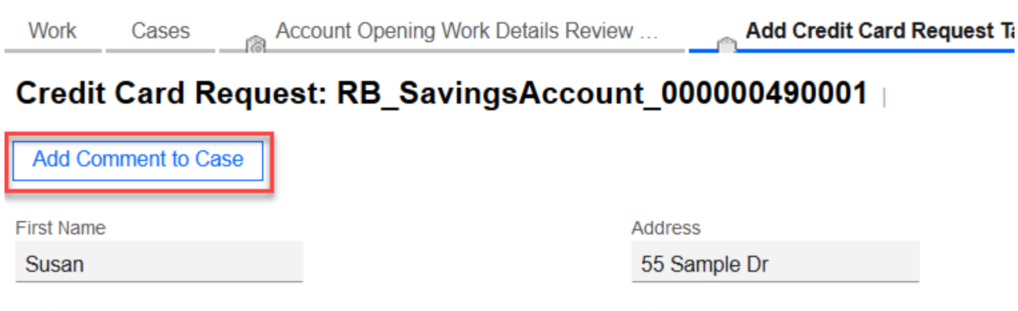


This Activity will automatically invoke a BPM Process to determine the Risk Score of Susan. The BPM process has an IBM Operational Decision Manager (ODM) rule evaluation which determines the following:

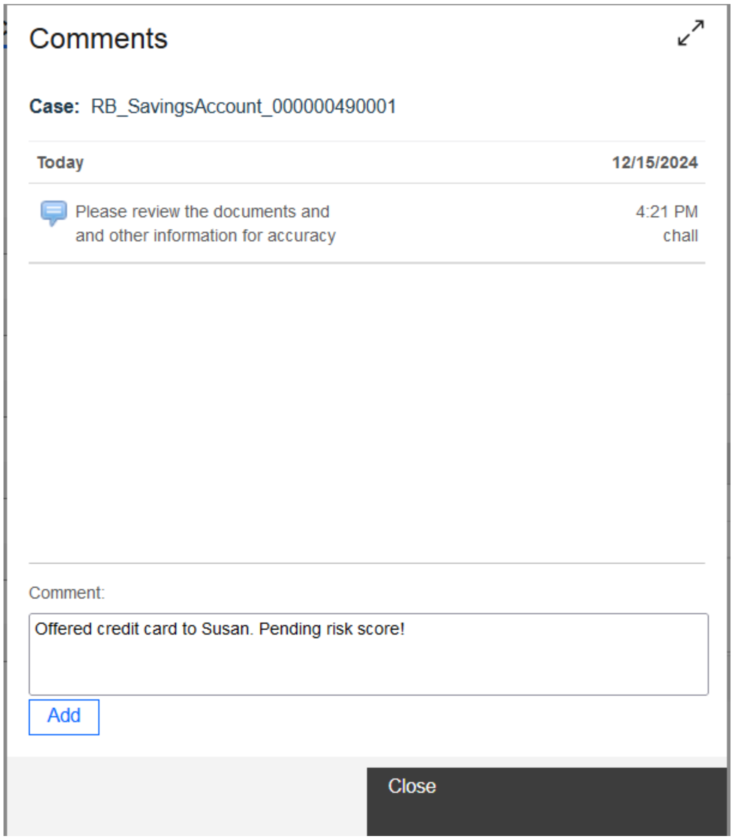
- If the Annual Household Income is less than or equal to $40,000, then a Risk Analyst will manually assign a Risk Score
- If the Annual Household Income is greater than $40,000, Risk Score will be automatically assigned.

	IBM Business Automation Workflow supports both legacy FileNet Case Foundation workflows and BPMN (Business Process Modeling Notation) compliant processes.

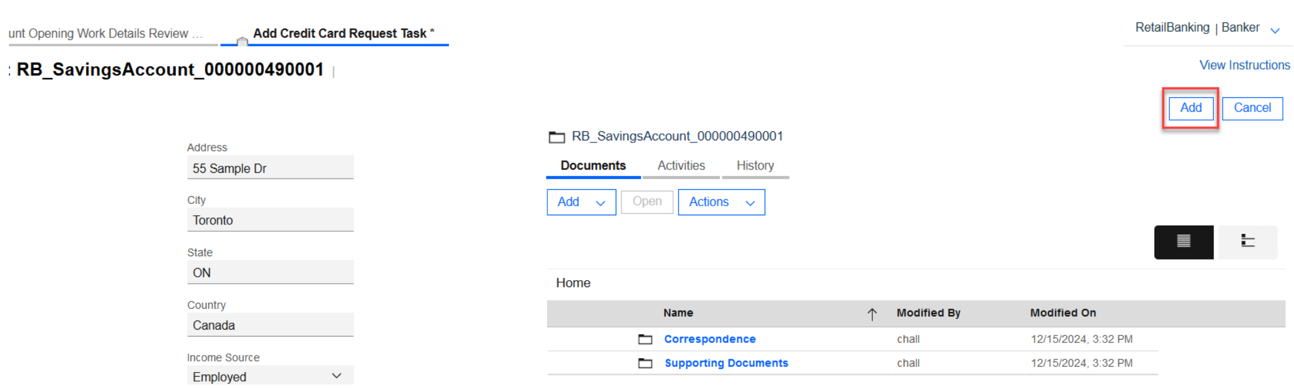
13. Click on **Add Comments to Case** button to add a new Comment.



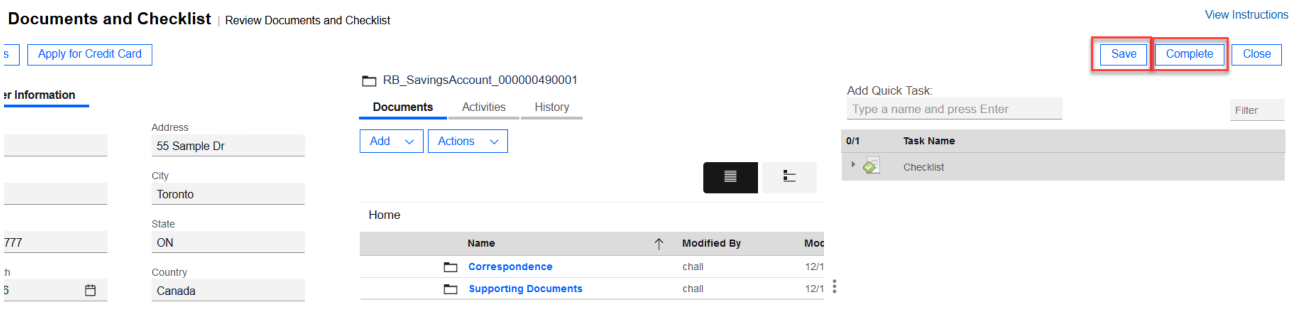
14. Add the following Comment to the Case: ***Offered credit card to Susan. Pending risk score!*** Click on **Add** and then **Close**.



15. Finally, click on **Add** to launch the Credit Card Request Activity. This will automatically launch a Case Activity that invokes the BPM Process as explained above.



16. Sue is now back on the Review Documents and Checklist step. Click on **Save** followed by **Complete** button to process the Review Documents and Checklist Activity.

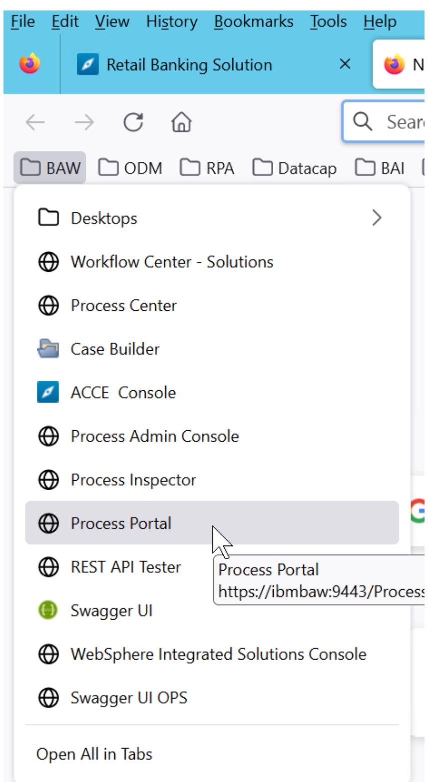


3.4 Risk Analyst – BPM Processes

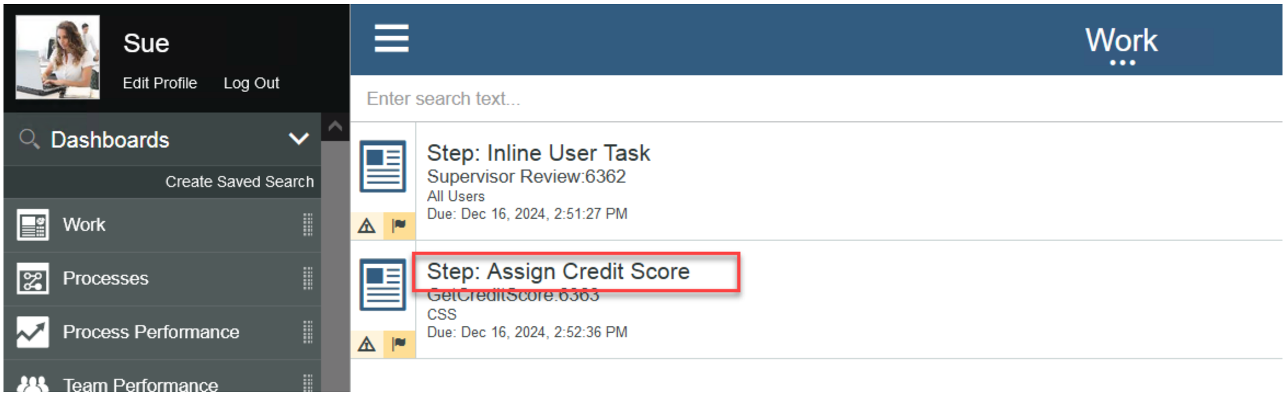
We will now change our role to a Risk Analyst (RA). Per our IBM Operational Decision Manager (ODM) rule, any credit card applicant with annual household income less than or equal to $40000, requires a manual score from a Risk Analyst. For our lab purposes, Sue will play the role of RA. Let's assume she has reviewed information from multiple systems on Susan's financial background and is now ready to assign a Risk Score.

We will explore a new interface – Process Portal – available in IBM Business Automation Workflow.

1. Open a new browser tab and select **BAW – Process Portal** from the bookmarks menu. You can also type https://ibmbaw:9443/ProcessPortal/ in the address field.

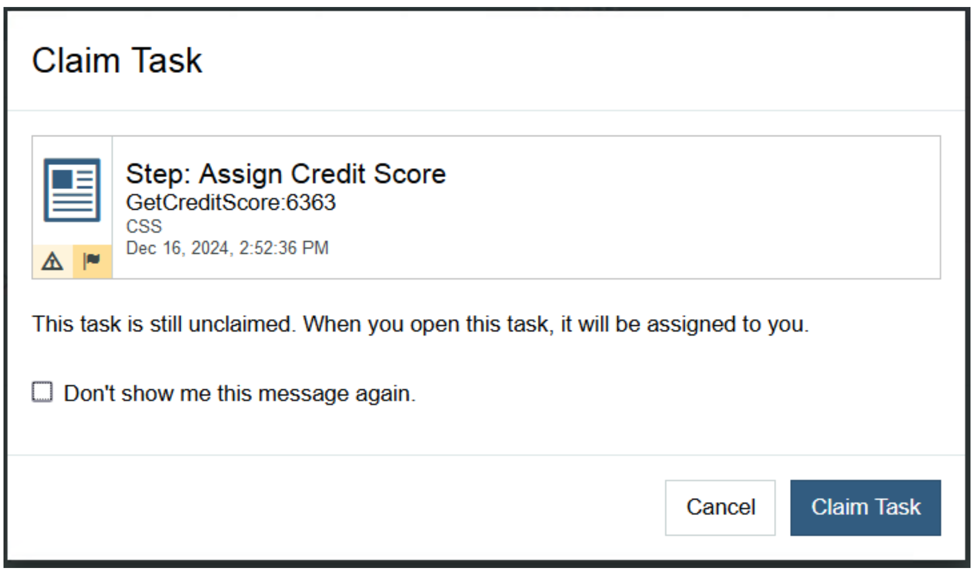


2. Locate the task **Step: Assign Credit Score** in the list of available work items and open it.

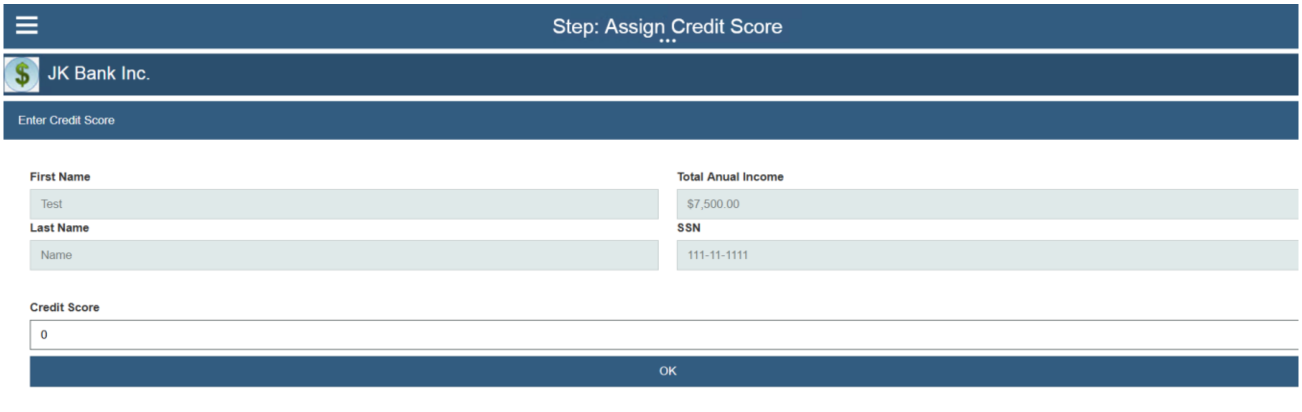


	Feel free to explore Process Portal before moving to the next step. It provides many features from work baskets to dashboards to ability to launch processes, and many more!

3. Claim the task by clicking on Claim Task button in the new dialog box.

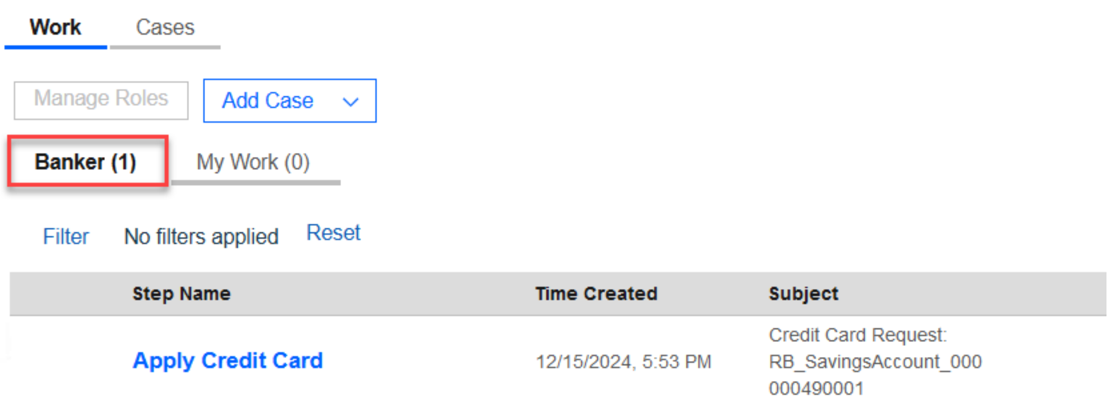


4. Note that the values are synchronized between the BAW Case Client and the Process Portal interfaces.



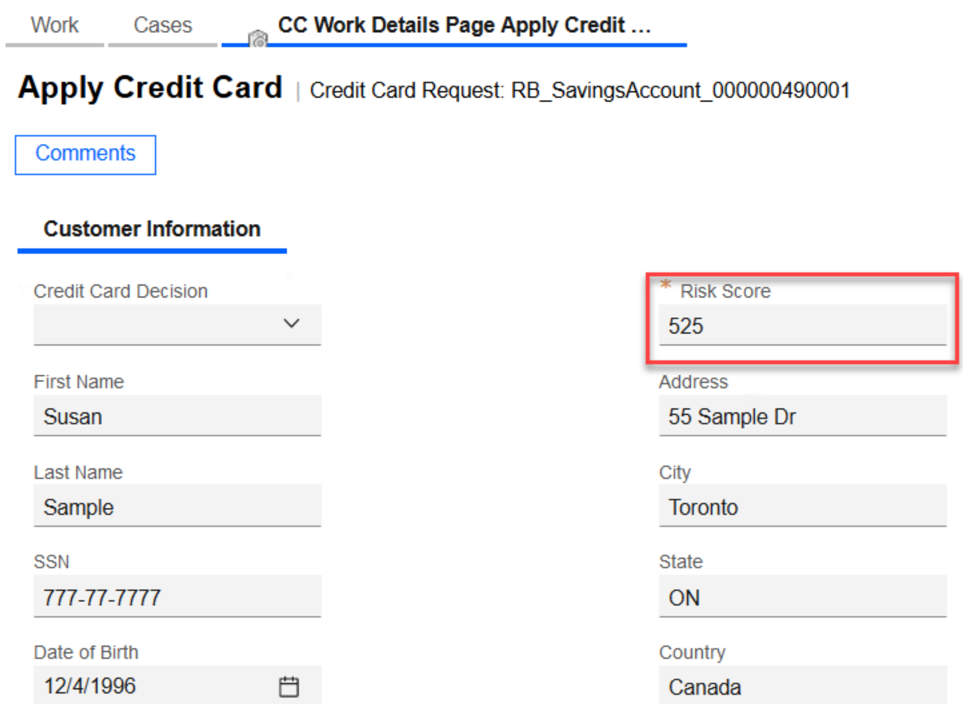
5. Enter any value in **Credit Score** field and click **OK**. The task will disappear from the inbasket.

6. Return back to BAW Case Client (opened in a separate browser tab), and switch to the **Banker** Tab to open the Apply Credit Card Work item.

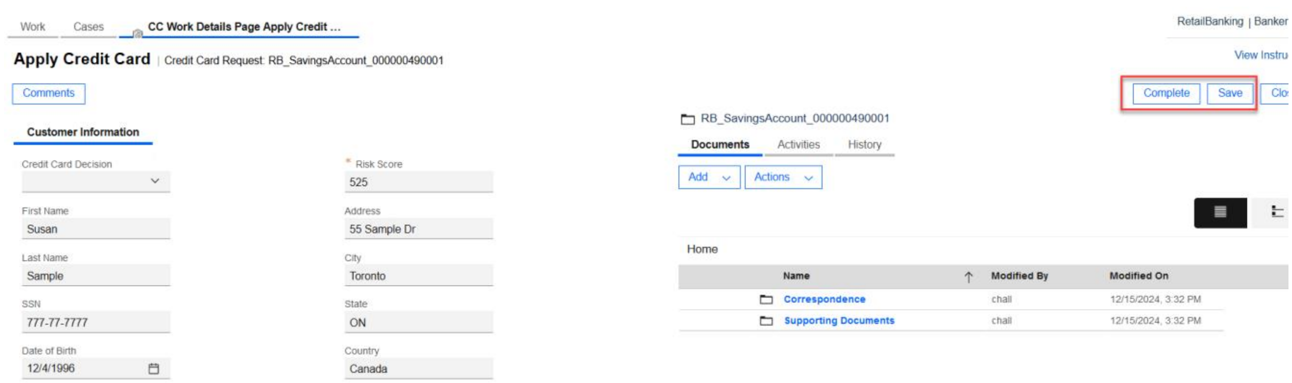


7. Sue clicks on **Apply Credit Card** step to see the details as well as status of this work item.

   As highlighted in previous steps, the **Risk Score** value is synced and available in both interfaces. You can override, as needed. For now, fill out the remaining **Credit Card Decision** field.



8. Click on **Save** followed by **Complete** button to successfully process the Apply Credit Card step.



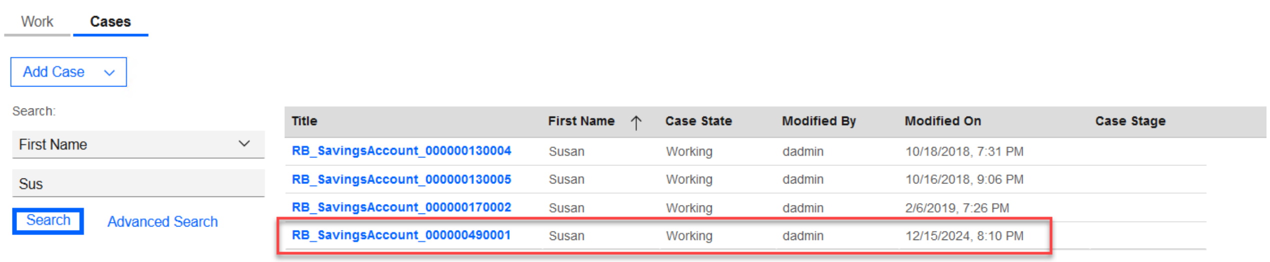
We have now successfully processed the new Savings Account request for Susan. During the Savings Account opening process, she also applied for a new Credit Card. The Risk Score needed to process the credit card request came from a BPM Process invoking an ODM rule.

3.5 Case History and Visualization

IBM BAW includes a Timeline Visualizer that provides a visual representation of the extended history for a case. These representations show the progression of events, activities, and work items over time for the case. This timeline shows progression of activities, work items, and events for the case. You can move the sliders to focus on a particular timeframe. The histogram represents the overall density of events for the case. The vertical bars in the histogram show when events occurred. You can expand the case to see when specific activities and work items occurred.

1. Click on the **Cases** Tab. Type in ***Sus*** under First Name and click **Search** to search for Cases for Susan.

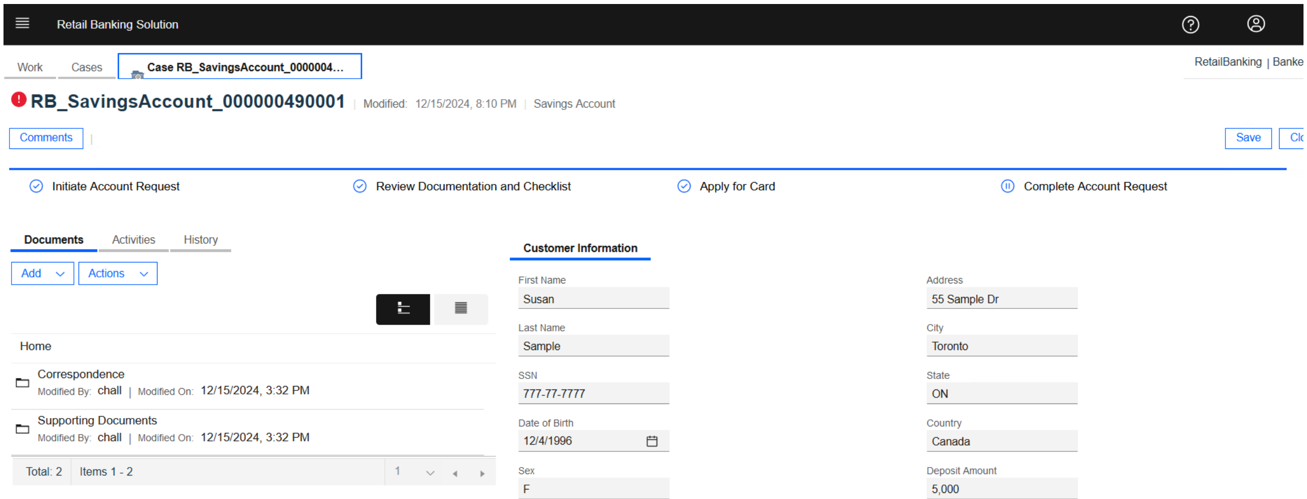
2. Select the latest Case for Susan (at the bottom of the list).



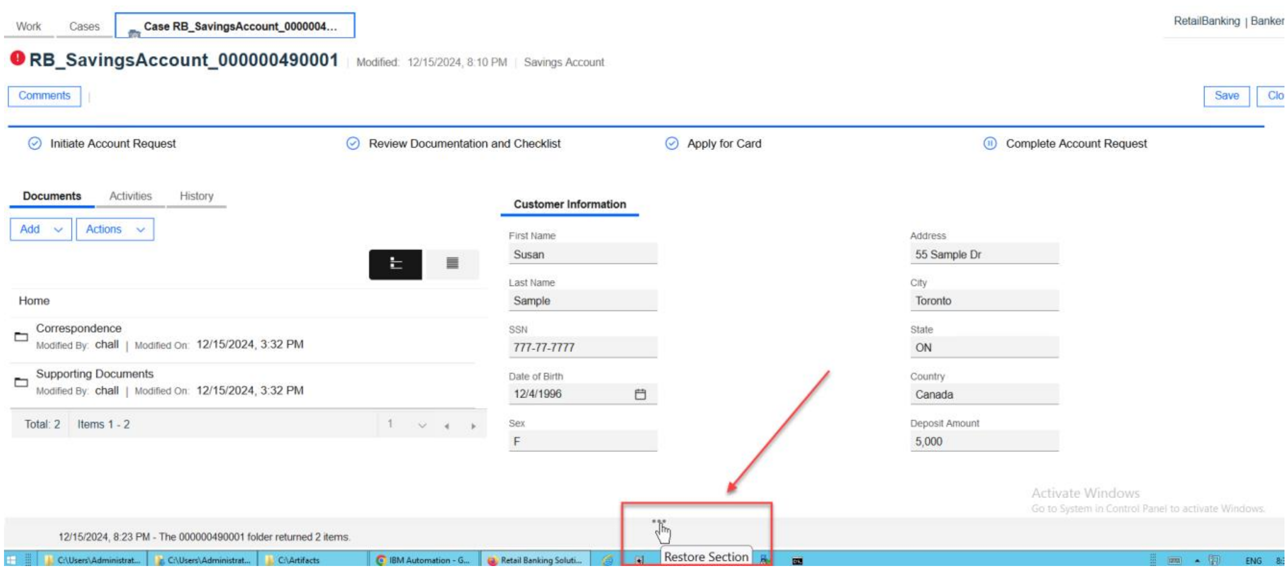
	Case Views are fully customizable, including searches, column displays and page layouts.

3. You are now looking at **Case Details** Page.

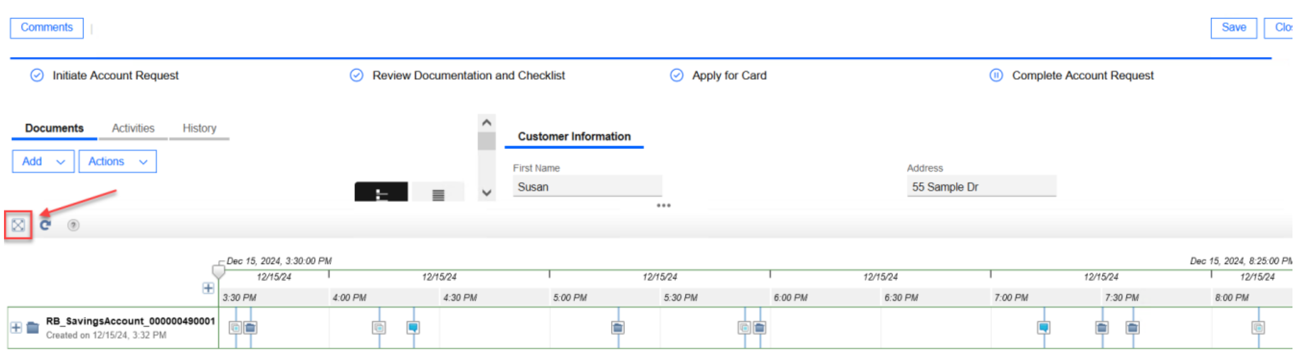
   Notice the Stages. The first three stages have been completed and we are at the last stage ending Credit Card Request. Stages can be configured per your business requirements to get a visual timeline of the Case lifecycle.



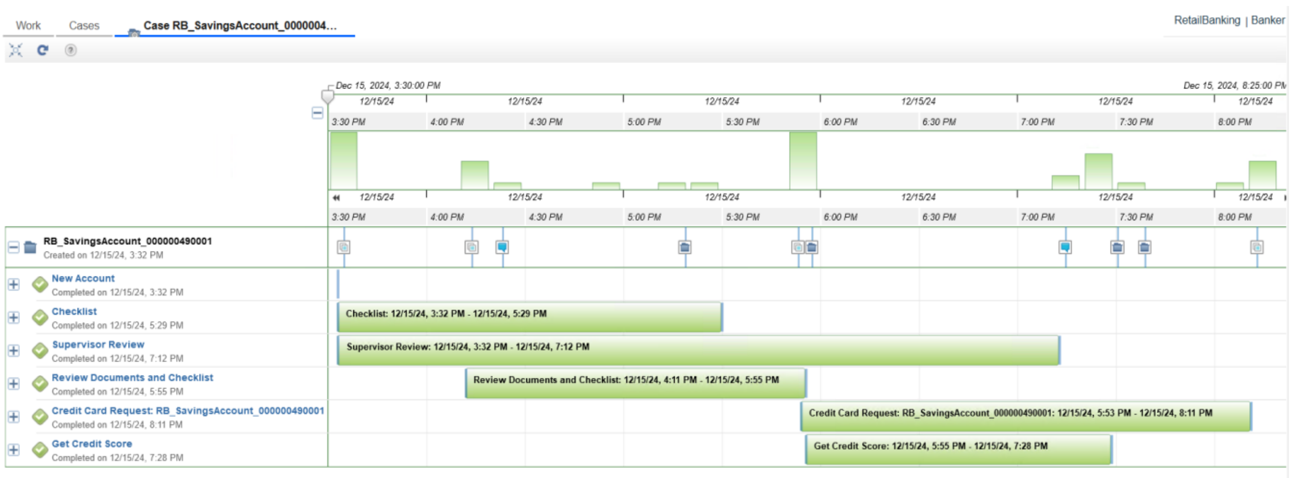
4. Click on the three dots **Restore Section** at the bottom middle of the page.



5. This restores a collapsed **Timeline Visualizer** widget. Click on **Maximize** to enlarge the visualizer.



6. Expand and hover over different elements of the Visualizer to for details. You click on Minimize icon to return to Case Details view.



7. Log out of BAW Client when you finished exploring the solution.

Summary

In this section of the lab, we accomplished the following:

- New case creation with multiple activities (workflows) starting automatically for it
- Integrations between workflow (BAW) and document management (FileNet) capabilities
- Different activity types available in BAW - mandatory, optional, discretionary, and checklists
- We walked through the main user interfaces in Business Automation Workflow - Case Client and Process Portal
- We explored Case and Work Details, Case History, and visualization options

Let's explore how the solution was created and configured now!

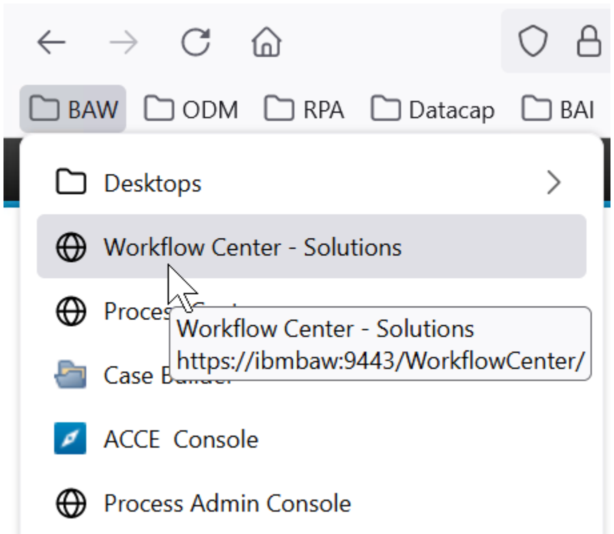
4 Solution Implementation Overview

In this section of the lab, you will explore how the Retail Banking solution was implemented as well as the tools that have been used for this.

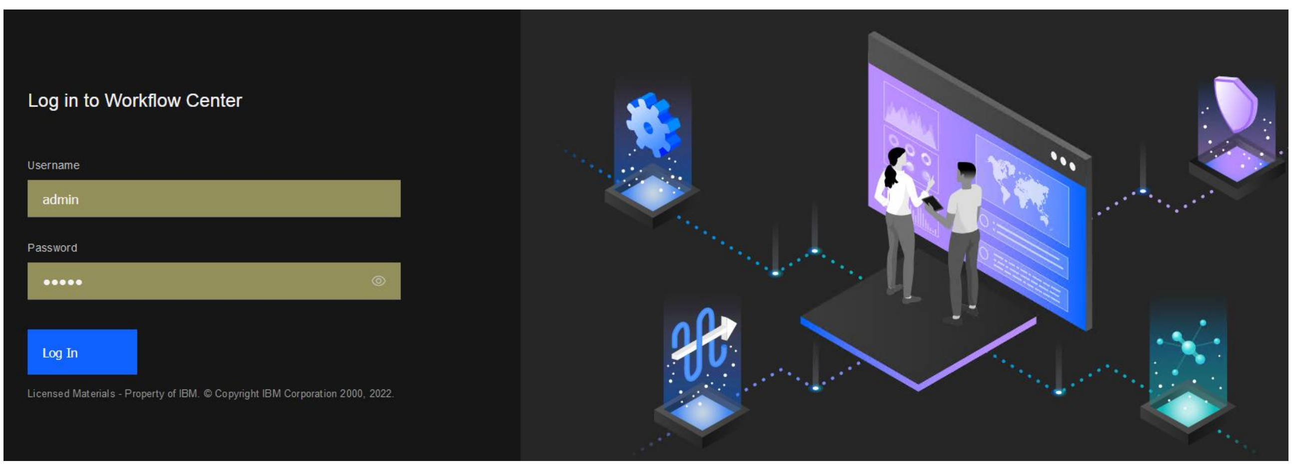
Before proceeding with this section of the lab, make sure that you log out of BAW Client that you used in the previous section!

4.1 Workflow Center and Case Builder

1. In the browser's bookmarks menu, **BAW: Workflow Center - Solutions**. You can also type https://ibmbaw:9443/WorkflowCenter/ in the address field.

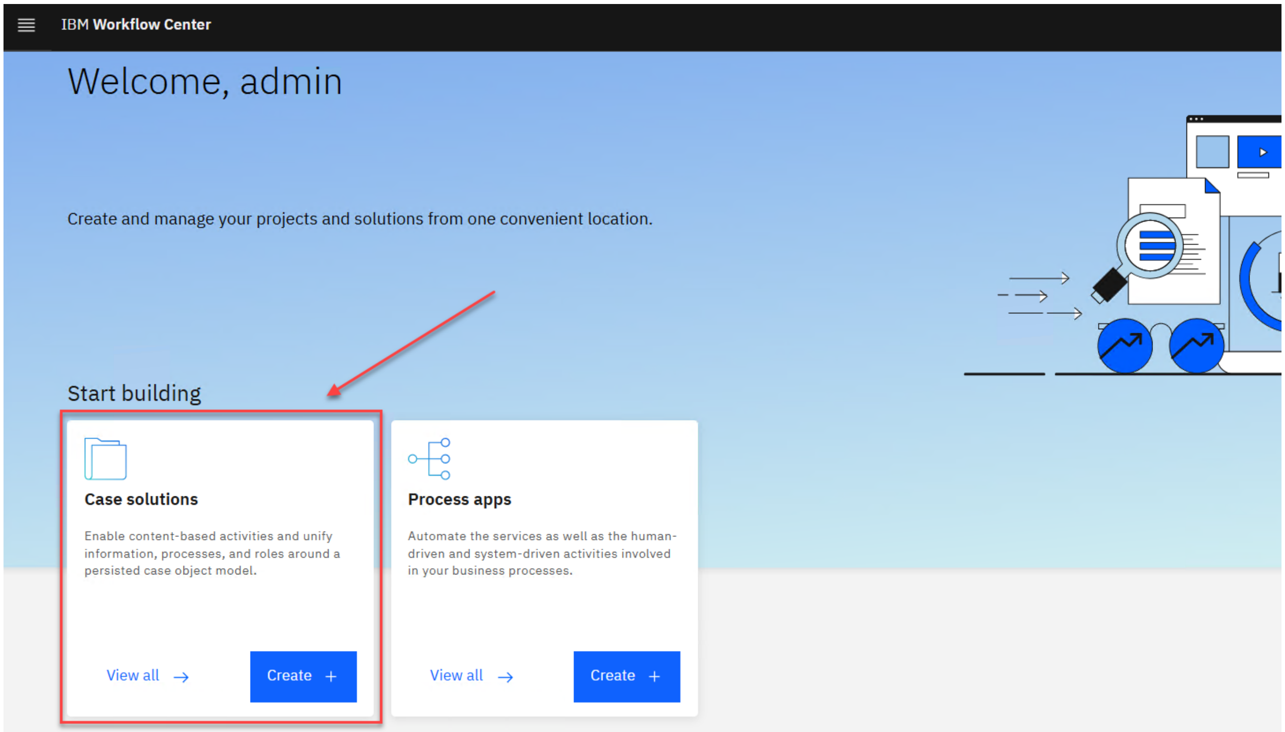


2. Login to Workflow Center using **username**: *admin* and **password**: *admin*.

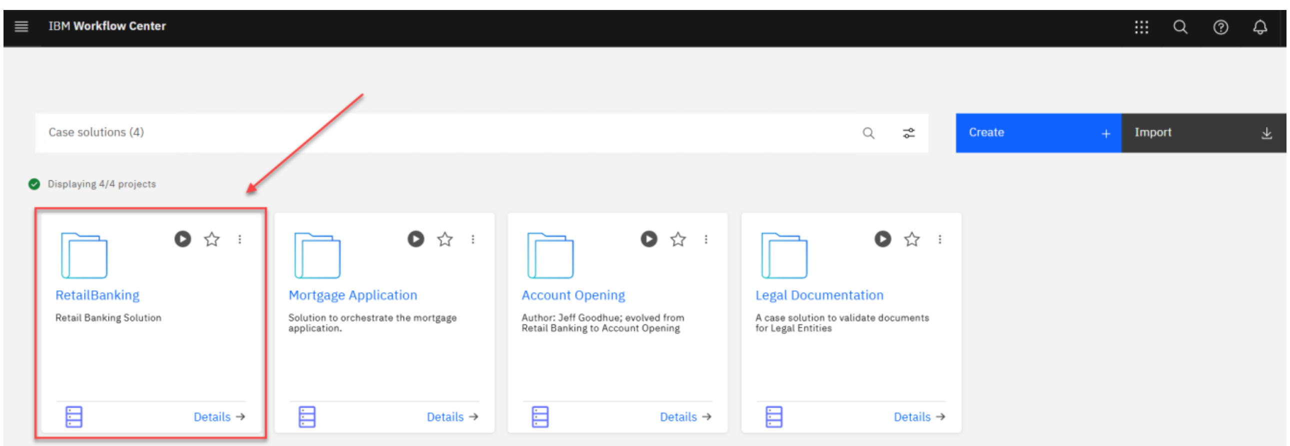


i	Workflow Center provides a convenient location for you to create and maintain high-level library items such as process apps, case solutions, and toolkits (collectively known as projects).

3. In the Workflow Center, select "**Case solutions"** tile.



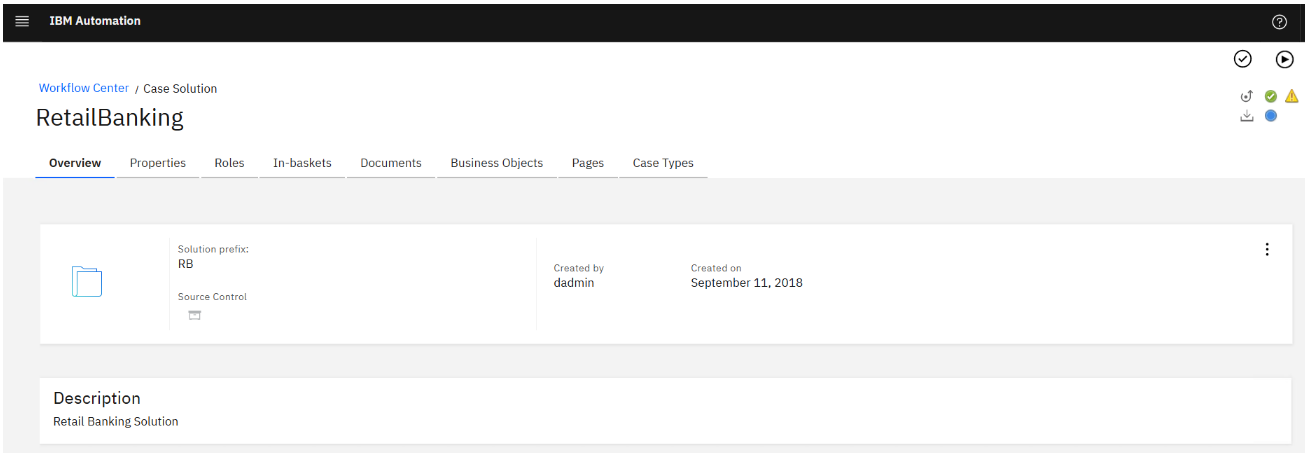
4. Click on **RetailBanking** solution. From there, a Business Analyst can review and define the various components of a Case solution.



The IBM BAW Case Builder is a web-based tool for business analysts to design a solution and the artifacts that make up cases in that solution. Business analysts can use a wizard in Case Builder to guide them through creating a solution, or they can create the solution components manually and in any order.

Most of the artifacts created in the solution become assets in the underlying FileNet content repository (properties, folders, roles, etc.). Through Case Builder interface business analysts can build, deploy and test solution without relying heavily on IT teams.

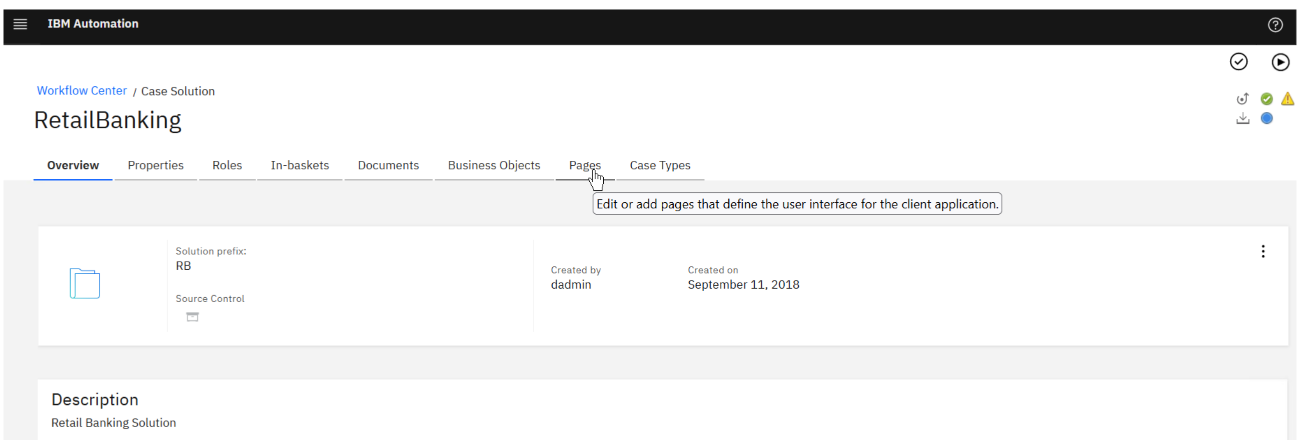
5. Click on each one of the Tabs to explore them further.



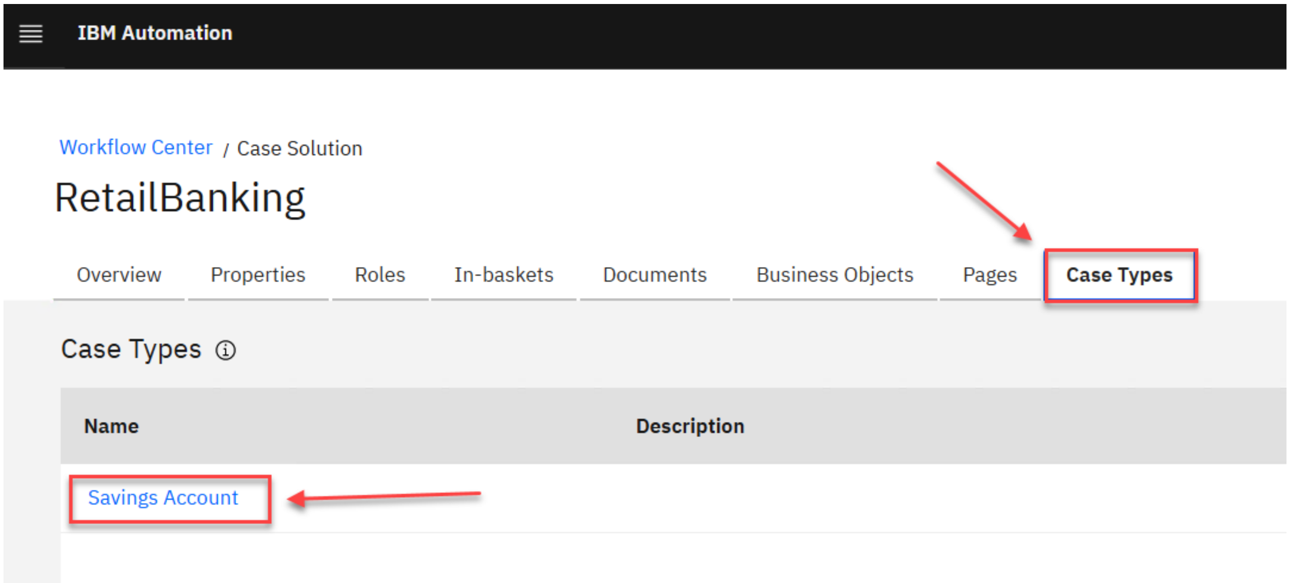
a. **Properties Tab**: Properties are associated with other solution artifacts. These properties may be defined at the solution level and reused in any case type, document type, task, or step in that solution. All the Case Properties for the Retail Banking Solution are created here.

b. **Roles Tab**: A role defines and groups people by the type of work that they do. You then associate roles with tasks. You assign users and groups to roles in the Case Manager Client to specify which users can access a task or step. In the Retail Banking Solution, we have the following Roles defined: CSR, Banker, and Teller.

c. Explore **other Tabs**. You can hover over tabs for more information on each Tab.

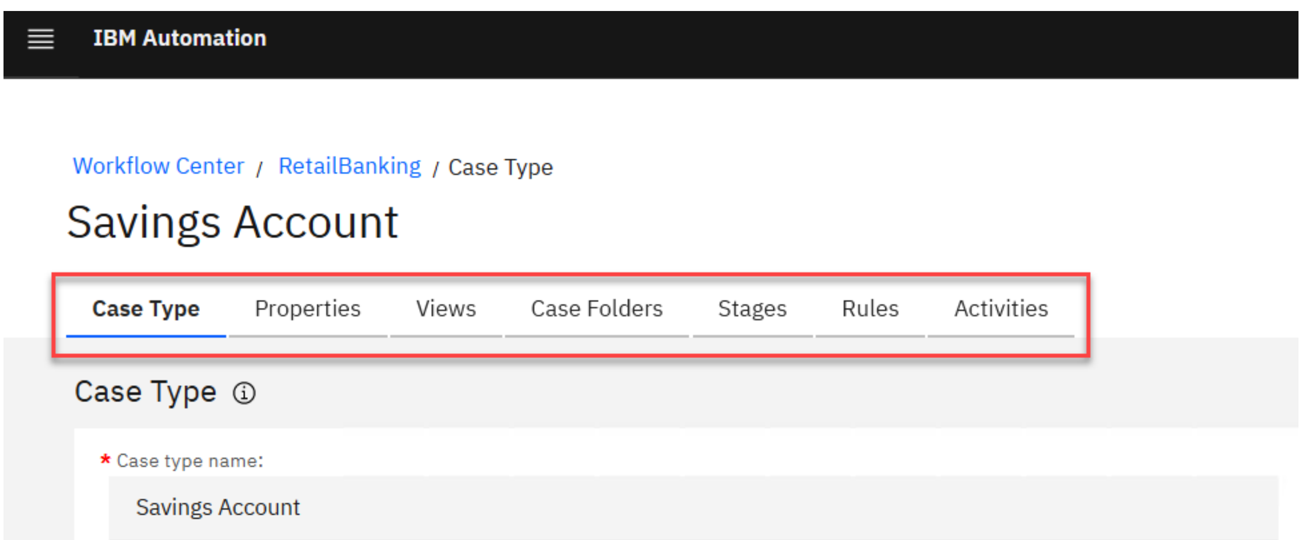


6. Click on the **Case Types** Tab and select **Savings Account**.

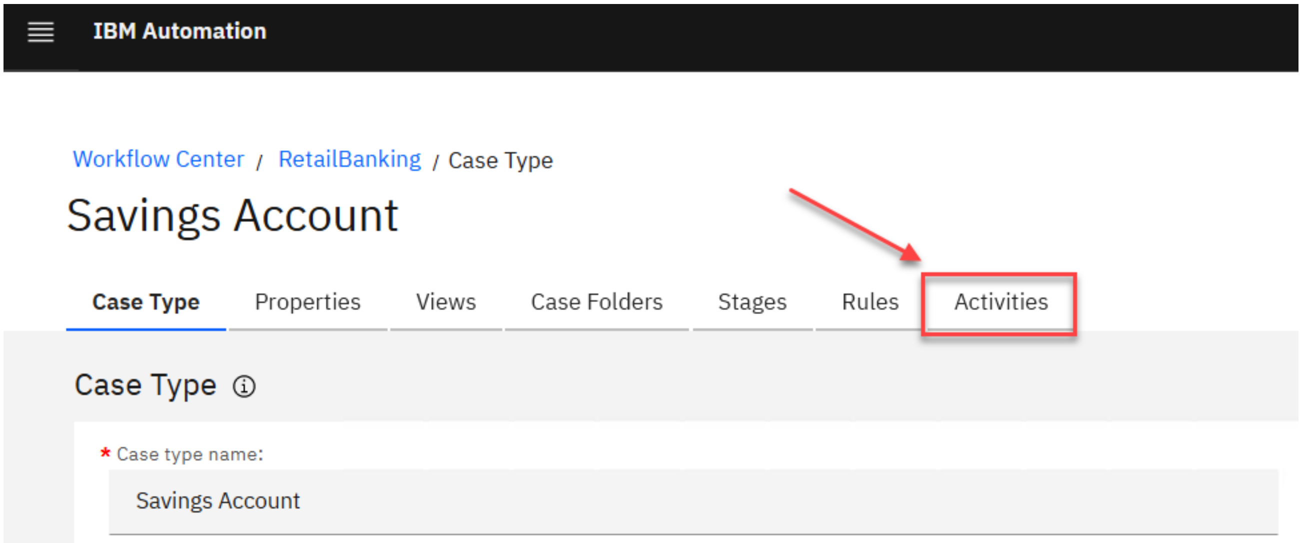


	Case types define the activities (workflows), the necessary document types to support the activity, the workflow steps, and the roles that must complete those steps to solve a business problem. The case type also includes properties that are displayed to case workers in views. Related case types make up a solution. One Case Solution can have multiple Case types. For instance, Savings Account, Checking Account, etc.

7. Feel free to explore all the artifacts of a **Case Type**:



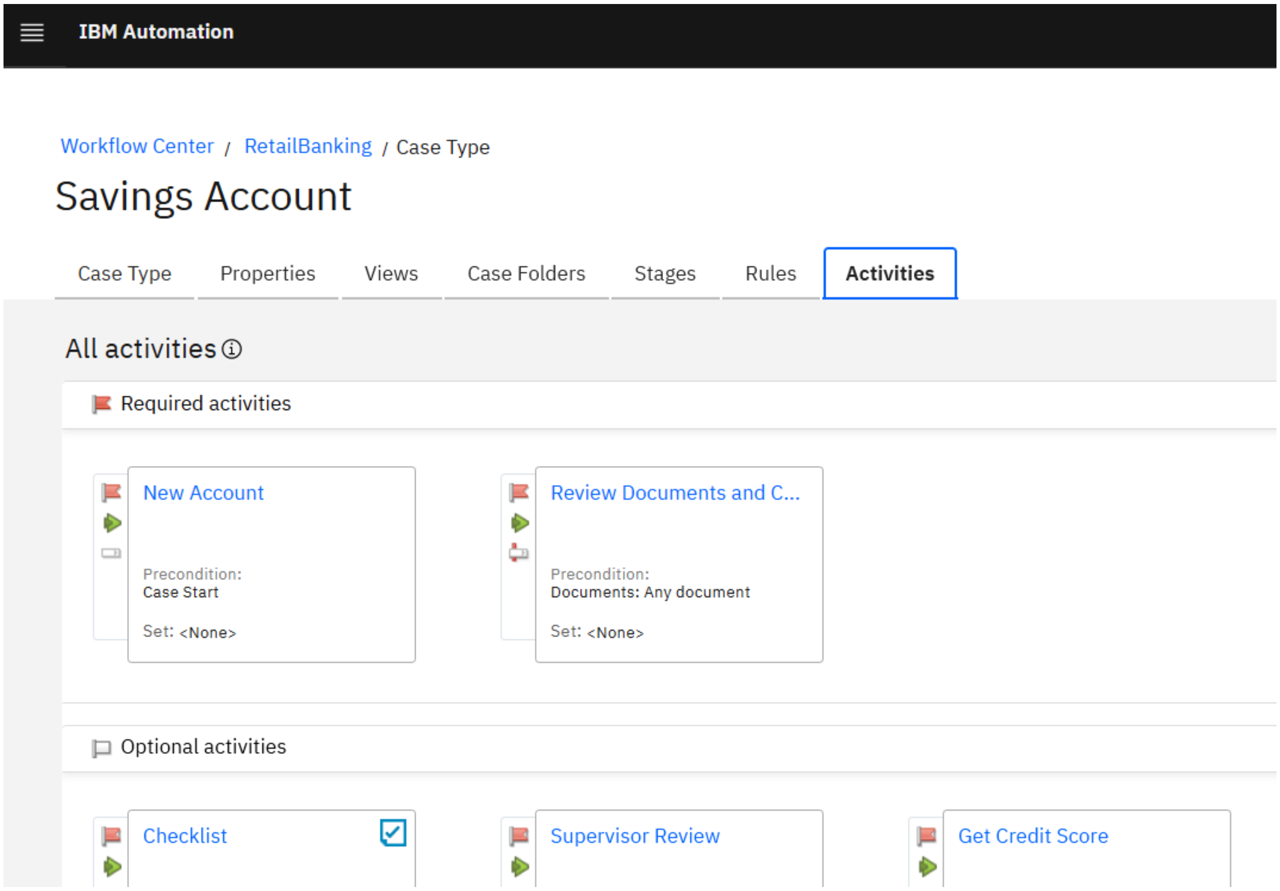
8. Click on **Activities** to view all the Activities available for the Retail Banking Solution.



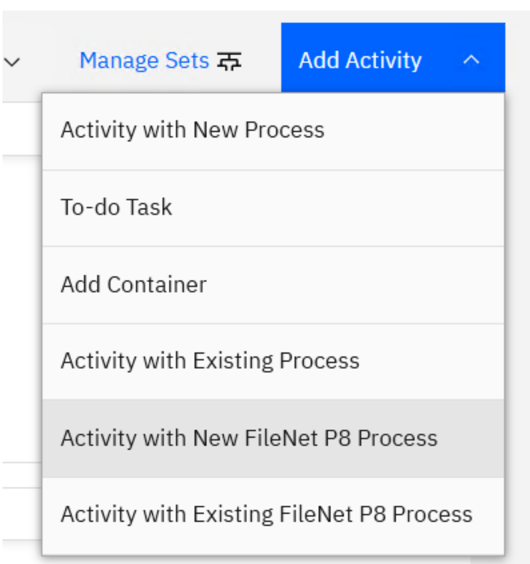
Activities are a key aspect of a case type. Activities dictate how a case is processed. A typical case type will have some collection of automatic and manual Activities. A subset of these workflows will be required and must complete before the case can be closed.

Tasks include pieces of work that that case workers perform, business rules that are evaluated by the system, and system related activities that enhance the execution by allowing integrations with other systems and/or performing low level functions at the server side.

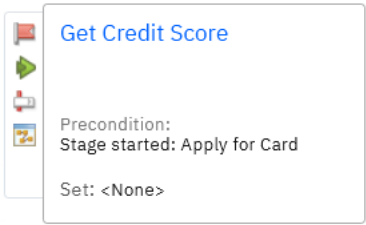
There are three types of activities: **Automatic, Manual, and Discretional**. Automatic activities are launched by the system automatically when the case is created or when a precondition is met. Manual activities are launched by the case worker. Discretional activities are launched as well by the case worker at any time and do not have preconditions. Both Automatic and Manual activities could have preconditions defined that dictate when the workflow is available for execution. Additionally, these activities could be defined as required. For the BAW system to close a case, all required activities/workflows must be completed.



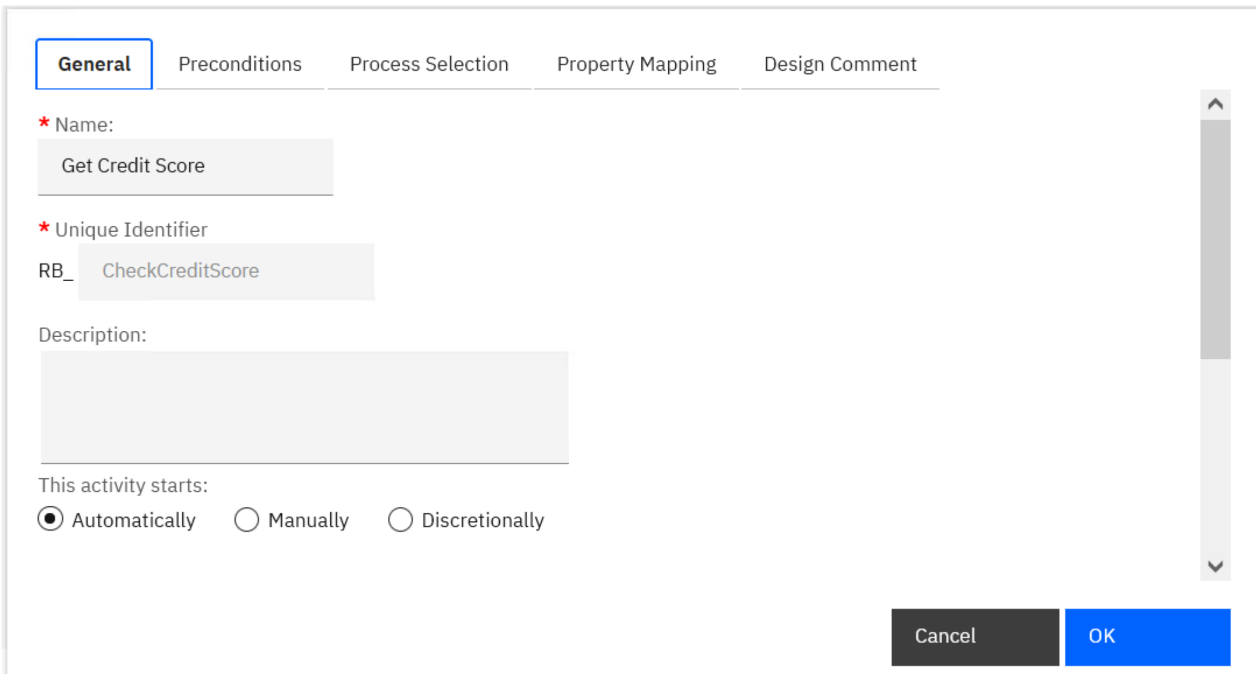
9. To Add a **New Activity**, click on Add Activity button and choose any of the options:



10. Let's examine the **Get Credit Score** Activity. This is an Activity that invokes the BPM Process to get a Risk Score back from the process application.

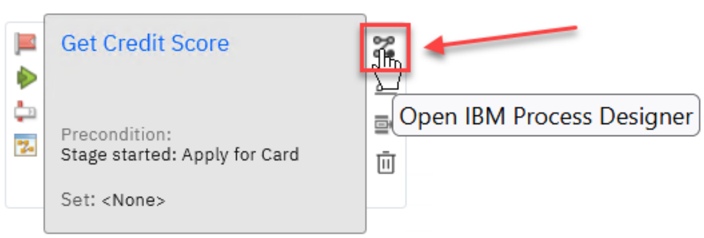


11. Open the Activity by clicking on Get Credit Score. Examine each of the Tabs.



12. Click **Cancel** to return back to the Activities page.

13. Hover over Get Credit Score activity and click on the **Open IBM Process Designer** icon.



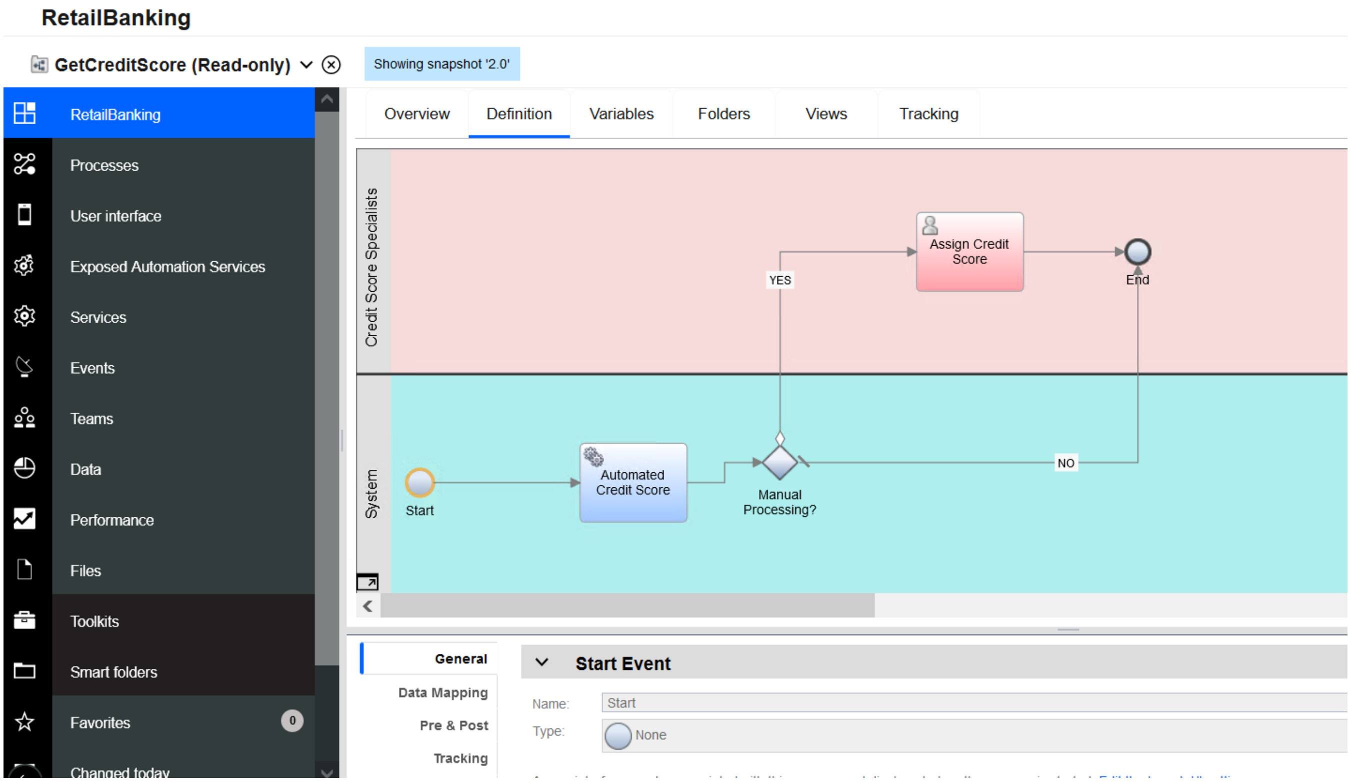
14. This will open the GetCreditScore Process in the IBM Process Designer.

Although the name is the same, BAW introduced a new workflow design tool called IBM Process Designer. The FileNet Process Designer is also supported to design and update FileNet Case Foundation workflows.

4.2 Process Designer

Business Automation Workflow Case Builder opened *GetCreditScore* in IBM Process Designer. Let's briefly examine this process.

The process has two swim lanes: *System* and *Credit Score Specialists*.



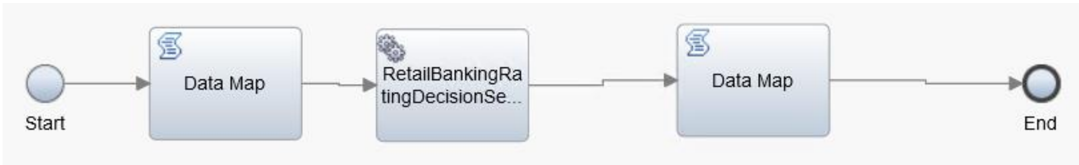
The "System" swim lane contains a System Task called "Automated Credit Score". This activity is implemented a call to IBM Operational Decision Manager (ODM) Decision Service. It takes the data passed from Case (total income) and calculates customer's credit score.

The next activity is a Decision Gateway called "Manual Processing?". This activity makes a simple decision: "if credit score cannot be calculated invoke Assign Credit Score activity otherwise end the process".

The third activity is a User Task called "Assign Credit Score". This activity is in the "Credit Score Specialists" swim lane. This swim lane is associated with a team of "Credit Score Specialists". Members of this team complete this User Task.

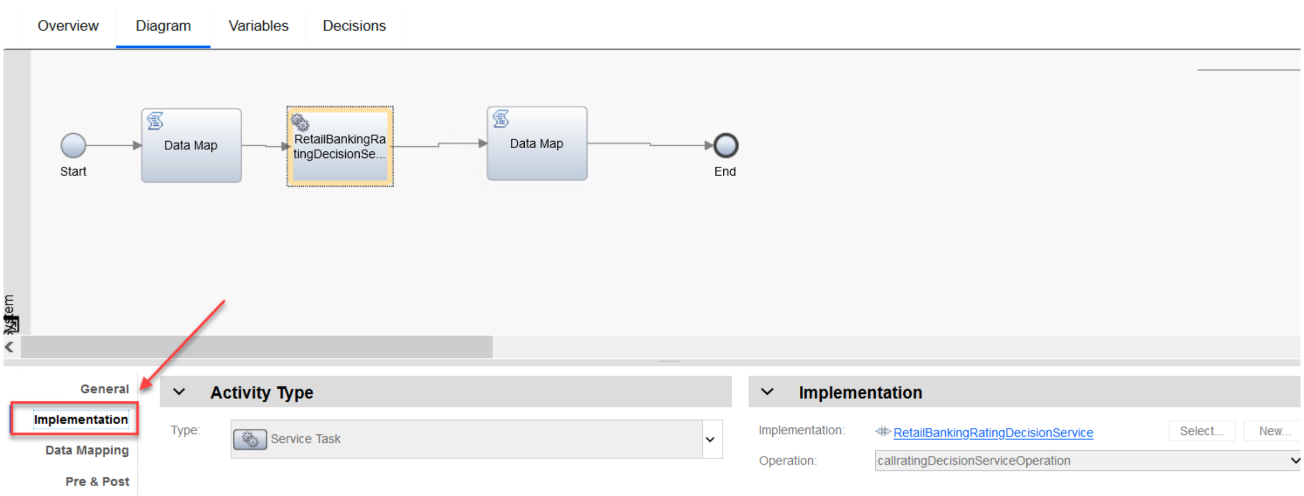
1. Double Click the **Automated Credit Score** System Task

2. The implementation of this activity is a **Service Flow**.



3. Click **RetailBankingRatingDecion** Service Task.

4. Click **Implementation** Tab in bottom pane.

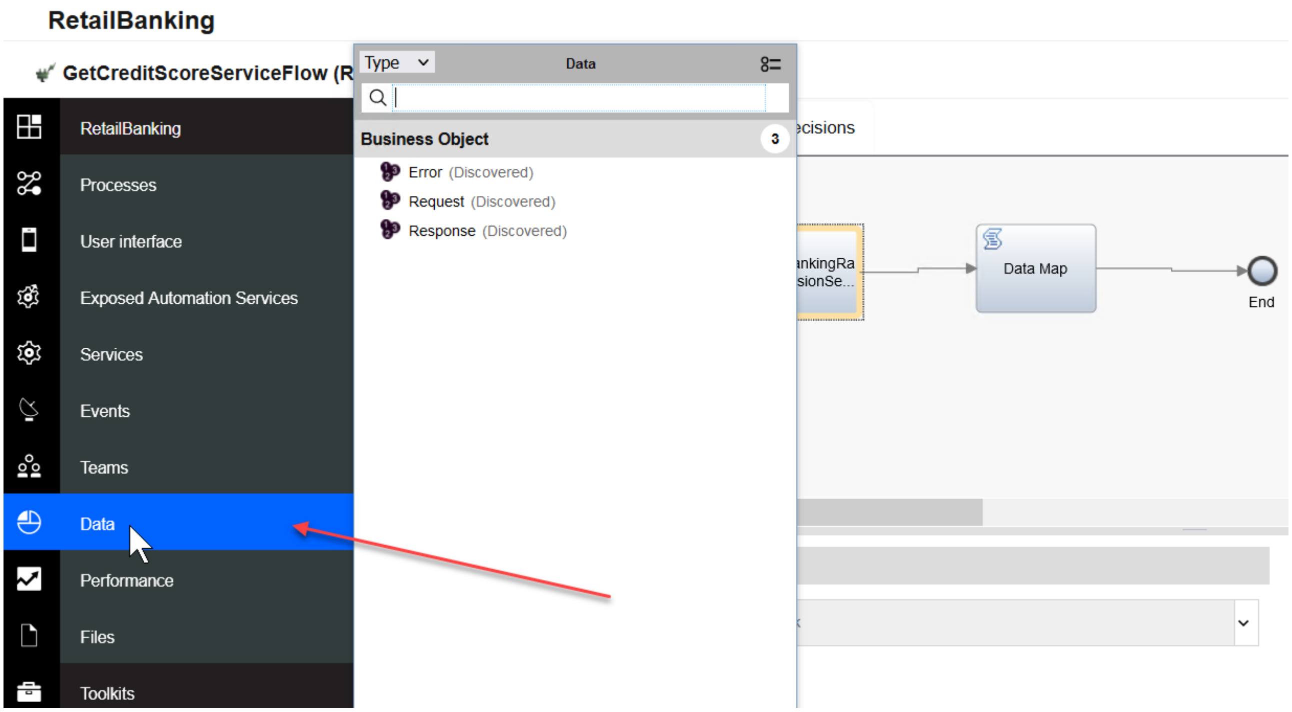


Note that the implementation is a REST Service with operation **callRatingDecsionServiceOperation**.

This REST Service calls the **IBM Operational Decision Manager (ODM)** Decision Service that returns customers credit rating.

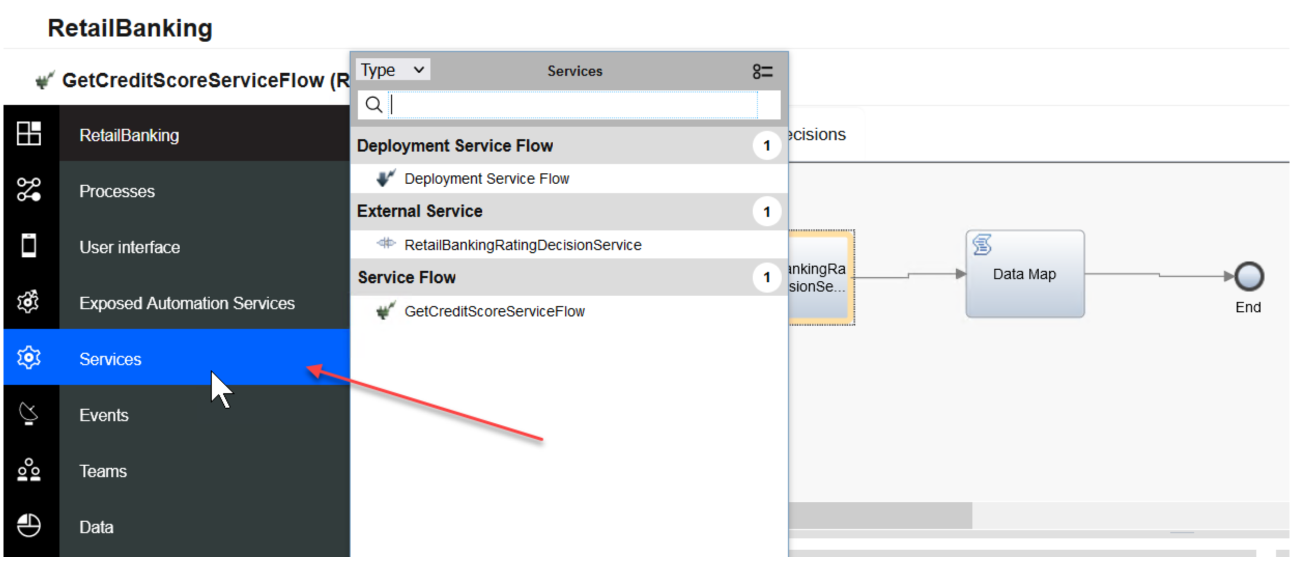
IBM Process Designer includes a **Service Discovery Wizard**. The Wizard introspected the Swagger File exported form ODM Rule Execution Server, created the REST Service and the data types used by this service.

5. Click **Data** to see the data types created.

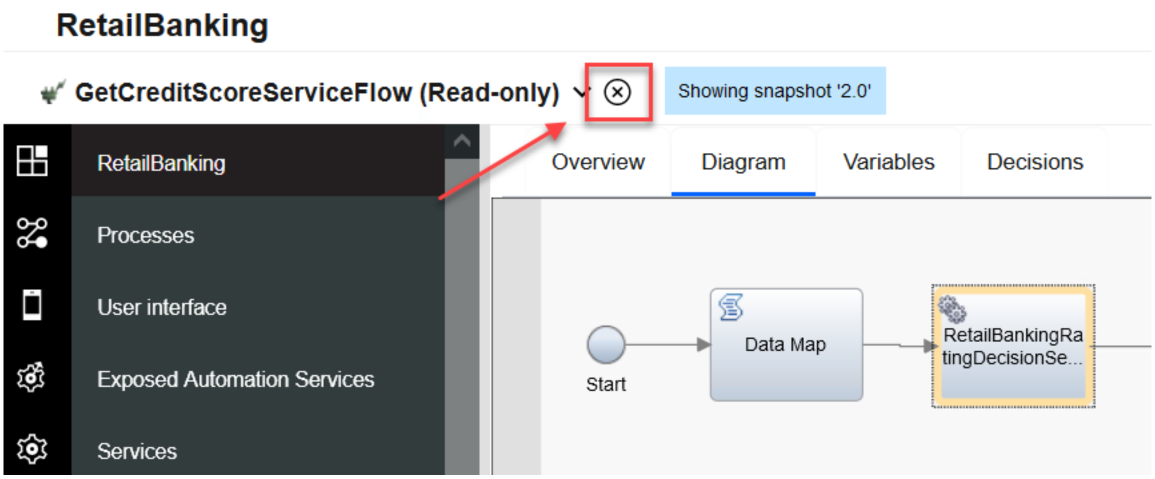


6. To see the REST Service crested by the Wizard click **Services**.

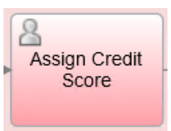
   The ODM REST Service is in **External Service** section.



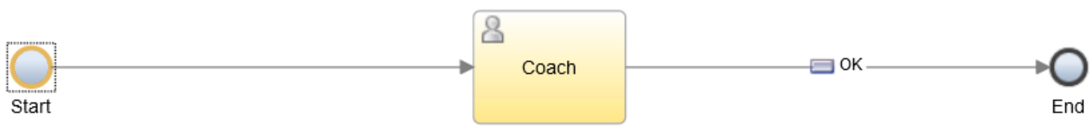
7. Click **X** button to close the Service Flow.



8. Double click the **Assign Credit Score** User Task.

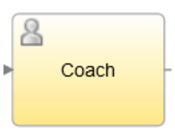


9. The implementation of this activity is a **Human Service Flow**.

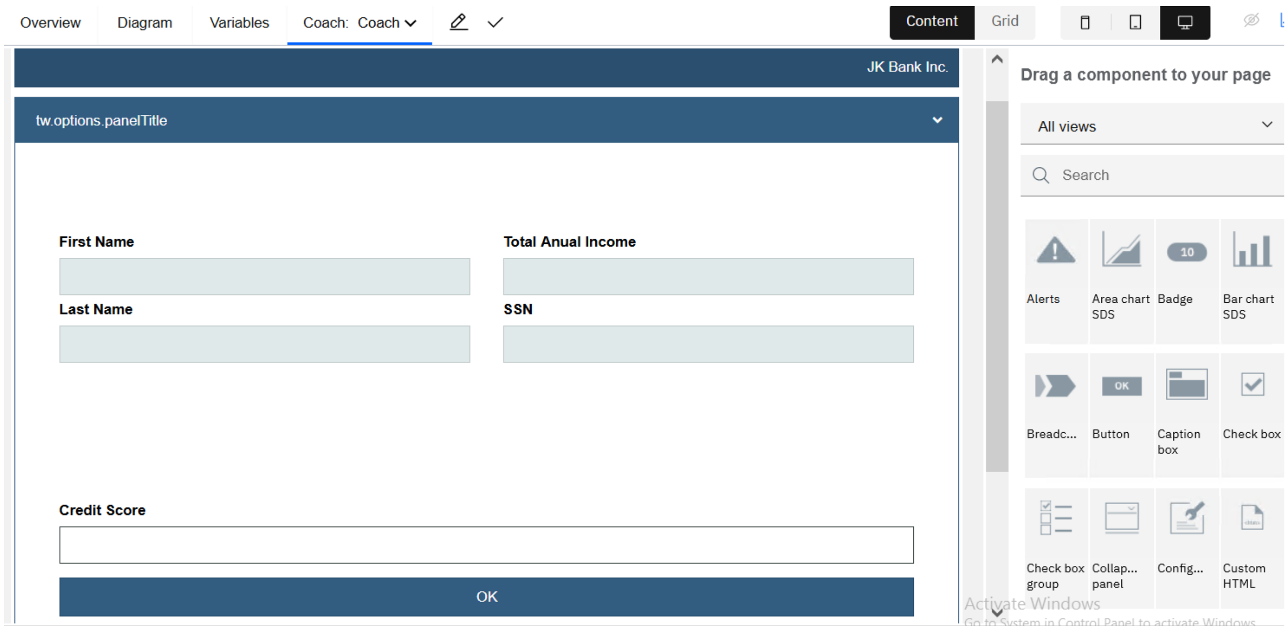


This is simple single-page user interface. The **Coach** represents the user interface for the first and the only step in the flow. The line leading to the End node is annotated with OK button to indicate that the flow ends when the user clicks the OK button.

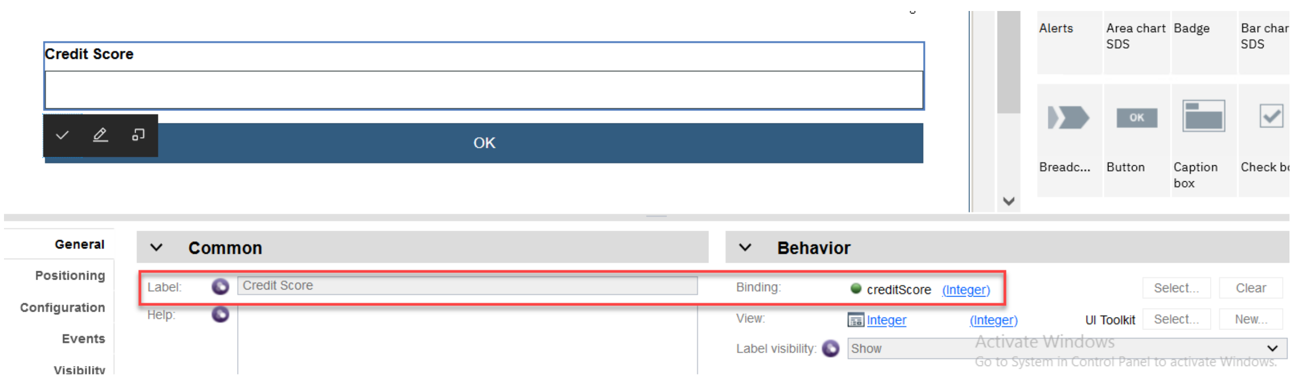
10. Double click **Coach**.



This opens the Coach Editor. The Coach Edit is a WYSIWYG (What You See Is What You Get) editor. To create the user interface, you simple drag and drop Coach Views (the UI building blocks) from a palette of over 90 prebuilt and potentially more custom Coach Views.



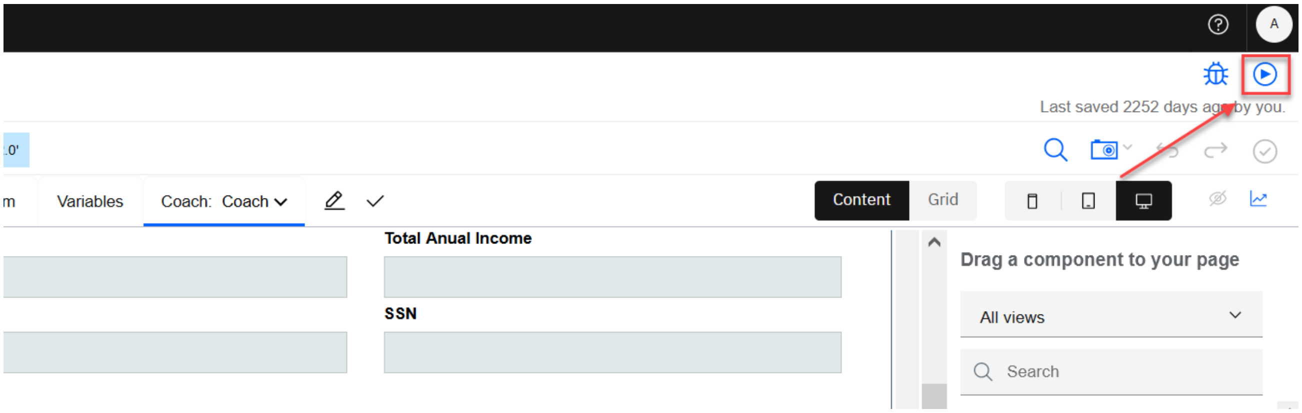
11. Select **Credit Score** entry field.



Once a Coach View is added, you can use the configuration setting to customize it. For example, as shown you can set the Label (Credit Score) and bind the Coach View to a variable (creditScore).

Feel free to explore UI builder for additional features and capabilities!

12. To test the Human Service simply click the **Run** button.



13. This will display you UI in a new Browser window allowing you to test as you design.

14. Close the web browser tab displaying the test UI.
15. Close the web browser displaying the Process.

Congratulations on completing this section of the lab!

5 Conclusion

What you have been experimenting with today is just scratching the surface of what IBM Business Automation Workflow is capable of. BAW is a mature and capable product that has the main goal of enabling users to quickly author and modify workflows, and to be able to test and deploy them in a safe and secure way. BAW is designed to scale to hundreds and thousands of workflows and case solutions. Advanced testing and simulation capabilities allow business and technical users to clearly see how their workflows perform before they make it into production.