IBM Cloud Pak for Business Automation Demos and Labs 2021

End to End Demo for Cloud Pak for Business Automation Using Client Onboarding Scenario

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1 Introduction

This lab is based on the use case of a simplified version of a **Client Onboarding solution** as part of **Focus Corp's service business**. Although intended to be realistic, it is fictitious, simplified and is meant to showcase key aspects of the Cloud Pak for Business Automation in an easy and quick way.
This scenario highlights selected business functions and technical integration points across the Cloud Pak for Business Automation. It showcases how combining these platform capabilities can be used to build an end-to-end business solution that helps to digitize all aspects of business operations.
This lab focuses on the business user experience executing a client onboarding from start to finish, not developing the solution itself.

1.1 Cloud Pak for Business Automation

IBM Cloud Pak for Business Automation is a set of integrated market-leading software, running on top of Red Hat OpenShift and therefore built for any hybrid cloud, and designed to help you solve your toughest operational challenges.
With AI-generated recommendations, analytics to measure impact, and business-friendly low-code tooling, IBM Cloud Pak for Business Automation helps customers to significantly reduce the amount of time spent on manual processes. Specialized business automation capabilities — for content, decisions, RPA, workflows, and document processing — are built on top of powerful automation services from the Automation foundation. The Automation foundation provided common services are also used by the two other IBM Automation Cloud Paks: Cloud Pak for Integration and Cloud Pak for AIOps. Using the process mining and operational intelligence capability, you can get insight into how your processes run, visualize issues, pinpoint fixes, and prioritize actions.
A single business automation capability may contain multiple products. For example, Document processing encompasses IBM Datacap and IBM Automation Document Processing. IBM Robotic Process Automation is part of the Automation Foundation and also directly featured in the Cloud Pak for Business Automation. While the server part of IBM Robotic Process Automation has recently been containerized so it can run on OpenShift, it is one of the few capabilities that requires Windows. This is both for the authoring environment as well as for executing the bots.
The products are integrated in many ways. Automation Services and an Automation Service catalog are the latest additions to the existing features of APIs and reusable UI libraries. Currently Workflow and Automation Decision Services from the Decision capability can publish automation services while Automation Application Designer and Workflow can consume automation services. Automation services allows discovery and usage of services within the Cloud Pak without the need to consider technical aspects like offering product, protocols, authentication/authorization etc. This makes them especially suitable to no-code consumption through business users.

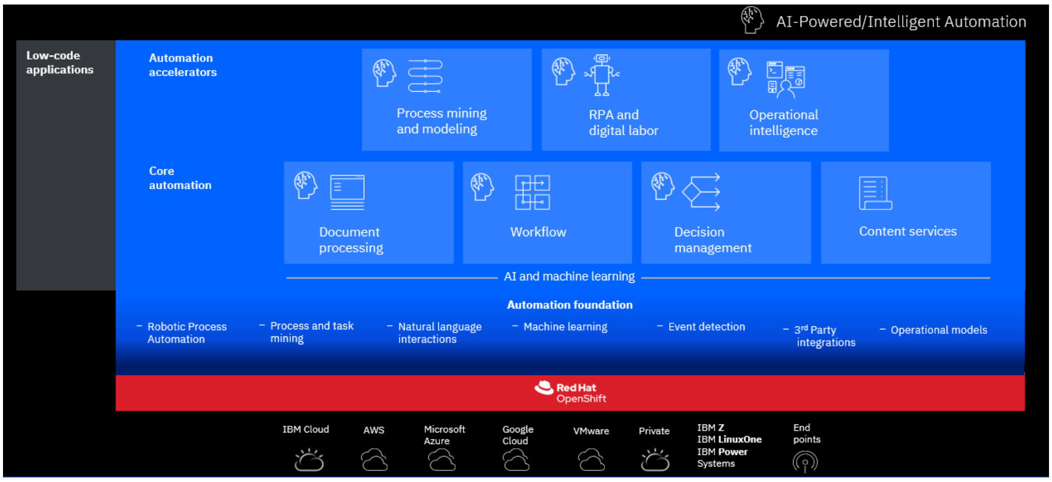


Figure 1: Marchitecture of the IBM Cloud Pak for Business Automation

1.2 Business Scenario

The overall Client Onboarding solution consists of a multi-page front-office intake app and a workflow that orchestrates all back-office activities (both automatic and system ones) to either onboard the client or reject their onboarding request.

The client representative initially works with the Client Onboarding app. This app has been created by the business using the low-code Automation Application Designer. It leverages services created by IT in the other capabilities of the platform. When a client calls, the client representative collects all required information about the client and the services the client wants to subscribe to, before they submit the onboarding request to the back-office part of the solution. While the app can be used by multiple client representatives at the same time, each of them completes their own onboarding request independently.

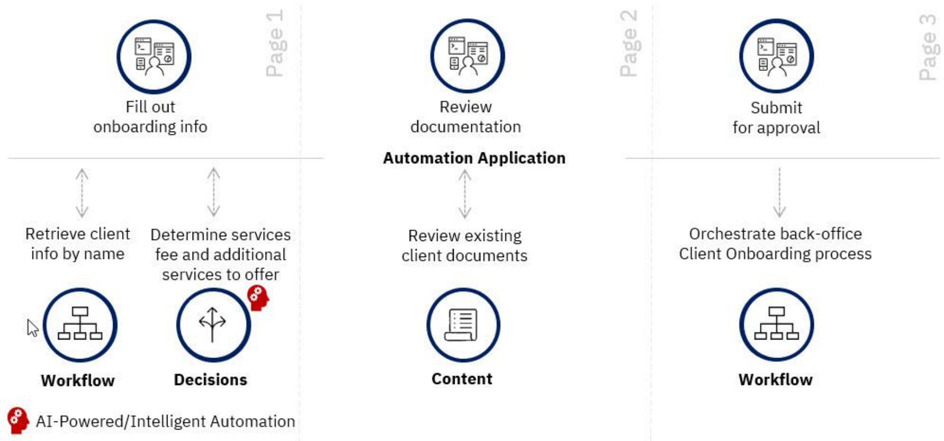


Figure 2: High-Level Client Onboarding Application Architecture

Figure 2 in the upper half gives a high-level overview of the three pages of the intake app designed using IBM Automation Application Designer and the purpose of the pages. The lower half depicts how the pages interact with other capabilities of the Cloud Pak for Business Automation to fulfil their purposes.

1. On the first page, the client representative can enter the client onboarding information or lookup the information for a known client. For the lookup the Automation Application calls out to Workflow. Additionally, once services to be onboarded have been selected, the fee for these services and potential upsell services are determined by calling out to Decisions. The red icon indicates that this place utilizes AI-Powered/Intelligent Automation with prescriptive rules and potentially predictive ML models hosted on an external machine learning server.
2. On the second page, the client representative can review the documents that are already available for the client and are required for the onboarding. For this the app uses Content capabilities.
3. On the third page, a message is displayed that confirms the successful submission of the onboarding request and incudes a reference ID that is associated to that request. The submission of the onboarding request triggers the back-office workflow in Workflow.

Depending on various factors the back-office workflow using the Workflow capability may involve an account manager, the client, and/or the client representative.

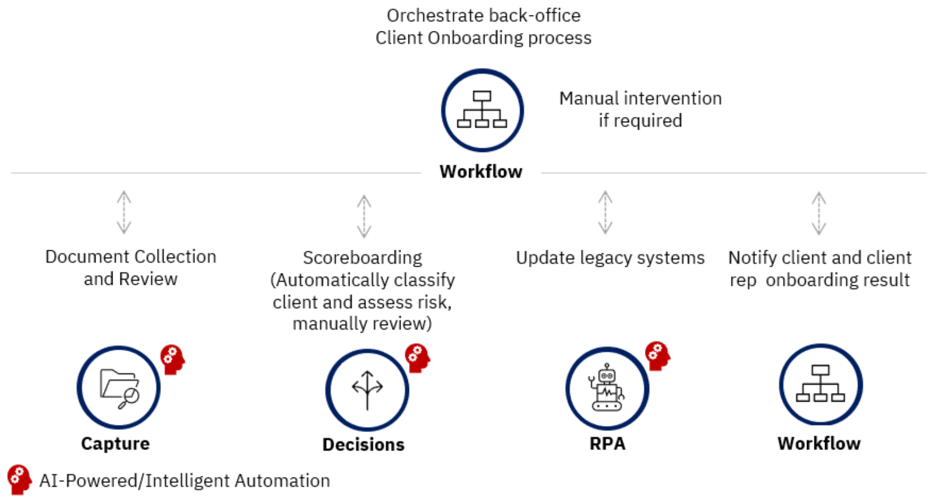


Figure 3: High-Level Client Onboarding Back-Office Solution Architecture

Figure 3 depicts that Workflow orchestrates various activities, both human-driven knowledge work and system activities, to perform the actual client onboarding in the back-office. The case capability in Workflow is specifically suited as it supports semi-structured use-cases. The red icon symbolizes again where AI-Powered/Intelligent Automation capabilities are applied. These can be built into the respective capability or provided by an externally hosted machine model. Depending on the circumstances of the onboarding request one or multiple of the activities are executed or skipped. These activities are grouped into four stages:

1. The activities performed in the Document Collection and Review stage depend on the availability or non-availability of documents required for the onboarding request. If all documents are available and they have all been verified by the client representative, no activity is required, and the stage is automatically completed. If documents are missing the client can upload the missing documents via the Capture capability which will trigger a review through a task by the client representative in Workflow.

   Note: At this point, the capture capability is not available in the lab environment. As a part of the instructions, you will verify all documents beforehand so that the Document Collection and Review stage automatically completes.
2. The first activity in the Scoreboarding stage uses rules and machine learning models from Decisions to categorize the client into a segment 1 or segment 2 client (using prescriptive rules), determines if the onboarding request is a low or high-risk request, and computes an assessment confidence (both based on using a predictive model). With a confidence of higher than 75% the decision to accept (low risk) or reject (high risk) the client onboarding request is performed automatically. When the scoreboarding confidence is lower than 75% then in the second activity an account manager must manually assess the onboarding request through a task in Workflow.
3. The third stage consists of an activity to update two legacy system of records of Focus Corp. As these systems don't have APIs available a Robotic Process Automation (RPA) bot is utilized.
4. In the fourth and final stage the client representative is informed of the onboarding result for the onboarding request they have initiated using a task in Workflow which completes the onboarding request.

Throughout the stages of the workflow the client is notified about status changes and activities needed through email.

1.3 Lab Setup Instructions

If you are performing this lab as a part of an IBM event, access the document that lists the available systems and URLs along with login instructions. For this lab, you will need to access the **Client Onboarding Desktop**.

2 Exercise: Onboarding a Client with High Confidence Level (Fully Automated)

2.1 Introduction

In this exercise, Automation Elite Inc. wants to subscribe to one service from Focus Corp's financial services.

You will take over the role of the client representative, a Focus Corp employee, who is on the phone with Automation Elite Inc. for this request. Initially, you collect all the required information before you submit the request.

Based on the information contained in the submission, the scoreboarding activity will classify Automation Elite Inc. as a Segment 1 client with a low risk profile and an assessment confidence greater than 75%. Therefore, this onboarding request will be handled automatically without a manual review required by the account manager. The client will be informed about the decision via email while you, as the client representative, will get a notification task as you initiated the onboarding request. This path through the onboarding scenario exemplifies one of the main goals when embarking on an automation journey, which is to automate business transactions as much as possible reducing the number of involved employees and therefore reducing cost, time required and manual errors.

2.2 Exercise Instructions

You will use the user assigned to you to perform all tasks as the client representative.

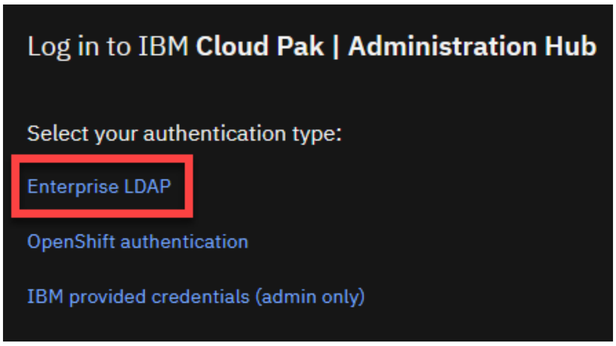
To remind you which role you currently perform, most screens show a Client Rep icon and label in the top right corner.

For this exercise, you will only assume the role of the Client Rep.

2.2.1 Taking the call from Automation Elite Inc. and collecting base information

_1. **Navigate** to the **Client Onboarding Desktop**.

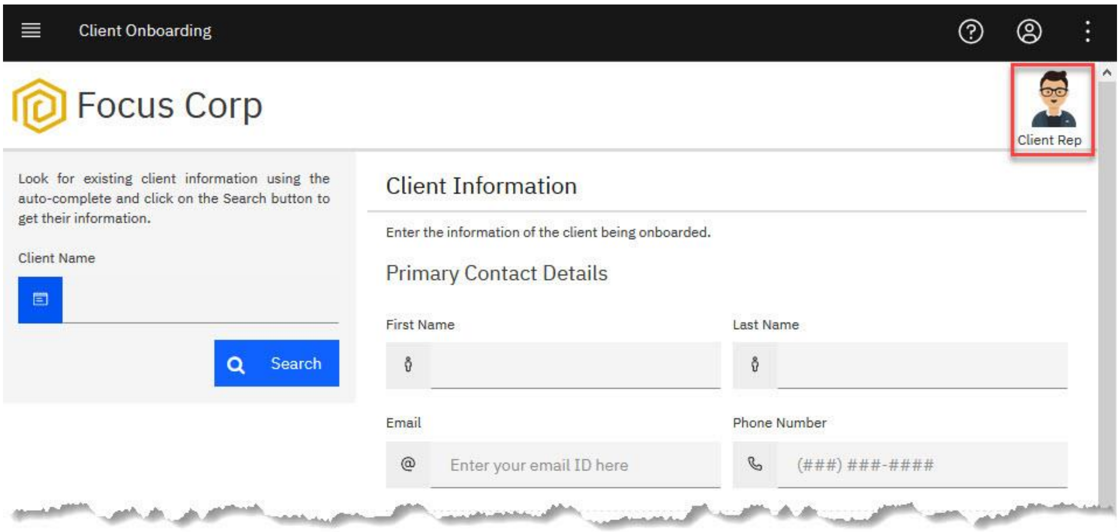
_2. **Select Enterprise LDAP** on the Log in to IBM Cloud Pak | Administration Hub page



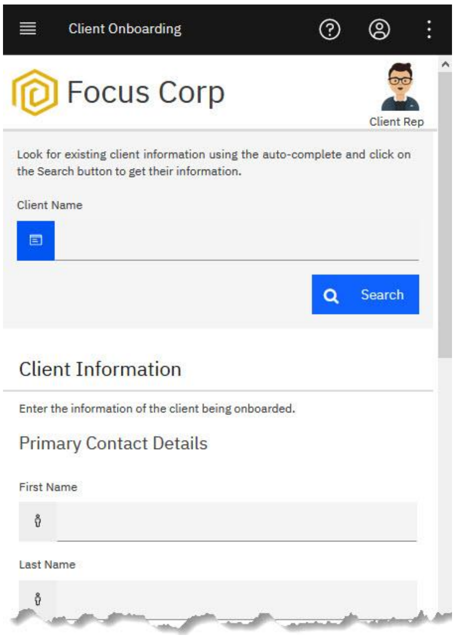
_3. **Login** with the username and password that has been assigned to you.

_4. As the **Client Representative** (see icon in the top right corner) **explore** the first page of the Client Onboarding app.

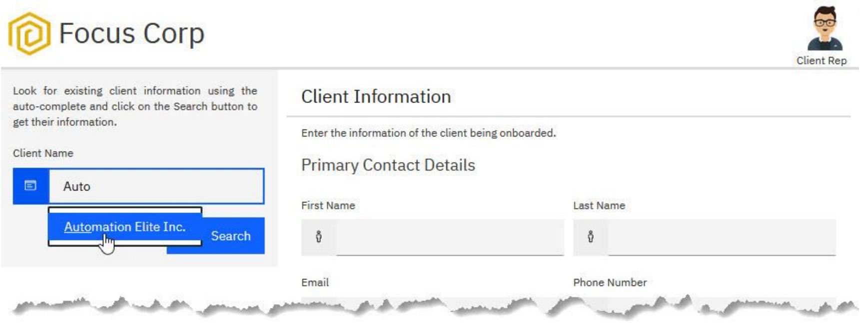
It provides means to search for an existing client by name, enter various information about the client, a selector for the industry for which Focus Corp offers services, a list of services the client can sign up for, and the ability to calculate the services fee based on the selection.



When you resize the browser window you will observe that the page is responsive. That means that a single app can be designed that it can easily be used on a large screen like a desktop/laptop, on a tablet, or mobile phone.

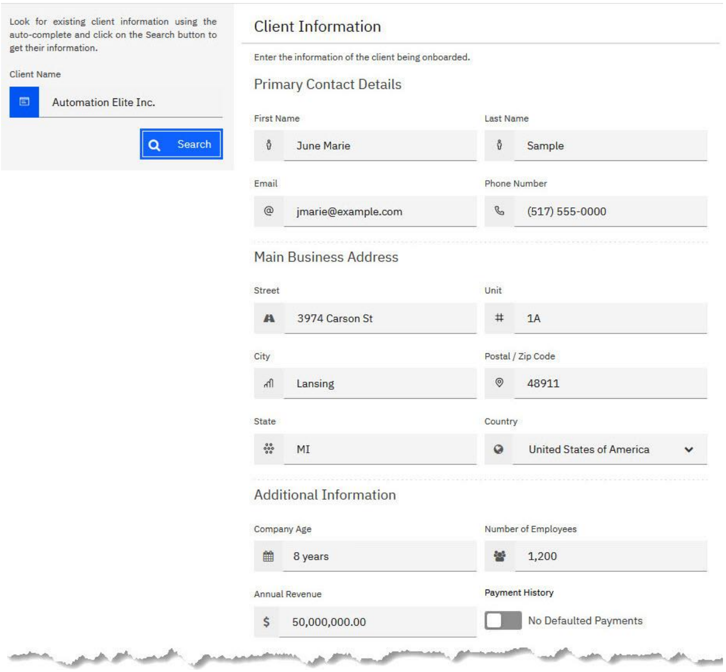


_5. **Type *Auto*** in the **Client Name** text field in the left panel to search for **Automation Elite Inc.** which is an existing client of Focus Corp.



_6. **Click** on **Automation Elite Inc.** once the type ahead feature offers it.

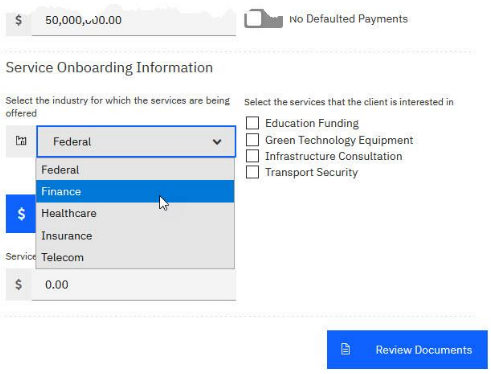
_7. **Click** on **Search** to load the details for the client into the panel on the right. It retrieves the client details using integration with the Workflow capability.



_8. **Optionally**, **replace** the **email address** jmarie@example.com with an email address of your choice that you can use to receive emails for the client as you execute the scenario.

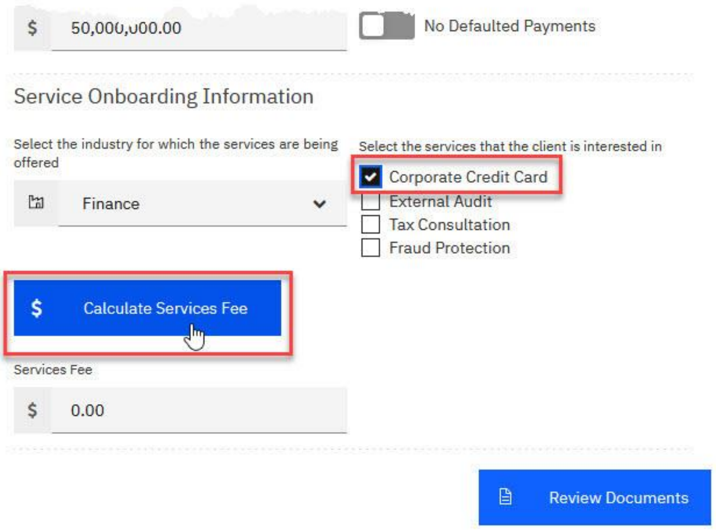
_9. **Select Finance** in the **Industry** drop-down list as Automation Elite Inc. requests to onboard to one service in that domain.

Selecting an entry from the drop-down dynamically changes the options in the services to onboard.

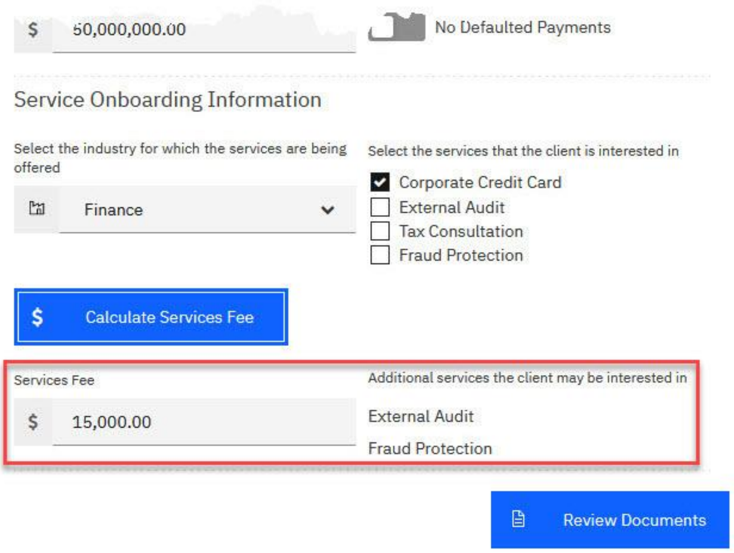


_10. **Check Corporate Credit Card** as the service that Automation Elite Inc. wants to onboard to**.**

_11. **Click Calculate Services Fee** to calculate the fees and get potential upsell recommendations.



> The fees are calculated by an external service pricing engine build using prescriptive rules. The additional services that the client rep could offer as upsell opportunity to the client are currently also based on prescriptive rules but could also be generated based on a machine learning model.

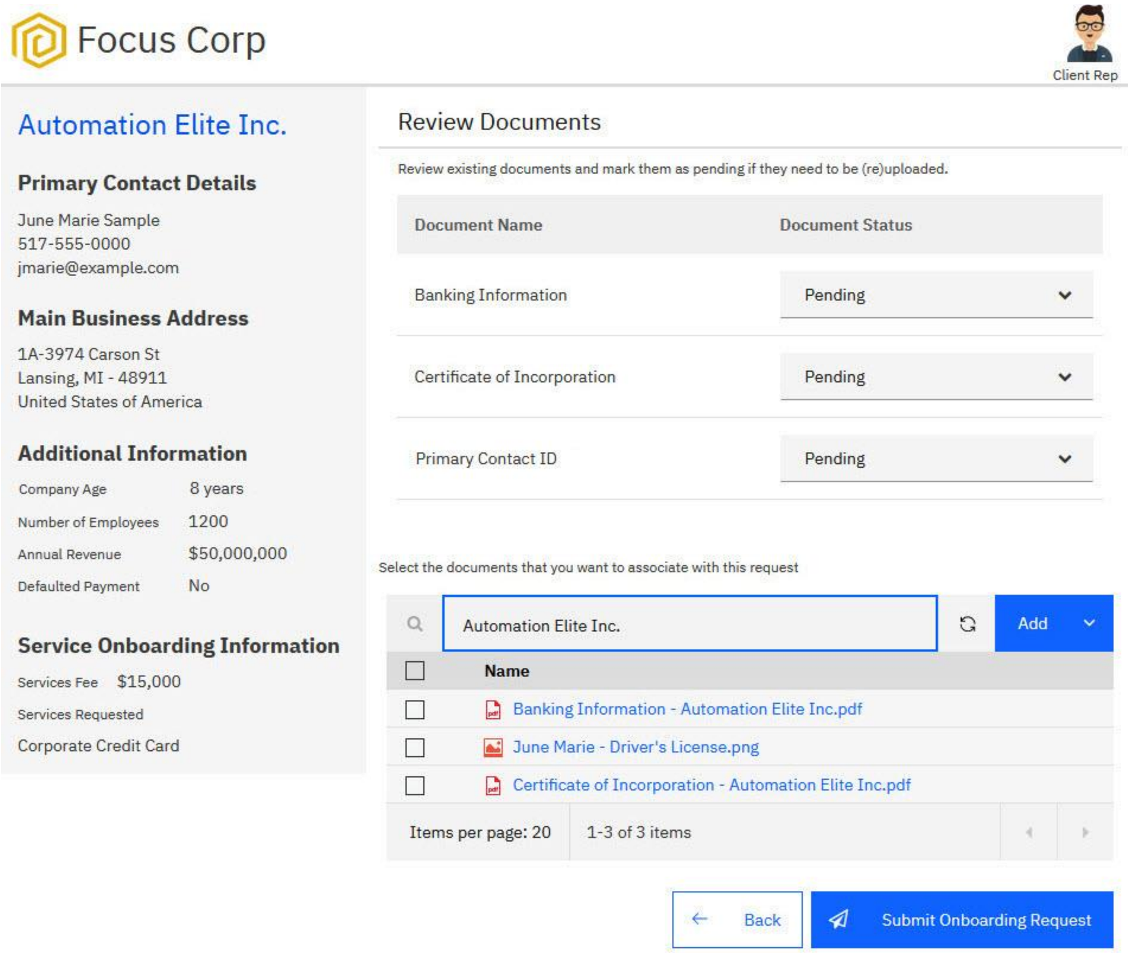


_12. **Click Review Documents** to navigate to the next page.

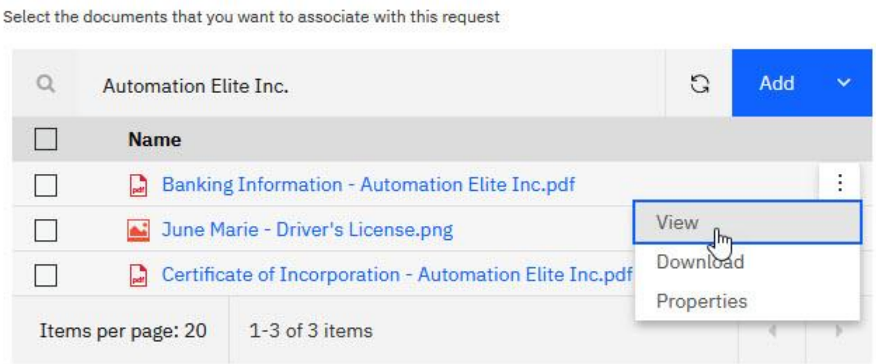
2.2.2 Verifying required documents and submitting the onboarding request

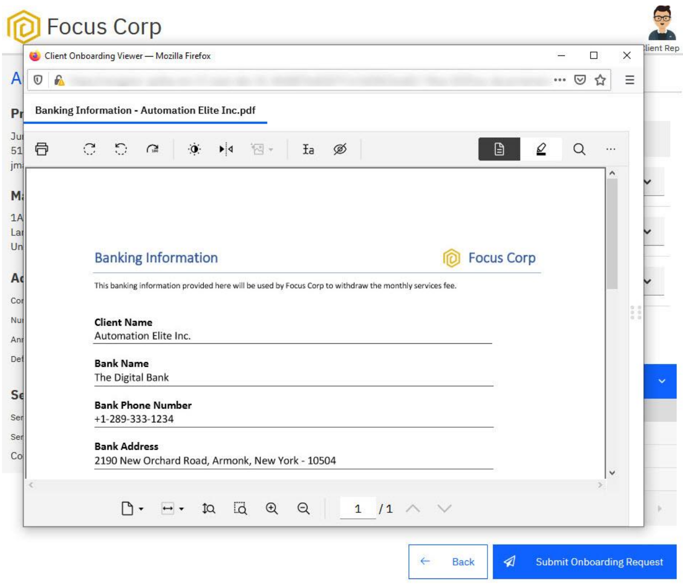
_1. **Explore** the second page of the Client Onboarding app.

The left pane lists all information provided on the previous page. On the right pane all documents that may be relevant to this onboarding request are listed with their individual status of either Pending (Default), Verified, or Not Required. At the bottom a list of all potentially relevant documents Focus Corp already has for Automation Elite Inc. is shown.



_2. **View** the **Banking Information – Automation Elite Inc.pdf** document by **clicking** the **three dots** at the right end of the row that appear when you hover over the line and **selecting View**. This opens the document in the integrated viewer. Afterwards **close** the viewer **window** again.

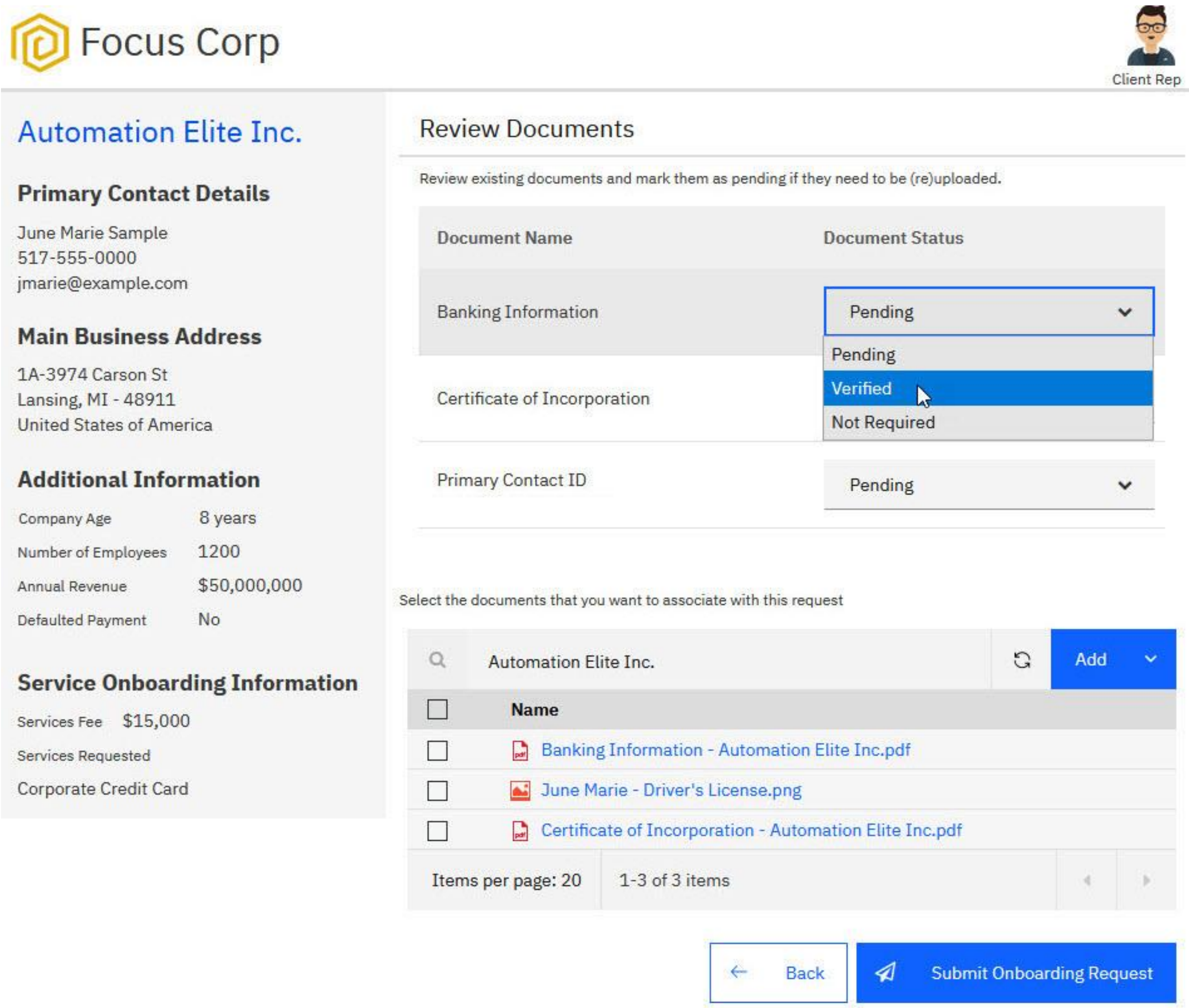




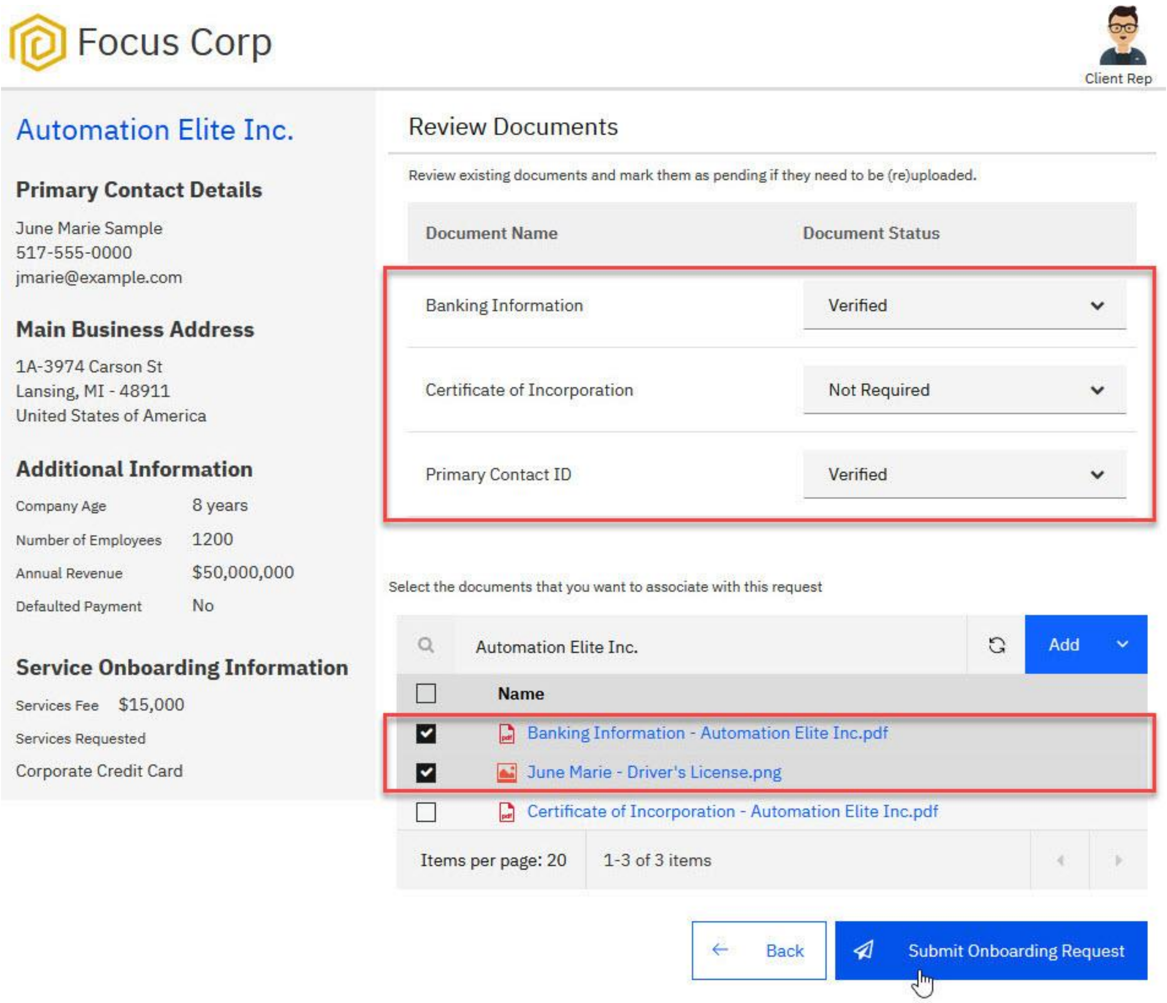
_3. **Select Verified** for **Banking Information** and **Primary Contact ID**.

_4. **Select Not Required** for **Certificate of Incorporation**.

This reflects the documents required for the selected service and the fact that these two documents are already available.



_5. **Check the boxes for the two documents Banking Information - Automation Elite Inc.pdf** and **June Marie - Driver's License.png** in the document list at the bottom to make these two documents part of the request when you submit the onboarding request.



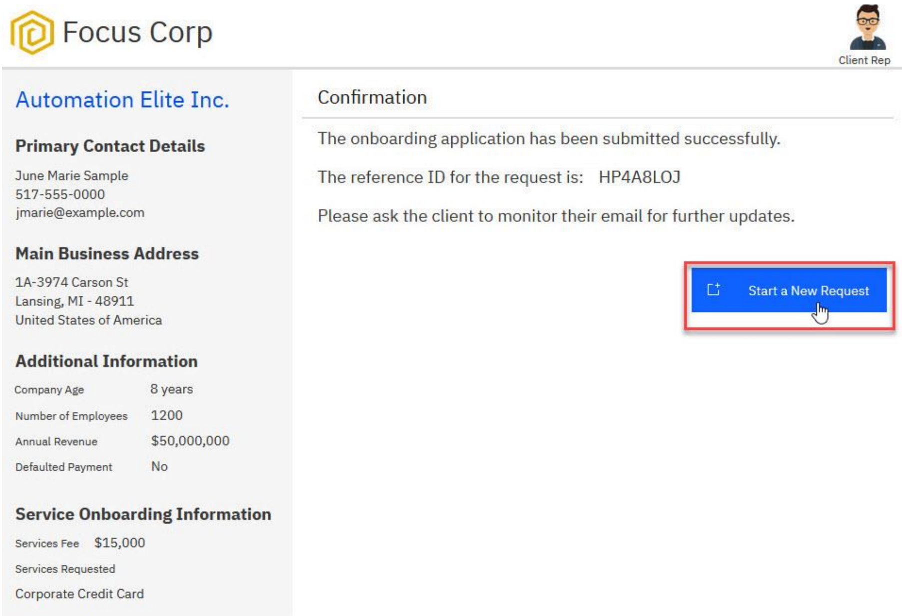
_6. **Click Submit Onboarding Request** to complete Automation Elite Inc.'s request and navigate to the final confirmation page.

The submission may take a few seconds during which you might notice a little spinner icon next to the Client Rep icon. Please wait until you are taken to the third page.

2.2.3 Onboarding request confirmation page

_1. **Explore** the third page of the Client Onboarding app.

The left pane again lists all information provided on the first page. The right-hand side provides a reference ID for the request that the client rep can share with the client and a comment that an email was sent to the client about their request.

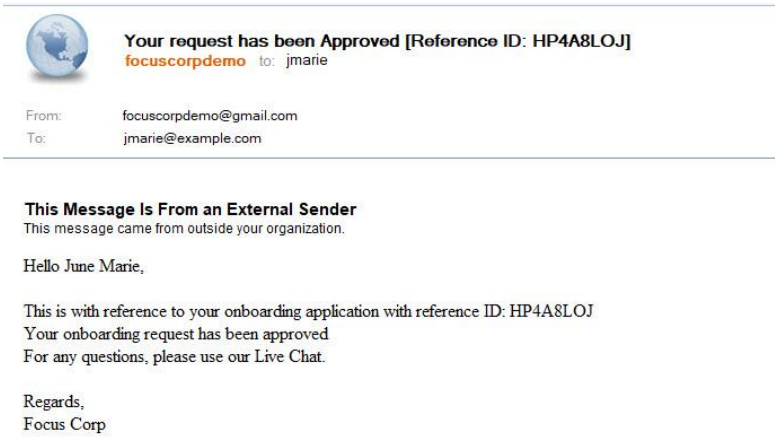


_2. **Click** on **Start a New Request** to get back to the first page to be able to continue onboarding the next client in the next exercise.

2.2.4 Checking the automatic email to Automation Elite Inc.

_1. **Open** your **email client** in case you have provided an email address on the first page that you can access.

_2. **Check** your inbox for an email from **focuscorpdemo**



The email contains the reference ID as displayed on the final page of the Client Onboarding app. It lets you know that your onboarding request has been approved.

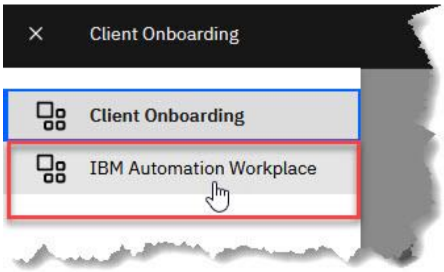
_3. Keep the email client open for the second exercise.

2.2.5 Checking the Client Rep notification about automated onboarding

_1. **Switch** back from the email client to the browser window containing the **Client Onboarding app**.

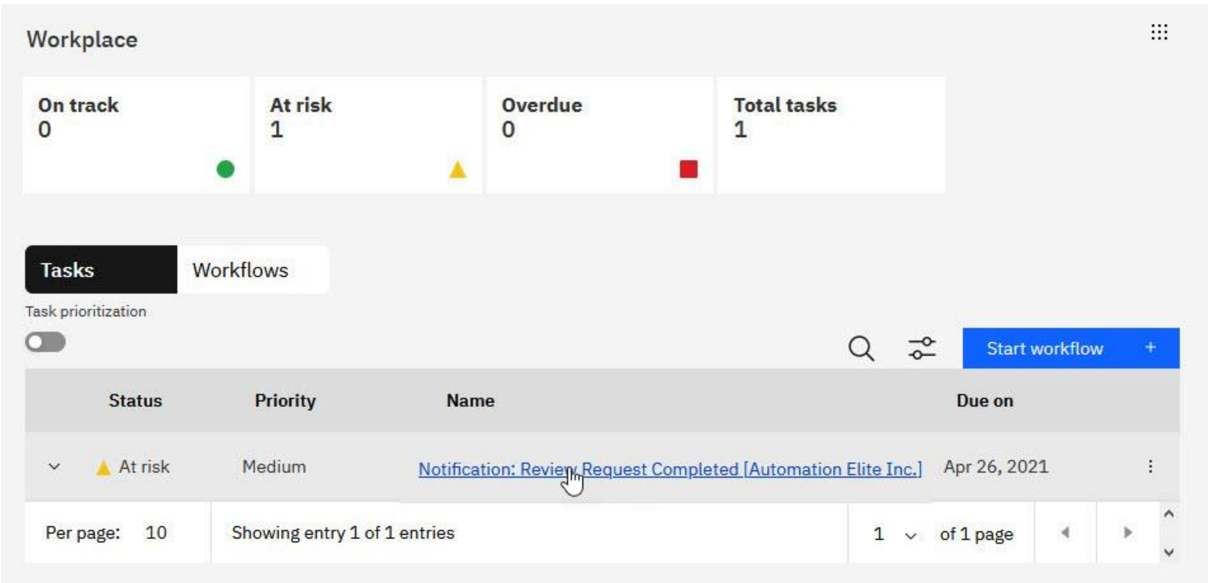
_2. **Click** on the **hamburger menu icon** in the top left corner and **select IBM Automation Workplace** to switch from the Client Onboarding app to your general workplace. After a short moment it shows the tasks available to you.

> Workplace is the next generation end-user client that complements the existing Process Portal and Case Client. It allows launching processes and cases and unifies access to all kinds of tasks. Its Task prioritization feature is another example of AI built into the product. When enabled it uses AI and historic runtime data to automatically order the tasks in the task list in terms of skill and impact, leading to workforce efficiency improvements.



> When you don't see a task here or in later sections, a refresh issue of the task list might have occurred.
> Trouble-shooting tips:
> If the list is empty but at least one of the numbers indicates a task is available, click in that field that should refresh.
> You might also want to try to refresh your browser, which will initially bring you back to the Client Onboarding app where you then have to switch to the IBM Automation Workplace again.
> If you still can't see the expected task reach out to one of your hosts for help.

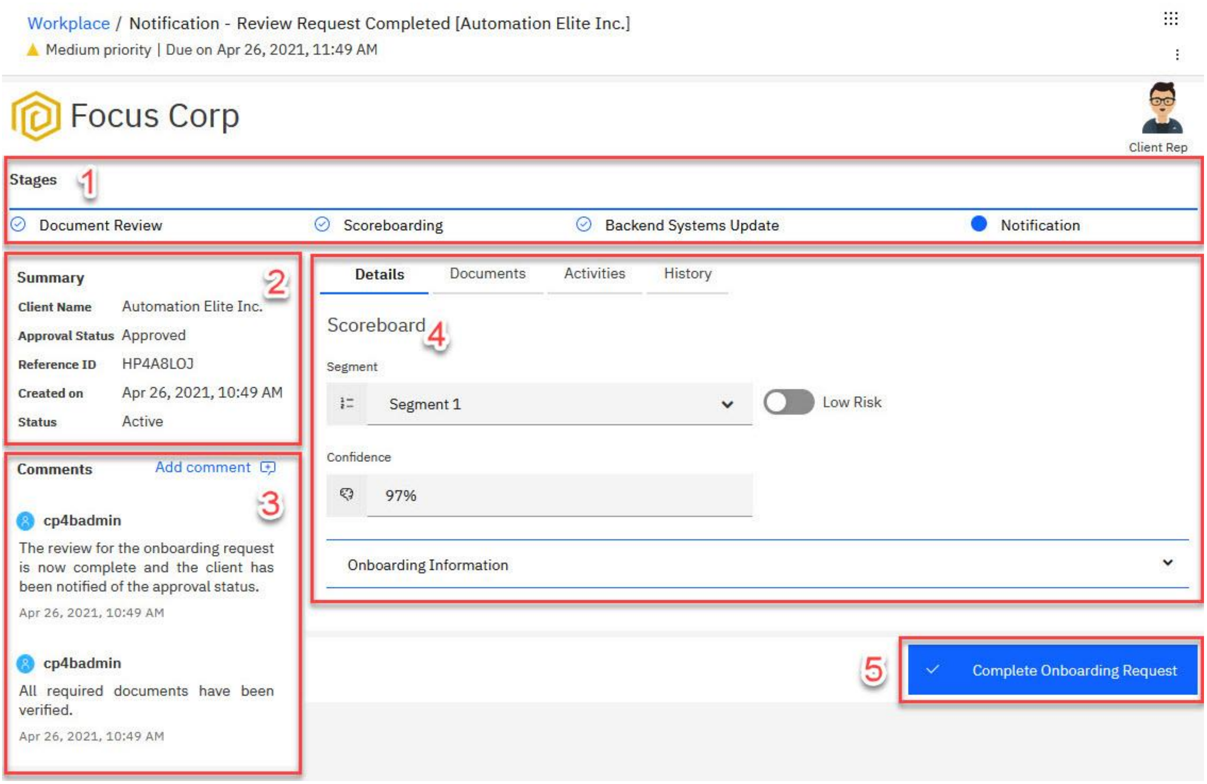
_3. **Open** the **task** that is available to you as client rep by **clicking on it**.



Depending on the network latency it may take a moment until the task page is loaded.

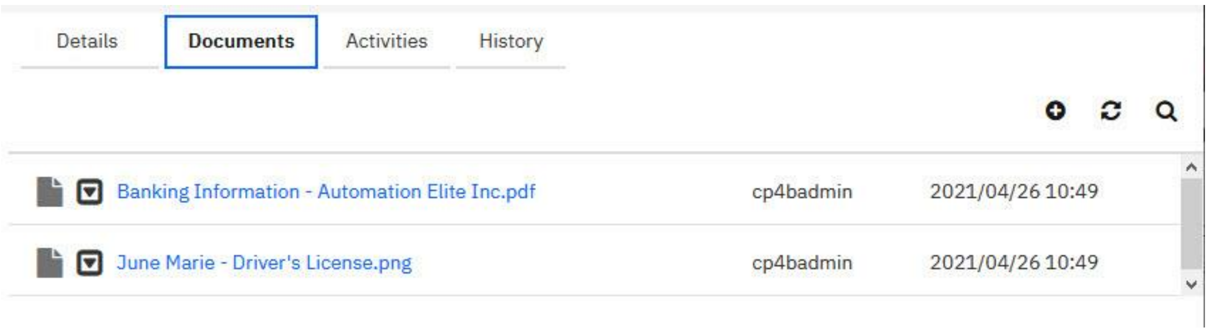
_4. **Explore** the task page.

At the top (1) the four stages of the request processing are shown. This task is part of the last stage (Notification). The other stages have been processed automatically. In this stage you as the client representative are informed about the outcome of the onboarding request. The first panel on the left (2) provides a summary of the request, mainly the Client Name, the Approval Status, and the Reference ID generated when you submitted the request in the app. The panel below (3) contains comments related to the request, in this case letting you know that the client was already informed via email about the approval. These comments are automatically added by the system. Therefore, an administrative user ID (cp4badmin) is shown as the originator. The main panel on the right (4) has four tabs. On the Details tab the scoreboard is shown that contains the segmentation, Automation Elite Inc. belonging to the Segment 1 clients, the risk assessment, here Low Risk, and the Confidence for the risk assessment, here with 97% being very high (the actual values may differ slightly in your onboarding request).

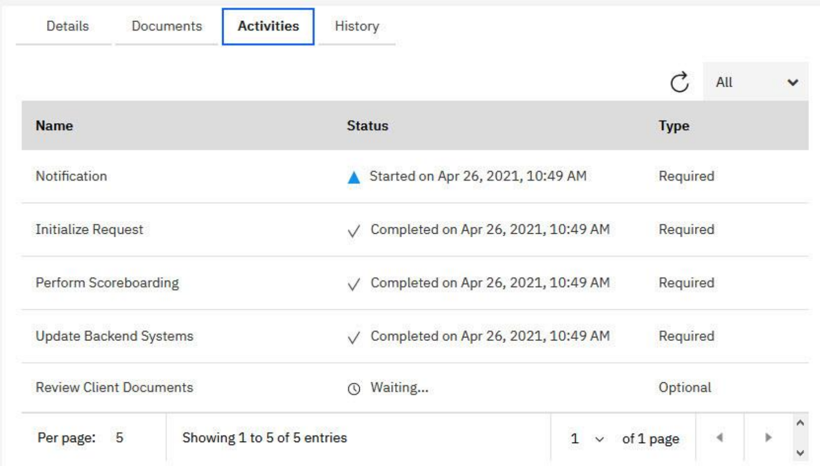


_5. **Explore** the Documents, Activities, and History tabs.

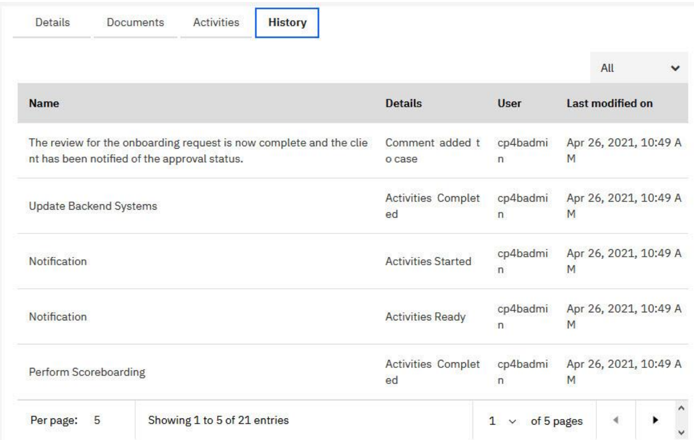
The **Documents** tab shows all documents that you had previously selected on the Review Documents page of the Client Onboarding app. They have been made part of the actual onboarding request.



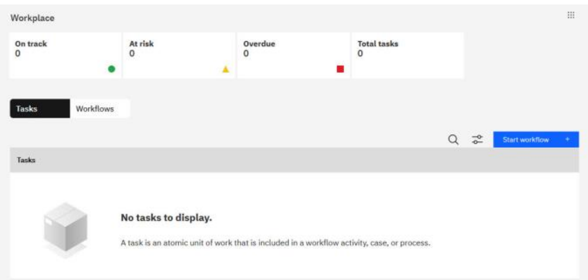
The **Activities** tab shows the status and type of all activities of the request. Since this is a case in the Workflow system, any discretionary activities defined in the case would be available here so that they can be started by the client representative.



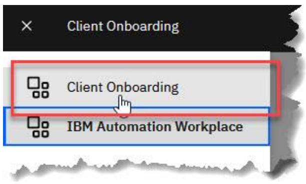
The **History** tab shows information about different types of events that happened for the request.



_6. **Click Complete Onboarding Request** (5) to complete the task. This closes the task, brings you back to the now empty work list for the client rep and completes the fully automated onboarding for a low risk high confidence client like Automation Elite Inc.



_7. **Click** on the **hamburger menu icon** in the top left corner and **select Client Onboarding** to switch back to the Client Onboarding app.



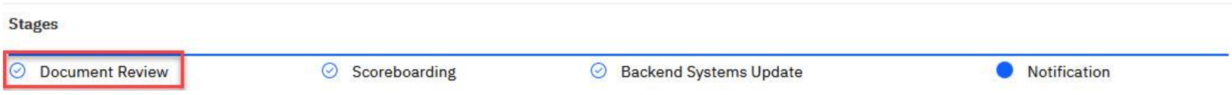
This completes the part of the exercise where you actively perform steps.

2.2.6 Review of Stages Performed Automatically

As part of the above fully automated client onboarding workflow you directly worked on the fourth stage of the request processing (Notification). The three request stages before that were already automatically completed and did not need manual activities.

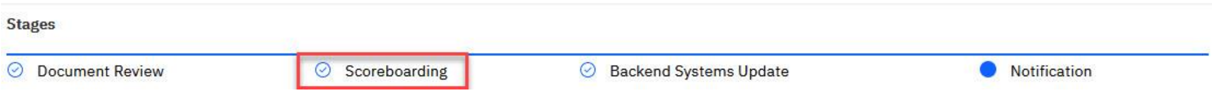
> This section provides information on how different aspects that happen automatically as part of the Client Onboarding are performed. You will not actively need to perform any steps, just read them. In chapter three you will again work directly with the Client Onboarding solution.

2.2.6.1 Document Review



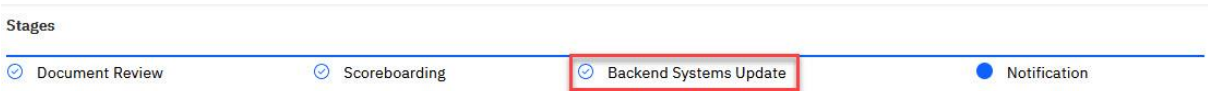
The first stage during processing the onboarding request is the Document Review stage. For the above request you have specified in the app that two documents are already verified and the third is not required. Therefore, this stage completes automatically.

2.2.6.2 Scoreboarding



As described before, the Scoreboarding stage consists of two activities.
The first activity automatically applies prescriptive rules and AI models. It determines the segment this client belongs to, the risk associated with onboarding the client and the confidence of the assessment.
The second activity is to manually review the onboarding request. However, in the request you created the calculated confidence of the assessment is above 75%. Therefore, the second activity to manually review the request is skipped.
For your request the client has been automatically onboarded, and the Scoreboarding stage has been automatically completed.

2.2.6.3 Backend Systems Update



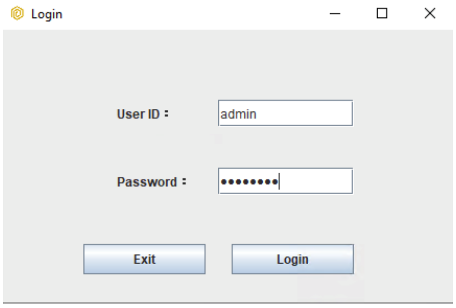
As part of the Backend Systems Update stage, Focus Corp needs to update some of its legacy systems of record:

- The first is the Client Management System. It offers a Java rich client to add or update data.
- The second is the Service Management System. It offers a web interface to interact with it.

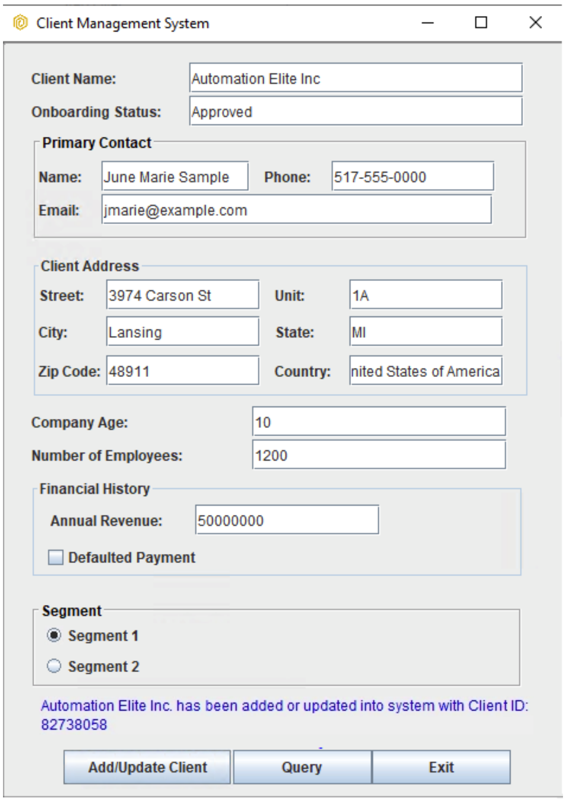
As Focus Corp strives for a high level of automation, they want to update the legacy systems automatically without involving a user. This also helps to remove the risk of potential human errors when copying and pasting information from one system to another. Therefore, they apply Robotic Process Automation (RPA).
The execution of the RPA bot happens automatically in the background. To get an impression how the bot operates the following screenshots explain the steps performed.

The first step is to create a client record or updating an existing client record in the Client Management System and to retrieve the Client ID for the client:

- The bot **starts** the **Client Management System** (with a Java UI) and **logs into it**.



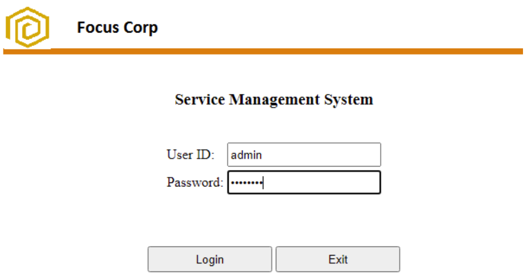
- The bot enters all values from the Client Onboarding solution into the respective fields and clicks on the **Add/Update Client** button and retrieves the **Client ID** from the output text.



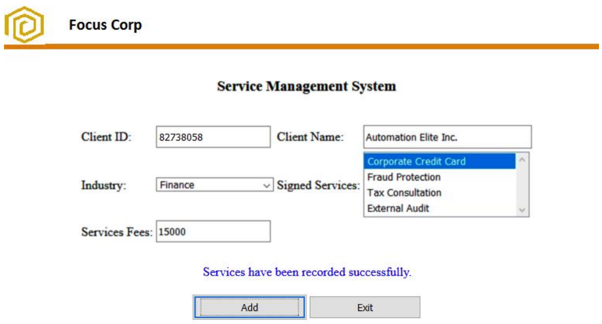
- Finally, it **closes** the Client Management System by **clicking** on **Exit**.

The second step is to record the services the client wants to onboard to in the Service Management System. This only applies when the onboarding request has been accepted during the Scoreboarding stage.

- The bot **starts** a **browser**, **navigates** to the **home URL** for the **Service Management System**, and **logs into it** as well.



- The bot **enters** the **Client ID** retrieved from the Client Management System as well as the **client name, industry, services** to be signed up to, and **services fees** from the Client Onboarding solution into the respective fields and clicks **Add**.



- Finally, the bot **clicks Exit** to **logout** from the Service Management System and **closes** the **browser window**.

> These two System of Records in our scenario are just mockups of potential real client systems. They represent systems that don't offer APIs at all to programmatically interact with them or where parts like updates are just exposed through the native UI and not an API. Such systems can easily be automated using the RPA capability.

3 Exercise: Onboarding a Client with Low Confidence Level (Manual Intervention)

3.1 Introduction

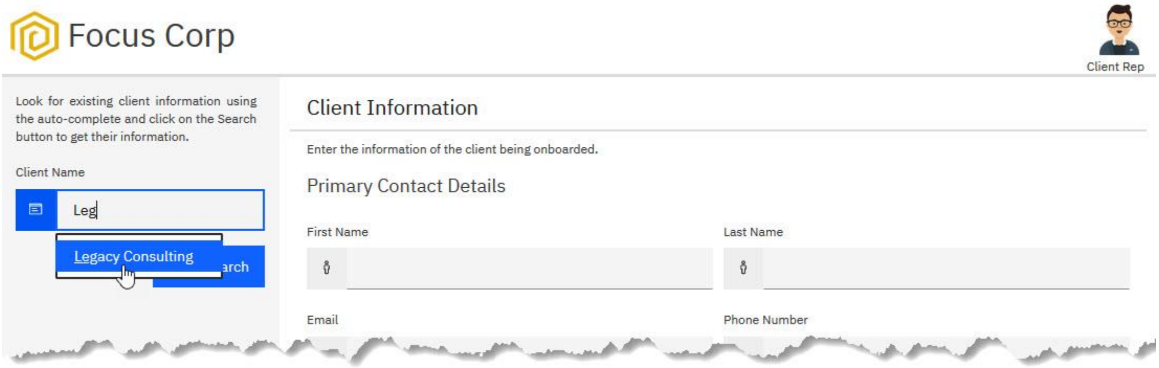
In this second exercise Legacy Consulting wants to subscribe to two services from Focus Corp's healthcare services.
You will first again take the role of the client representative, a Focus Corp employee, who is on the phone with Legacy Consulting for this request. Initially, you collect all the required information before you submit the request.
Based on the information collected so far, the score boarding activity will classify Legacy Consulting as a Segment 2 client with a high-risk profile and an assessment confidence of less than 75%.
Under these circumstances, the request cannot be handled automatically and requires handling by an account manager. You will take over the role of the account manager to manually review the request.
As the default risk is too high, you will reject the onboarding request. The client will be informed via email as will be the client representative via a notification task as they initiated the onboarded request.
This path through the onboarding scenario exemplifies that often for complex, high value, high risk decisions or those where a machine generated decision has low confidence, knowledge workers need to make the final decision. The decision made by a human can then be used to further train the machine learning model so for future cases even more automation is possible.

3.2 Exercise Instructions

You will use the same user to perform all tasks even when assuming the different roles of Client, Client Representative, and Account Manager. To remind you which role you currently perform, most screens show an icon and label in the top right corner. In this flow the ones for the Client Representative and Account Manager.

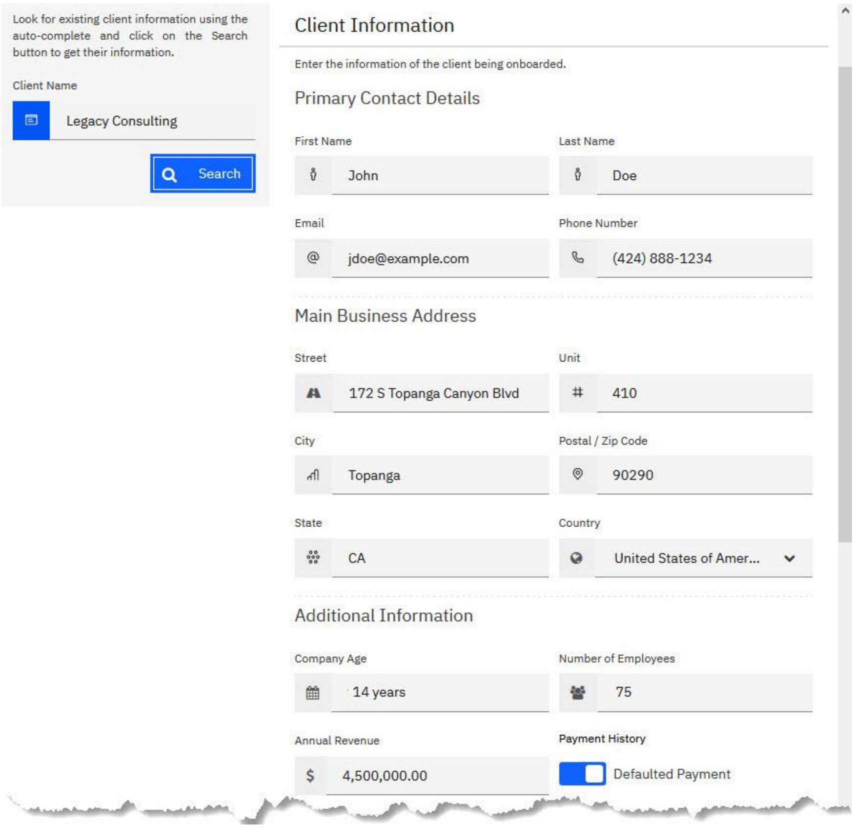
3.2.1 Taking the call from Legacy Consulting and collecting base information

_1. As the **Client Representative** (see icon in the top right corner), **type Leg** in the **Client Name** field in the left panel to search for **Legacy Consulting** which is another existing client of Focus Corp.



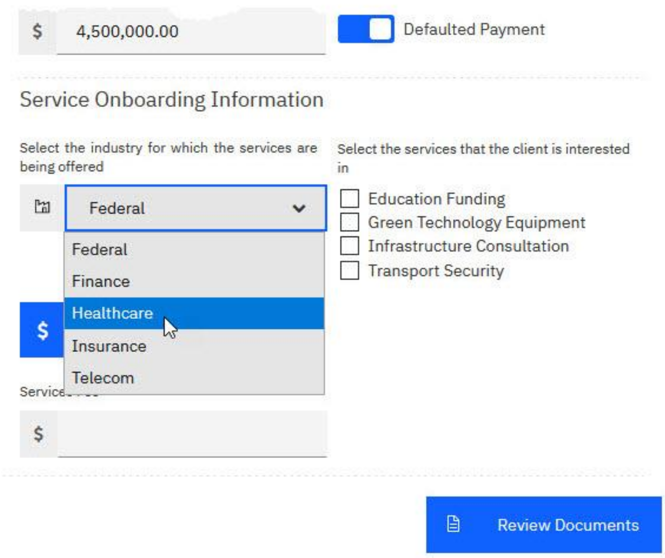
_2. **Click** on **Legacy Consulting** once the type ahead feature offers it.

_3. **Click** on **Search** to load the details for the client. It retrieves the client details using integration with the Workflow capability.

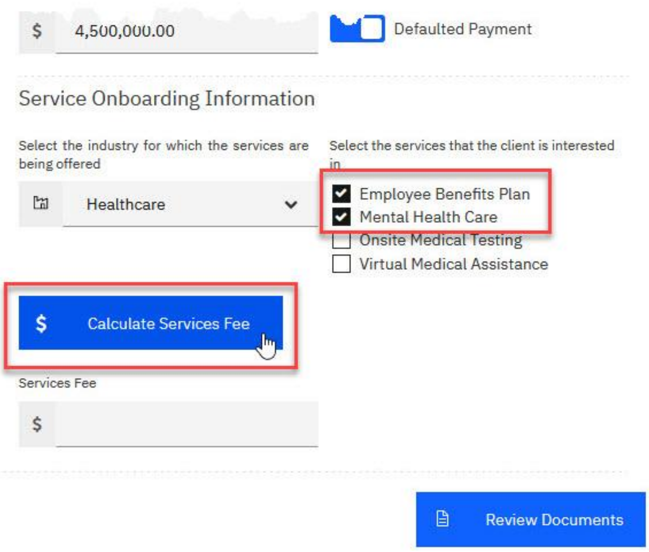


_4. **Optionally, replace** the **email address** jdoe@example.com with an email address of your choice that you can use to receive client emails associated with the scenario.

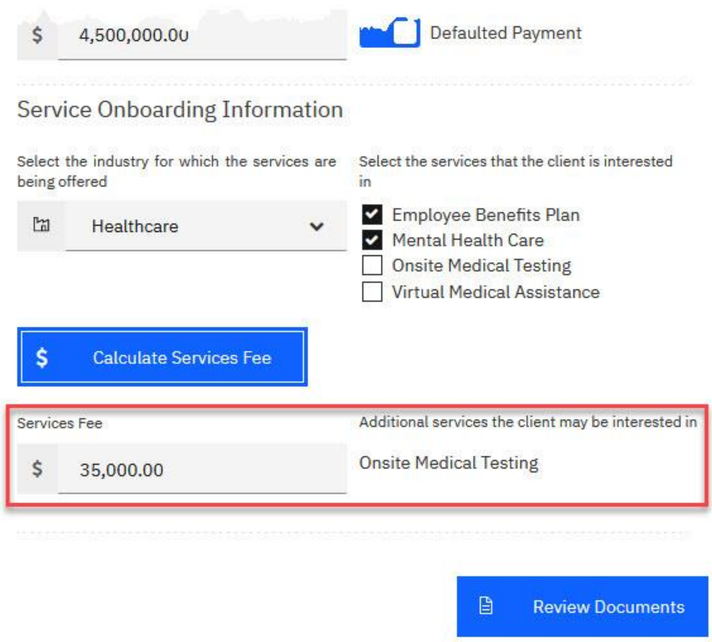
_5. **Select Healthcare** in the **Industry** drop-down list as Legacy Consulting requests to onboard to two services in that domain.



_6. **Check Employee Benefits Plan** and **Mental Health Care** as the services that Legacy Consulting wants to onboard to.



_7. **Click Calculate Services Fee** to calculate the fees and get upsell recommendations.



The fees are calculated by an external service pricing engine build using prescriptive rules. The additional services that the client rep could offer as upsell opportunity to the client are currently also based on prescriptive rules but could also be generated based on a machine learning model.

_8. **Click Review Documents** to navigate to the next page.

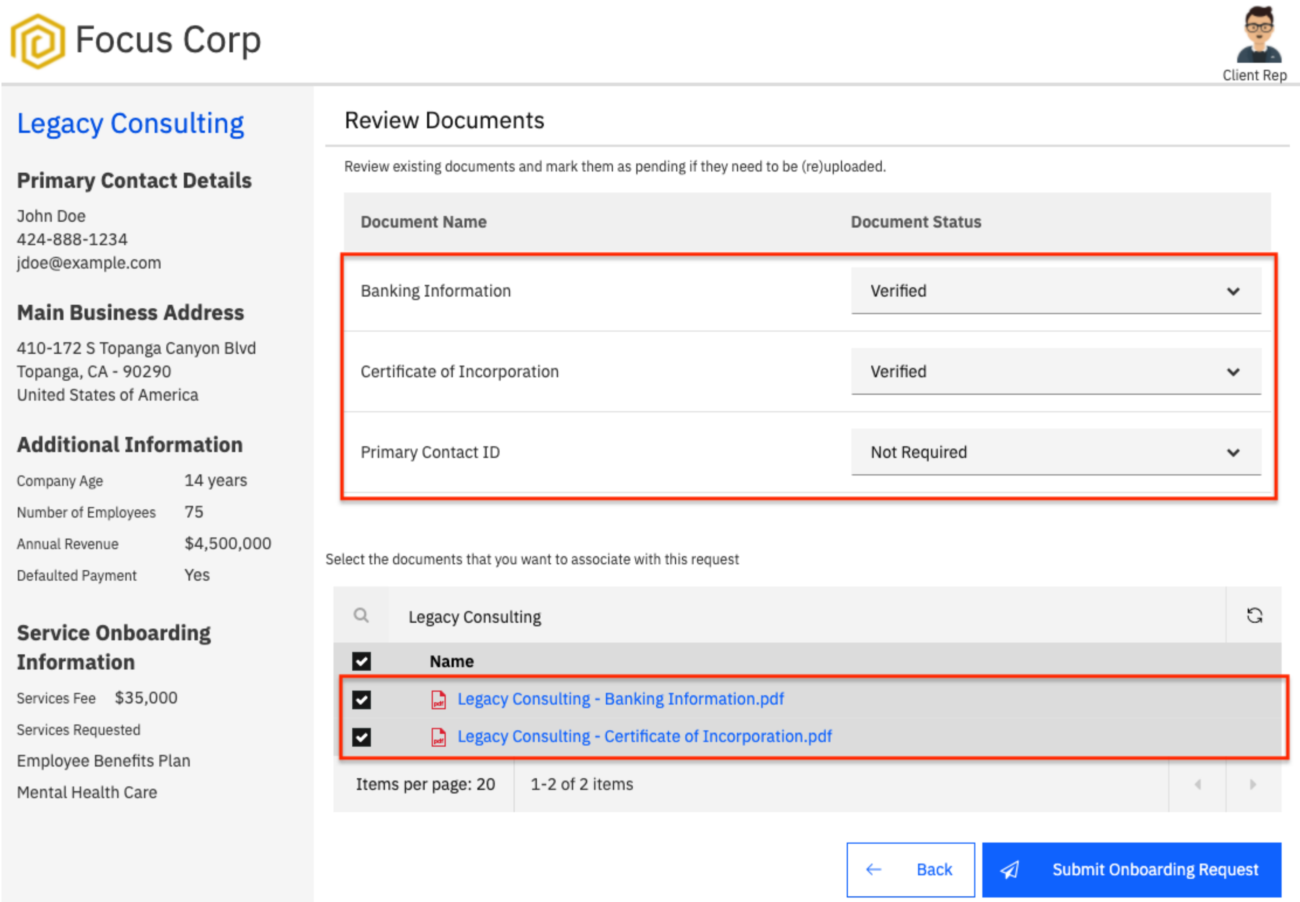
3.2.2 Verifying required documents and submitting the onboarding request

_1. **Select Verified** for **Banking Information** and **Certificate of Incorporation.**

_2. **Select Not Required** for **Primary Contact ID**.

This reflects the documents required for the selected service and the fact that the first two documents are already available. With the Capture capability it would be possible to upload the primary contact ID after submitting the client onboarding request. This would then extract structured information from the unstructured ID and create a new review task for the Client Rep in the Document Review stage of the Workflow. As we don't have the Capture capability installed, we will mark the document as **Not Required**.

_3. **Check the boxes for the two documents** (Legacy Consulting – Certificate of Incorporation.pdf and Legacy Consulting - Banking Information.pdf) in the document list at the bottom to make these two documents part of the request when you submit the onboarding request.

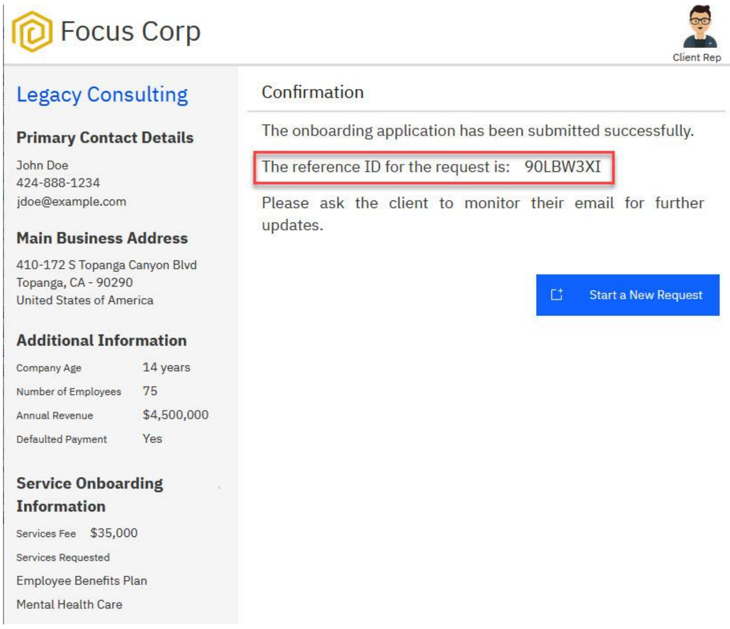


_4. **Click Submit Onboarding Request** to complete Legacy Consulting's request and navigate to the final confirmation page.

The submission may take a few seconds during which you might notice a little spinner icon next to the Client Rep icon. Please wait until you are taken to the third page.

3.2.3 Onboarding request confirmation page

You again get to the confirmation page providing a reference ID for the request that the client representative can share with the client and a comment that an email was sent to the client about their request.

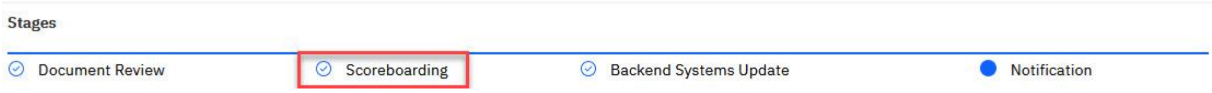


_1. **Click** on **Start a New Request** to get back to the first page to potentially continue with onboarding the next client.

3.2.4 Document Upload and Review

The first stage processing the onboarding request is the document review. As you have specified that the none of the documents are pending, this stage is automatically completed.

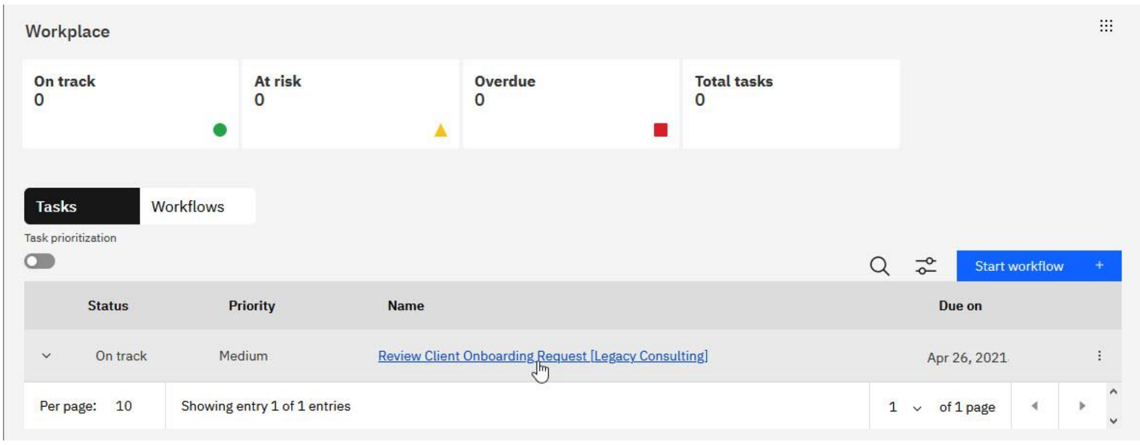
3.2.5 Scoreboarding



The next stage in processing the client onboarding request is the Scoreboarding stage.
As described before scoreboarding consists of two activities. The first activity automatically applies prescriptive rules and AI models to determine the segment this client belongs to, the risk associated with onboarding the client and the confidence of the assessment. The second activity is to manually review the onboarding request by an account manager when the confidence of the assessment is below 75%.
As the confidence for this request is below 75% an email was sent to the client that their onboarding request will be manually reviewed by an account manager. You may want to check your inbox for it. Additionally, a task for the account manager was created to make the final decision if the approve or reject the onboarding request.

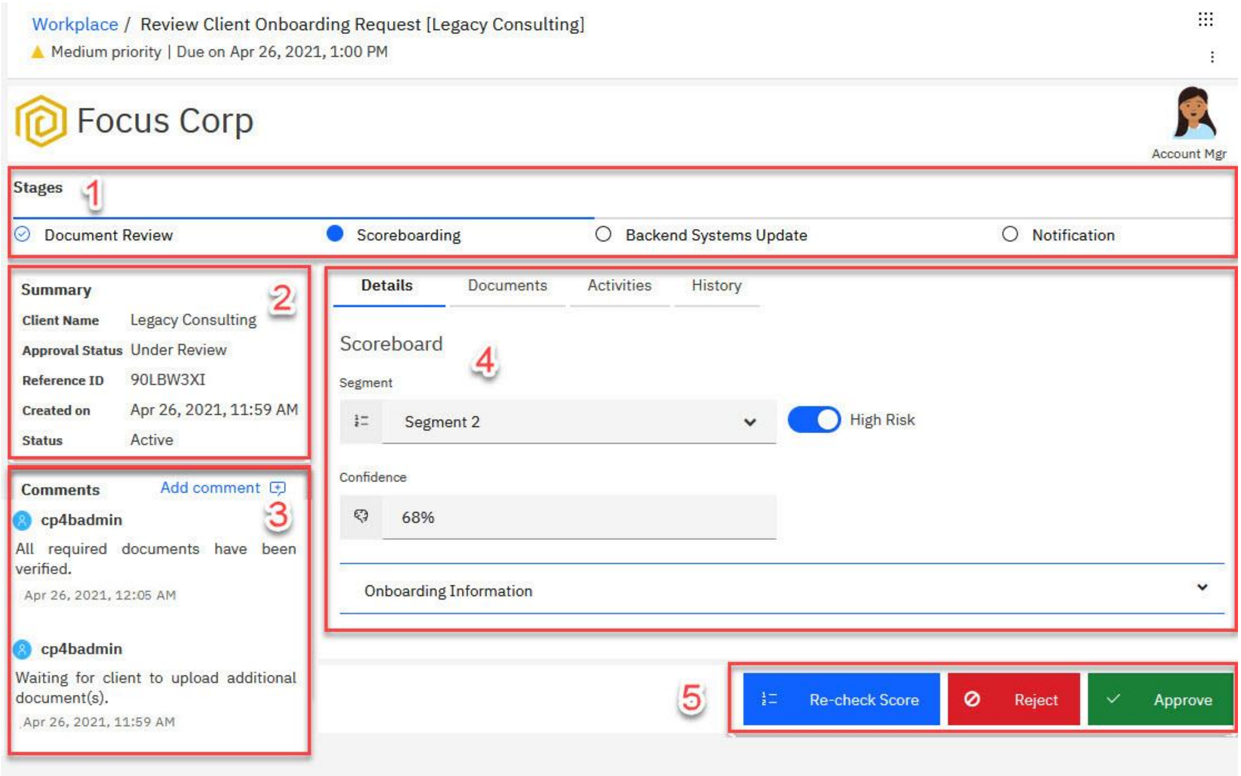
_1. **Open** the **task** that is available to you by **clicking on it**.

If the task is not showing up after some time, follow the trouble-shooting steps outlined in section 2.2.5. Another reason could be that you did not change the status of the documents to Verified or Not Required. In this case, you can always resubmit the Client Onboarding request using the Client Onboarding application.

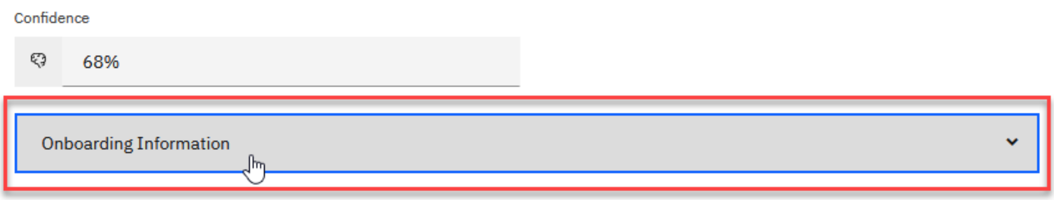


_2. **Explore** the task page.

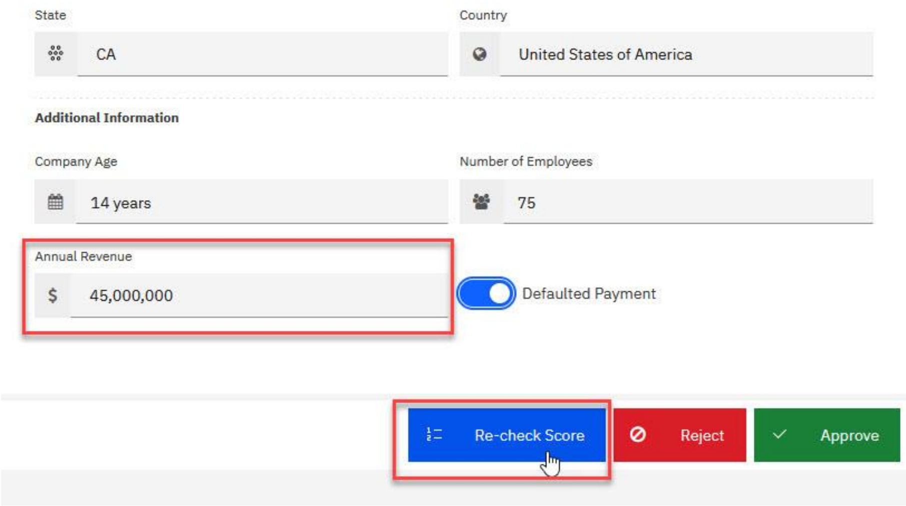
The icon in the top right signifies that you are performing this task as an Account Manager. At the top (1) the four stages of the request processing are shown. This task is part of the scoreboarding stage where you as the account manager have to manually assess those onboarding requests that have a confidence below 75%. The first panel on the left (2) provides a summary of the request, mainly the Client Name, Reference ID and the Approval Status. The panel below (3) contains messages related to the request, for example that all required document have been verified. The main panel on the right (4) has four tabs. On the Details tab the scoreboard is shown that contains the segmentation, Legacy Consulting belonging to the Segment 2 clients, the risk assessment, here High Risk, and the Confidence for the risk assessment, here with 68% being below the threshold to take an automatic decision based on the risk (the actual values may differ slightly in your onboarding request).



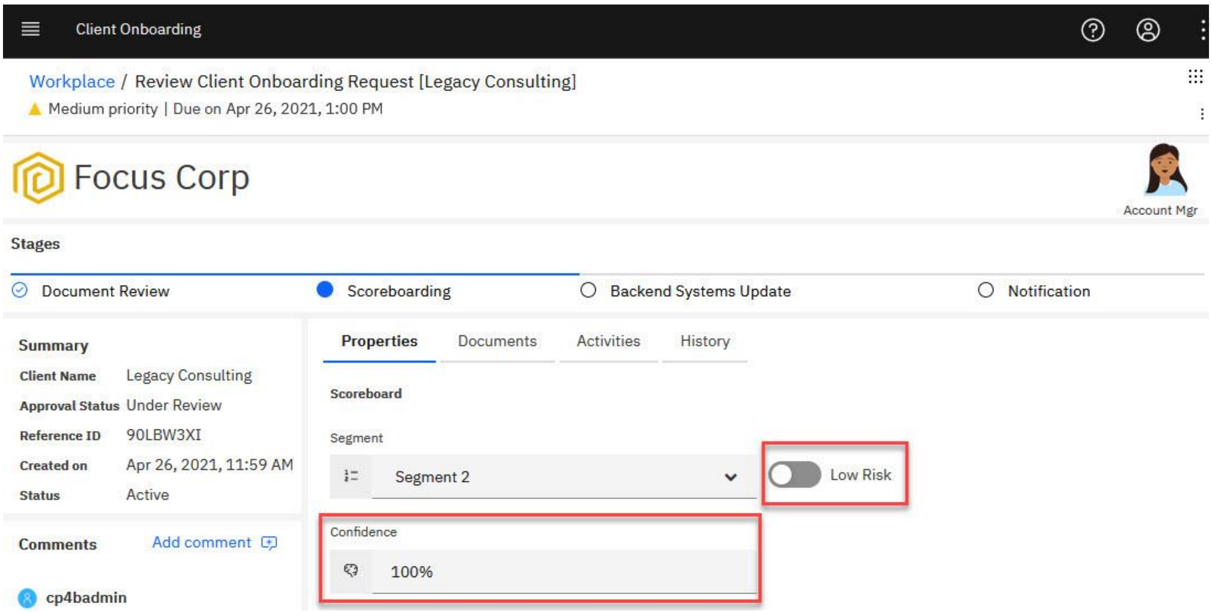
_3. **Expand** the **Onboarding Information** section by clicking on the section header.



_4. **Modify** the **Annual Revenue** to be **$45,000,000** instead of $4,500,000.



_5. **Click Re-check Score** (5) to reevaluate the scoreboard and **observe** that the **risk** changed to low and the **confidence** was computed to be 100%.



_6. Optionally, change the Annual Revenue back to $4,500,000 and perform the scoreboarding a final time by clicking Re-check Score.

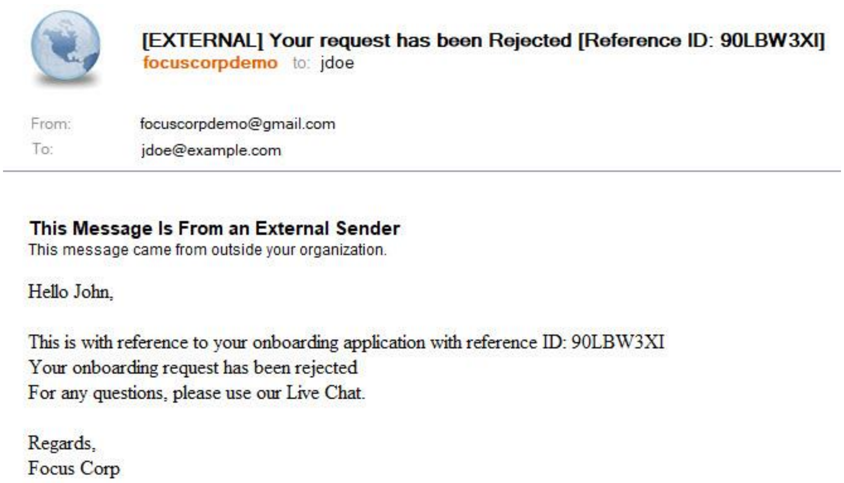
_7. **Click Reject** (5) to reject the onboarding request by Legacy Consulting as you the account manager consider the risk to be too high.

This will trigger an email to be sent to the client with the final onboarding decision.

3.2.6 Checking the automatic email to Legacy Consulting

_1. **Open or bring to the front** your **email client** in case you have provided an email address on the first page that you can access.

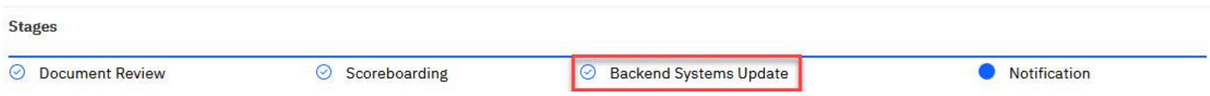
_2. **Check** your inbox for an email from **focuscorpdemo**



_3. The email contains the reference ID as displayed on the final page of the Client Onboarding app. It lets you know that your onboarding request has been rejected.

_4. You may close the email client now.

3.2.7 Backend Systems Update



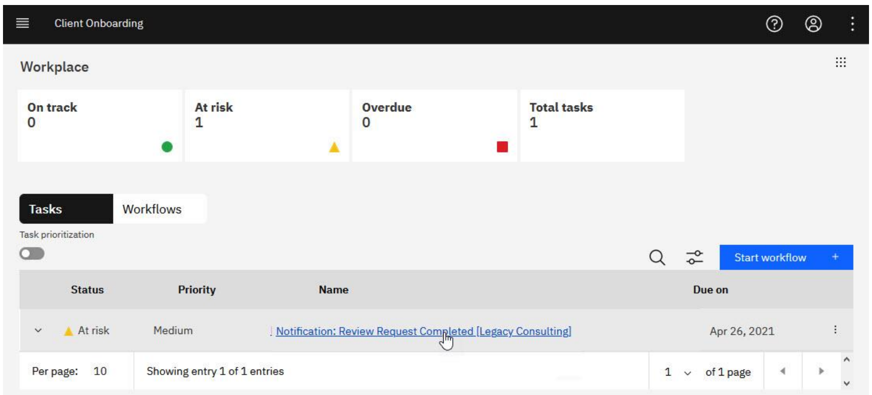
As shown in the previous exercise Focus Corp needs to update some of its legacy systems of record as part of the Backend Systems Update stage. As the onboarding of service for Legacy Consulting was rejected only the Client Management System will be updated by the RPA bot. This is identical to what was described previously.

3.2.8 Checking the Client Rep notification about rejected onboarding

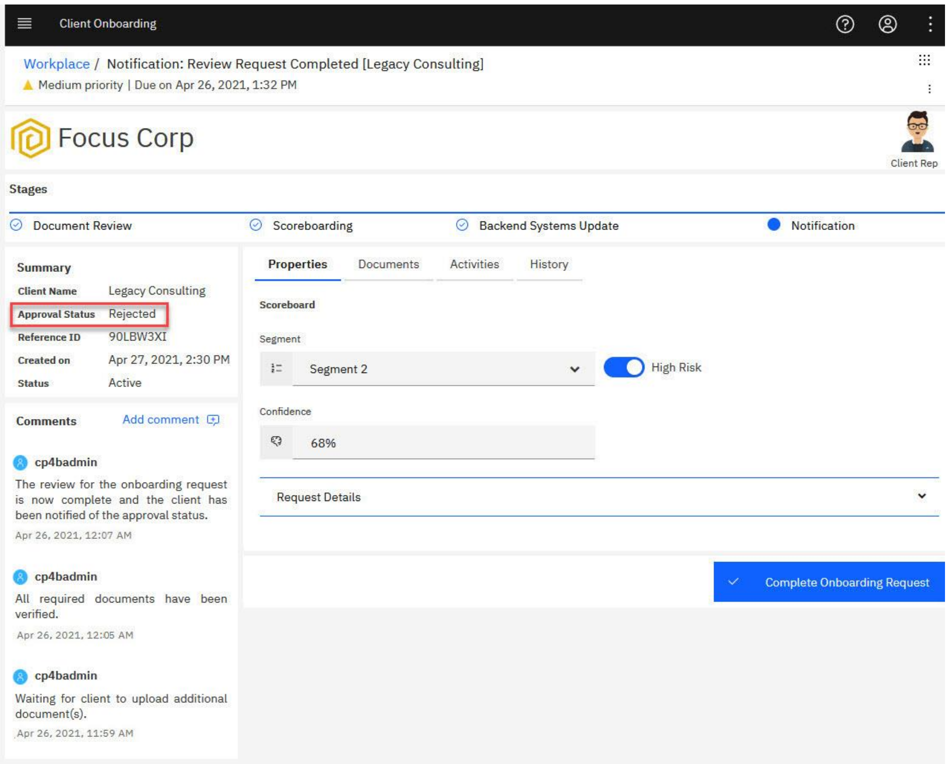
_1. **Switch** back from the email client to the browser window containing the **Client Onboarding app**.

_2. **Open** the **task** that is available to you as client representative by **clicking on it**.

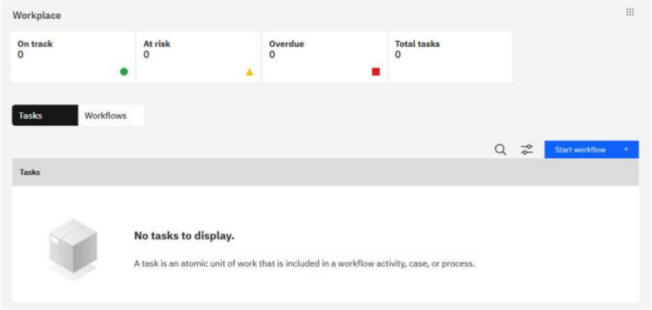
If the task is not showing up after some time, follow the trouble-shooting steps outlined in section 2.2.5.



_3. **Observe** the **Approval Status** task page that shows that the client onboarding request was **rejected**.



_4. **Click Complete Onboarding Request** to complete the task. This closes the task, brings you back to the now empty work list for the client rep.



4 Outlook

The Client Onboarding scenario is ever evolving. While it is already very comprehensive some interesting aspects are not yet implemented:

- **Processing of complex/partly unstructured documents using IBM Automation Document Processing**

  As part of their onboarding request the client may need to provide more complex or partly unstructured documents. The client may prefer different means of providing this document like sharing through an upload portal or similar. The relevant data will then need to be extracted automatically from the documents to make it usable throughout the workflow and connected components.
  In a future version of the end-to-end scenario, we expect to include such capabilities by using **external share, email, and/or upload capabilities** to share such documents. The processing of these documents will then be performed by **IBM Automation Document Processing** with its machine-learning based classification and extraction capabilities.

- **Business Insights into how Client Onboarding is performing**

  Focus Corp would want to have business and operational dashboards available for their users to:

  - Understand how their business performs and what actions to take to expand their business or course correct if needed.
  - Get operational details on the execution of the solution components to understand metrics such as task distribution, time taken by services, number of decisions executed and so on.

  In a future version of the end-to-end scenario, we expect to include such capabilities via **Business Performance Center** (BPC) and **Workforce Insights** as part of **IBM Business Automation Insights** (BAI). BPC provides easy to use and meaningful dashboards to visualize business-relevant KPIs for lines of business to have a near real-time view on their business operations. Workforce Insights enables the computation of various process related key performance indicators, such as the execution time for activities, waiting time for activities, activity execution frequency, reworks, actor efficiency rankings, team utilization statistics, and team throughput. Based on these dashboards and insights business people may take manual actions to improve how the business performs.

- **Client Interacting with Focus Corp Online**

  Currently the client has to call Focus Corp to place their onboarding request by talking to a customer representative. Focus Corp may want to allow clients to either request onboarding themselves by filling in a form. Additionally, after submitting the onboarding request Focus Corp may want a self-service capability on their web site.
  In a future version of the end-to-end scenario, we expect to incorporate a Chat bot capability provided via **IBM Robotic Process Automation (RPA)** to facilitate such requirements.

- **Analyzing the Client Onboarding solution using IBM Process Mining**

  Focus Corp is always looking for improvement opportunities to streamline their business activities. IBM Process Mining provides various means of analyzing execution logs of performed business processes to generate insights on how to improve them.

  One of the challenges is having access to execution data to derive meaningful insights from. At this point IBM Process Mining does not yet provide built-in capabilities to extract these for the Workflow capability as part of Cloud Pak for Business Automation.

- **Utilizing the capabilities of other IBM Cloud Paks**

  Focus Corp has multiple custom Systems of Records and packaged solutions that should be connected to the client onboarding solution. Similarly, as this is a very critical business application Focus Corp needs to ensure that it is constantly available, outages are avoided, or that it can at

least be recovered instantly. As the solution accesses critical client data and internal information, it needs to be secured against any threads and attacks. Finally, as Focus Corp is seeing the value of using machine learning they want to expand on it introducing proper governance etc.
In a future version of the end-to-end scenario, we expect to address these by integrating capabilities from the

- IBM Cloud Pak for Integration to address connecting various systems
- IBM Cloud Pak for Watson AIOps to automate IT operations and deliver actionable insights
- IBM Cloud Pak for Security to gain insights into threats and risks and respond faster
- IBM Cloud Pak for Data to scale AI-powered transformation easily by unifying data and tools in a single solution

This completes the lab to experience how IBM Cloud Pak for Business Automation can be used in a simplified version of a Client Onboarding solution as part of Focus Corp's service business.

Congratulations on completing the lab!

> We love to hear your **feedback**.
>
> Depending on the venue, please provide feedback via the Slack channel, during the Webex calls, by sending an email to the authors (Olaf.Hahnl@de.ibm.com / aswapnil@ca.ibm.com), and through the survey at the end of the event.