

IBM Cloud Pak for Business Automation Demos and Labs 2025

Documents Processing with DataCap+Watsonx.ai
in Cloud Pak for Business Automation

V 2.0.1 (for CP4BA 25.0.0)

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1. Introduction

1.1 IBM Datacap

IBM Datacap is a complete solution for document and data capture. Datacap scans, classifies, recognizes, validates, verifies, and exports data and document images quickly, accurately and cost effectively.

By combining the common recognition engines for Optical Character Recognition (OCR), Intelligent Character Recognition (ICR), Optical Mark Reading (OMR) and barcodes with libraries of hundreds of script-based and code-based (.NET) actions, Datacap accurately captures data from any type of structured, highly variable, or unstructured documents.

Datacap can capture machine print, handprint, bar codes, and check box data. By using the Datacap rules engine, data capture can be tailored to fit the most demanding business requirements and can be changed quickly when business needs change.

This scenario describes how to create and configure an application in DataCap and to integrate with Watsonx.ai using two authoring tools (**FastDoc Admin and Datacap Studio**), connect it to an **ECM system** as well as use the created application with **Datacap Desktop** (Watsonx client) and **Datacap Navigator** (web based through IBM Content Navigator).

1.2 Lab Overview

This lab demonstrates how to create a Datacap application and integrate it with *watsonx.ai* within IBM Cloud Pak for Business Automation. The focus is primarily on document capture and data processing capabilities using *Datacap in combination with watsonx.ai*. This case showcases how to classify documents and extract content using Watsonx.ai, simplifying the development, by reducing the need for complex rulesets such as fingerprinting, keyword or regex searches and ongoing maintenance. The Watsonx.ai integration also accelerates Datacap application development.

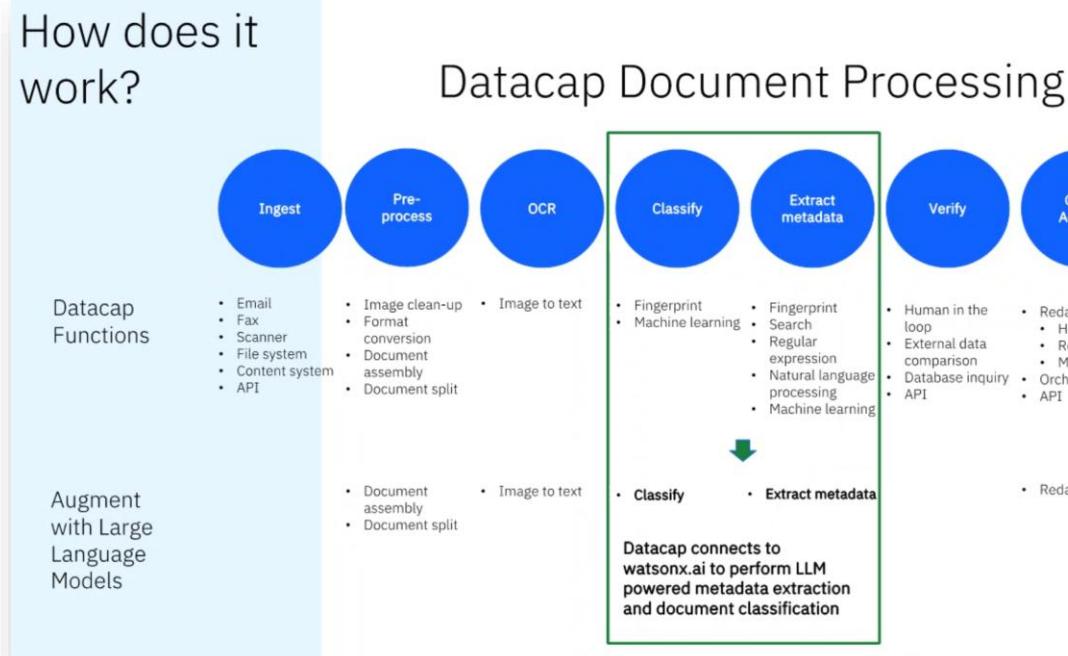


Figure 1: Datacap Document Processing Functions

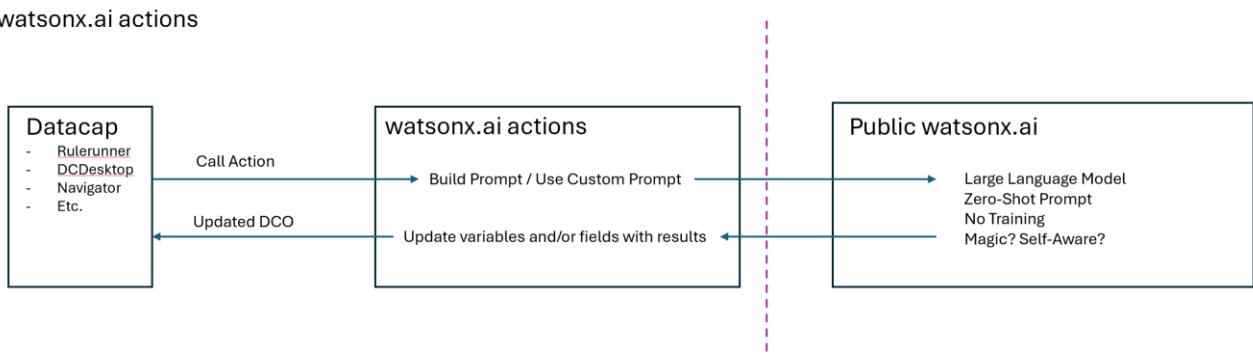


Figure 2: Watsonx.ai actions Flow diagram

1.3 Overview of Exercises

Exercise 1:

In this exercise you will use the *FastDoc Admin authoring tool* to create an initial version of the DataCap application. FastDoc Admin lets you create applications quickly; however, it does not give you easy access to the full functionality of the Datacap product.

Exercise 2:

In this exercise, you will use the *Datacap Studio authoring tool* to enhance the newly created application by adding rulesets, rules, functions, task workflows and additional fields, allowing for capturing additional input forms and configuring communication to the ECM system. Datacap Studio is the more complex, but all-encompassing developer tool for Datacap applications.

Exercise 3:

This exercise guides you with running the Datacap application you developed in an environment that closely simulates that of a production scenario.

You will first use the *Datacap Navigator Desktop*, which acts as the runtime environment for your application. It allows you to capture input in batches, process documents, and export the extracted data and images to the ECM repository. This experience mirrors how virtual scanning would typically be initiated from the Content Navigator desktop.

Following that, you will use *IBM Content Navigator* as both the user interface and runtime environment. This demonstrates how Datacap can be accessed and operated entirely through a web browser. It also reflects real-world usage, where in a production setup, most tasks—such as classification, recognition, and export—are automatically handled by Rulerunner. In such cases, the human operator is generally responsible only for performing the ‘Verify’ task.

By completing these combined exercises, you will gain insight into both runtime options, desktop and browser-based and understand how tasks are distributed in an automated Datacap workflow.

Exercise Format:

- i) *Exercise Introduction*
 - Provides a high-level overview of the goals and objectives of the exercise.
 - Lists all required data, configurations, or prerequisites.
 - Designed so that experienced users can complete the exercise using this section alone.
- ii) *Step-by-Step Instructions*
 - Detailed, easy-to-follow instructions to guide users through the exercise.
 - Ideal for less experienced users or those unfamiliar with the tools or technologies involved.

- Each step is clearly described to ensure successful completion.
- iii) *Verification Instructions*
- Explains how to test and validate your implementation.
 - Helps ensure your configurations or development steps are functioning as expected before moving on.
- iv) *Exercise Summary*
- Recaps what has been completed in the exercise.
 - Reinforces key learning outcomes and successful configurations.

In the lab instructions there are sections marked with a grey bar on the left side, like this one. In these sections, additional explanations are given. For example, about concepts and additional features.

1.4 Audience

This lab is suited to anyone interested in the Digital Business Automation space, especially technical people who are interested in the details of processing input originating from paper forms, extracting image content to strings and numbers that will be fed into the other components like *IBM Business Automation Workflow* and processed there.

1.5 Getting HELP during the lab

You may reach out to the following resources at hand for any help needed during performing the lab:

- For ***internal IBMer***, check the archived slack channel for questions: **#ba-wxo-tech-jam-Datacap+Watsonx.ai**. You may also use the Microsoft teams to raise the query.
- For ***external participants*** besides the Slack channel, use the *Microsoft Teams* to raise your query if you are in a TechJam event team meeting.
- Getting help after lab, reach out to the following:
 - Sundeep.anne@ibm.com(preferred)
 - harrish.narayanan@ibm.com
 - pooja.luthra@ibm.com

2. Lab Setup

2.1 Provision Techzone Environment

IBM TechZone – Overview

What is IBM TechZone?

IBM Technology Zone (techzone.ibm.com) enables IBM teams and IBM Business Partners to provision technical “Show Me” live environments, Proof-of-Technologies, prototypes, and Minimum Viable Prototypes, which can be customized, shared with peers and clients to experience IBM Technology.

Learn more: <https://techzone.ibm.com/collection/onboarding#tab-1>



Note: If you have been assigned a pre-provisioned DBA vM environment as part of the IBM event, you can skip this section, ‘2.1.1 Reserve Environment’, and continue to section ‘2.2’.

2.1.1 Reserve Environment

- _1. Navigate to:
<https://techzone.ibm.com/collection/ibm-business-automation-traditional-and-on-premise/environments>.
- _2. Click IBM Business Automation-Traditional and on-premises.v4.5 tile (at the right most end of the screen) and click on **Reserve**

The screenshot shows a list of environment tiles. The first tile is for 'IBM Business Automation - Traditional and On-premises. V3.3 [Updated 2025-01-03]'. The second tile is for 'IBM Business Automation - Traditional and On-premises. V4.5 [Updated 2025-08-26] - US East...'. Both tiles show their descriptions, update dates, and visibility levels (IBMer, Business Partners). Below each tile is a 'Reserve' button, with a hand cursor hovering over the one for the V4.5 environment.

- _3. On Create a reservation screen **select option** for 'Education' in **Purpose**. which will give you 2 days to complete your lab exercises. Otherwise, you will need a legitimate opportunity to leverage another

reservation type.

The screenshot shows the 'Create a reservation' page. At the top, there are tabs for 'IBM Technology Zone', 'My TechZone', and 'Support'. Below the tabs, the title 'Create a reservation' is displayed, along with the subtitle 'IBM Business Automation - Traditional and On-Premises'. There are three main tabs at the top of the form: 'Select a environment/infrastructure' (selected), 'Select a reservation type' (radio button), and 'Fill out your reservation' (radio button). A progress bar indicates 'Complete' status. The 'Name' section contains the text 'IBM Business Automation - Traditional and On-premises, V4.5 [Updated 2025-08-26] - US East Only'. The 'Purpose' section has a dropdown menu with 'Education' selected, which is highlighted with a red box and a hand cursor icon. Other options include 'Test' and 'Demo'. The 'Sales Opportunity number' section has a placeholder 'Enter an opportunity number' and a note about providing an IBM Sales Cloud opportunity number or a Project Work ID. The 'Purpose description' section contains the text 'Datacap>Watsons@Lab Exercises'. The 'Preferred Geography' section shows 'itzvmware-itzna3-wdc06 - AMERICAS - us-east region - wdc06 datacenter'. The 'Start date and time' section shows '09/15/2025 04:30 PM' and 'America/New_York'. The 'End date and time' section shows '09/17/2025 04:30 PM' and 'America/New_York'. A note at the bottom of the form states: 'Reservation policy: Recommended 2 days, but can be reserved up to 2 days on this reservation form. Extended later for 2 days increments up to 4 days total. Max time 6 days total.' On the right side, there is a sidebar with 'Environment' and 'Business Automation - Traditional and On-premises, V4.5 [Updated 2025-08-26] - US East Only'. It also includes a 'Duration Policy' dropdown and a checkbox for 'I agree to IBM Technology Zone's Terms & Conditions and End User Security Policies'. A blue 'Submit' button is located at the bottom right of the form.

- _4. Enter <some description> in the Purpose description box.
- _5. For Preferred Geography (required) select your preferred data center location

The screenshot shows the 'Preferred Geography' section of the reservation form. It displays the selected location: 'itzvmware-itzna3-wdc06 - AMERICAS - us-east region - wdc06 datacenter'. This section is part of a larger form with other fields like 'Start date and time' and 'End date and time'.

- _6. Select a date a time if you picked something different then “Education” for the reservation. (if not, it will already be chosen for you)
- _7. On the right-hand pane, click on the option “I agree” and click on the “Submit” button.

The screenshot shows the IBM Technology Zone reservation form. At the top, there are tabs for 'IBM Technology Zone', 'My TechZone', and 'Support'. Below the tabs, there are three main sections: 'Select a environment/infrastructure' (set to 'IBM Business Automation - Traditional and On-premises, V4.5 [Updated 2025-08-26] - US East Only'), 'Select a reservation type' (set to 'Fill out your reservation'), and 'Complete'. The 'Name' field contains 'IBM Business Automation - Traditional and On-premises, V4.5 [Updated 2025-08-26] - US East Only'. The 'Purpose' section includes 'Demo' (selected), which describes it as 'Deliver a client specific demonstration based on discovery with the client and aligns to the identified architecture. Automatically captures Technical Sales Activity in IBM Sales Cloud on the Opportunity code provided.' It also includes 'Education' (selected) with the description 'Gaining experience with specific technology, product, or solution.', 'Pilot' (not selected), and 'Test' (not selected). The 'Sales Opportunity number' field contains 'Enter an opportunity number' and 'Providing an IBM Sales Cloud opportunity number, or a Project Work ID will allow you to extend your reservation date.'. The 'Purpose description' field contains 'Datacap+Watsonx.ai Lab Exercises'. The 'What are you doing? Why do you need this? What are you trying to accomplish?' field is empty. The 'Preferred Geography' dropdown is set to 'itzvmware-itzna3-wdc06 - AMERICAS - us-east region - wdc06 datacenter'. Under 'Start date and time', the 'Select a date' dropdown is set to '09/15/2025' and the 'America/New_York' dropdown is selected. Under 'End date and time', the 'Select a date' dropdown is set to '09/17/2025' and the 'America/New_York' dropdown is selected. A note at the bottom of this section states 'Reservation policy: Recommended 2 days, but can be reserved up to 2 days on this reservation form. Extend later for 2 days increments up to 4 days total. Max time 6 days total.' In the bottom right corner, there is a checkbox labeled 'I agree to IBM Technology Zone's Terms & Conditions and End User Security Policies' with a checked box, and a blue 'Submit' button.

- _8. You will receive an email saying ‘Reservation Provisioning on IBM Technology Zone’. Once provisioning gets completed, you will receive another email telling that your environment is ready. Once the start-up process is completed, you can click on the links identified in the email. However, it is recommended that you review your reservation information from the IBM Technology Zone – [My reservation site](#).

 In the emails, pay attention to the Step and Status. The system is not up fully until the Step labeled “Cloud Pak Services Running” has a status of “Complete”.

 If after receiving email, a few hours have passed but your environment is not up, check with Techzone support team via [How to Open a Support Web Case for IBMers](#).

- _9. You will also need to reserve the **Watsonx.ai Techzone Tile** to obtain the Project ID and API key, which are required for integrating Datacap with Watsonx.ai Foundation Models.

Watsonx.ai Techzone Reservation Tile:

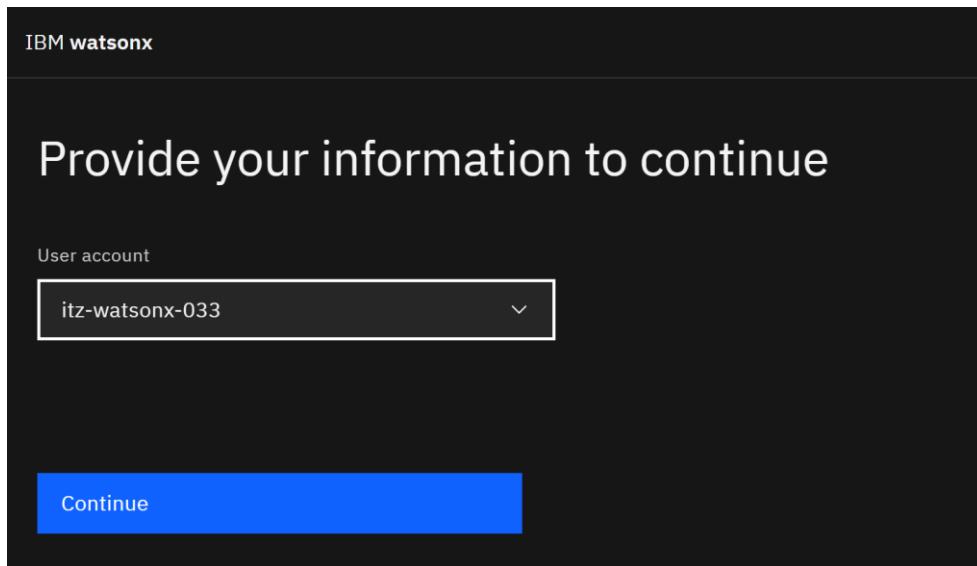
<https://techzone.ibm.com/my/reservations/create/6696a8ada7b42e001ef21b52>

To reserve this Techzone Tile, you must have a valid opportunity code.

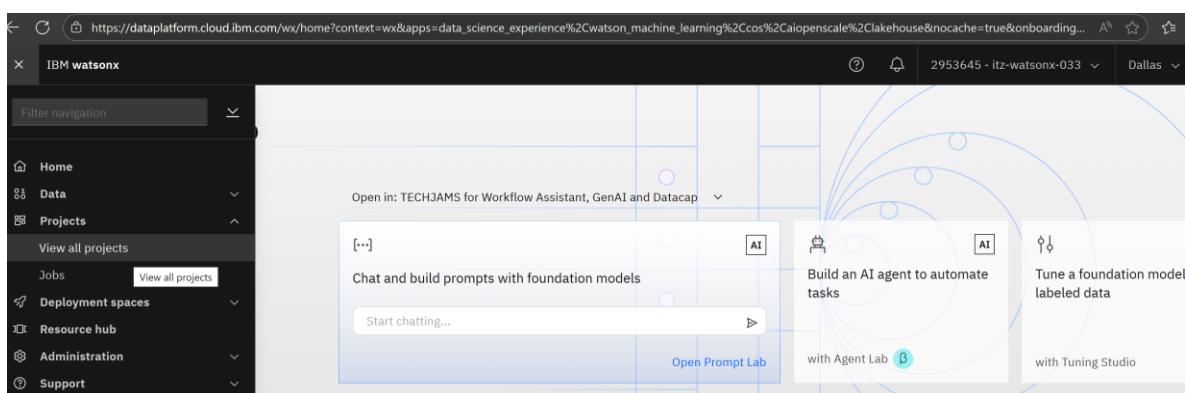
Note: Once you reserve the Watsonx.ai TechZone environment, you’ll receive multiple emails such as “Reservation Provisioning on IBM Technology Zone” and “Reservation Transferred on IBM Technology Zone.” If you don’t receive an invitation email to join the IBM Cloud account, you’ll need to use the AskTZ self-help chat. Provide the email ID you used to log into TechZone and the reservation ID from the confirmation email.

If your reservation is successfully retrieved based on the information provided, you’ll receive a join invitation email. Once you click “Join,” your ID will be mapped to the IBM Cloud account, giving you access to Watsonx Studio. From there, you can create a project and use its details—such as Project ID and API Key—for Datacap integration.

- _10. Once you've joined the account, you can access watsonx.ai by clicking the provided link, selecting the account listed in your invitation email, and then clicking "Continue."



- _11. Once you've successfully accessed the environment, you'll see the Open Prompt Lab. Click the hamburger menu, then select "View All Projects" to proceed.



- _12. Click on "New Project," enter a name for your project, and then click the "Create" button to proceed.

A screenshot of the "Create a project" dialog box. It has tabs for "New", "Local file", and "Sample". The "New" tab is selected. The "Name" field contains "Datacap+Watsonx.ai". The "Description (optional)" field is empty. The "Tags (optional)" field has "Add tags" and "Add tag" buttons. The "Storage" field contains "itz-watsonx-033". The "Advanced settings" dropdown is open. At the bottom are "Cancel" and "Create" buttons, with "Create" being highlighted.

_13. You'll see four tabs: Overview, Assets, Jobs, and Manage. Please click on the Manage tab to continue.

The screenshot shows the IBM Watsonx interface for a project named "Datacap+Watsonx.ai". The top navigation bar includes a menu icon, the "IBM Watsonx" logo, user information (2953645 - itz-watsonx-033), and a location dropdown (Dallas). Below the header, there are four tabs: "Overview" (selected), "Assets", "Jobs", and "Manage". A "Start working" section contains four cards with icons and text: "Add users as collaborators", "Add data to work with", "Chat and build prompts with foundation models", and "Tune a foundation model with labeled data". Below this is a "View all" link. The main content area is divided into three columns: "Jump back in" (with a "View all" link), "Resource usage" (showing 0 CUH, 0 Tokens, 0 Hosting hours, and 0 Pages), and "Your documentation" (with a "New!" badge, a "Get started with your documentation" message, and a "Open Documentation editor" button). At the bottom, there's a "Project history" section showing a recent creation entry: "You created project Datacap+Watsonx.ai Today at 11:55 AM".

_14. You can find the Project ID—needed for integrating Watsonx.ai with Datacap—under the Manage tab. Be sure to copy this ID for use during the configuration process.

The screenshot shows the "Manage" tab selected in the IBM Watsonx project settings. On the left, a sidebar menu has "General" selected under the "Project" section, while other options like "Access control", "Environments", "Resource usage", and "Services & integrations" are available. The main "General" tab displays project details: "Name" (Datacap+Watsonx.ai), "Description" (What's the purpose of this project?), and "Tags" (Add tags to make projects easier to find). At the bottom, there's a "Project ID" field with a redacted value.

_15. From the left-hand menu, select Services and Integrations, then click on Associate Service to proceed.

- _16. From the hamburger menu, click on IAM under the Administration section. This will open a new tab where you can create API keys. These keys will be valid for your IBM Cloud account and can be used across any of your projects.

- _17. Click Create, enter a name for the key to help you remember its purpose, then copy and download the API key for safekeeping.

The screenshot shows the IBM Cloud IAM API keys management interface. The left sidebar has a 'API keys' section selected. The main area displays a table of API keys with columns for Status, Name, Description, Date created, and Enabled. Two entries are listed:

Status	Name	Description	Date created	Enabled
Open	TechJAm		10-1-2025 01:11 GMT	<input checked="" type="checkbox"/> Yes
Open	TigerTeamAPIKey		10-1-2025 01:12 GMT	<input checked="" type="checkbox"/> Yes

- _18. Once you have the API key, return to the previous browser tab where Watsonx Studio is open. From the hamburger menu, click Home. You'll see the Prompt Lab featuring your newly created project. Click on the Freeform tab, where you can test your prompt and view the available foundational models, as shown in the screenshot.

The screenshot shows the Watsonx Prompt Lab interface. The top navigation bar includes 'Projects / Datacap+Watsonx.ai / Prompt Lab'. The main area has tabs for Chat, Structured, and Freeform, with Freeform selected. On the left, there's a sidebar with 'Sample prompts' and 'Meeting transcript summary'. The central workspace shows a 'Hint' message: 'Hint: This model works better when you provide at least 1 example.' Below it, there's a text input field with placeholder text: 'Enter your prompt text. Remember: This is not a chat interface. Provide instructions and examples to show the model what to do.' At the bottom, there's a note: 'When you prompt a text-generating model, the model responds by appending text to your prompt text or continuing your prompt text.' To the right, there are AI model selection options: 'Model: granite-3-8b-instruct' and a dropdown for 'View all foundation models'.

- _19. Switch the model to “mistralai/mistral-small-3-1-24b-instruct-2503” as it was used for this particular use case. You’re also free to explore other available models if needed.
- _20. To retrieve the necessary integration details—Project ID, Endpoint URL, and Model Name—click on the View Code tab located at the top-right corner next to the foundational models. Copy the displayed cURL command into a notepad; it contains all the required parameters for integrating Datacap with Watsonx.ai.

The screenshot shows the Prompt Lab interface with the following details:

- Projects / Datacap+Watsonx.ai / Prompt Lab**
- Sample prompts** section:
 - A message: "Not sure how to improve your prompt?" with a "Try these prompt tips" button.
 - A hint: "Hint: This model works better when you provide at least 1 example."
 - An input field placeholder: "Enter your prompt text."
 - A note: "Remember: This is not a chat interface. Provide instructions and examples to show the model what to do."
 - A message: "When you prompt a text-generating model, the model responds by appending text to your prompt text or continuing your prompt text."
 - A note: "Try the sample prompts for a variety of use cases."
- View code** section:
 - Curl, Node.js, Python tabs.
 - Code snippet:


```
curl "https://us-south.ml.cloud.ibm.com/ml/v1/text/generate?version=2023-05-29" \
-H 'Content-Type: application/json' \
-H 'Accept: application/json' \
-H "Authorization: Bearer ${YOUR_ACCESS_TOKEN}" \
-d '{
  "input": "",
  "parameters": {
    "decoding_method": "greedy",
    "max_new_tokens": 200,
    "min_new_tokens": 0,
    "stop_sequences": [],
    "repetition_penalty": 1
  },
  "model_id": "mistralai/mistral-small-3-1-24b-instruct-2503",
  "temperature": "0.05"
}'
```

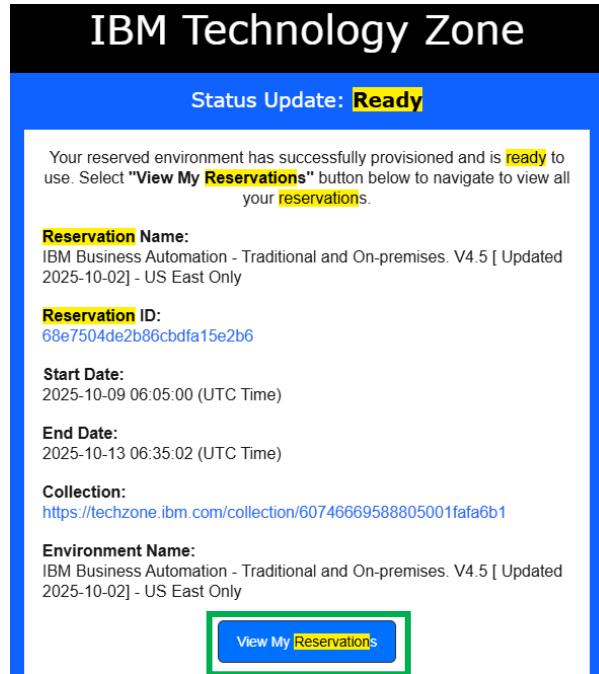
Note:

- Reservations are restricted to Demo or Pilot use only.
- Education and testing reservations are currently unavailable due to high operational costs in this environment.

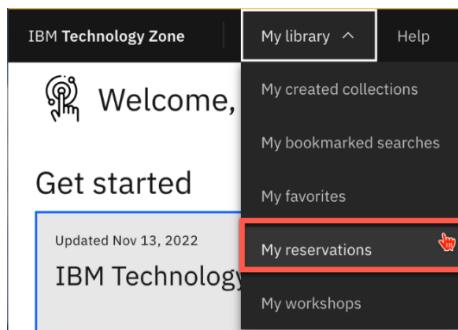
For **Tech Jam events**, a *temporary project ID and IAM key* with limited tokens will be provided by the event organizers.

Thank you for your understanding and cooperation.

- _21. Once you get the email from the IBM Technology Zone site, you can access your environment reservation(s) by **clicking** on the View My Reservations link in email.



Or you may access the same from your reservations in the Techzone environment under **My library** then clicking on **My Reservations**



You can also access directly using the link below

<https://techzone.ibm.com/my/reservations>

2.2 Getting Started – Accessing the Environment

This section explains how to access the DBA VM environment prepared for DBA Demos and Labs v25.0.0, and how to get familiar with the key tools required for the upcoming exercises.

Tool	Location / URL
Datacap FastDoc	Start -> Datacap FastDoc (Admin)
Datacap Studio	Start -> Datacap Studio

For this, you will require the following IDs and passwords:

Access Mode	User ID	Password
Windows Console	Administrator	IBMDem0s!
Datacap FastDoc/Desktop	admin	admin

Step 1: Open the reserved environment by navigating to the TechZone
URL:<https://techzone.ibm.com/my/reservations>

Step 2:

Click on the **Console** icon from the **Status** page, as shown below.

Status

- Requested
- Pending Approval
- Scheduled
- Promotional
- Ready
- Available for use
- Deleted

Published services

- Port 80: seast.services.cloud.techzone.ibm.com:72400
- Datacap REST API: <http://seast.services.cloud.techzone.ibm.com:35962/ServiceWITM.svc/help>
- ODM Decision Center: <http://seast.services.cloud.techzone.ibm.com:29550/decisioncenter>
- BAW Navigator: <http://seast.services.cloud.techzone.ibm.com:4480/navigator>
- Remote Desktop (RDP): <http://seast.services.cloud.techzone.ibm.com:22522>
- SOR for wvd Labs: <http://seast.services.cloud.techzone.ibm.com:10429>
- Remote Desktop (VNC): <http://seast.services.cloud.techzone.ibm.com:26004>

Purpose

Purpose	Opportunity ID
Demo	004gR000000XEH044
Opportunity Product(s)	Opportunity description
004gR000000V537QAO	Datacapstone.ai lab preparation for Tech Jam events and Tech Sellers and Business Partners
Customer(s)	

Environment

Reservation ID	Type
6fc894aabfc3ca3fb8ba49f0	IBM Cloud
Request method	Transaction ID
vmware-template	6d140039-7f7e-49bd-a53c-4923ed733960
Cloud Account	Geo
ITZMMWAIK-ITZNA3-WDC06	americas
Region	Datacenter
us-east	wdc06
Customer data	Environment
false	6fc894aabfc3ca3fb8ba49f0
Idle runtime limit	Timeout action
10800	

Virtual Machines

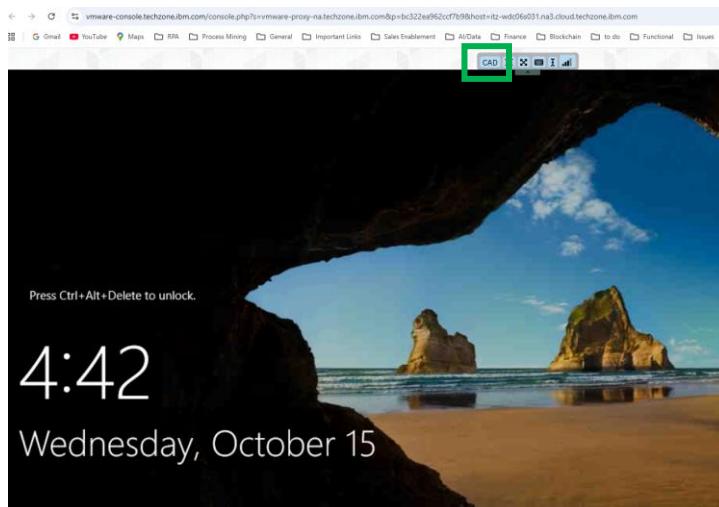
Name	OS	IP	Status
6fc894aabfc3ca3fb8ba49f0-QDA-4-2022	Microsoft Windows Server 2022 (64-bit)	10.0.0.6	Running Console 🔗

Step 3:

The console window opens, if the windows appears in locked state, unlock the windows using the controls at the top of console(CAD) and enter the following credentials to login:

Username – Administrator

Password – IBMDem0s!

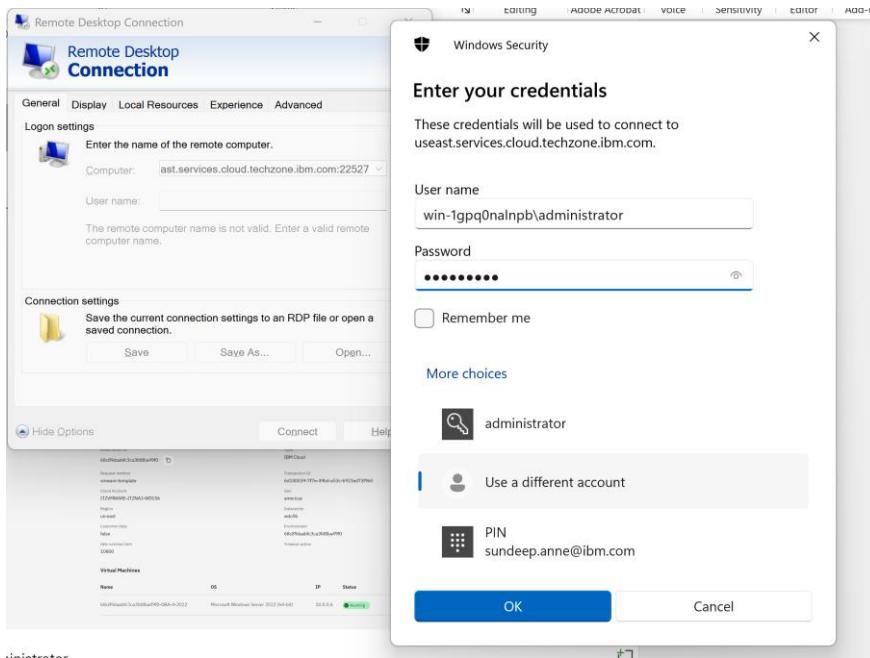


Alternatively, you can connect to the virtual machine using the **Remote Desktop Client** on your local machine.

To do this, copy the **RDP** link from the **Reservation Status** page and paste it into your RDP client.

Use the following credentials:

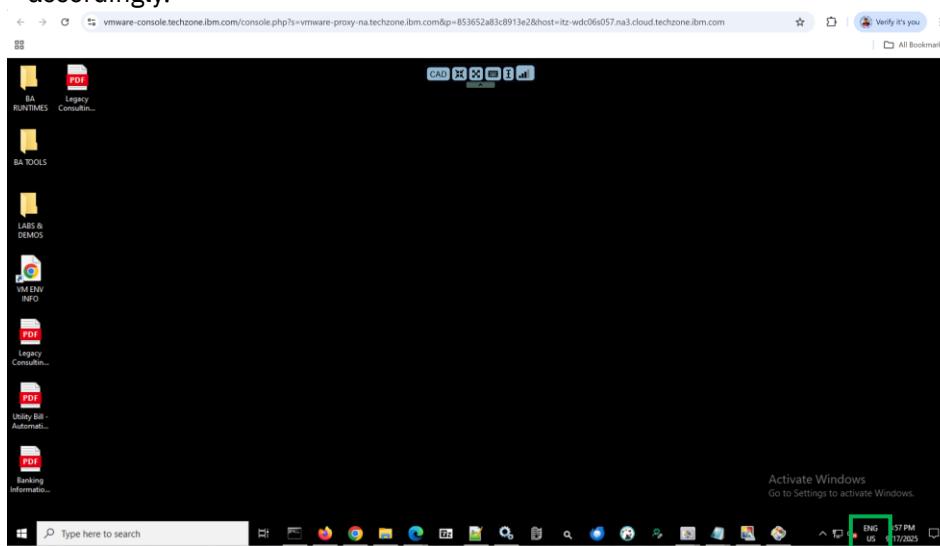
- Username:** win-1gpq0nalnpb\administrator
- Password:** IBMDem0s!



Step 4: The VM's desktop will open in a new browser tab.

2.3 Introducing the components

- As a first step, you may want to change the keyboard layout from **US English** to your preferred language. You can do this at two locations using your mouse:
 - In the **Windows taskbar** (bottom right corner) – click the language/icon to switch layouts.
 - In the **browser's remote desktop toolbar** (if available) – adjust the keyboard input settings accordingly.



- Have a look at the start menu. Here you find:

- ✓  **Datacap FastDoc**, one of the two development environments. It will be used in Exercise 01 to build a first version of the application.



✓ **Datacap Studio**, the other development environment which will be used in Exercise 2 to enrich the application with further fields, features and functionality.

- ✓ To use **Datacap Navigator** to run the Datacap “**ClientDocumentProcessing**” application which will be used in Exercise 3. ‘<https://win-1gpq0nalnpb:9443/navigator/?desktop=ClientDocumentProcessing>’

A screenshot of a web browser window displaying the Datacap Navigator interface. The title bar shows the URL: "win-1gpq0nalnpb:9443/navigator/?desktop=ClientDocumentProcessing". The main content area is titled "IBM Capture Demonstration" and "ClientDocumentProcessing". It features a central table with columns: Queue, Job, Task, Status, Job Start, Job Time, Operator, Station, Docum..., and Pages. A single row is visible with the values: Queue... (highlighted with a dashed border), 20250916.000007, Navigator Job, Export, Job done, 9/26/2023, 9:54 PM, 1, admin, 1, 1, 1. To the left of the table is a sidebar with icons for Scan, Verify, and Upload, along with a "Saved Filter" section. On the right side, there is a "Properties" panel showing "Class: Queue" and "Batch: 20250916.000007", and a "System Properties" section.

3. Exercises – Configuration Lab Instructions

3.1 Exercise 1: Create Datacap application by using Datacap FastDoc Admin

3.1.1 Datacap FastDoc – Introduction

In this exercise, you will explore the user interface of Datacap FastDoc.

Datacap FastDoc	Start -> Datacap FastDoc (Admin)
-----------------	----------------------------------

End result/Conclusion: The exercise is completed when you build the first version of the ClientDocumentsProcessing solution and extract the desired data fields from the Client Onboarding documents.

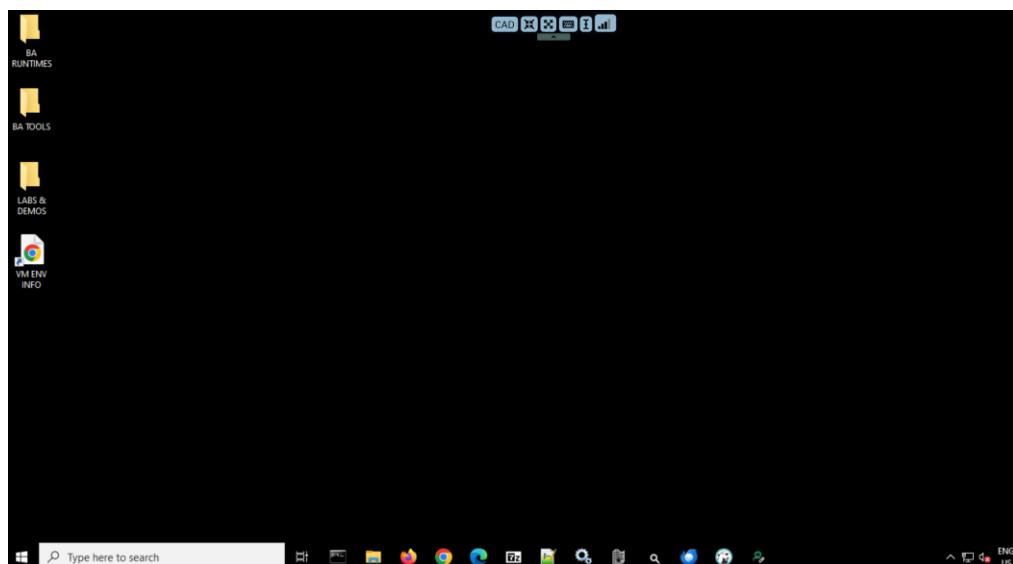
Using FastDoc, you'll learn that the overall processing of a Datacap application follows a more or less fixed sequence of major steps (the Datacap workflow).

Note: You use FastDoc Admin and Datacap Studio tools throughout the exercises.

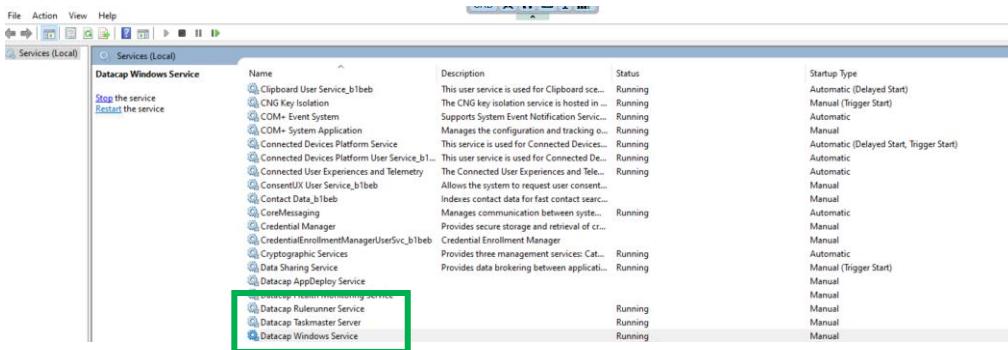
3.1.2 Datacap FastDoc – Step by Step Instructions

To get started with this exercise, execute the following steps:

1. Log in to VM using the credentials as relevant provided in **section 2.2**.



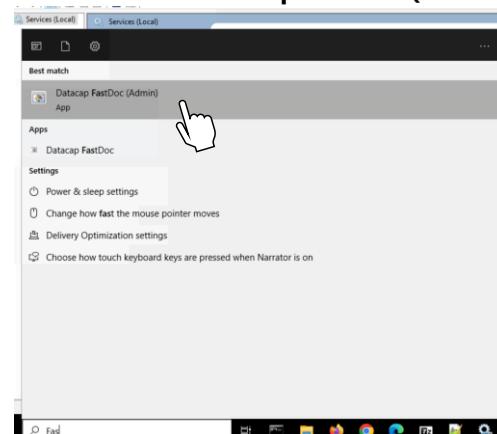
2. Ensure Datacap Server is started. Go to “Services” and check the status of three Datacap services as listed below:
 - ✓ Datacap Taskmaster Service
 - ✓ Datacap Rulerunner Service
 - ✓ Datacap Windows Service



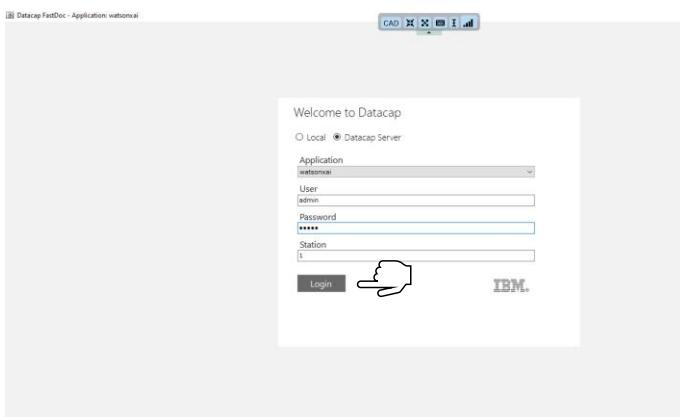
3. If it's not already running, start it by right clicking on the Datacap Task Master and do the same for the rest of the mandatory services enlisted in point 2.

Name	Description	Status	Startup Type
Clipboard User Service_b1beb	This user service is used for Clipboard sce...	Running	Automatic (Delayed Start)
CNG Key Isolation	The CNG key isolation service is hosted in ...	Running	Manual (Trigger Start)
COM+ Event System	Supports System Event Notification Servic...	Running	Automatic
COM+ System Application	Manages the configuration and tracking o...	Running	Manual
Connected Devices Platform Service	This service is used for Connected Device...	Running	Automatic (Delayed Start, Trigger Start)
Connected Devices Platform User Service_b1...	This user service is used for Connected De...	Running	Automatic
Connected User Experiences and Telemetry	The Connected User Experiences and Telem...	Running	Automatic
ConsentUX User Service_b1beb	Allows the system to request user consent...	Running	Manual
Contact Data_b1beb	Indexes contact data for fast contact sear...	Running	Manual
CoreMessaging	Manages communication between syste...	Running	Automatic
Credential Manager	Provides secure storage and retrieval of cr...	Running	Manual
CredentialEnrollmentManagerUserSvc_b1beb	Credential Enrollment Manager	Running	Manual
Cryptographic Services	Provides three management services: Cat...	Running	Automatic
Data Sharing Service	Provides data brokering between applicati...	Running	Manual (Trigger Start)
Datacap AppDeploy Service		Running	Manual
Datacap Health Monitoring Service		Running	Manual
Datacap Rulerunner Service		Running	Manual
Datacap Taskmaster Server		Running	Manual
DB2 - DB2COPY1 - BP0105T-0	Allows applications to create, update, con...	Running	Automatic
DB2 Governor (DB2COPY1)	Collects statistics for applications connect...	Running	Manual
DB2 Logon Service (DB2COPY1)	Manages DB2 logons	Running	Manual
DB2 Management Service (DB2COPY1)	Manages DB2 registry entries for backwar...	Running	Automatic
DB2 Remote Command Server (DB2COPY1)	Supports remote DB2 command execution	Running	Automatic
DB2DA5 - DB2DA500	Supports local and remote database admini...	Running	Manual
DCOM Server Process Launcher	The DCOMLAUNCH service launches CO...	Running	Automatic
Declared Configuration(DC) service	Process Declared Configuration document...	Running	Manual (Trigger Start)
Delivery Optimization	Performs content delivery optimization ta...	Running	Manual (Trigger Start)
Device Association Service	Enables pairing between the system and ...	Running	Manual (Trigger Start)

4. Click on Start and select '**Datacap FastDoc (Admin)**'.



5. Select "**Datacap Server**", choose any application, and log in using the following credentials:
 • **Username:** admin, **Password:** admin and **Station:** 1

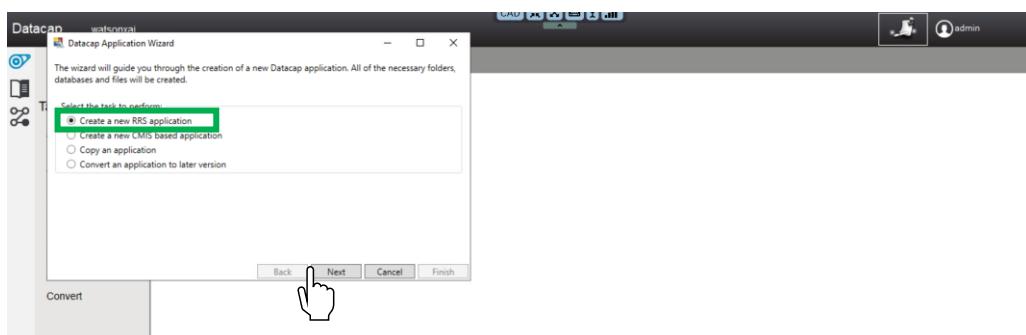


6. Explore the user interface of Datacap FastDoc:

- ✓ Explore the different sections (Top bar, leftmost column)
- ✓ Click on the different icons in the leftmost column. For each of these icons, the rest of the UI shows what you can do and what you can act upon.
- ✓ is for processing batches of documents
You see various actions that you can perform on batches of documents.
- ✓ is for configuring documents, pages and fields. You can browse through the structure of a document with its pages and fields.
- ✓ is for configuring the Datacap workflow
You see various types of jobs, the high-level steps of the job's workflow and which processing rules are associated with each of these steps.

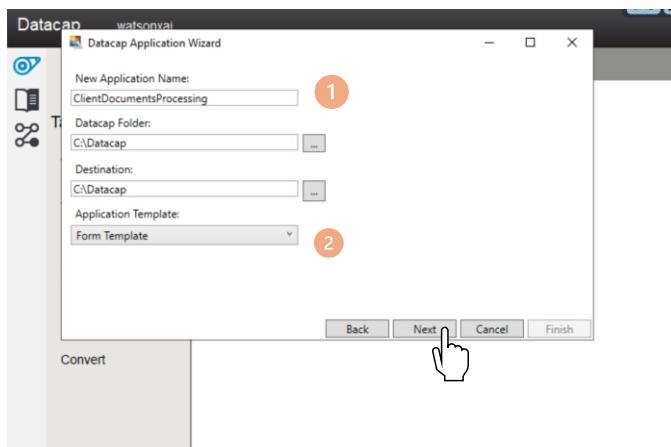
7. Now you will start to define the application for this exercise:

8. In the top right corner bar, click on Application Wizard ()
9. Select '*Create a new RRS application*' and click on 'Next' button.

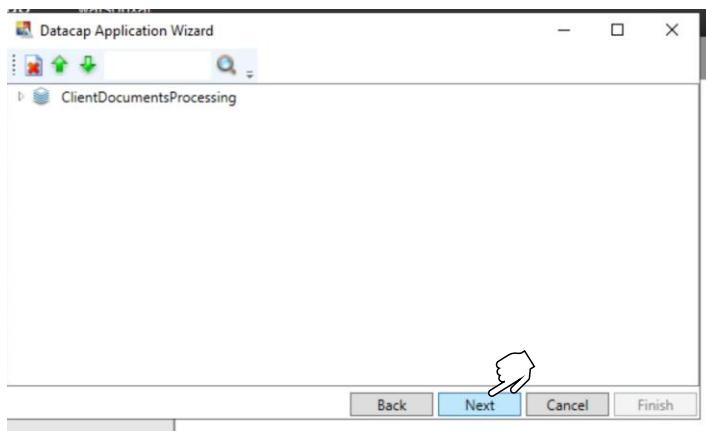


(RRS stands for RuleRunner Service, which is one of Datacap's internal components)

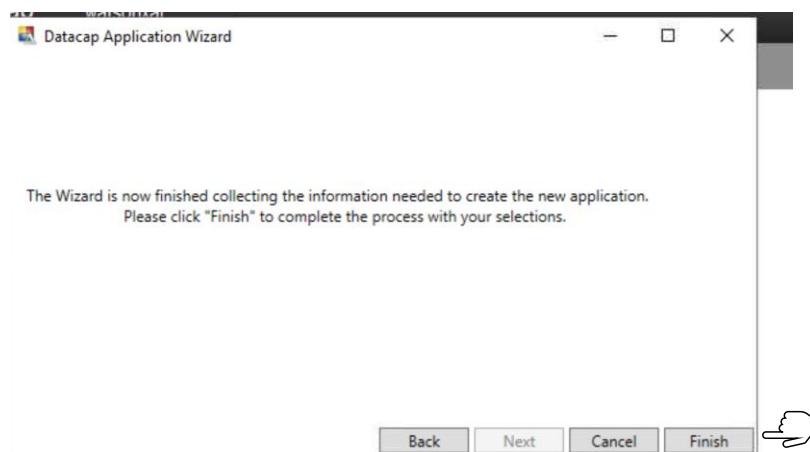
10. Enter in *New Application Name*: **ClientDocumentsProcessing** and set value of *Application Template*: **Form Template**. Click on **Next**.



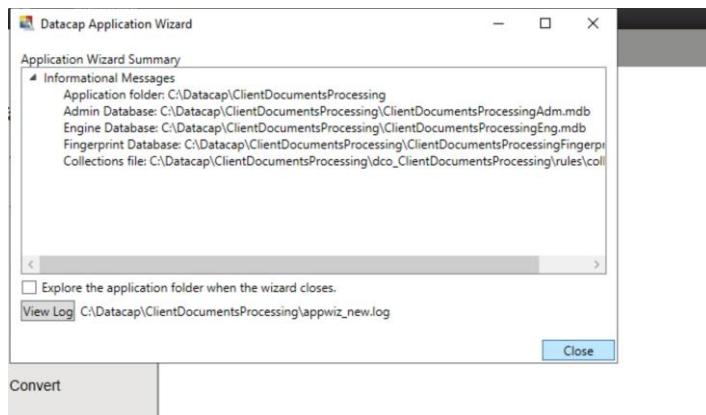
11. Client Documents Processing is displayed, click **Next**.



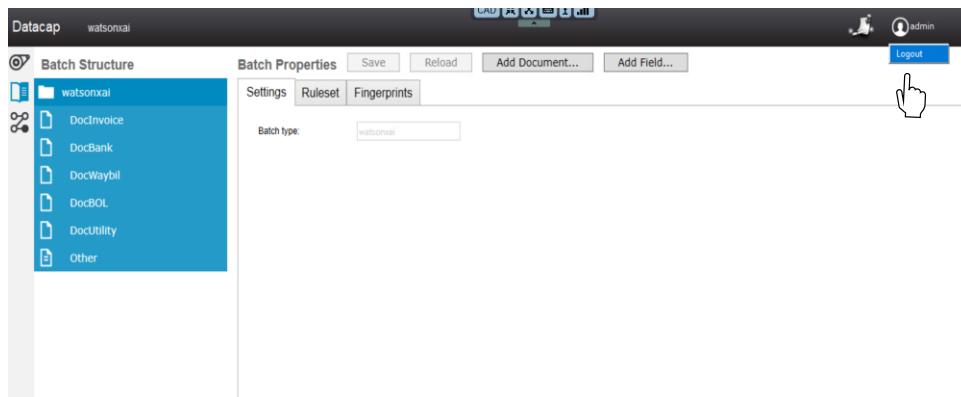
12. Click **Next** again in the next window. Click on **Finish** in the following window to finish the process of selections.



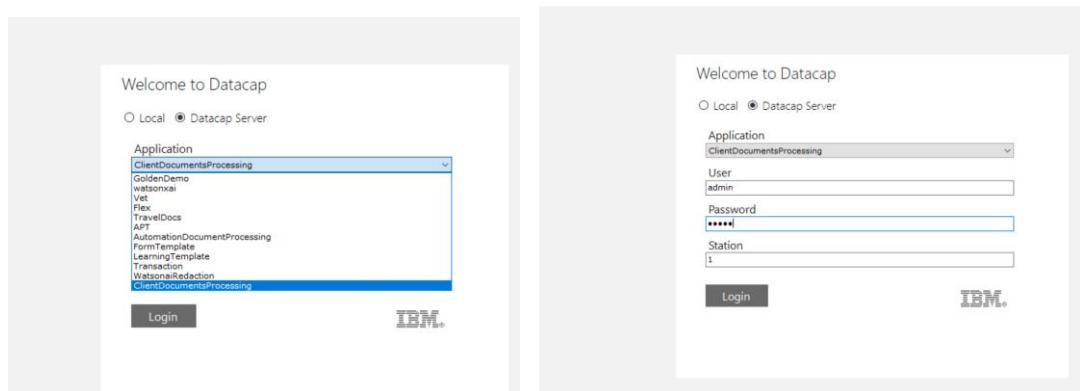
13. Once the Datacap application is successfully created, you will see the Datacap Application Summary screen as shown below. Click on **Close** button.



14. Log out of the Datacap FastDoc application .

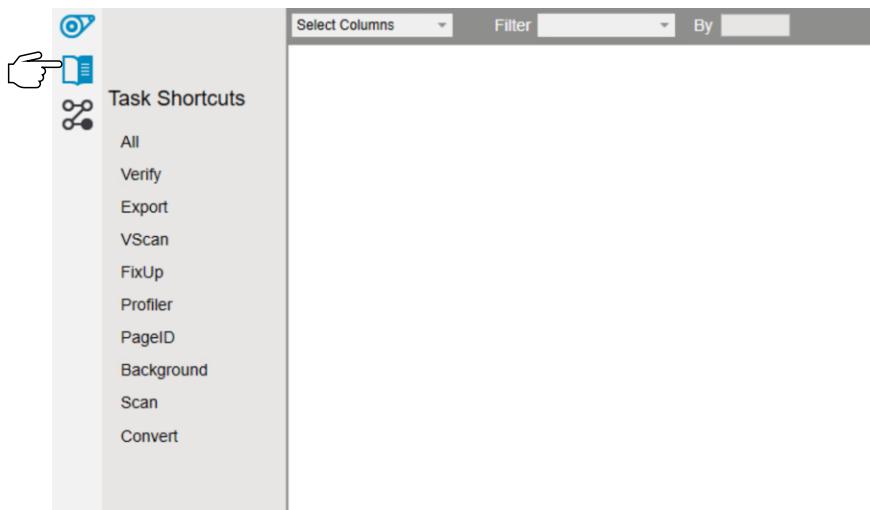


15. Log in again by first selecting **ClientDocumentsProcessing** application and using the **admin/admin** credentials with **station 1**. Click on **Login** button.

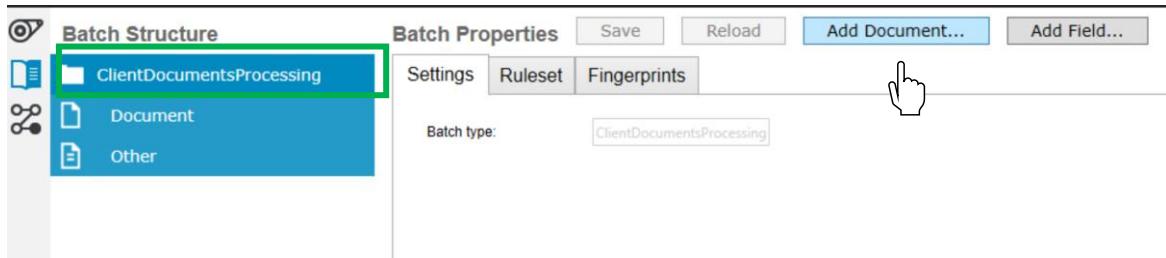


You are creating the Client Document Type and Page Types using the FastDoc app.

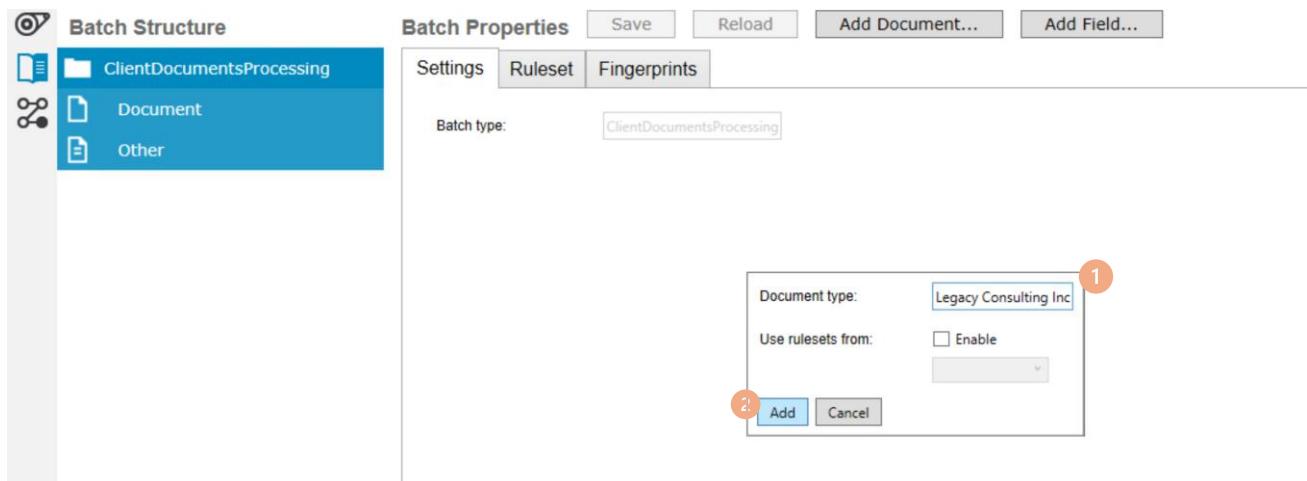
16. Click on the icon which is for configuring documents, pages and fields.



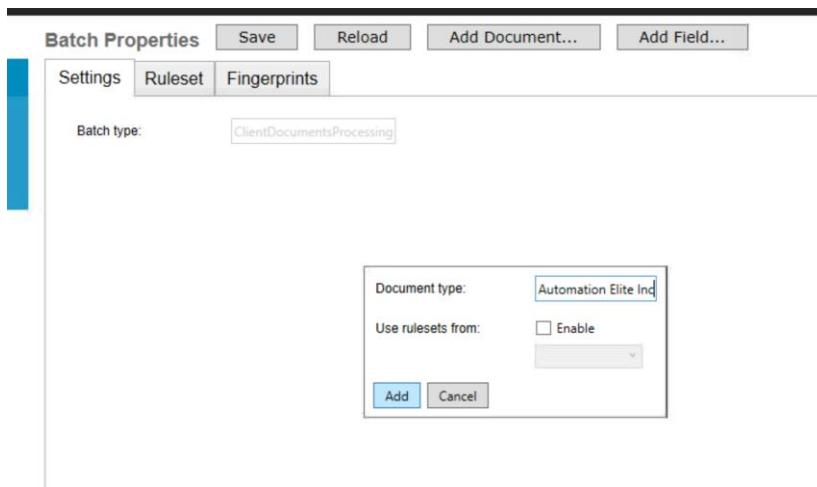
17. Select ClientDocumentsProcessing under Batch Structure and click on Add Document.



18. Name the document type as **Legacy Consulting Inc.** and click on **Add** button.

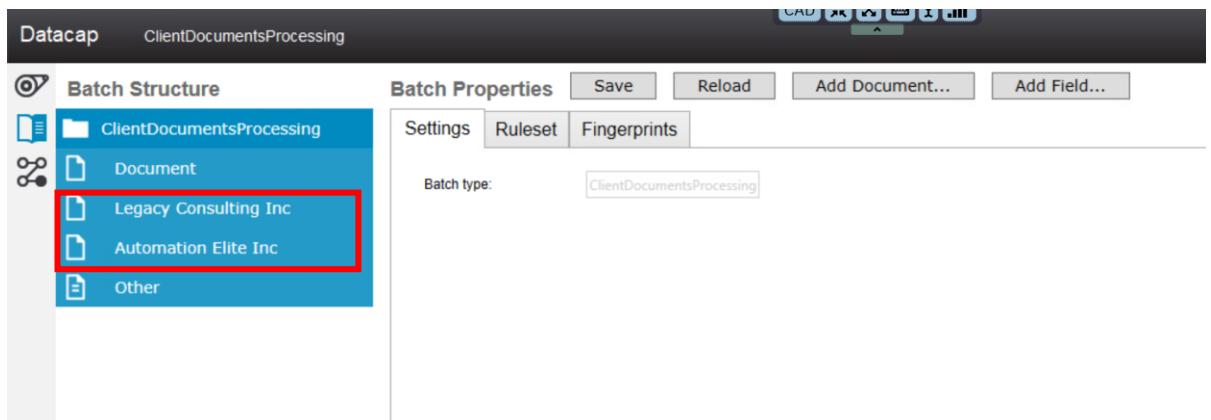


19. Click **Add Document** again to create another document type, and name it **Automation Elite Inc.**

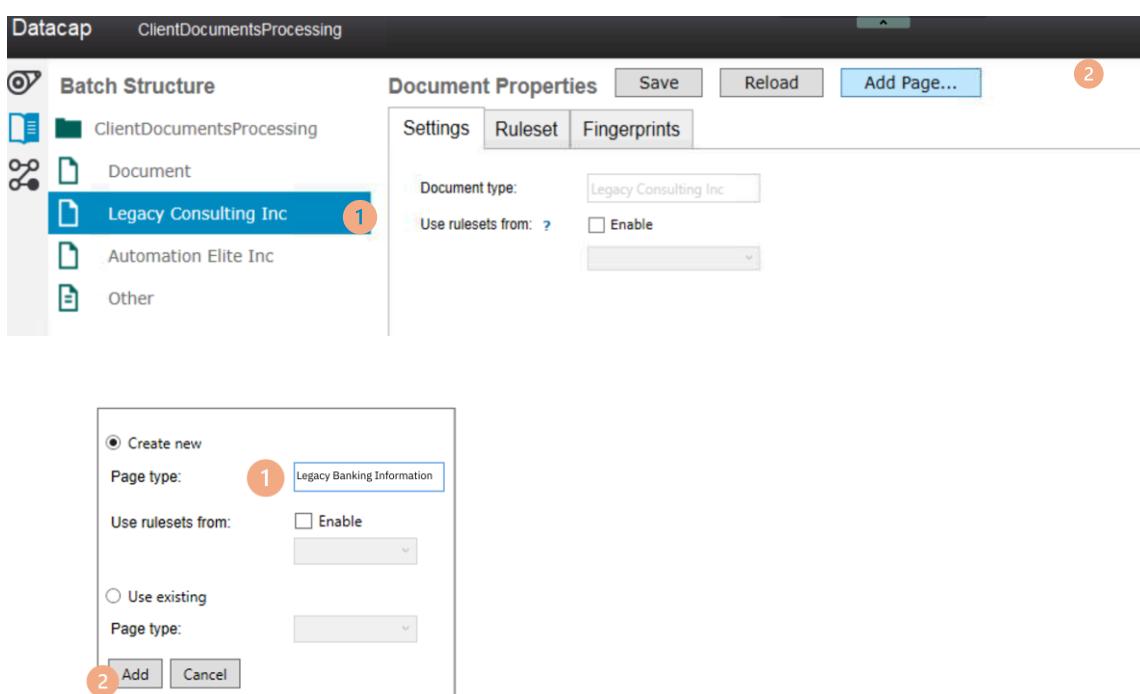


20. Click on Save button

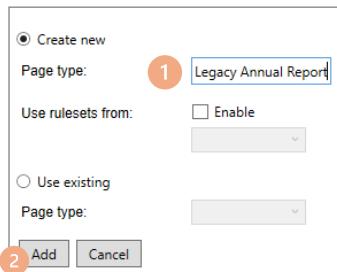
21. You can see two new document types created as shown in the screenshot below.



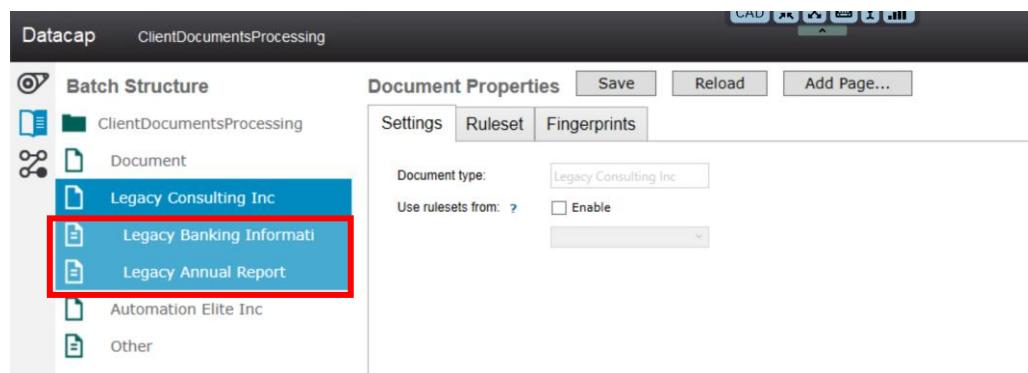
22. To add two new page types for the **Legacy Consulting Inc** document type, select **Legacy Consulting Inc** under **Batch Structure**, click **Add Page...**, and name the first page type **Legacy Banking Information**.



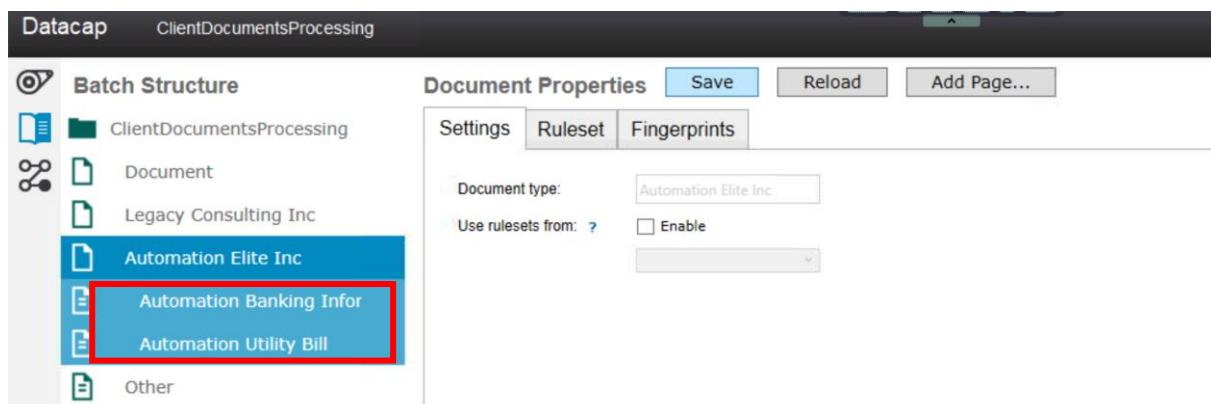
23. Click **Add Page** again and name it **Legacy Annual Report**. Click on **Add** button.



24. After adding these two-page types to the **Legacy Consulting Inc** document type, you should see the structure as shown in the screen below.



25. Add two page types—**Automation Banking Information** and **Automation Utility Bill** to the Automation Elite Inc document type.



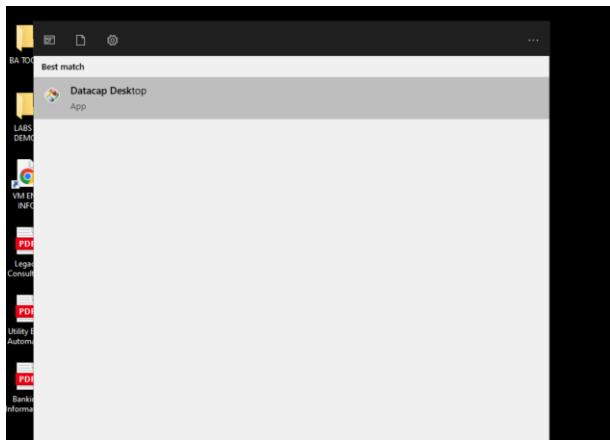
26. Click on Save button

3.1.3 Datacap FastDoc – Verification Instructions

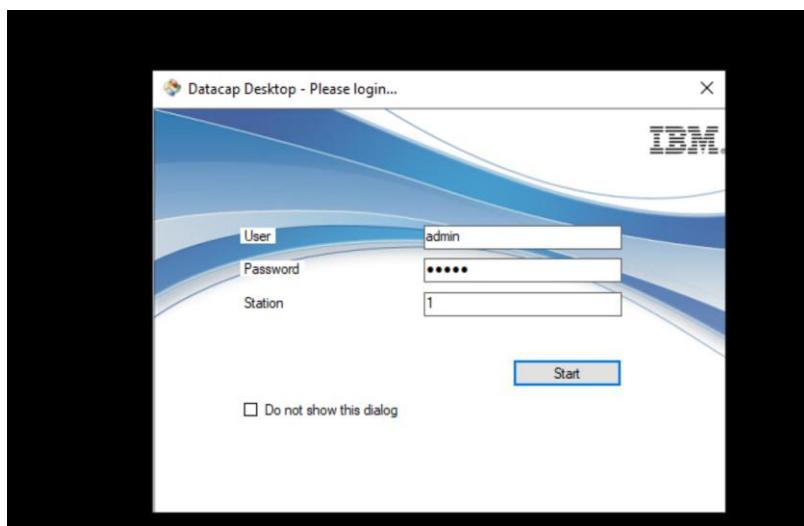
To verify successful completion of this exercise, ensure that you can run the newly created **ClientDocumentsProcessing** application.

_1. Start Datacap Desktop:

Click on **Start** menu and select **Datacap Desktop**

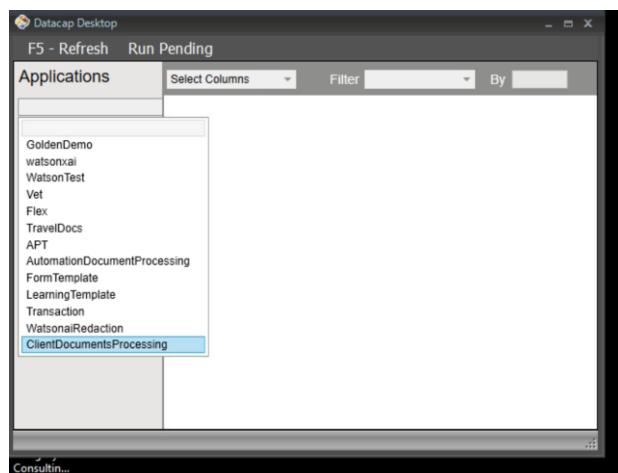


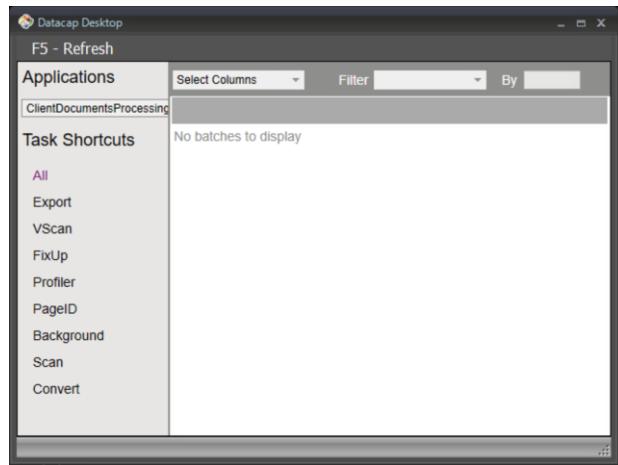
_2. Log in as user – ‘admin’, password – ‘admin’ and station – ‘1’



_3. What you see next is the **workplace** of the typical operator who uses physical scanners to process batches of documents through the **Datacap Thick Client Desktop**.<Explain more>.

_4. Open the **ClientDocumentsProcessing** application in Datacap Desktop and you will see the application getting loaded.





_5. Once the application loads successfully in Datacap Desktop, it confirms that the initial Datacap application has been created correctly. At this point, you can close both the FastDoc Admin and Datacap Desktop clients.

3.1.4 Datacap FastDoc – Summary

In this exercise, you have:

1. Gained an initial impression of Datacap FastDoc.
2. Explored the various tabs and sections within the application.
3. Developed a basic Datacap application, including creating the batch structure with document and page types.
4. Verified that the **ClientDocumentsProcessing** application runs successfully from the Thick Client.

Note: If the Datacap application is not created correctly or contains issues, you may encounter errors when attempting to open it in the Datacap Desktop application.

3.2 Exercise 2: Enhance and complete the Datacap application by using Datacap Studio

3.2.1 Datacap Studio

In this exercise, you will explore the user interface of **Datacap Studio**, the advanced development tool for Datacap.

You will access the following tools:

Tool	Location / URL
Datacap Studio	Start -> Datacap Studio

The exercise will be completed once you have successfully accessed all the Datacap development tools and completed the verification steps.

If you want to get a more detailed set of information on Datacap Studio, please follow the below link to the Datacap Knowledge Center describing the functions and concepts of Datacap Studio:

<https://www.ibm.com/docs/en/datacap/9.1.9?topic=reference-datacap-studio>

3.2.2 Datacap Studio – Step by Step Instructions

Section Overview: Enhancing and Completing the ClientDocumentsProcessing App in Datacap Studio

In this section, you will perform the following key actions to enhance and complete the **ClientDocumentsProcessing** application for document processing using Datacap Studio.

Document Classification using Watsonx.ai Large Language Models (LLM)

- Create Watsonx.ai_PageID Ruleset(Rules, and Functions) for the ClientDocumentsProcessing app with Datacap Studio
- Map Watsonx.ai_PageID Ruleset to Task Profile Workflow
- Map the Watsonx.ai_PageID (Other Rule) to the Document Hierarchy (DCO)

Document Extraction using Watsonx.ai Large Language Models (LLM)

- Create Extraction with Watsonx.ai Rulesets(Rules, and Functions) for the ClientDocumentsProcessing app with Datacap Studio
- Map Extraction with Watsonx.ai Ruleset to Task Profile Workflow
- Map the Extraction with Watsonx.ai (Extraction Rule) to the Document Hierarchy (DCO)

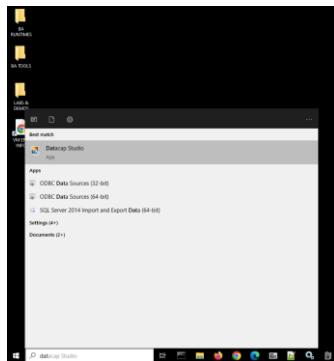
Document verification

- Create verify Ruleset(Rules, and Functions) for the ClientDocumentsProcessing app with Datacap Studio
- Map verify Ruleset to Task Profile Workflow

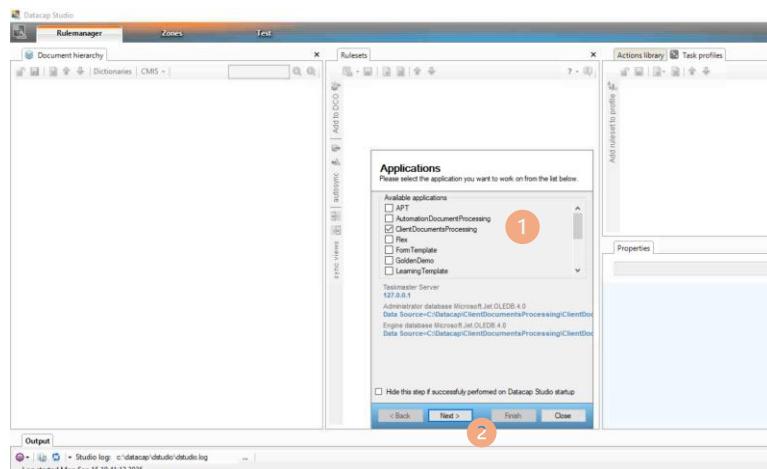
Configure FileNet Content Manager integration

- Set up **FileNet** to export extracted fields and documents from Datacap

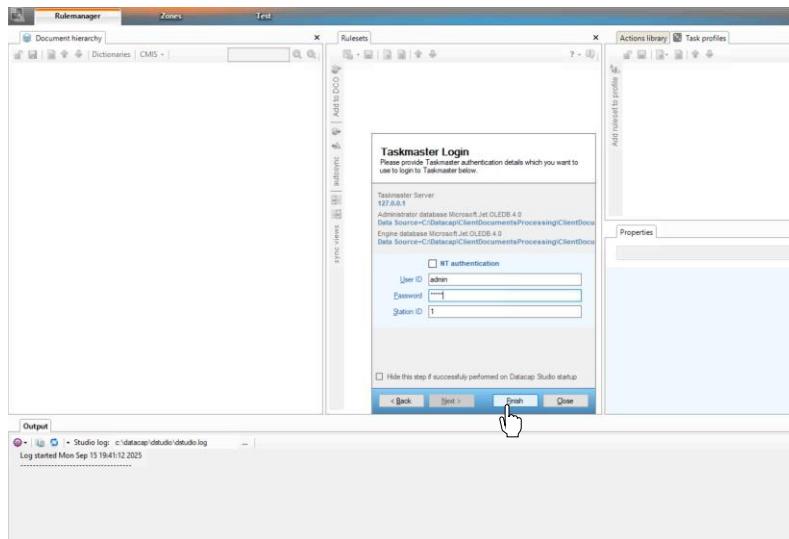
_1. Click on Start and open Datacap Studio.



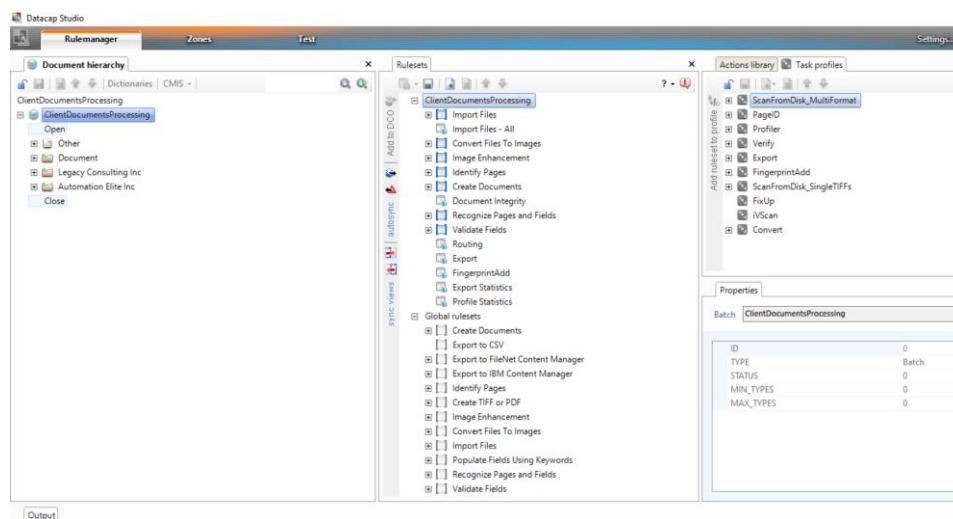
_2. Select the application you created in exercise 2 and click Next.



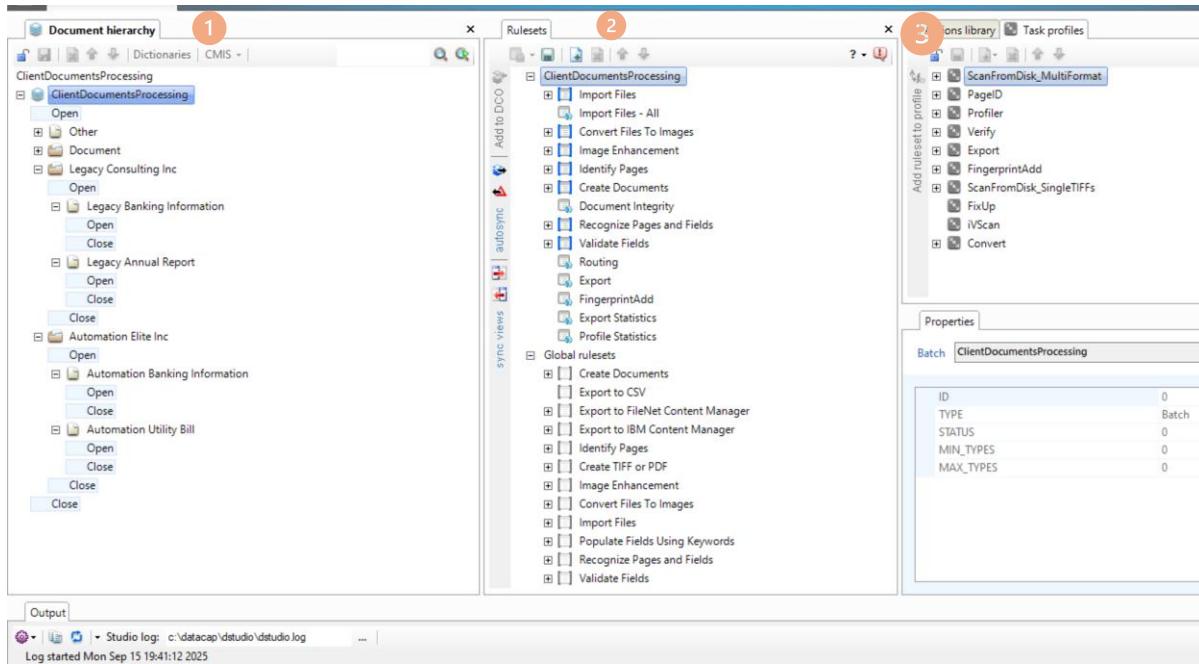
_3. On the Taskmaster login window, enter the username **admin**, password **admin**, and set the station ID to 1. Click on Finish button to Login.



_4. Explore the user interface of Datacap Studio.

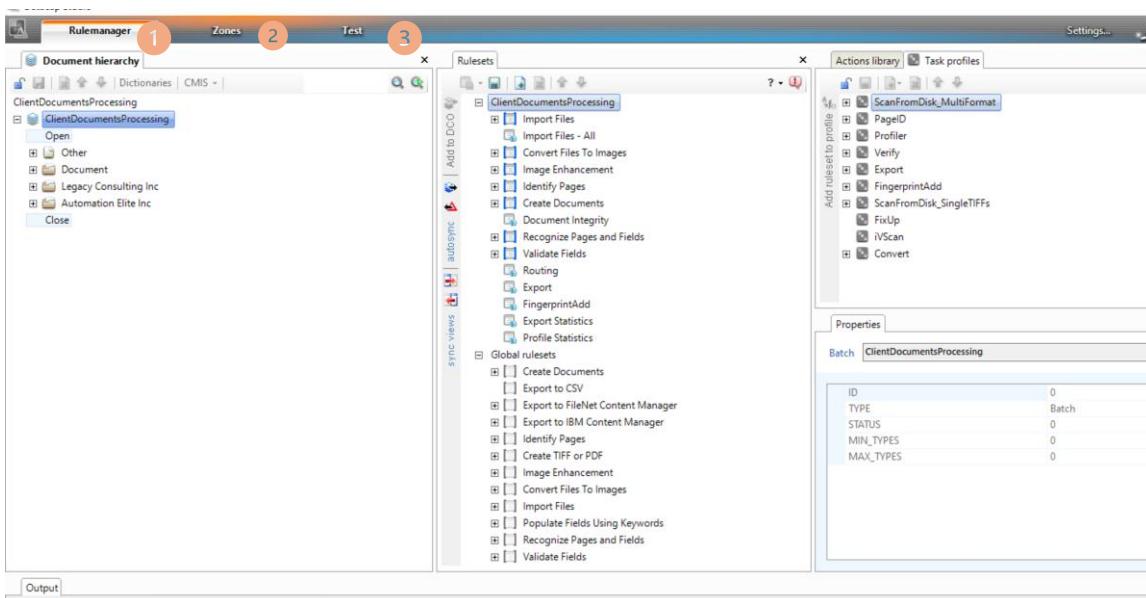


- a. Explore the different sections: **Document Hierarchy**, **Rulesets**, **Properties**, **Actions Library**, and **Task Profiles**.



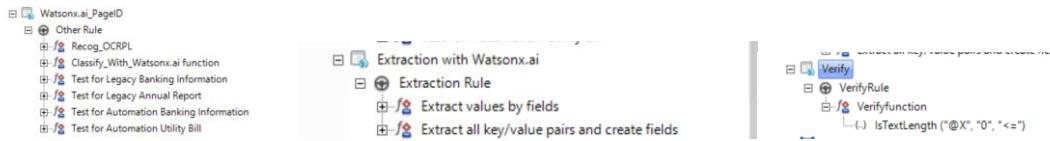
- b. Explore the different tabs from the top ribbon: **Rulemanager**, **Zones**, and **Test**.

Note: Some rulesets and task profile tasks may be created automatically when you select the **Form Template** application during setup.



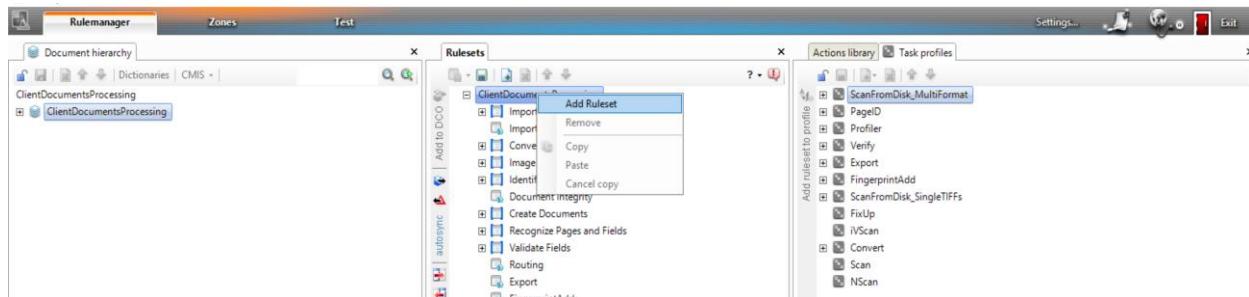
3.2.2.1 Document Classification using Watsonx.ai Large Language Models (LLM)

Create the Watsonx.ai_PageID ruleset (including rules and functions) for the ClientDocumentsProcessing application using Datacap Studio. In this section, you will create the PageID ruleset along with the relevant rules and functions, as illustrated in the diagram below.



Key advantage of integrating watsonx.ai with IBM Datacap for document processing: Enhanced semantic comprehension of unstructured data

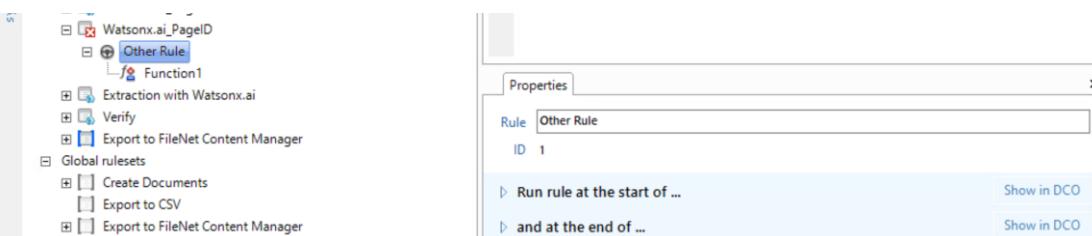
_1. Right Click on the **ClientDocumentProcessing** under rulesets and click on ‘Add Ruleset’ to add new ruleset called “**watsonx.ai_PageID**” to recognise the documents, pages and for Document classification. You can also click on the icon to add new ruleset by selecting ClientDocumentsProcessing application.



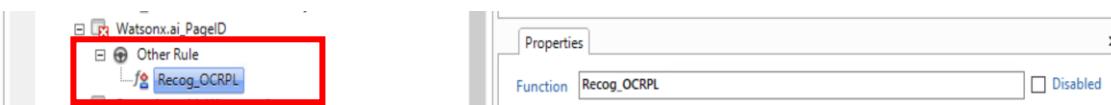
_2. Name the ruleset “**Watsonx.ai_PageID**”.



_3. Right click on Watsonx.ai_PageID ruleset and select Add Rule. Name the rule “**Other Rule**”, as shown below.

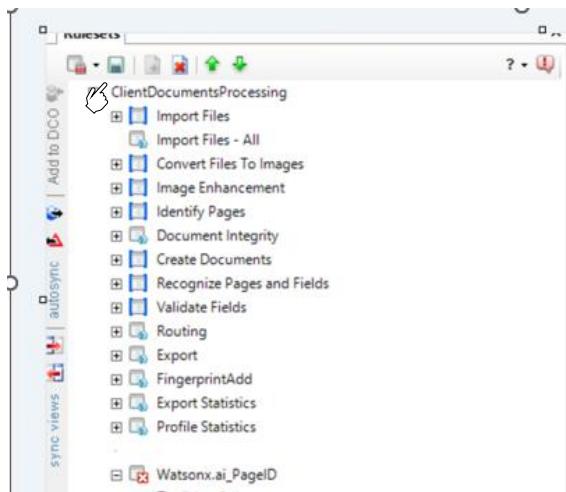


_4. Right click on Other Rule and select Add Function to add a new function named **Recog_OCRPL**.

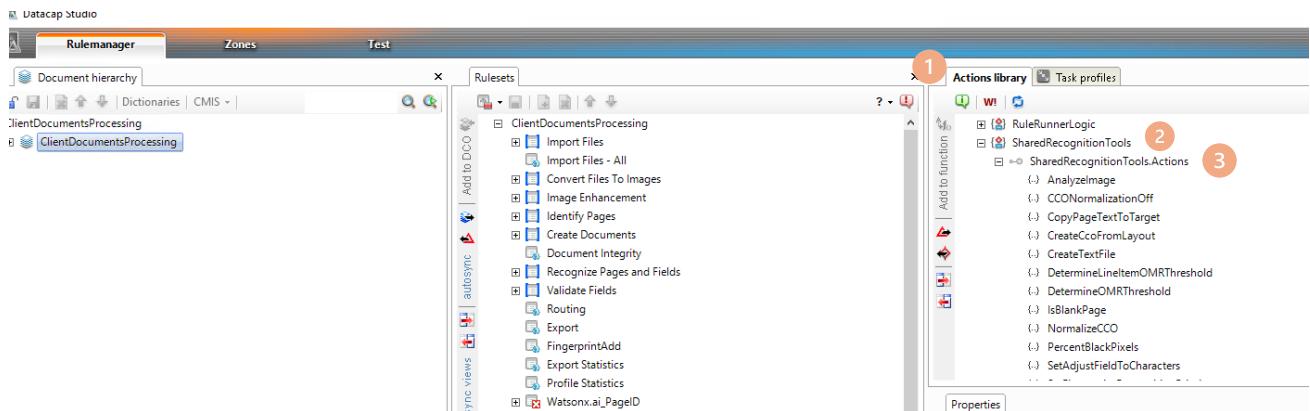


_5. Click on **Save Button**.

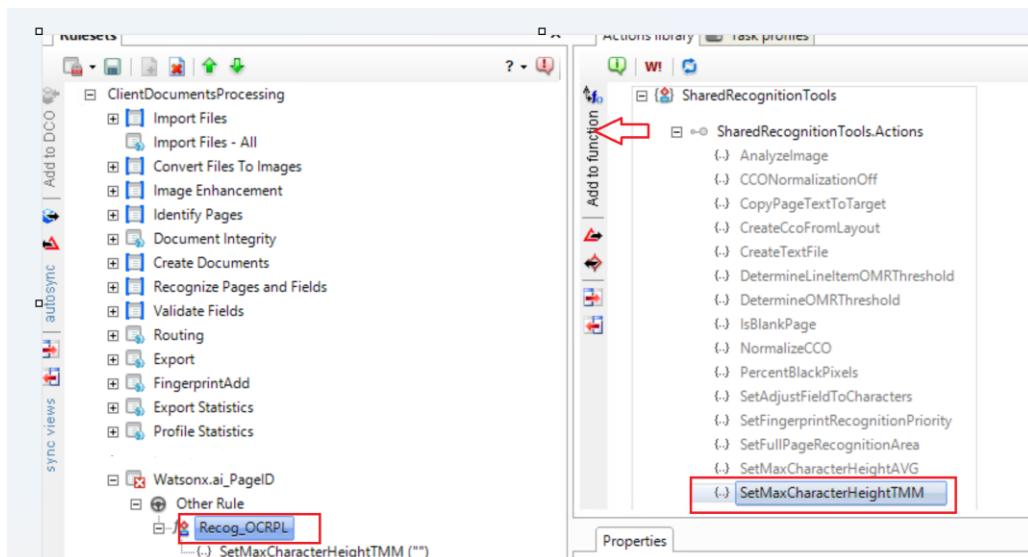




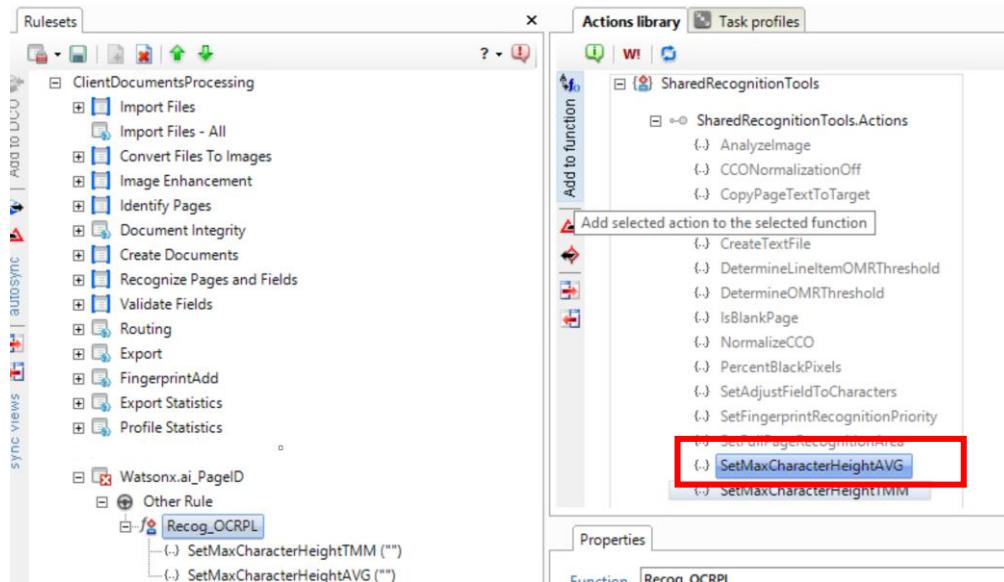
_6. Go to actions library, scroll down to SharedRecognitionTools. Open actions under SharedRecognitionTools by clicking on SharedRecognitionTools.Actions.



_7. Select the **SetMaxCharacterHeightTMM** method from the actions. On the Rulesets section, select Recog_OCRPL function and click on ‘Add to function’ button from Action Library’s panel.



_8. Add the **SetMaxCharacterHeightAVG** method from the **Recognition Tools** actions available under the **SharedRecognition Tools** action library to the **Recog_OCRPL** function.

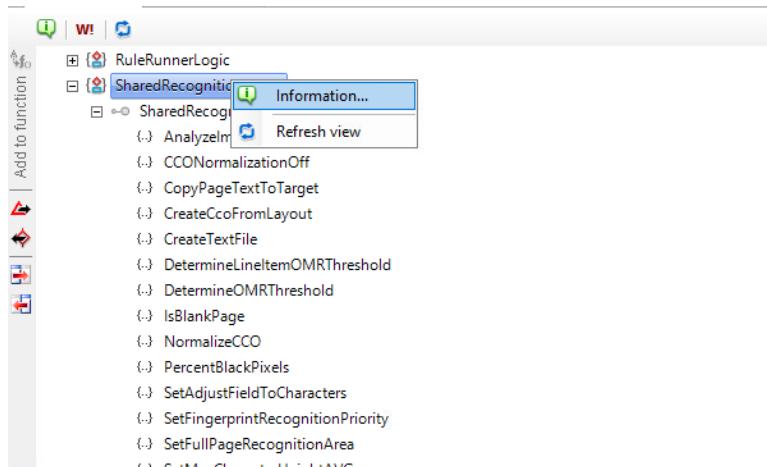


You can also right-click on any action within the Action Library in Datacap Studio to view detailed information and reference documentation about that action.

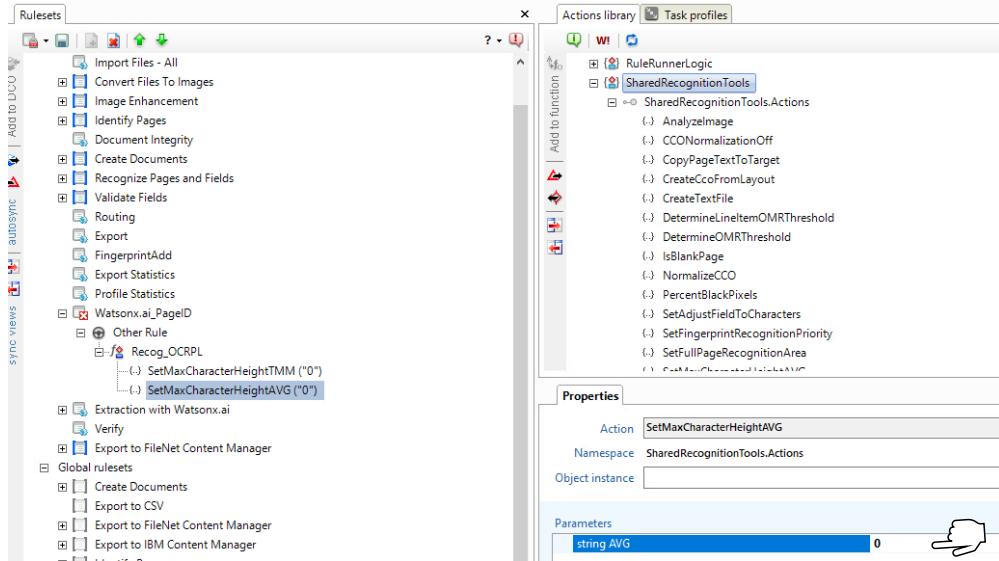
This feature provides helpful insights into:

What the action does

- Input and output parameters
- Usage guidelines and common scenarios



_9. Select '**SetMaxCharacterHeightTMM**' from recently created in Ruleset panel, you will see **Properties** tab appear on the right hand side. Set the values of parameters of both **SetMaxCharacterHeightTMM** and **SetMaxCharacterHeightAVG** methods to **0**.



_10. Open **RecognitionOCRPL** and open Actions underneath that. From there choose '**Recognize**' and add it to **Recog_OCRPL function** as done earlier.

Datacap supports multiple embedded OCR engines beyond the default configurations. These include:

ABBY OCR (OCRA)

Nuance OCR (OCRS/R)

You are encouraged to experiment with these alternative recognition engines to understand their strengths, limitations, and use cases. Each engine may offer varying performance based on:

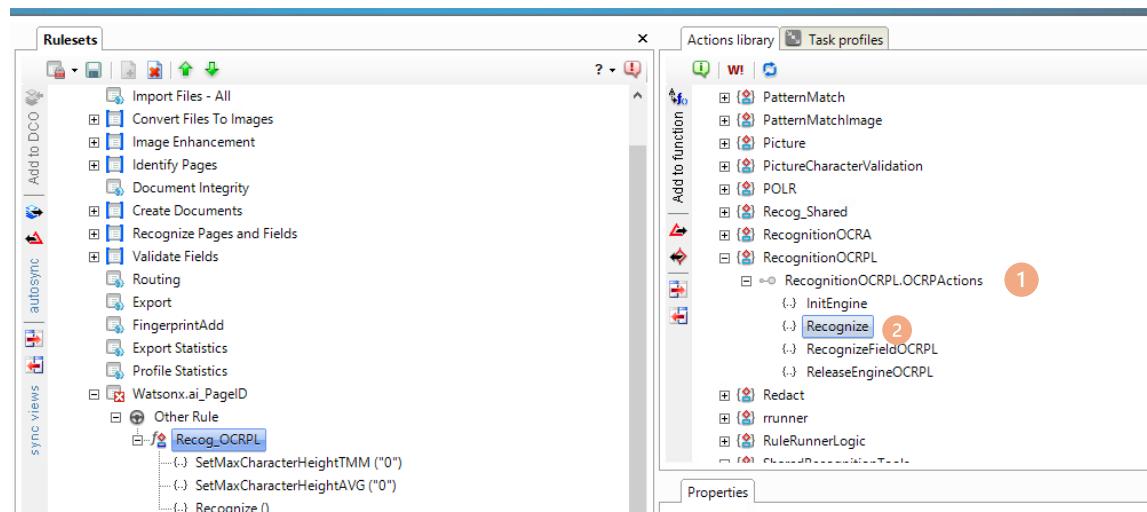
Document layout complexity

Language support

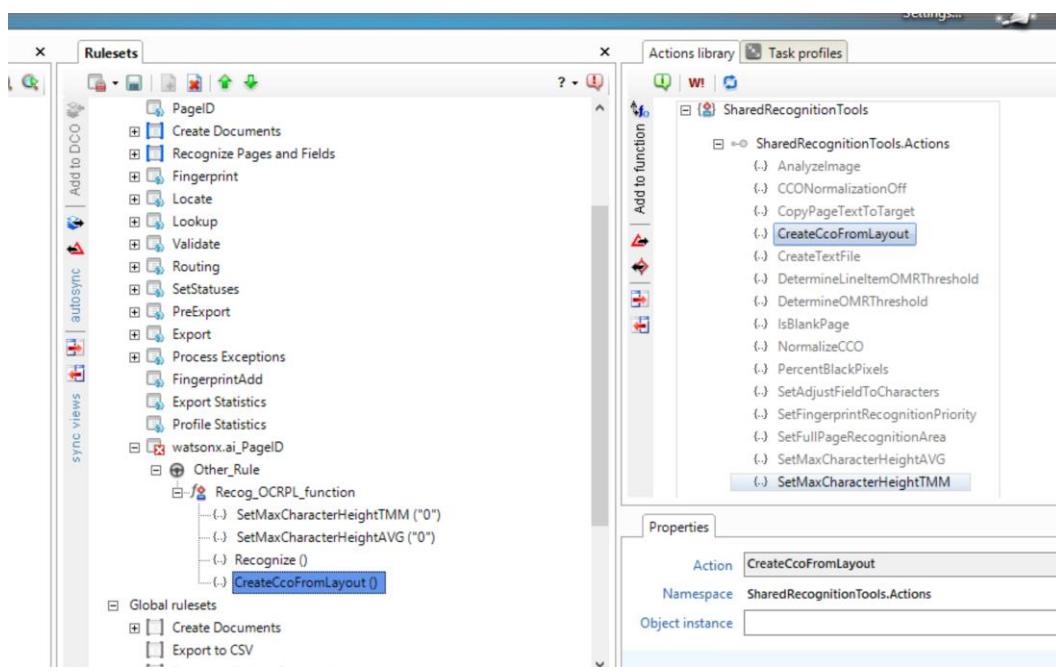
Accuracy in field extraction

Processing speed

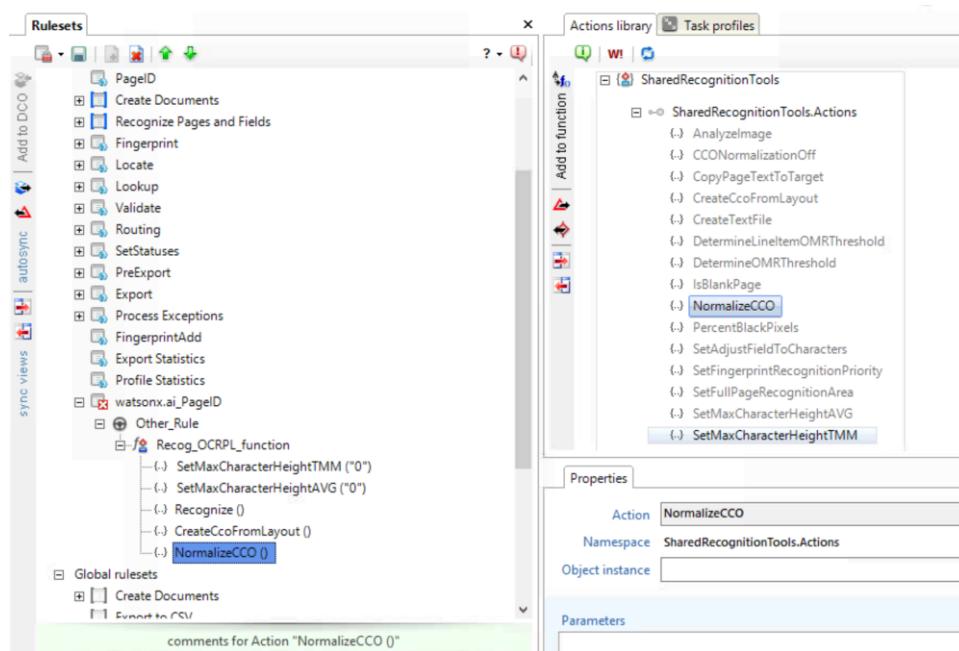
Choosing the right OCR engine is essential for optimizing recognition quality and overall application performance.



_11. Add the '**CreateCcofromLayout**' method from **sharedRecognitionTools.Actions** under the **SharedRecognitionTools library** to the **Recog_OCRPL function**.



_12. Add the ‘NormalizeCCO’ method from **sharedRecognitionTools.Actions** under the **SharedRecognitionTools library** to the **Recog_OCRPL function**.



Note: Recognize()

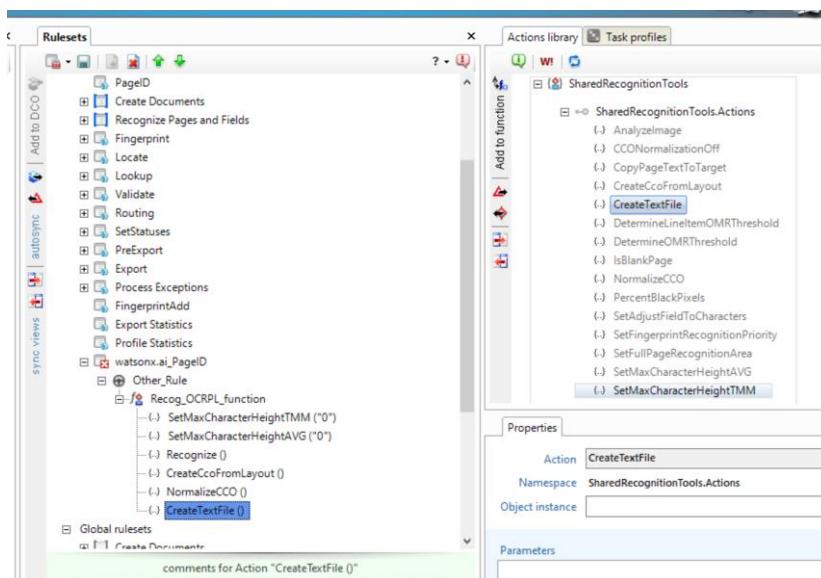
CreateCcoFromLayout()

NormalizeCCO()

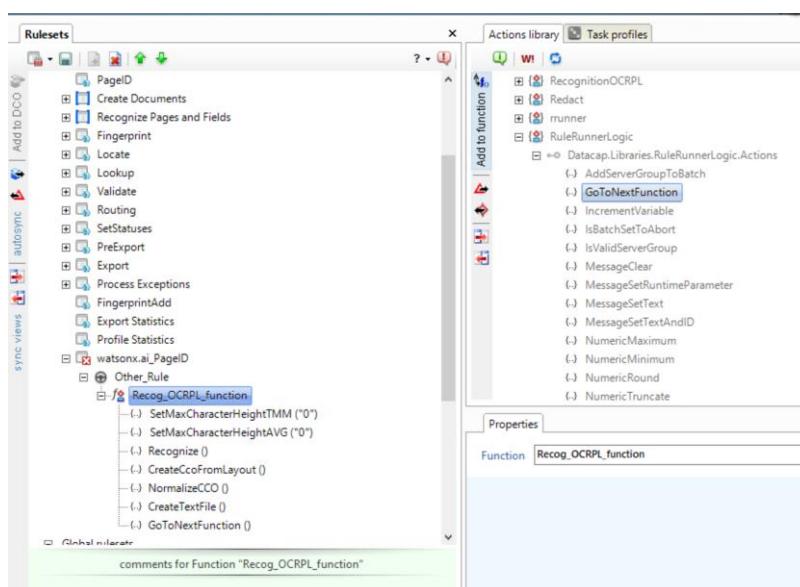
The layout file is created by the Recognize method. Then CreateCcoFromLayout creates the CCO based on the recognition results. NormalizeCCO then normalizes the CCO to get it ready for use by other Datacap clients and actions.

In the context of the IBM Datacap software platform, **CCO** stands for "Content Classification Object" and refers to a file that contains the recognized text and its coordinates on a document. This file is an integral part of the data extraction and validation process.

_13. Add the '**CreateTextFile**' method from **sharedRecognitionTools.Actions** under the **SharedRecognitionTools library** to the **Recog_OCRPL** function.



_14. Add the '**GoToNextFunction**' action from **Datacap.Libraries.RuleRunnerLogic.Actions** under the **RuleRunnerLogic library** to the **Recog_OCRPL** function.

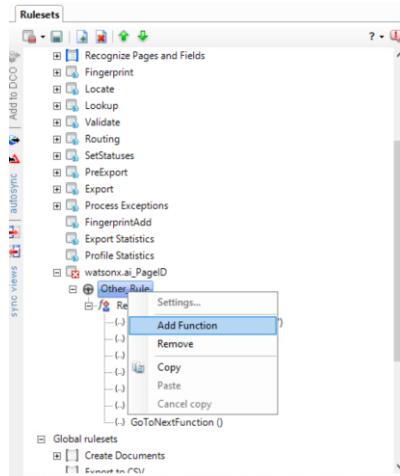


_15. Click on **Save changes** in Ruleset panel.

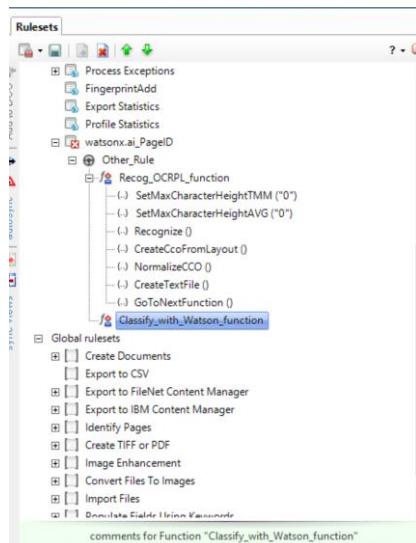
Ensure that all function methods are added in the exact order shown in the screenshot. If your function order differs, you can rearrange them using the green up and down arrows located above the list.

Note: To avoid losing any changes made in your ruleset, make sure to click the Save icon regularly in Datacap Studio.

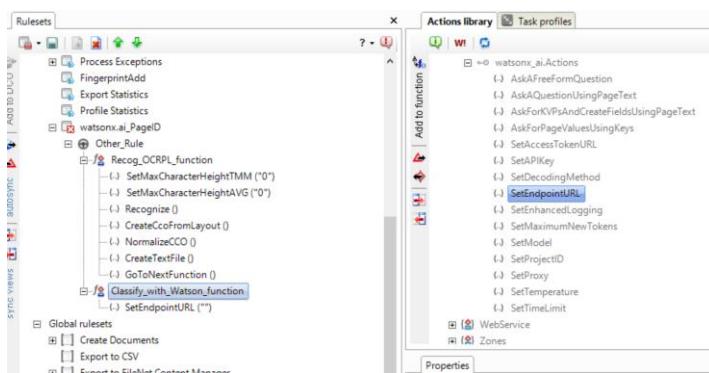
_16. Add a new function to the **Other Rule** by right-clicking on **Other Rule**.



_17. Name the new function '**Classify_with_Watson_function**'.



_18. Add the '**SetEndpointURL**' method from the **Watsonx_ai.Actions** action under the **watsonx_ai** library to the **Classify_with_Watsonx_function**.

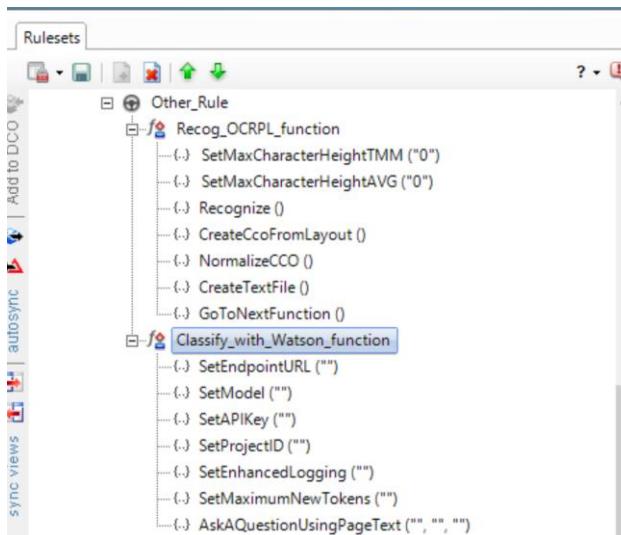


_19. Add the following methods to the **Classify_with_Watson_function** from the **Watsonx_ai.Actions** action under the **watsonx_ai** library following steps mentioned earlier:

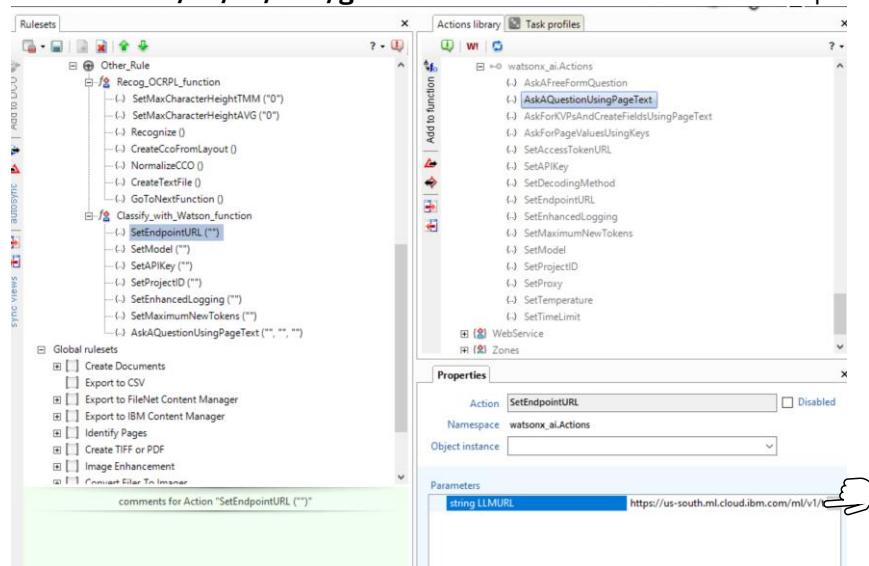
- **SetModel**
- **SetAPIKey**
- **SetProjectID**
- **SetEnhancedLogging**
- **SetMaximumNewTokens**
- **AskAQuestionUsingPageText**

To proceed, you'll need to gather the following details from Watsonx.ai Studio: **Endpoint URL**, **Model Name**, **API Key**, and **Project ID**. You can obtain these by either accessing the environment directly or by following the lab setup instructions starting from section 2.1.1, step 9.

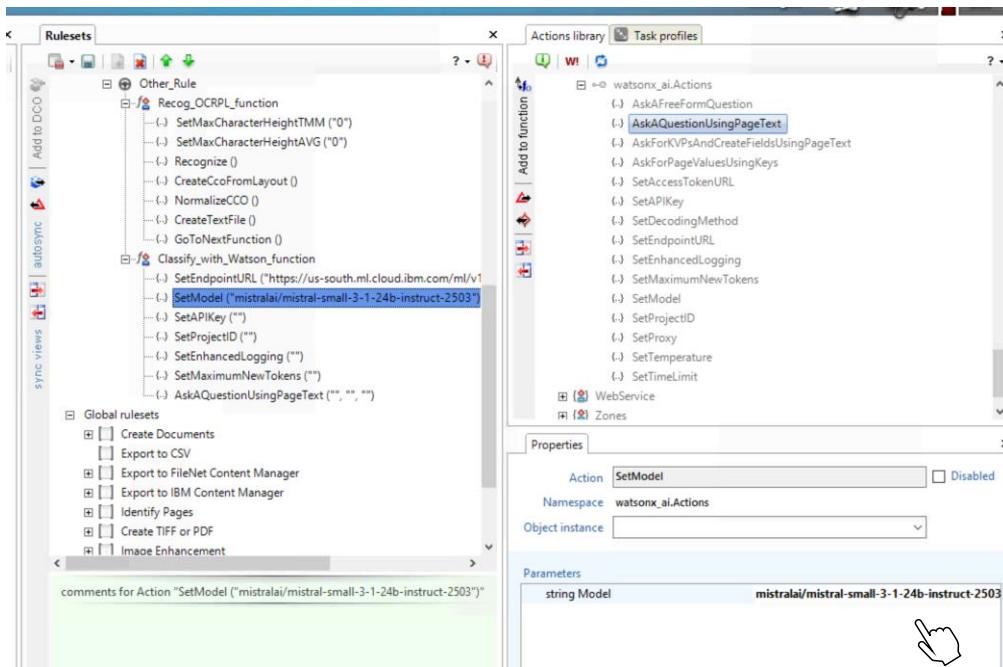
During the TechJam event, these parameters will also be provided. However, please keep in mind that the number of available tokens is limited, so plan accordingly.



_20. Add the Endpoint URL parameter's value to '<https://us-south.ml.cloud.ibm.com/ml/v1/text/generation?version=2023-05-29>' as a parameter, as shown below.



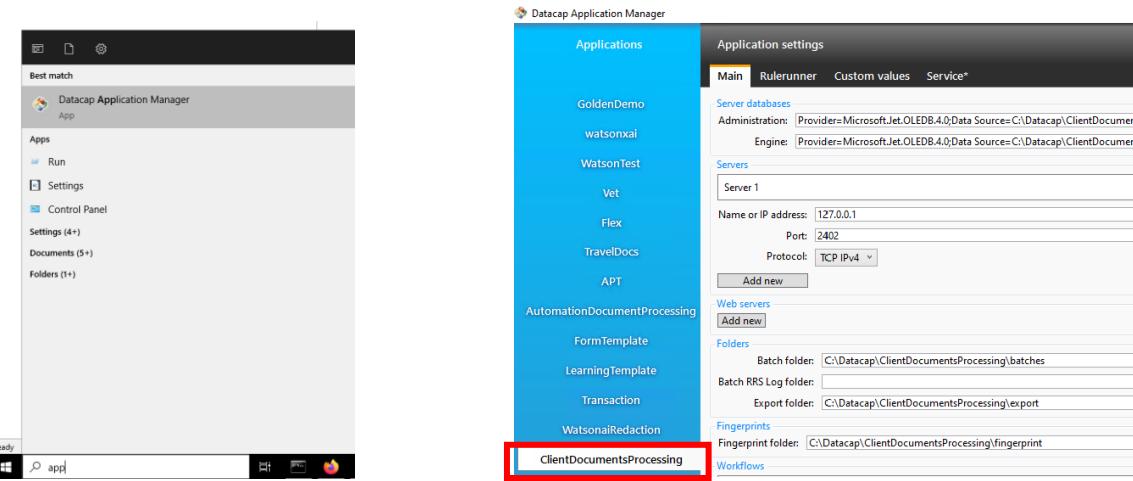
_21. Set the **model** value to ‘mistralai/mistral-small-3-1-24b-instruct-2503’



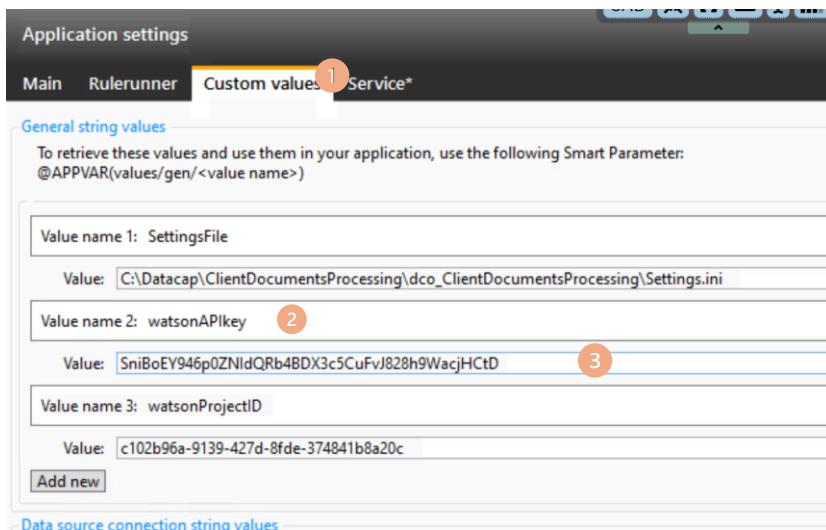
You can configure and use different foundation models available on the Watsonx.ai platform, depending on the region where your project is deployed

The screenshot shows the Datacap Watsonx.ai Demo / Prompt Lab interface. At the top, it says 'Projects / Datacap Watsonx.ai Demo / Prompt Lab'. Below that, there are tabs for 'Chat', 'Structured', and 'Freeform'. An 'AI' button is present. To the right, there's a 'View code' section with tabs for 'Curl', 'Node.js', and 'Python'. The 'Curl' tab contains a command-line snippet for interacting with the AI model. The 'Node.js' tab contains a code snippet for generating AI output. The 'Python' tab is partially visible. At the bottom, there are buttons for 'Clear output', 'Generate', and a large '→' button.

_22. Open the Datacap application manager and click on the **ClientDocumentsProcessing** under **Applications** from the left panel.



_23. In ClientDocumentsProcessing , navigate to custom values tab, click on add a new variable with **Name: watsonAPIkey** and **value** (*your actual Watsonx.ai APIKey*) under general string values.



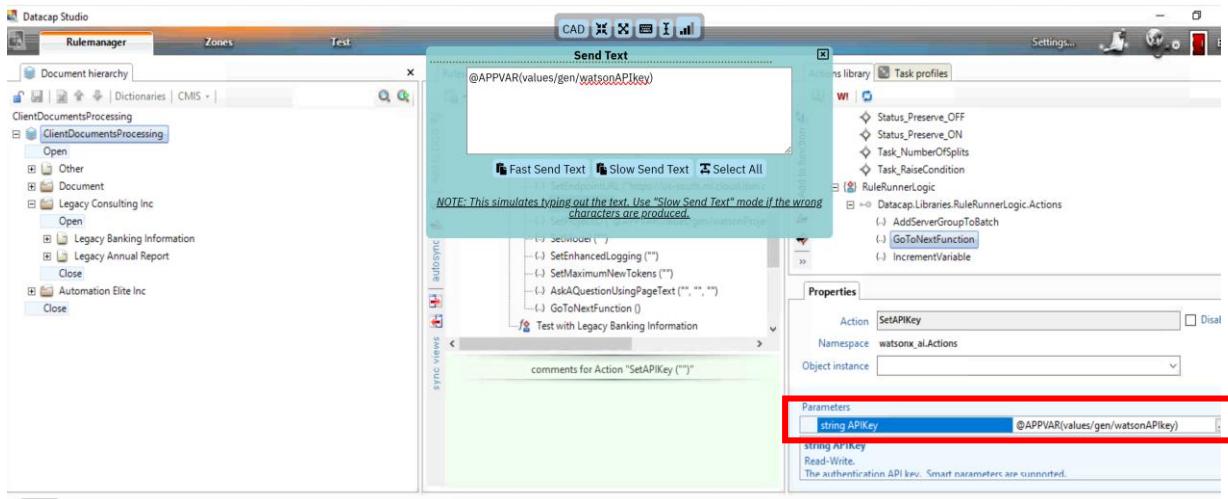
_24. Add another variable under general string values **Name :watsonProjectID** and **Value:** (*your actual Watsonx.ai Project ID*). Once you add both parameters, save the changes and close it.

_25. Return to Datacap Studio to set API Key and ProjectID parameters to the variable values.

_26. Set API Key parameter as a Datacap Application Variable – ‘@APPVAR(values/gen/watsonAPIkey)’ by setting this value in parameter stringAPIKey.

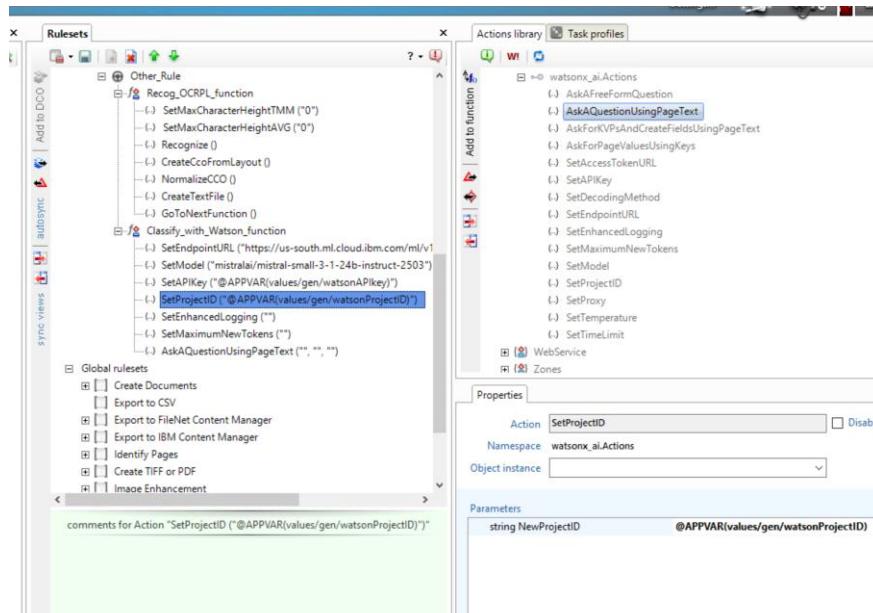
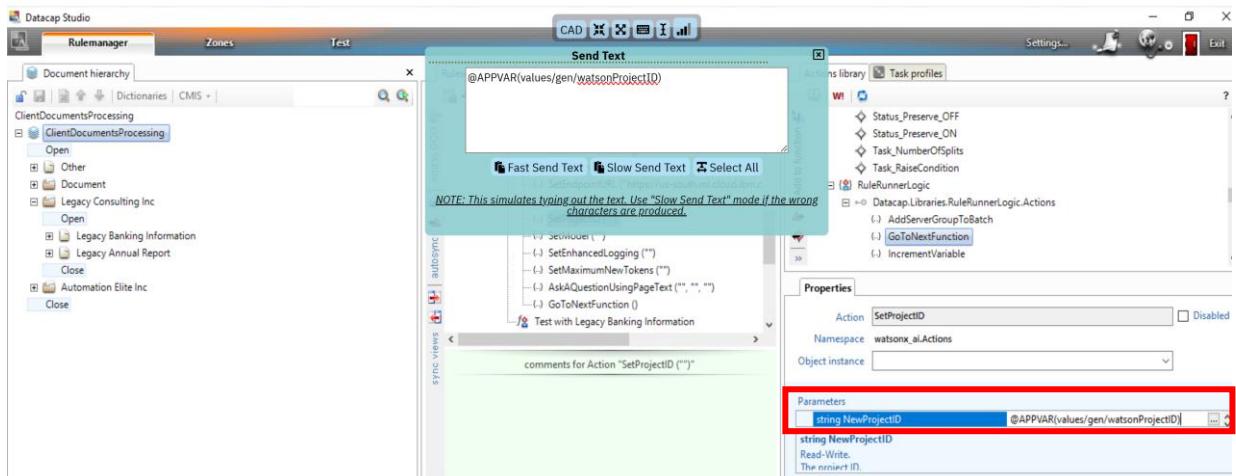
Note: To enable integration with Watsonx.ai, you must **add the API Key** associated with your project. This key is used to authenticate and securely access Watsonx.ai services.

Make sure the API Key corresponds to the **correct region and project ID** you are working with.



_27. Set ProjectID parameter as a Datacap Application Variable '@APPVAR(values/gen/watsonProjectID)'.

Note: To integrate your Datacap application with Watsonx.ai, you also need to store the **Project ID** as a variable in?

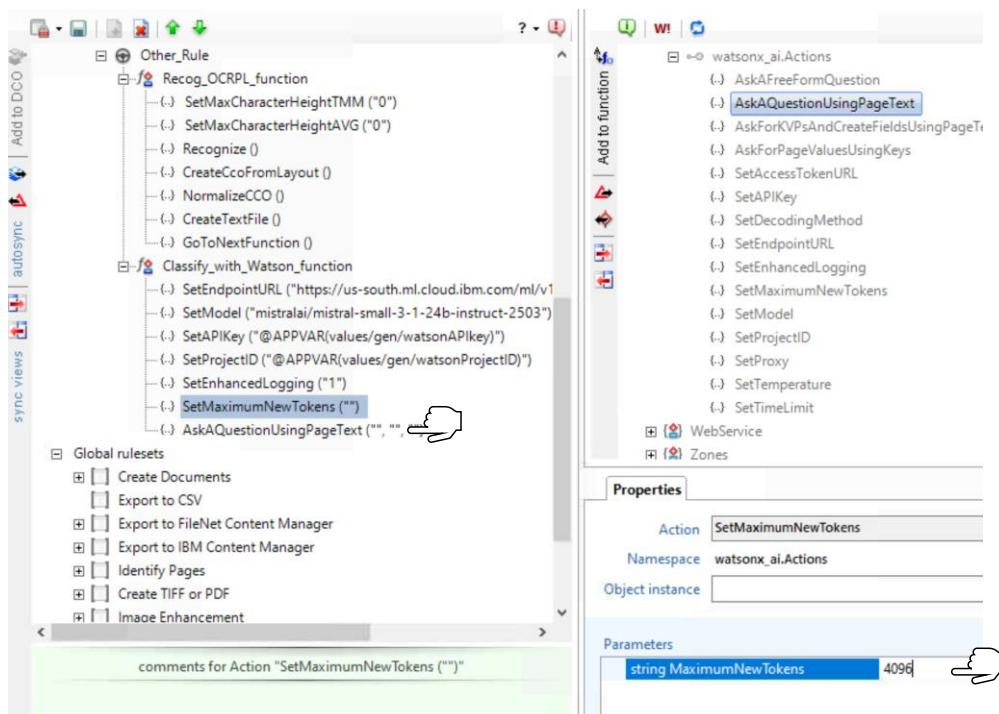


_28. Set Enhanced Logging Value to 1.

This setting is helpful to view the prompts sent to Watsonx.ai and the corresponding responses received. Detailed logs will be written in the following files for better understanding.

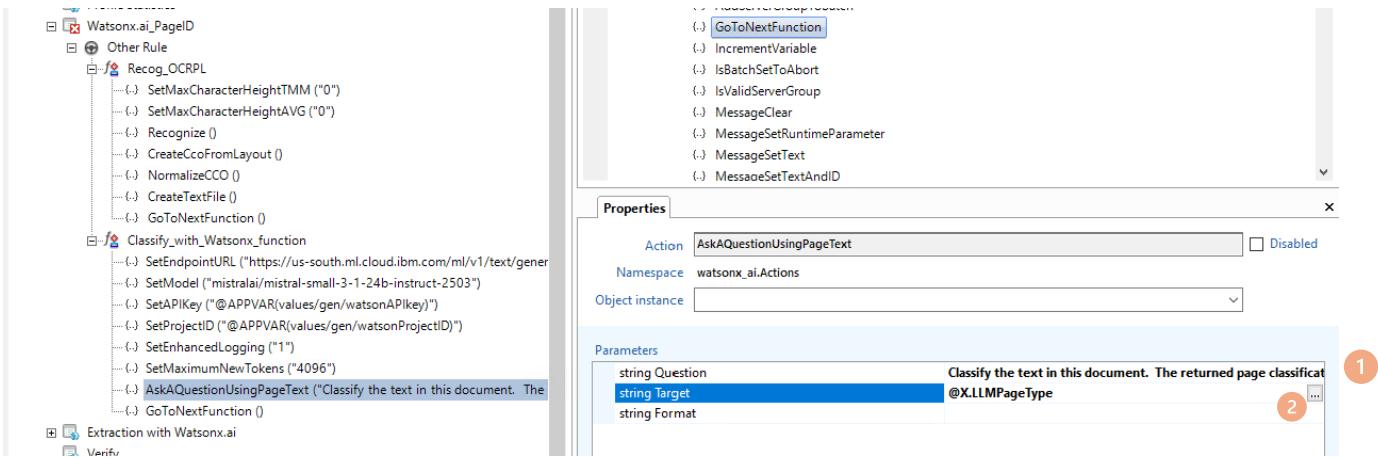
PageID_rrs.log
Profiler_rrs.log

_29. Set SetMaximumNewTokens value to 4096 which Controls the number of returned tokens from the LLM.



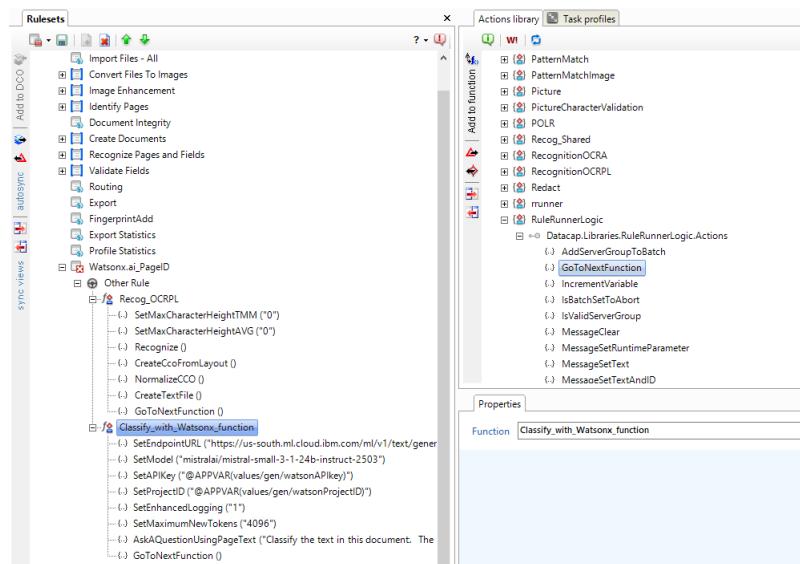
_30. Add both string parameter values in AskAQuestionUsingPageText method

- 1) string **Question** = 'Classify the text in this document. The returned page classification must be exactly one of the following classification types: "Legacy Banking Information", "Legacy Annual Report", "Automation Banking Information", "Utility Bill", "Unknown". Only respond with the exact answer. Do not return explanation text.'
- 2) string **Target**= '@X.LLMPageType'

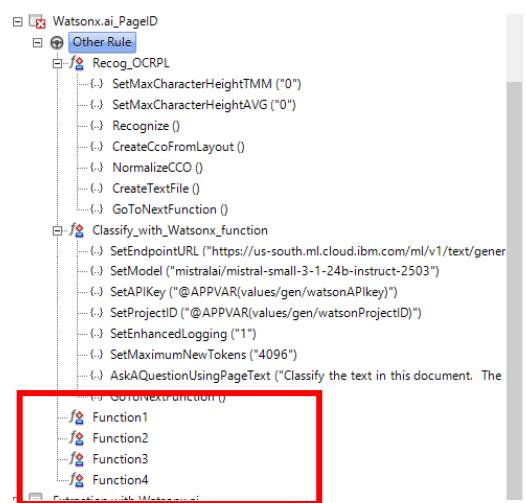
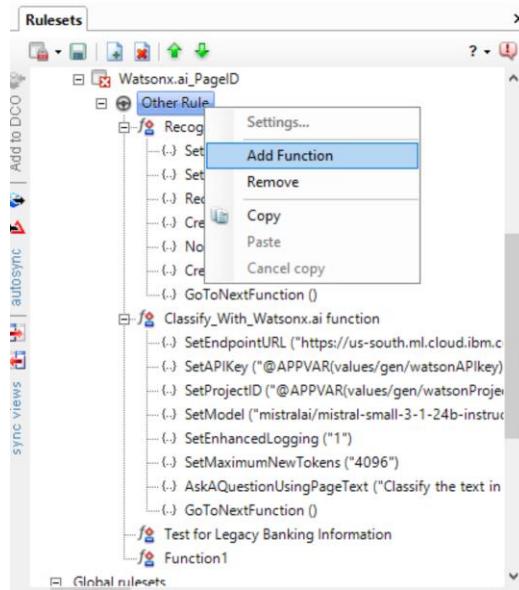


_31. You can copy the **GoToNextFunction()** method from the **Recog_OCRPL** function by right-clicking on the method and pasting it into the **Classify_with_Watsonx_function**.

Alternatively, you can add this method from the **Datacap.Libraries.RuleRunnerLogic.Actions** under the **RuleRunnerLogic** library.

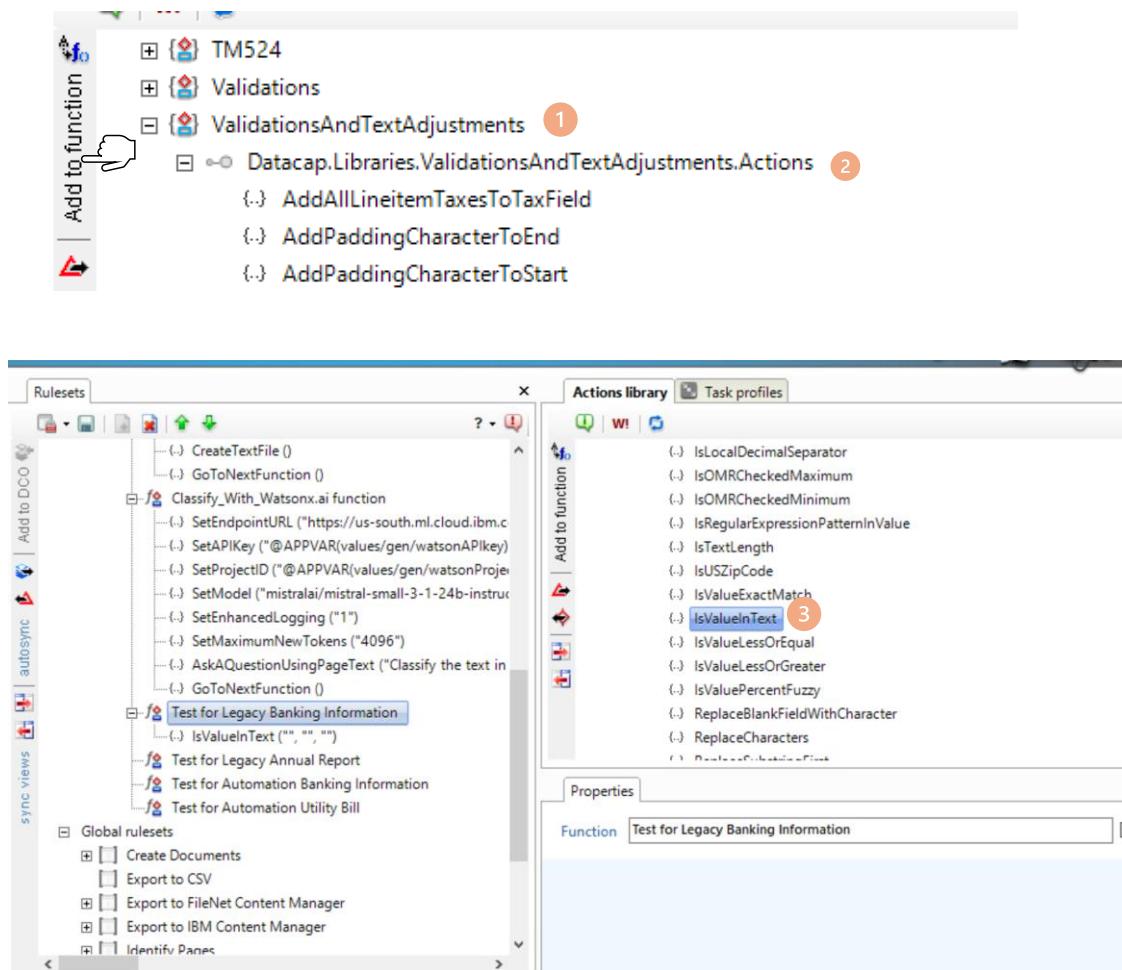


_32. Add four new functions by right-clicking on the **Other Rule** four times. These functions will be used to set the Page Type dynamically based on the **LLMPageType** response returned from the Page Classification process.



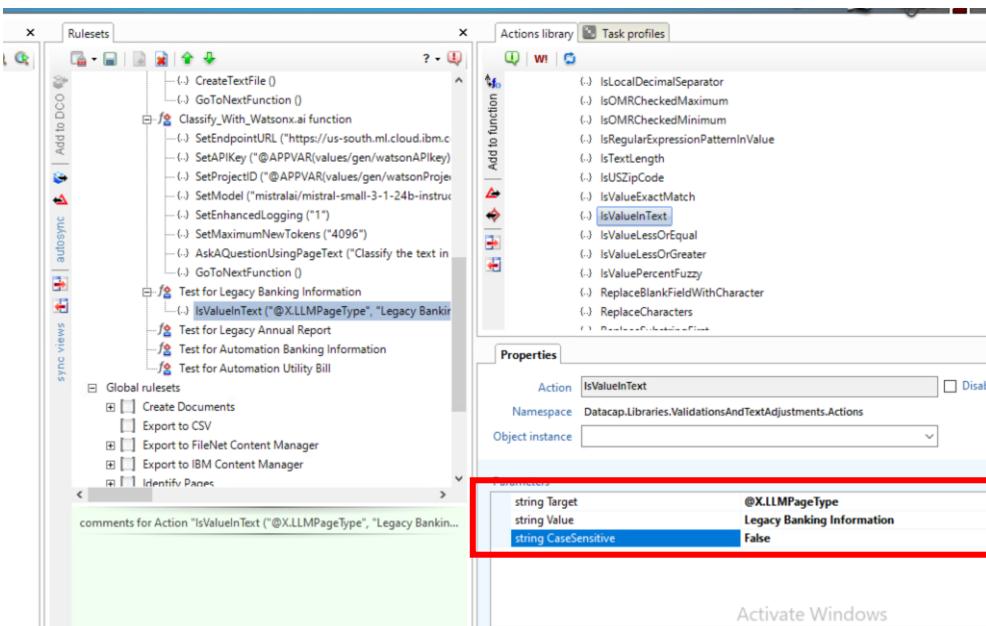
_33. Rename the four newly added functions as shown below.

_34. Select the **Test for Legacy Banking Information** function, then add the **IsValueInText** method by selecting it from the action library **ValidationsandTextAdjustments** and Datacap libraries and clicking **Add to Function**.

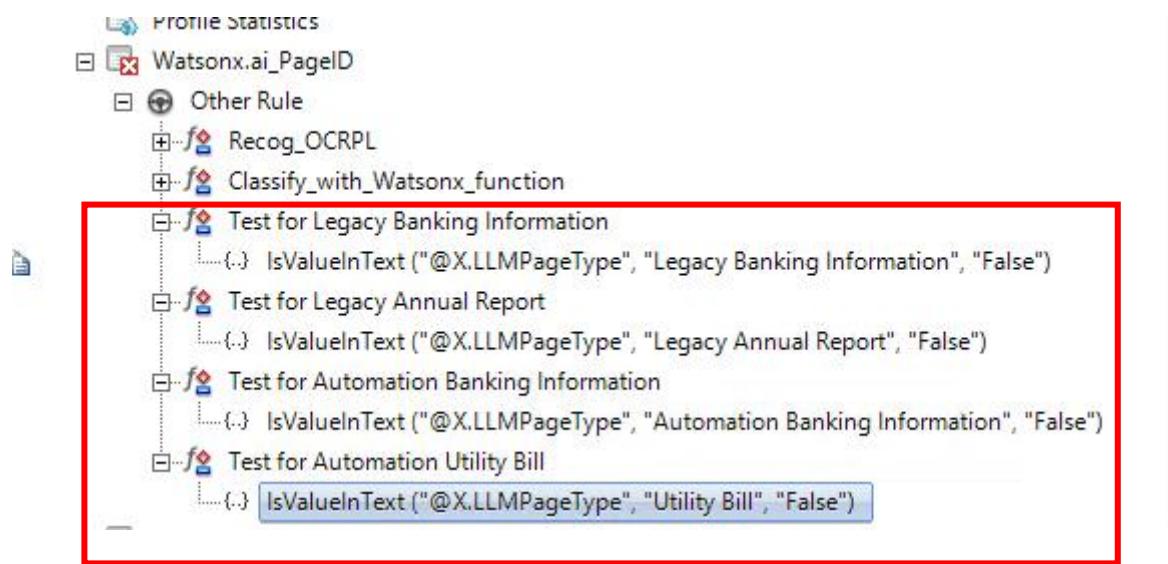


_35. Set the following parameter values for the **IsValueInText** method to check if the return response matches the expected value:

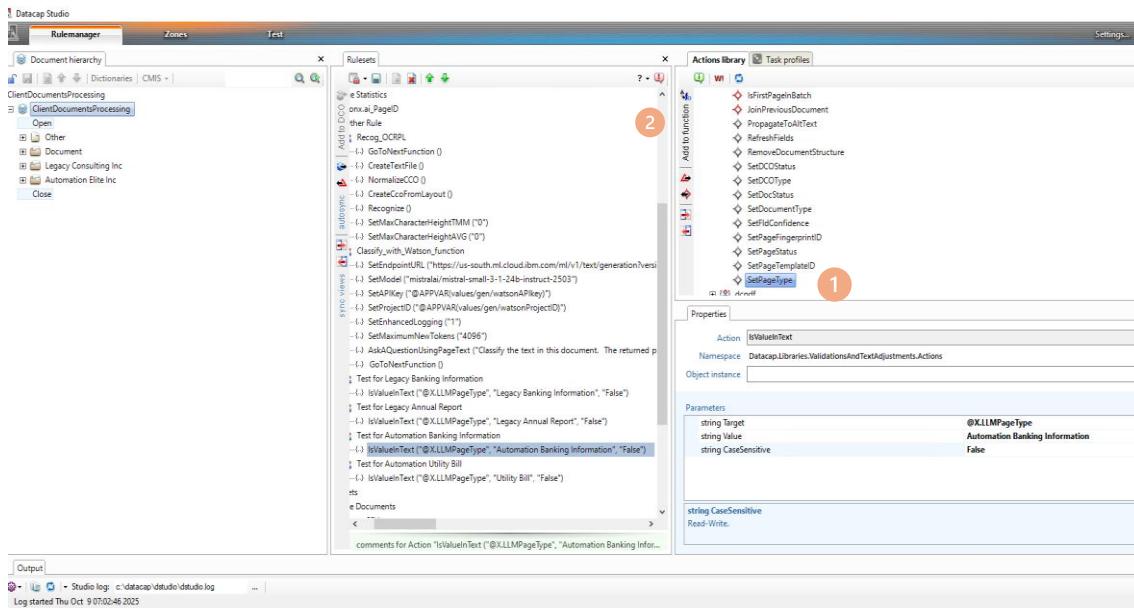
- **Target string value:** @X.LLMPageType
- **String value:** Legacy Banking Information
- **CaseSensitive:** False



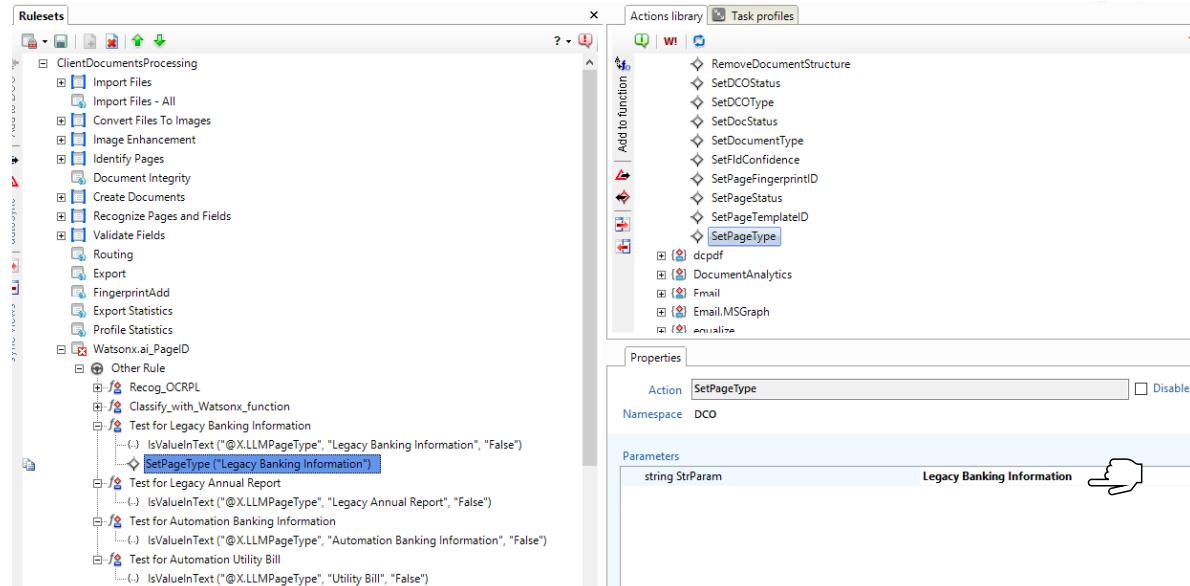
_36. Add the **IsValueInText** method along with the corresponding parameters to the remaining three functions, as shown below.



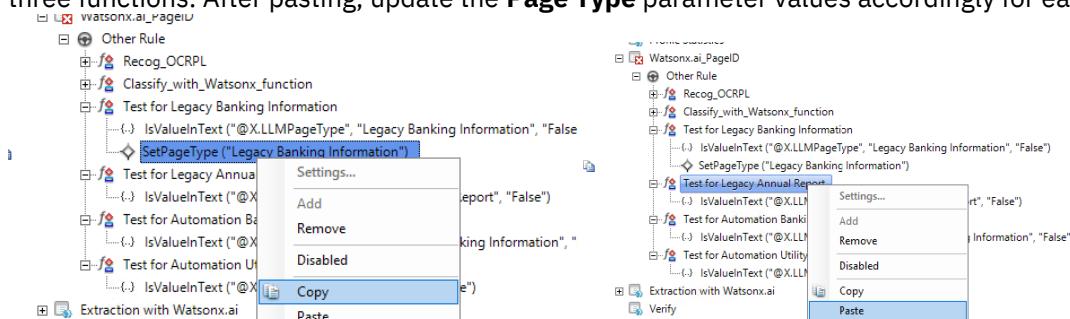
_37. After adding the **IsValueInText** method and its parameters to all four functions, select the **Test for Legacy Banking Information** function and add the **SetPageType** method to it from the **DCO** action library.



_38. Set the **Page Type parameter value to ‘Legacy Banking Information’ for the **Test for Legacy Banking Information** function by setting the **string StrParam** value in Properties.**

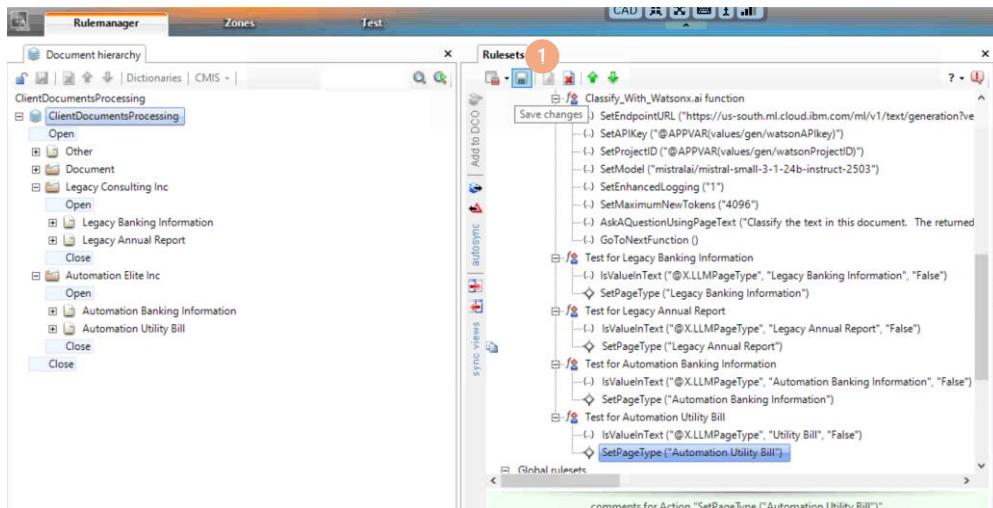


_39. You can copy the **SetPageType method by right-clicking on it (as shown below), then paste it into the remaining three functions. After pasting, update the **Page Type** parameter values accordingly for each function.**

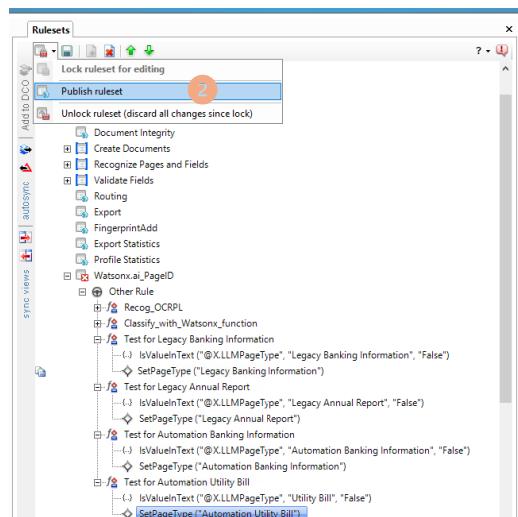


The order of methods in a function matters as they will be run sequentially. So, once you add the methods inside function, check from the screenshots to see if the order appears as is displayed. This will ensure that the steps are executed sequentially and no issues are faced.

- _40. Click the **Save** icon and then **Publish** the ruleset, as shown in the screen below.



You have successfully created the ruleset for **recognition** and **page classification** using **Datacap Studio**.



3.2.2.2 Map Watsonx.ai_PageID Ruleset to Task Profile Workflow

1. Go to **Task Profiles** in right panel and open PageID. Next, remove all other rulesets from the **PageID** task under **Task Profiles**, except for the **CreateDocuments** and **Document Integrity** rulesets.

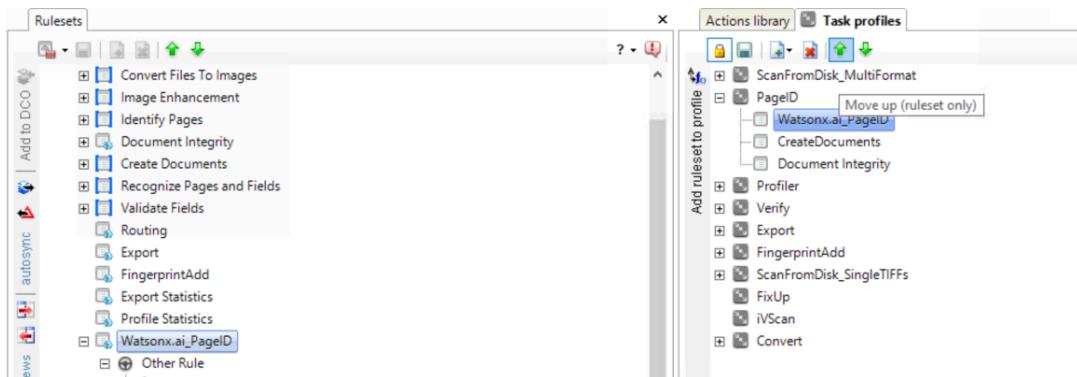
Please note that the previous step instructed you to remove the default rulesets from the **PageID** task profiler to streamline execution and eliminate unnecessary steps. Ensure that only the following three rulesets remain, in this exact order:

Watsonx.ai_PageID

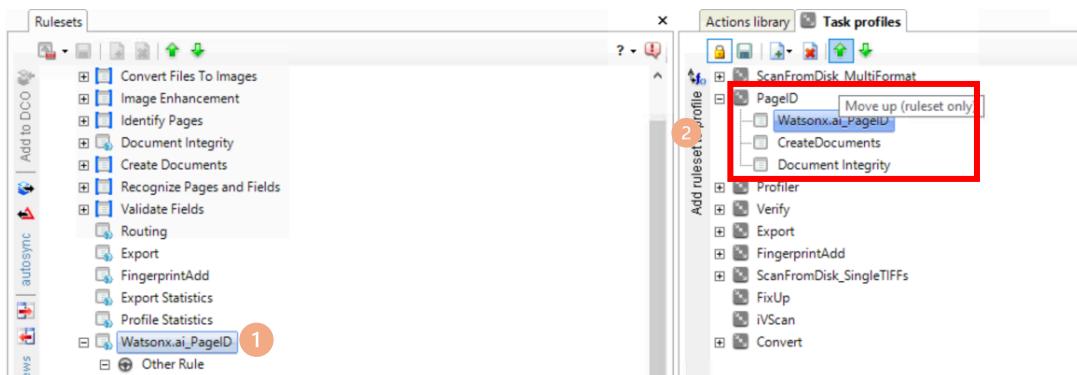
CreateDocuments

Document Integrity

If you'd like to understand the purpose of [CreateDocuments](#) and [Document Integrity](#), refer to the official IBM documentation for detailed explanations.



- Select Watsonx.ai_PageID from the Rulesets panel and click on **Add ruleset to profile** button to Add the Watsonx.ai_PageID ruleset to the **PageID Task Profile** workflow under the **PageID** section.

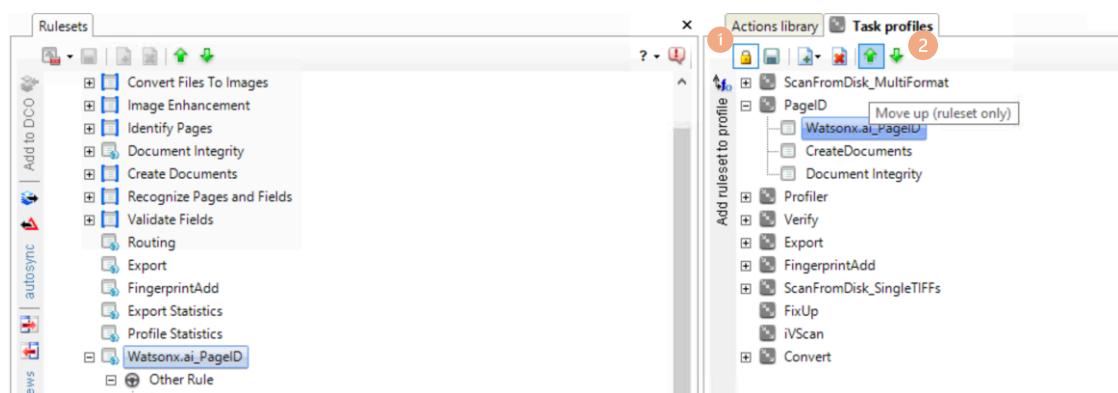


Make sure to add the Watsonx.ai_PageID ruleset *before* the CreateDocuments task, as shown below.

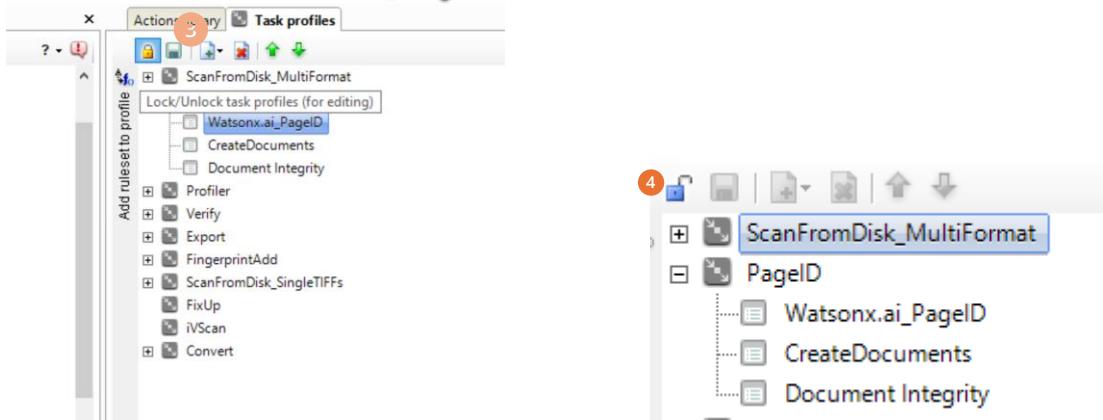
Before editing Task Profiles, you must lock them by clicking the lock icon on the Task Profiles tab.

To remove a ruleset, click the "X" icon next to the ruleset name.

To add a ruleset, click the "Add Ruleset to Profile" button and select the desired ruleset from the list.



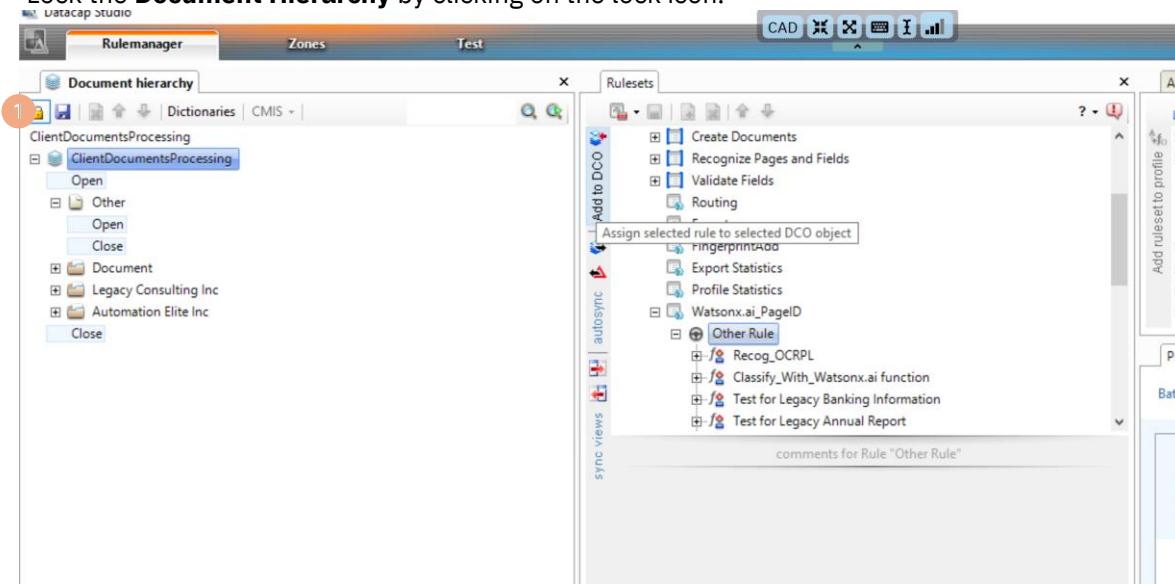
To make changes in the task profiles, lock the Task profiles, move the task profiles up or down as per requirement and lock the Task Profiles again.



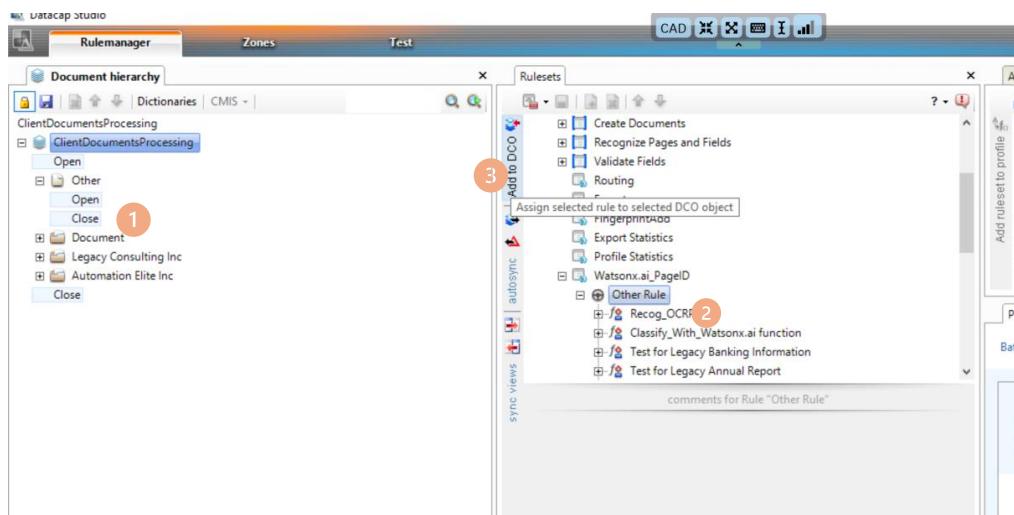
3.2.2.3 Map the Watsonx.ai_PageID (Other Rule) to the Document Hierarchy (DCO)

Now, add the rule to the **DCO (Document Hierarchy)** to specify where the ruleset should be executed during processing.

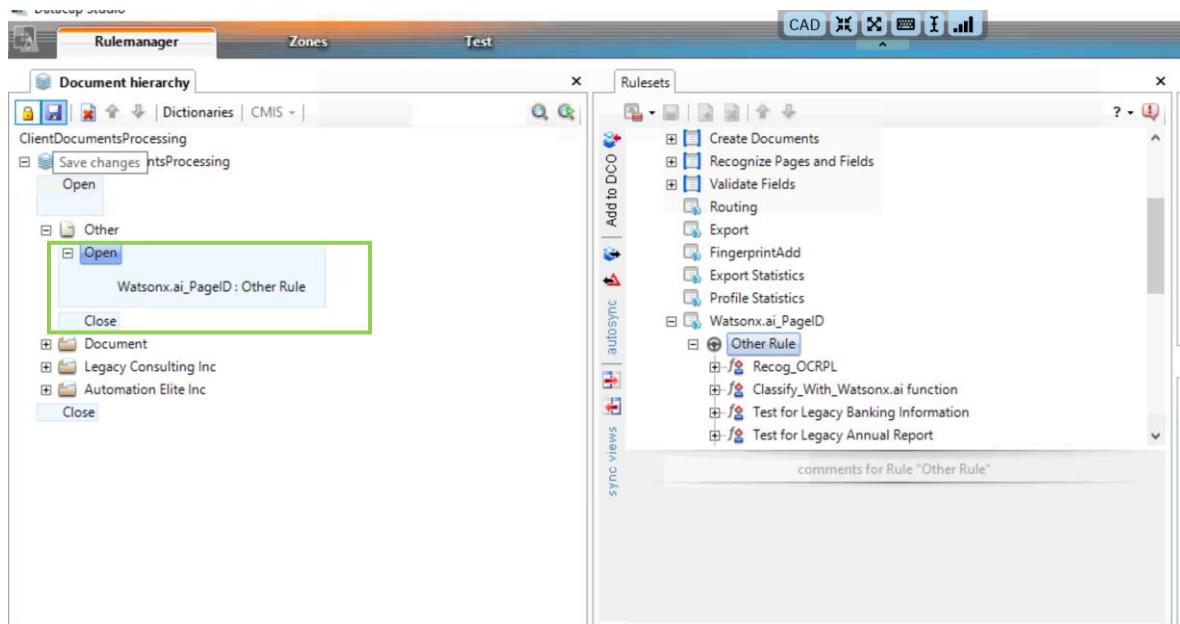
1. Lock the **Document Hierarchy** by clicking on the lock icon.



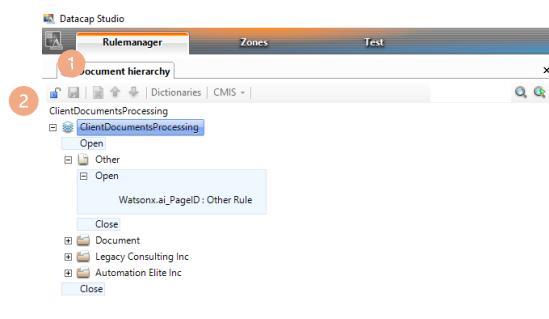
2. Expand the **Other** in document hierarchy pane, select Open, we want to associate the rule to Other document hierarchy. Click on **Other Rule** from the ruleset under Watsonx.ai_PageID and click on '**Add to DCO button**' to apply this rule to Document Class.



After the rule added to the **DCO** object, you should see it reflected as shown in the screenshot below.



3. Click **Save** icon, then click the **lock** icon to **unlock** the **DCO** as shown below.



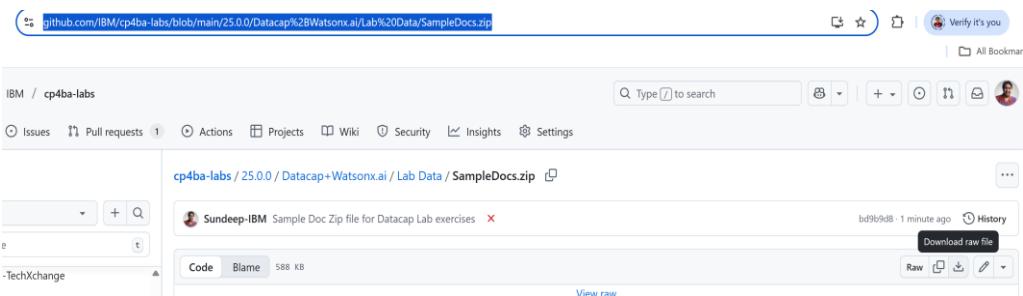
You have successfully enhanced the Datacap application to recognize documents using the OCRPL (Planet.AI) engine and to perform Document classification with Watsonx.ai, enabling accurate document classification prior to extraction.

IBM Datacap, when integrated with watsonx.ai, transcends the limitations of traditional OCR systems by introducing **dynamic layout interpretation** and **semantic understanding**. Traditional OCR relies on fixed templates and basic character recognition, often struggling with unstructured or variable document formats.

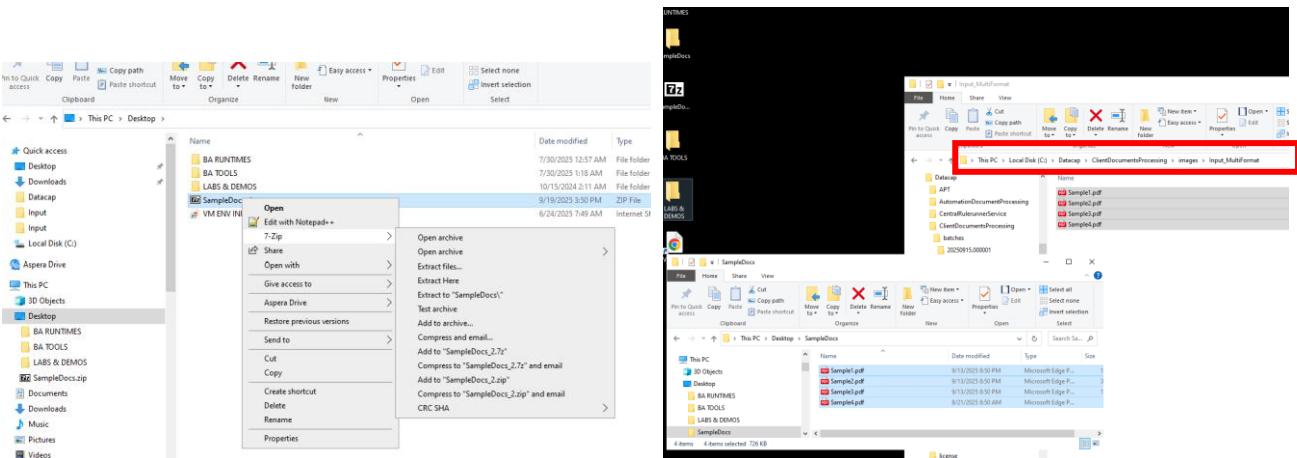
3.2.2.4 Verify/Test the Document classification within DataCap studio with Client Documents

In this section you are validating the Watsonx.ai_PageID ruleset in DataCap with Client Documents.

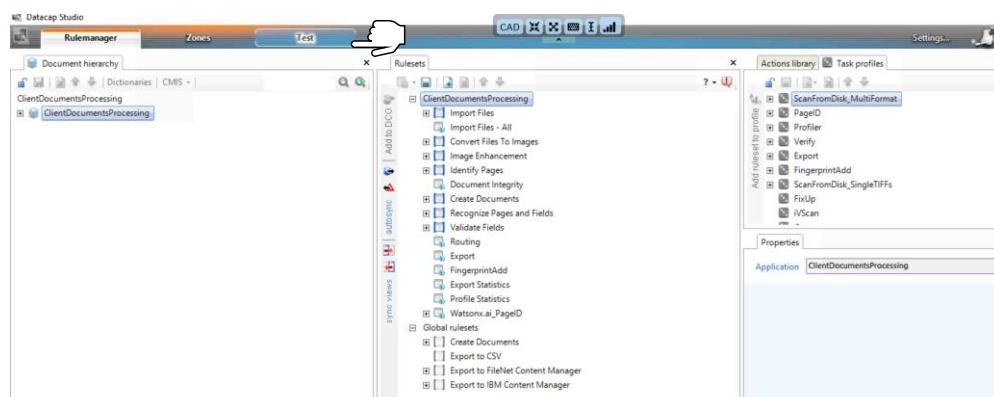
- _1. Download the sample documents into the VM from the GitHub link <https://github.com/IBM/cp4ba-labs/blob/main/25.0.0/Datacap%2BWatsonx.ai/Lab%20Data/SampleDocs.zip> as shown below.



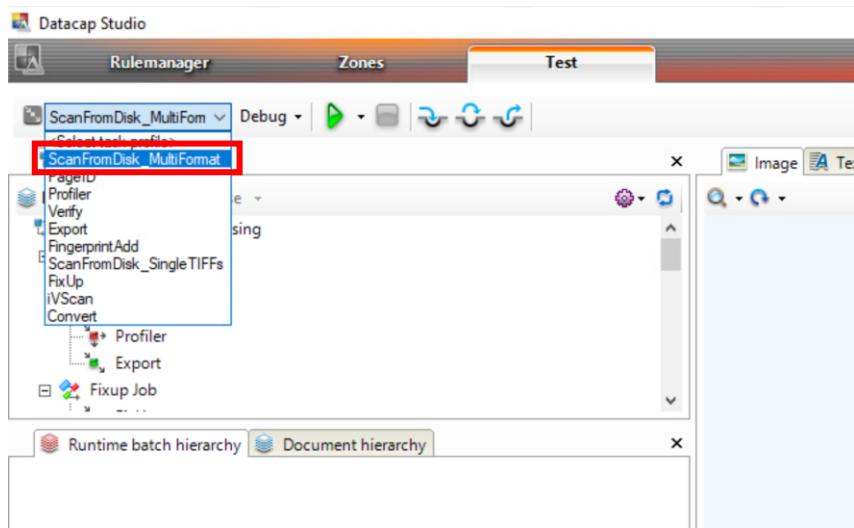
- _2. Unzip the SampleDocs folder and copy the sample documents in to Input folder "**C:\Datacap\ClientDocumentsProcessing\images\Input_MultiFormat**".



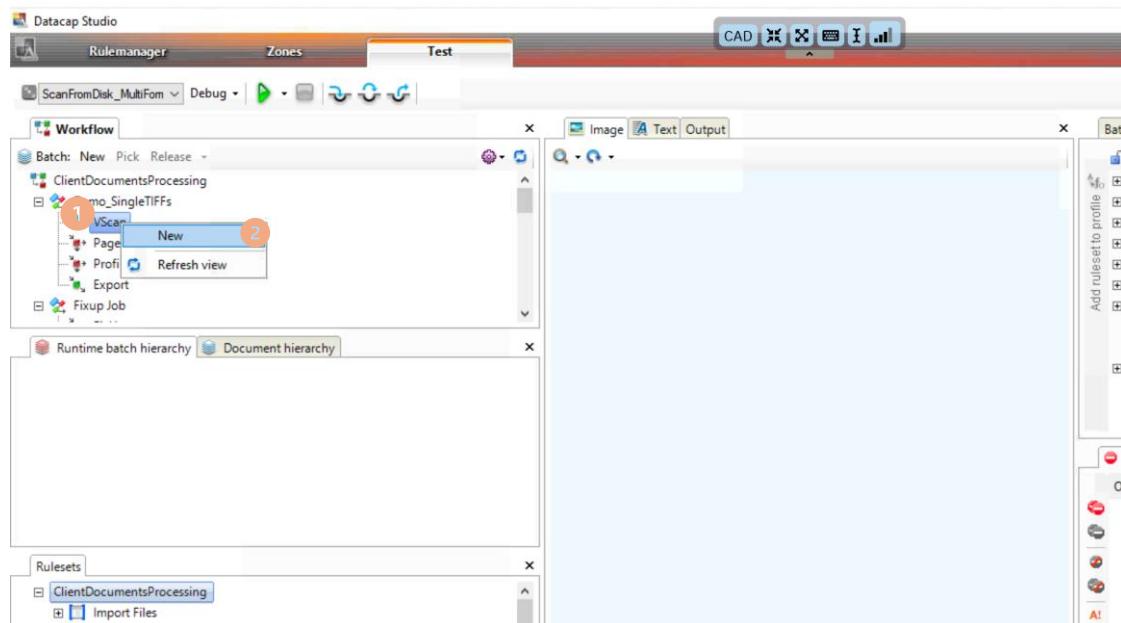
- _3. Click the **Test** tab from the DataCap studio



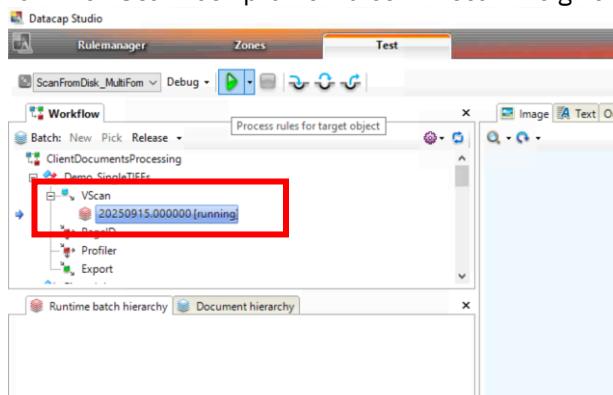
_4. Select **ScanFromDisk_MultiFormat** from the **dropdown** menu as shown below.

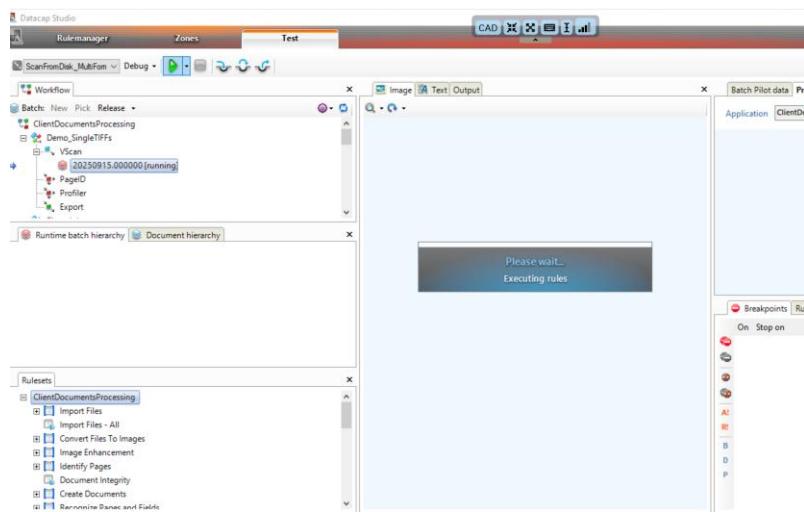


_5. Right click on the Vscan under **Demo_singleTiffs** and click **New** and click the green **Play** button to start the process.



_6. Now the **vScan** task profiler rules will scan the given input sample docs.



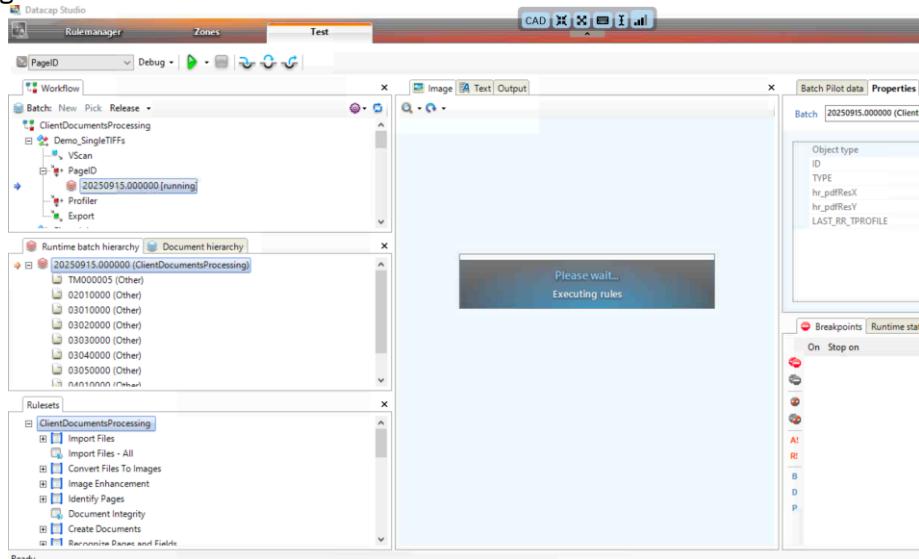


In the Vscan task-All the sample documents get converted from pdf into tiff images and moved to Other Page. Open File Explorer, navigate to C:\Datacap\ClientDocumentsProcessing\Batches\, and select the current batch folder to observe behind-the-scenes activity during the Vscan task.

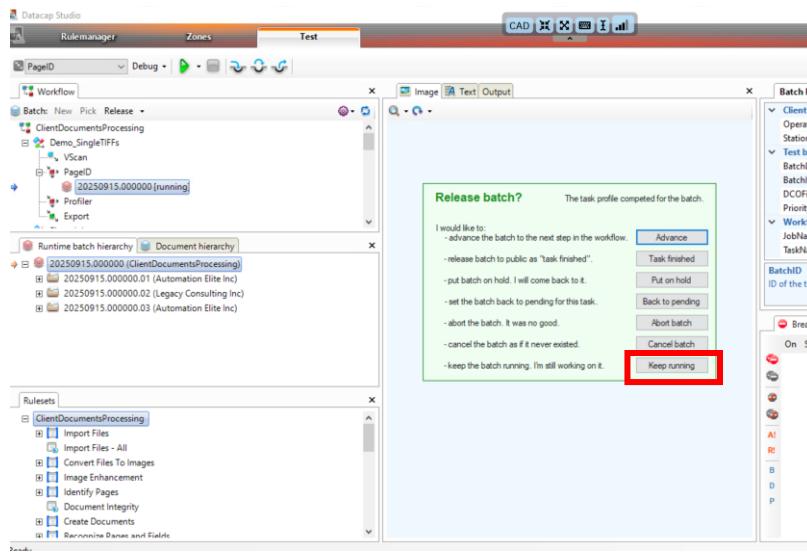
If you encounter an error during task execution, you can check the corresponding RRS logs—such as **Vscan_rrs.log**—in the current batch folder located in File Explorer.

_7. Click on the “**Advance**” button from the popup window and click the green **Play** button to start the process.
<Screenshot to be added here>

_8. Now the batch has moved to **PageID task profiler** where you added the watsonx.ai_PageID ruleset for recognition and classification.



_9. When the popup window appears, click the “Keep Running” button. This allows you to verify the results before moving forward. It's a recommended practice to check outcomes at each stage to ensure smooth execution and accurate results.



You can see the documents are successfully classified based on the Watsonx.ai LLM model response.
In case, documents are not classified then go to troubleshooting section to troubleshoot your application.

_10. Expand each Document Type in the Runtime Batch Hierarchy and verify how each page has been classified to ensure the Document classification logic has been applied correctly.

Service Period: 00424-99452	
Cable TV Plan - Digital HD	\$ 7.38
Includes: Digital Starter Programming, Interactive Program Guide, Music Choice	\$ 8.11
Total Base Cable Fee \$ 16.41	
Additional Services	
Pay Per View Service	\$ 8.85
Additional Outlet - Digital Converter	\$ 8.70
Total Additional Service Charges \$ 18.43	
Other Charges	
Broadcast TV Fee	\$ 11.26
Regional Sports Fee	\$ 10.06
Total Other Charges \$ 21.32	
Taxes & Surcharges	
State Sales Tax	\$ 3.75
Franchise Related Fee	\$ 2.85
Total Taxes & Surcharges \$ 6.60	
TOTAL CHARGES FOR THE PERIOD \$ 62.76	

3.2.2.5 Document Extraction using Watsonx.ai Large Language Models (LLM)

Create Extraction with Watsonx.ai Ruleset (Rules and Functions) for the ClientDocumentsProcessing App using Datacap Studio

In this section, you will create two rulesets—“**Extraction all fields with Watsonx.ai**” and “**Extraction values by defined fields with Watsonx.ai**”—including the relevant rules and functions, as illustrated in the diagram below.

Note:

- **Extraction All Fields with Watsonx.ai:** This ruleset automatically identify and extract **all possible fields** from a document—without predefined rules or templates.

Significance:

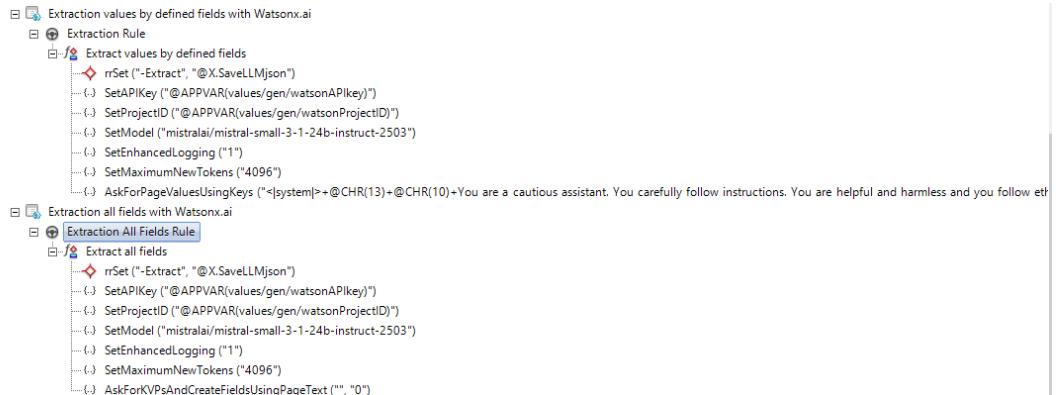
- o **Fully AI-driven:** Relies on foundation models to understand document structure and content.
- o **Flexible:** Ideal for unstructured or semi-structured documents where field positions may vary.
- o **Fast setup:** No need to define fields manually, Watsonx.ai infers them.
- o **Use case:** Best for exploratory tasks, rapid prototyping, or when dealing with diverse document formats.

Note:

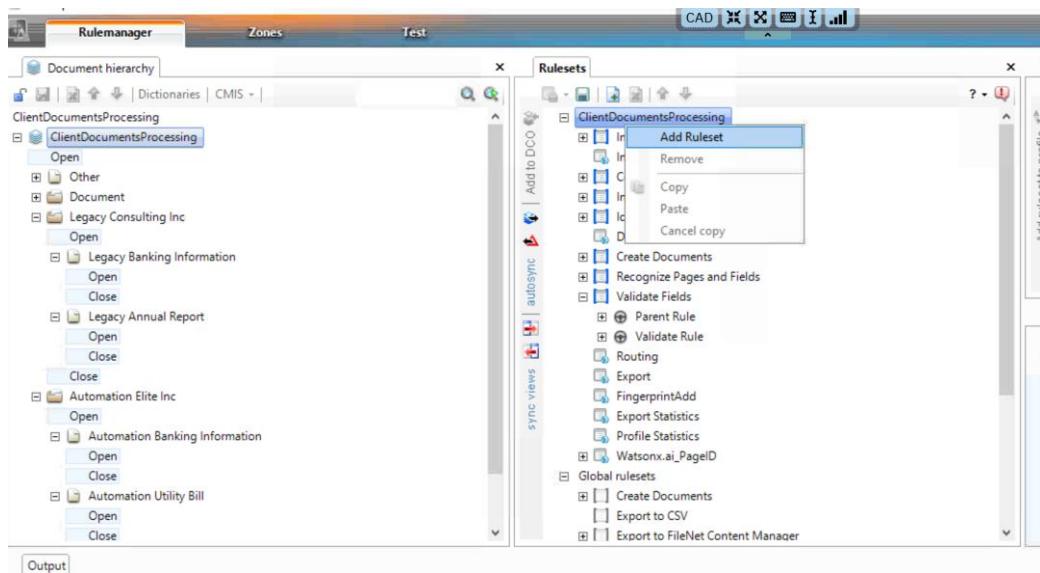
- **Extraction Values by Defined Fields with Watsonx.ai:** This ruleset to extract values **only for specific fields** that have been defined in advance (e.g., Client name, Account number, Address etc).

Significance:

- o **Targeted extraction:** Focuses on retrieving values for known, relevant fields.
- o **Higher accuracy:** AI is guided by field definitions, reducing ambiguity.
- o **Controlled output:** Ensures consistency across batches and aligns with business rules.
- o **Use case:** Ideal for production workflows, compliance-driven processes, or when integrating with downstream systems like Datacap.



_1. Add a new ruleset by right-clicking on **ClientDocumentsProcessing** and click on **Add Ruleset**.



_2. Rename Ruleset1 to '*Extraction all fields with Watsonx.ai*' by right clicking and selecting option to rename, rename Rule1 to '*Extraction All Fields Rule*', and rename Function1 to '*Extract all fields*', as shown below



_3. Copy the methods from **classify_with_Watsonx_function** under the **Watsonx.ai_PageID** ruleset and paste them into the **Extract all fields** function. Alternatively, you can add these methods directly from **watsonx.ai** action library and set the corresponding parameters.

Make sure the **APIKey** and **ProjectID** methods are set **before** the **Model** method within the function; otherwise, you may encounter errors when calling Watsonx.ai.

```
Extract all fields
  ...-> SetAPIKey ("@APPVAR(values/gen/watsonAPIkey)")
  ...-> SetProjectID ("@APPVAR(values/gen/watsonProjectID)")
  ...-> SetModel ("mistralai/mistral-small-3-1-24b-instruct-2503")
  ...-> SetEnhancedLogging ("1")
  ...-> SetMaximumNewTokens ("4096")
```

The screenshot shows the 'Extract all fields' function in the 'Watsonx.ai_PageID' ruleset. The code consists of several method calls: 'SetAPIKey', 'SetProjectID', 'SetModel', 'SetEnhancedLogging', and 'SetMaximumNewTokens'. The 'SetMaximumNewTokens' call is highlighted with a blue selection bar.

_4. Add the **AskForKVPsAndCreateFieldsUsingPageText** method from **watsonx.ai** action library to the function and set the **String format** parameter value to **0**.

Note: The function **AskForKVPsAndCreateFieldsUsingPageText** in IBM Datacap is used to extract key-value pairs (KVPs) from the page text and automatically create corresponding fields in the document hierarchy. It leverages AI capabilities—such as Watsonx.ai—to analyze the page content and identify

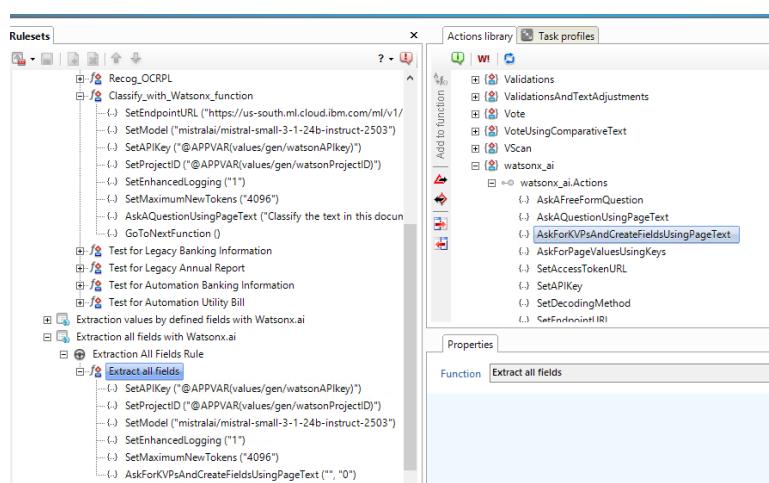
relevant data points without predefined templates. For full technical details and usage examples, refer to IBM's official Datacap API documentation [AskForKVPsAndCreateFieldsUsingPageText - IBM Documentation](#)

To ensure accurate results, you must add all required methods in the correct sequence as shown in the reference screen. Missing or misordered methods may lead to incomplete or incorrect field extraction.

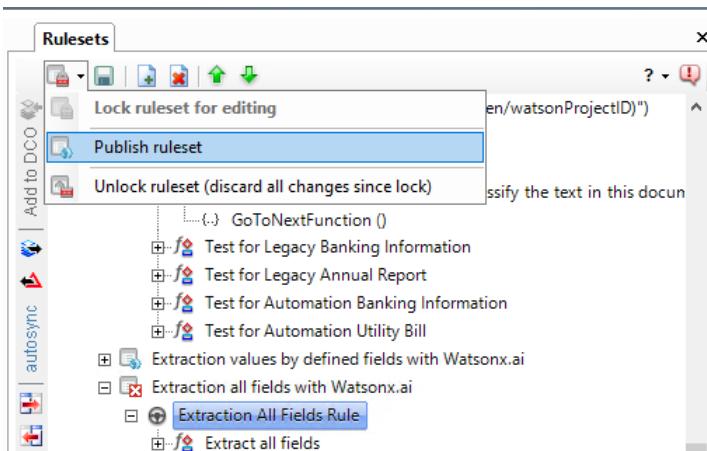
In IBM Datacap, the **String Format** parameter determines how the page content is sent for processing:

- **0** → Sends the page as **plain text** format
- **1** → Sends the page as **HTML** format

This setting affects how functions like AskForKVPsAndCreateFieldsUsingPageText interpret and extract data from the page. Use format **0** for simpler text-based documents, and format **1** when layout or styling (like tables or labels) is important for accurate extraction.

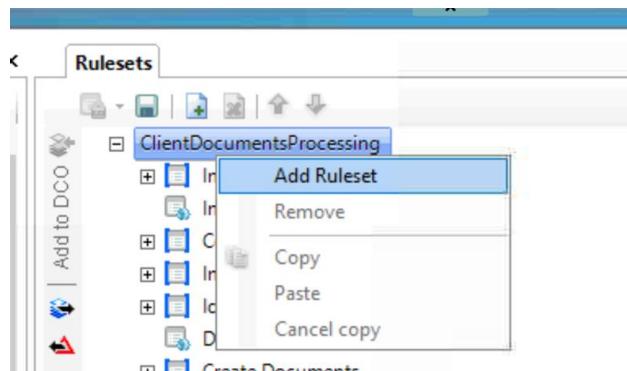


_5. Save and publish the Extraction all fields with Watsonx.ai ruleset.

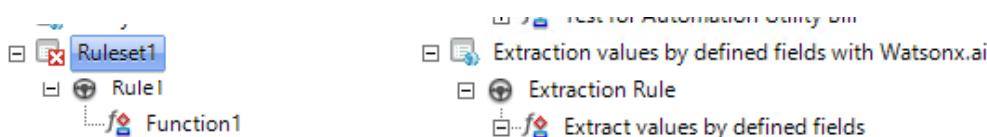


Add a new ruleset to the **ClientDocumentsProcessing** application to extract the defined fields using a Watsonx.ai model, leveraging the **AskForPageValuesUsingKeys** method from the Watsonx.ai Action Library.

_6. Right click on the **ClientDocumentsProcessing** and click on **Add Ruleset**.



_7. Rename **Ruleset1**, **Rule1**, and **Function1** to ‘*Extraction values by defined fields with watsonx.ai*’, ‘*Extraction Rule*’, and ‘*Extract values by defined fields*’, respectively, as shown below.



_8. Copy the methods **SetAPIKey**, **SetProjectID**, **SetModel**, **SetEnhancedLogging**, and **SetMaximumNewTokens** from the earlier ruleset, then add the **rrset** method from the RuleRunner action library, setting **varSource** to “-Extract” and **varTarget** to @X.SaveLLMJson.



To ensure accurate results, you must add all required methods in the correct sequence as shown in the reference screen. Missing or disordered methods may lead to incomplete or incorrect field extraction.

Note: This method **rrSet("-Extract", "@X.SaveLLMJson")** ensures that during the **Extract** phase, the system executes the SaveLLMJson logic, capturing and storing AI-generated results in a structured format for further processing or validation.

The rrset("-Extract", "@X.SaveLLMJson") method in IBM Datacap is used to configure rule execution by setting a specific rule set for the **Extract** action. Here's what each part signifies:

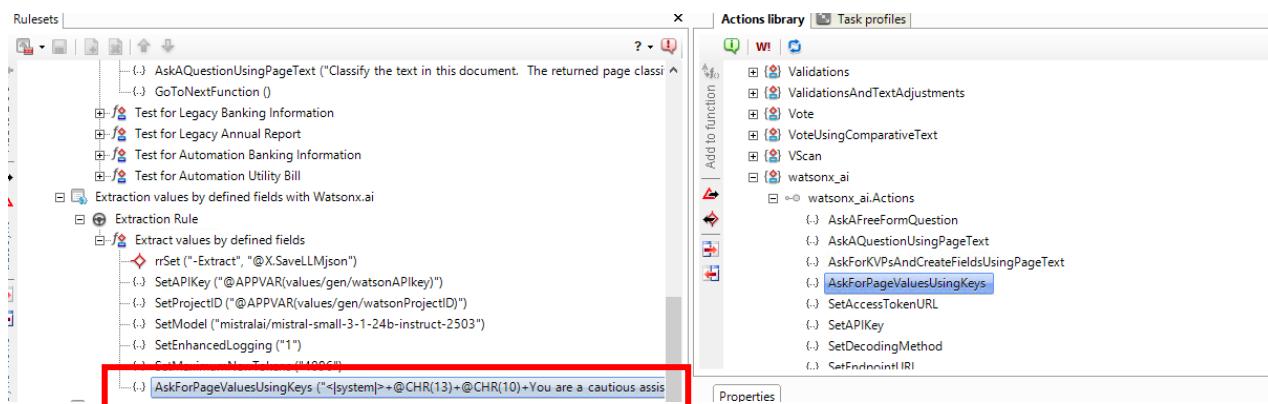
- **Extract:** This is the action or task phase where the rule set is applied—typically during data extraction.

- **@X.SaveLLMJson:** This refers to the rule set or method being assigned. In this case, it likely triggers the SaveLLMJson function from the X ruleset, which is designed to save the output from a large language model (LLM) like Watsonx.ai in JSON format.

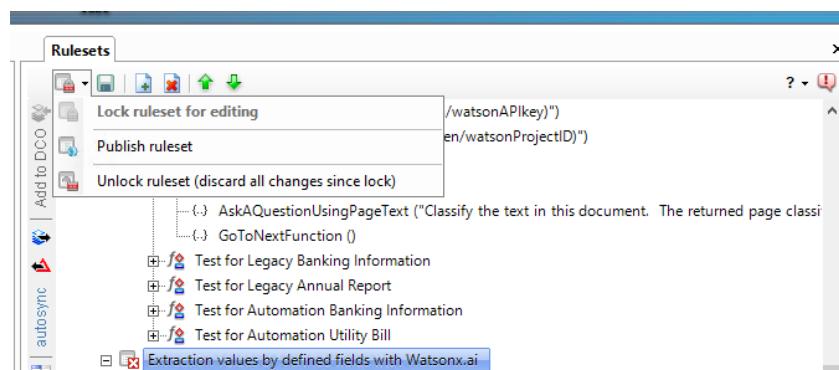
_9. Add the “**AskForPageValuesUsingKeys**” method from watsonx.ai action library to the function and add the

- **String Question** value “<|system|>+@CHR(13)+@CHR(10)+You are a cautious assistant. You carefully follow instructions. You are helpful and harmless and you follow ethical guidelines and promote positive behavior.+@CHR(13)+@CHR(10)+<|user|>+@CHR(13)+@CHR(10)+[Document]+@CHR(13)+@CHR(10)+{{PAGETEXT}}+@CHR(13)+@CHR(10)+[End]+@CHR(13)+@CHR(10)+The following is a list of keys to find within the document. Please find only these keys and do not return any additional keys.+@CHR(13)+@CHR(10)+@CHR(13)+@CHR(10)+{{LLMKEYS}}+@CHR(13)+@CHR(10)+@CHR(13)+@CHR(10)+**Return the key value pairs in JSON format. Return only JSON in the following format.** Do not include additional keys. Do not include additional text before or after the JSON.+@CHR(13)+@CHR(10)+@CHR(13)+@CHR(10)+<| assistant |> “

- **String format** parameter value to 0



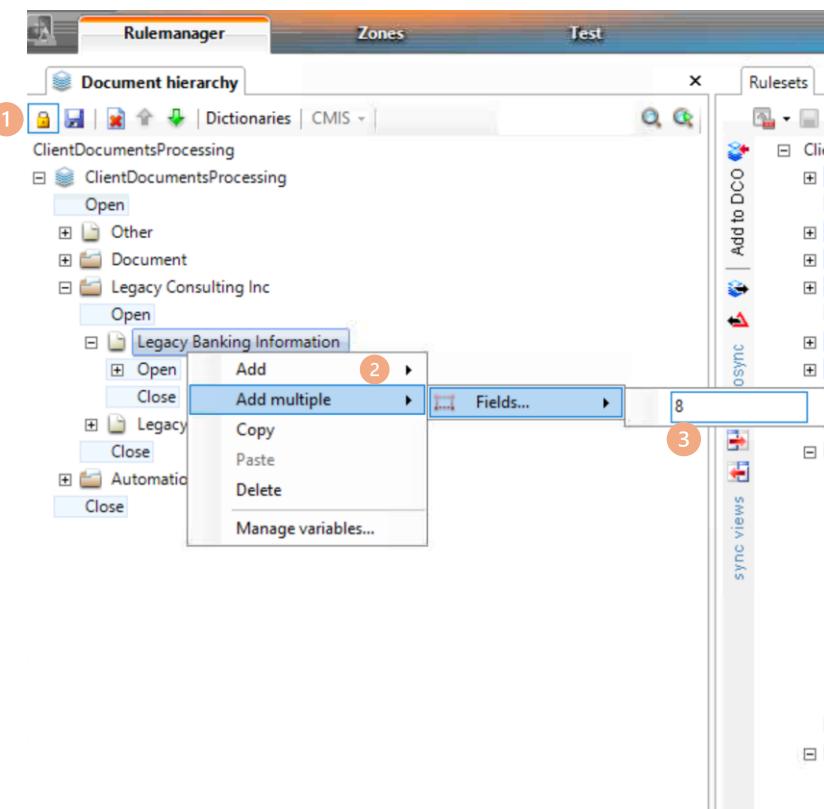
_10. Save and publish the “**Extraction values by defined fields with Watsonx.ai**” ruleset.



You have successfully created both the rulesets “*Extraction all fields with Watsonx.ai*” and “*Extraction values by defined fields with Watsonx.ai*” using Datacap Studio.

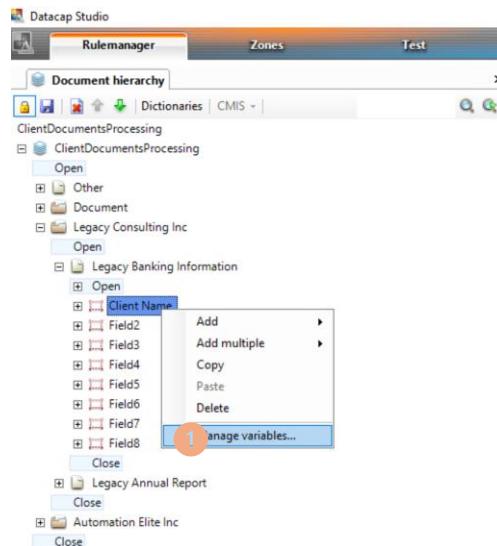
You are going to create the defined fields for the “**Legacy Banking Document**” using **Datacap Studio**, though you can also create these fields using the **FastDoc Admin** application if you prefer.

_11. Click the **lock icon** in the **Document Hierarchy**, then right-click on **Legacy Banking Information**, select **Add Multiple Fields**, and enter the value **8**, indicating that you will extract **8 fields** from the document.

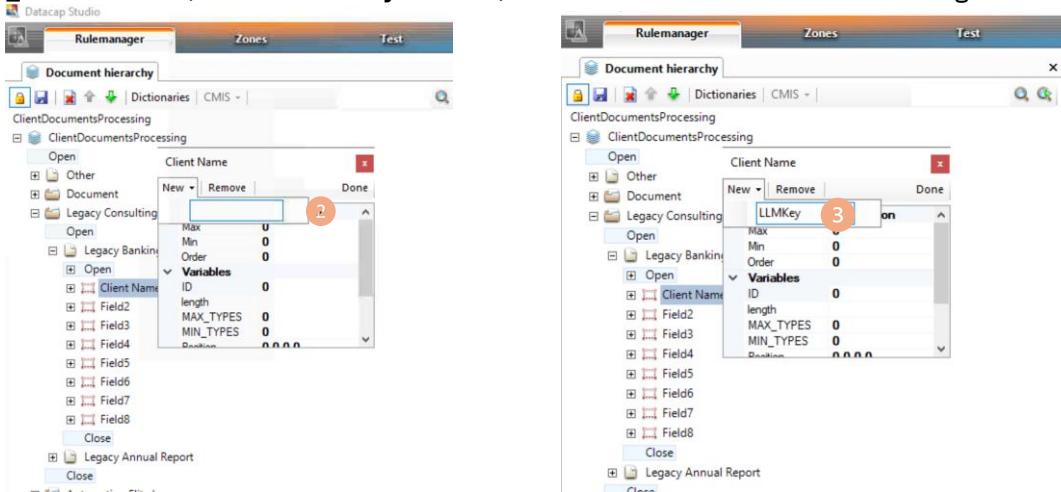


_12. Rename **Field 1** to **Client Name** from the Properties tab.

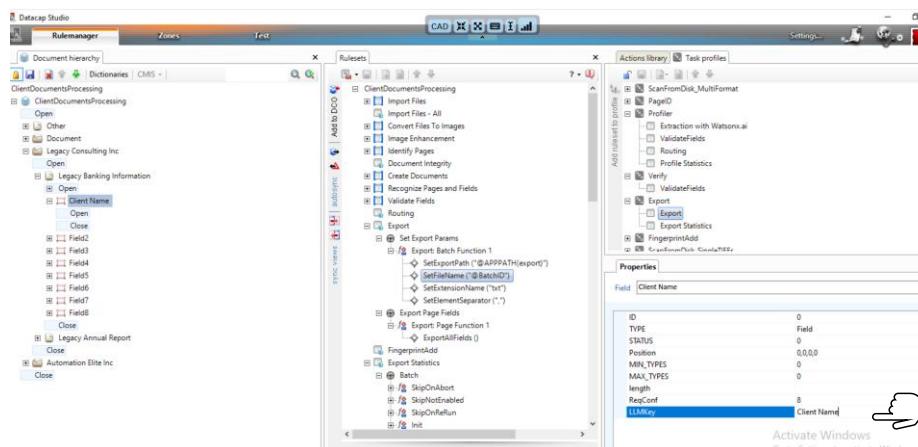
_13. You need to define the **LLMKey** variable and assign its value to the field by **right-clicking on "Client Name"** and selecting **Manage Variables**.



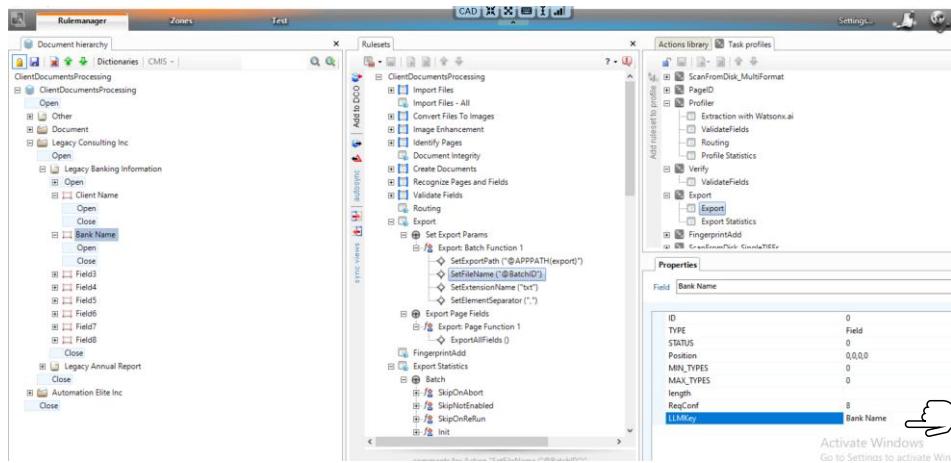
_14. Click **New**, add the **LLMKey** variable, and then click **Done** to save the changes.



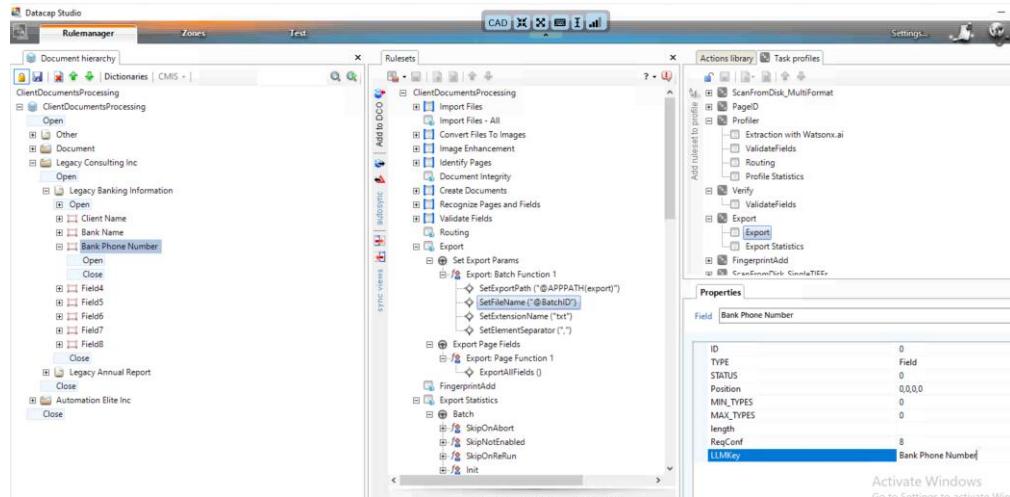
_15. Set the **LLMKey** variable value for the **Client Name** field to "Client Name".



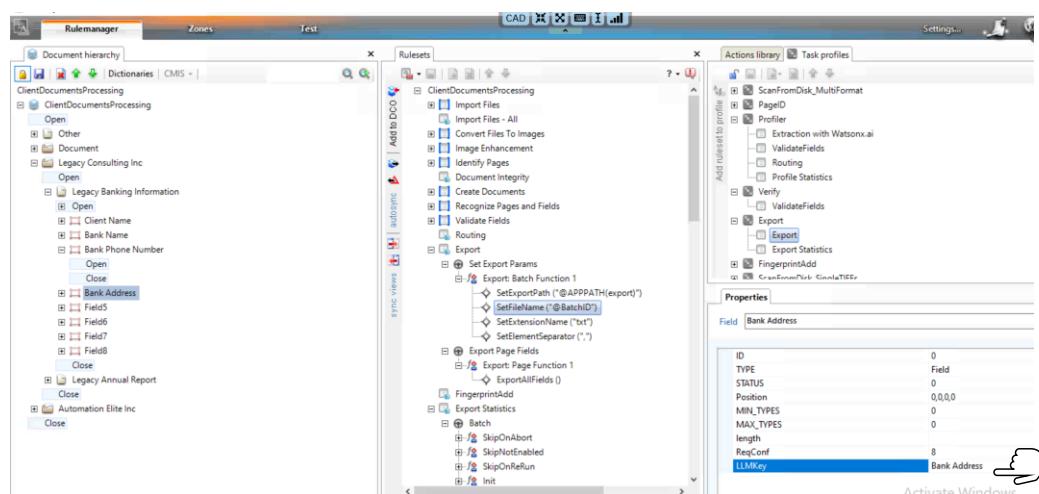
_16. Rename **Field 2** to **Bank Name**, then add the **LLMKey** variable and set its value to "**Bank Name**".



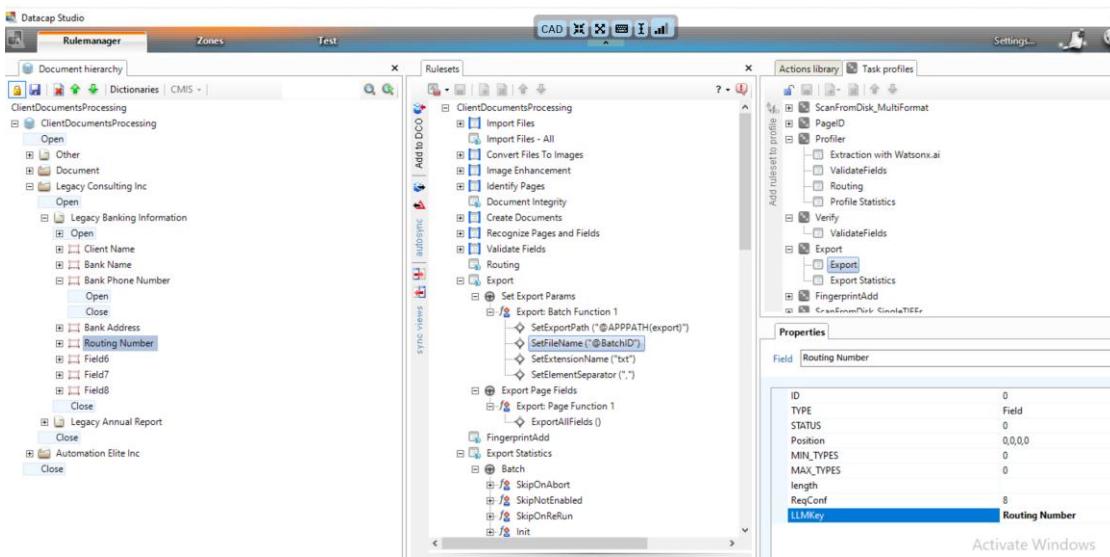
_17. Rename Field 3 to **Bank Phone Number**, then add the **LLMKey** variable and set its value to "**Bank Phone Number**".



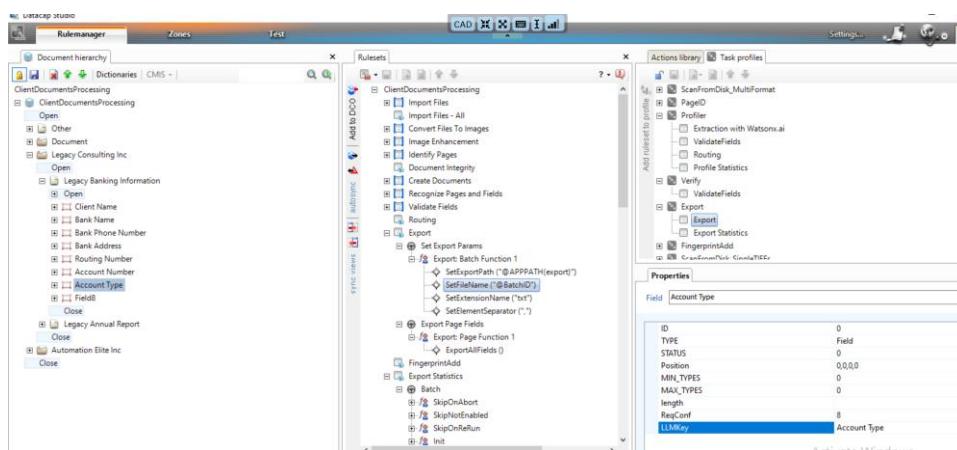
_18. Rename Field4 to **Bank Address**, then add the **LLMKey** variable and set its value to "**Bank Address**".



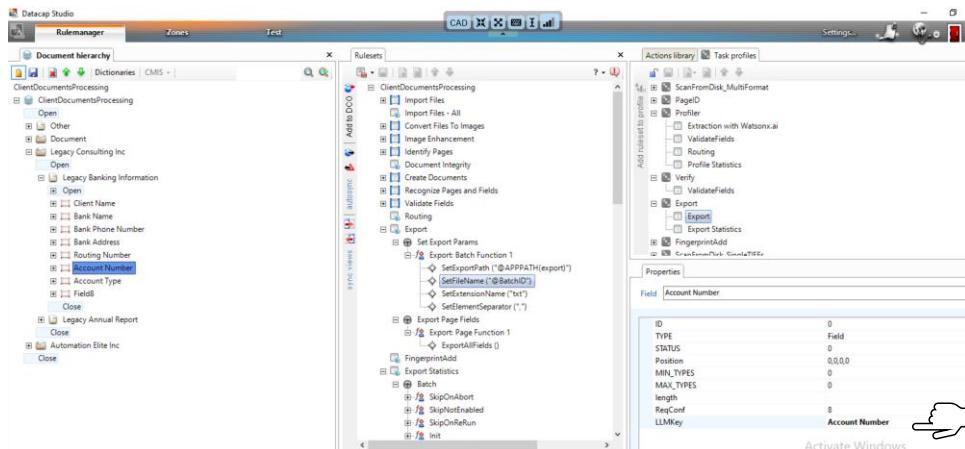
_19. Rename **Field5** to **Routing Number**, then add the **LLMKey** variable and set its value to " **Routing Number** ".



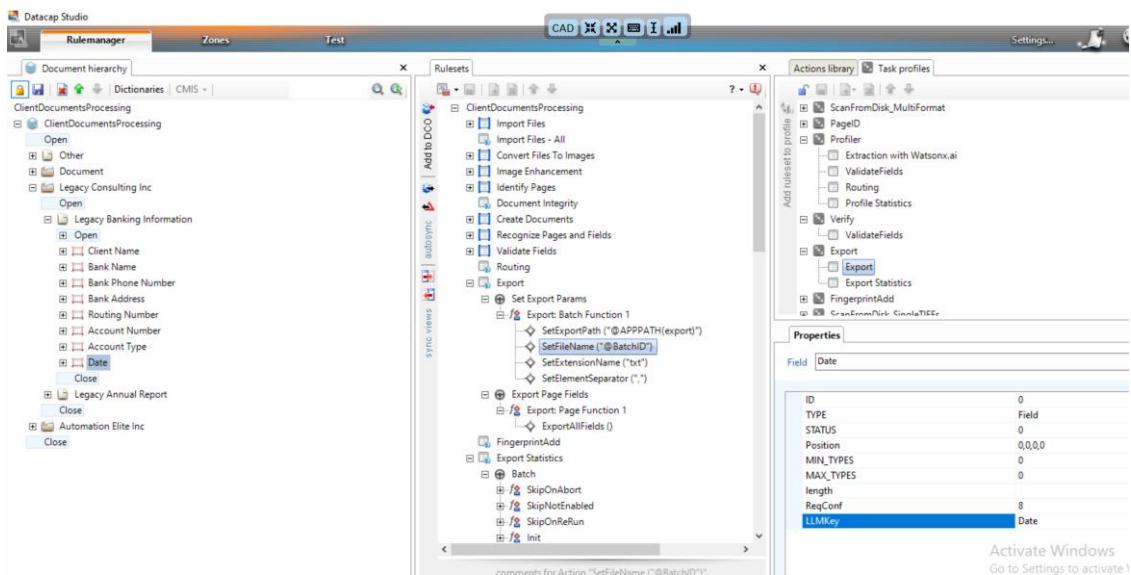
_20. Rename **Field6** to **Account Type**, then add the **LLMKey** variable and set its value to " **Account Type** ".



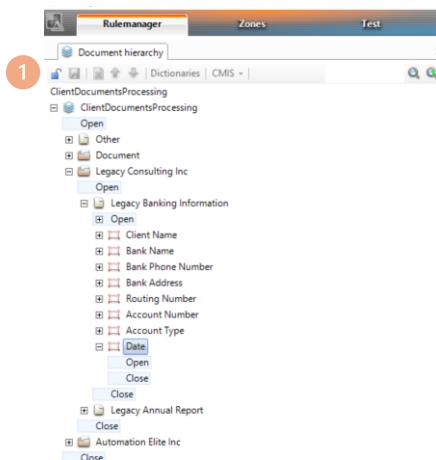
_21. Rename **Field7** to **Account Number**, then add the **LLMKey** variable and set its value to " **Account Number** ".

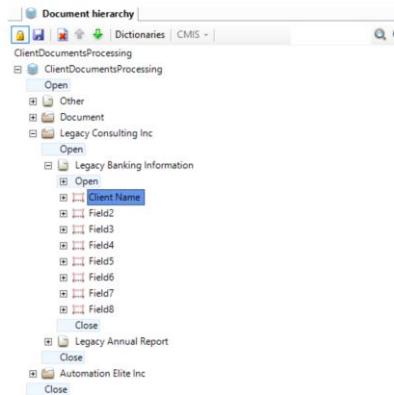


_22. Rename **Field8** to **Date**, then add the **LLMKey** variable and set its value to “**Date**”.



_23. Save your changes and click the **lock icon** to unlock the **DCO under Document Hierarchy**, as shown below.





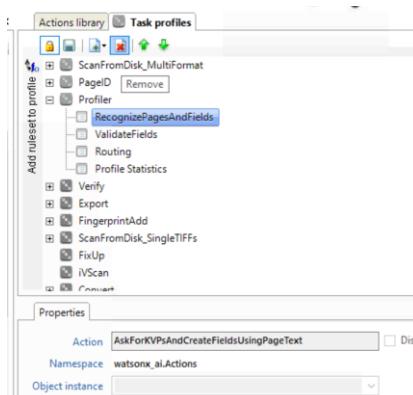
3.2.2.5 Map both rulesets “Extraction all fields with Watsonx.ai” and “Extraction values by defined fields with Watsonx.ai” to Task Profile Workflow

_1. Remove Recognize Pages and Fields ruleset from “**Profiler**” under *Task profiles*. Now add both rulesets “Extraction all fields with Watsonx.ai” and “Extraction values by defined fields with Watsonx.ai” to Profiler task.

Before editing Task Profiles, you must **lock them** by clicking the lock icon on the Task Profiles tab.

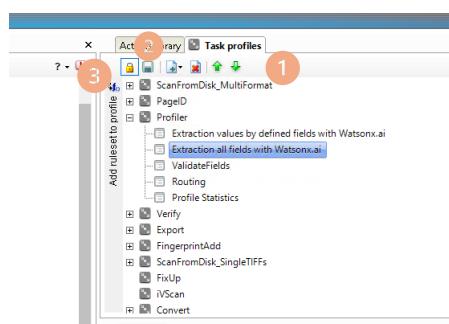
To remove a ruleset, click the “**X**” icon next to the ruleset name.

To add a ruleset, click the “**Add Ruleset to Profile**” button and select the desired ruleset from the list.



_2. Move both rulesets above validateFields using the arrow icons, click **Save**, then click the **lock icon** to unlock the Task Profiles.

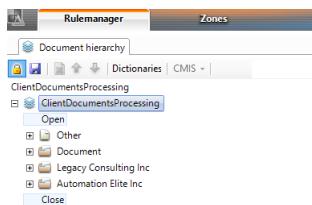
You successfully mapped the extraction rulesets to task profiles.



3.2.2.6 Map the Extraction rules to the Document Hierarchy (DCO)

Now you are adding the rules to the DCO (Document Hierarchy) to specify where the ruleset should be executed during processing.

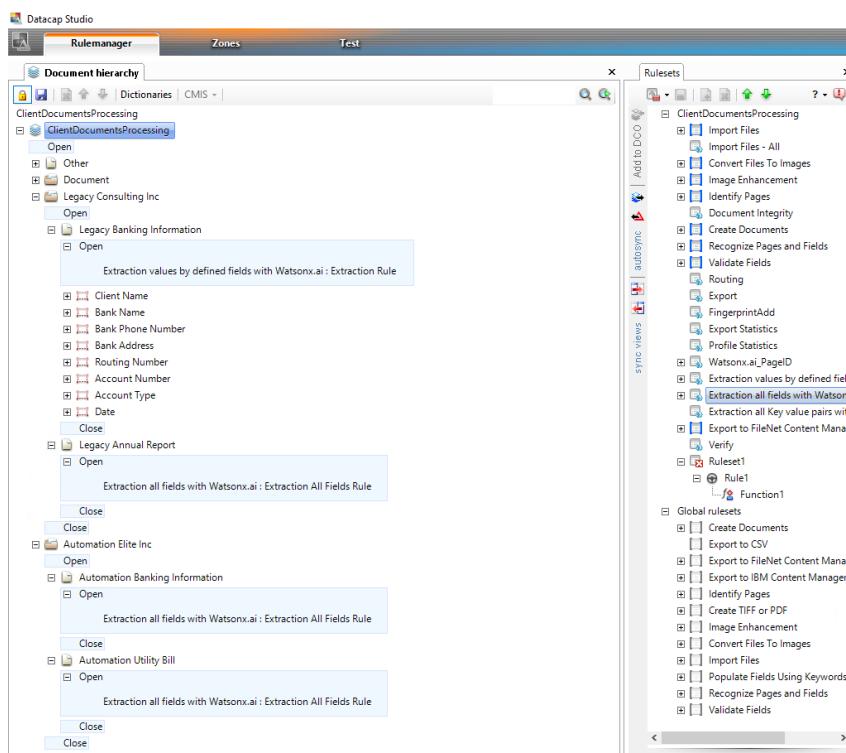
_1. **Lock** the Document Hierarchy by clicking the lock icon, then **add the extraction Rules** from ruleset to the DCO under the Pages by clicking **Add to DCO**.



_2. Added the **Extraction Rule by defined fields with Watsonx.ai** to **Legacy Banking Information page Type** under the **Open Page** section, as LLMKeys have been defined for this document and extraction is performed using the AskForPageValuesUsingKeys method with a **zero-shot prompt**.

_3. **Added the Extraction All Fields** with Watsonx.ai rule (Extraction All Fields Rule) to the remaining page types: **Legacy Annual Report, Automation Banking Information, and Automation Utility Bill**.

After the rules are added to the DCO object, you should see it reflected as shown in the screenshot below.



_4. **Save** and click on the lock icon to unlock the DCO.

3.2.2.7 Verify/Test the Document Extraction within DataCap studio with Client Documents

In this section you are validating the Extraction rulesets in DataCap with Client Documents.

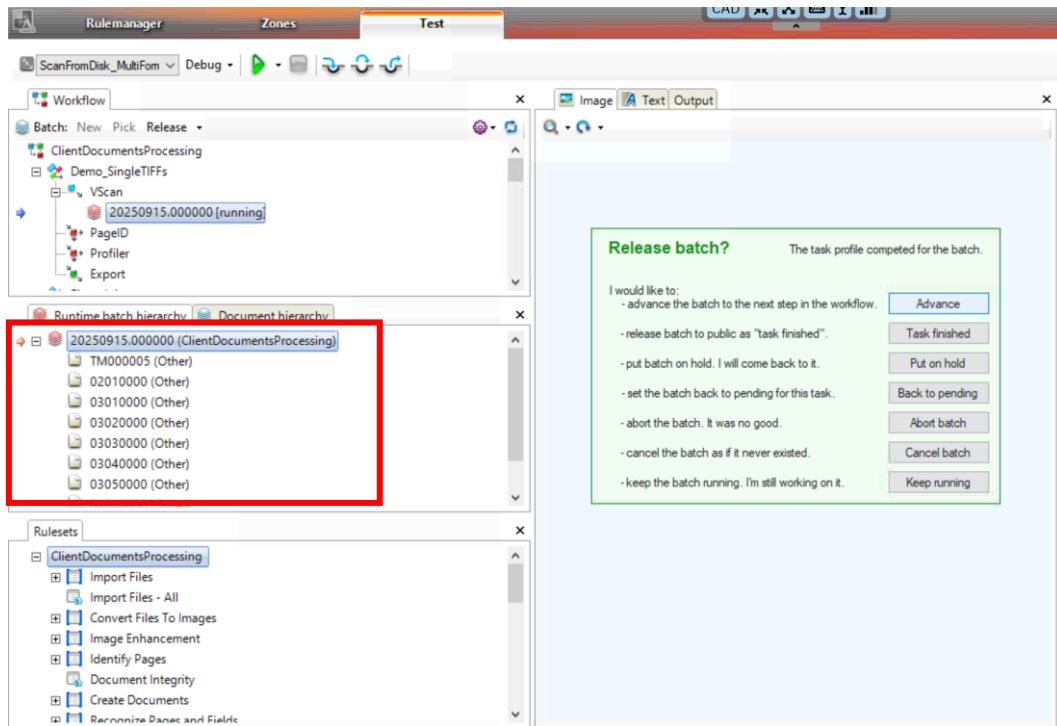
You already placed the documents in the **input folder** during document classification verification section.

_1. Click **Test** Tab from the Datacap Studio.

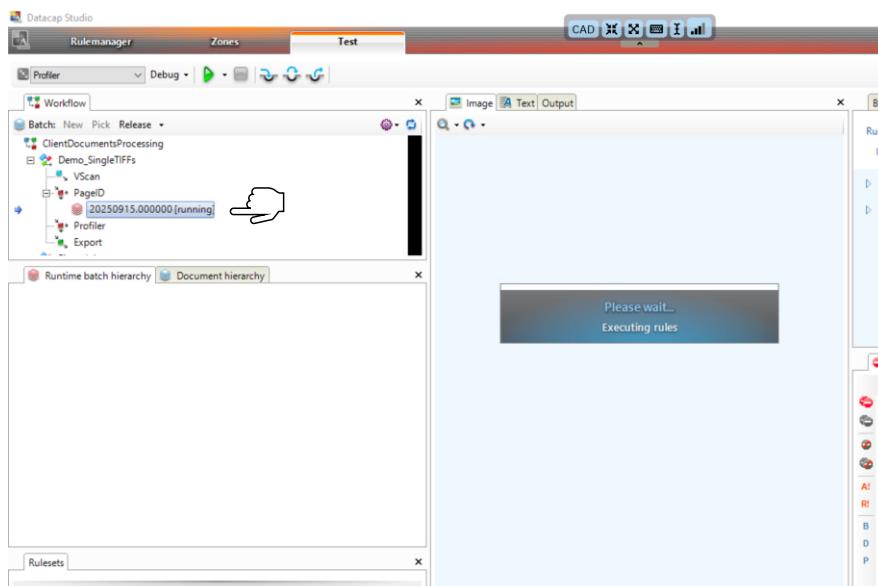
_2. Select **ScanFromDisk_MultiFormat** from the dropdown menu as shown below.

_3. Right click on the Vscan under **Demo_singleTiffs**, click New and click the green **Play** button to start the process.

_4. Click **Advance** button to move to the **PageID** task once it's scanned and convert pdf files into tiff files.

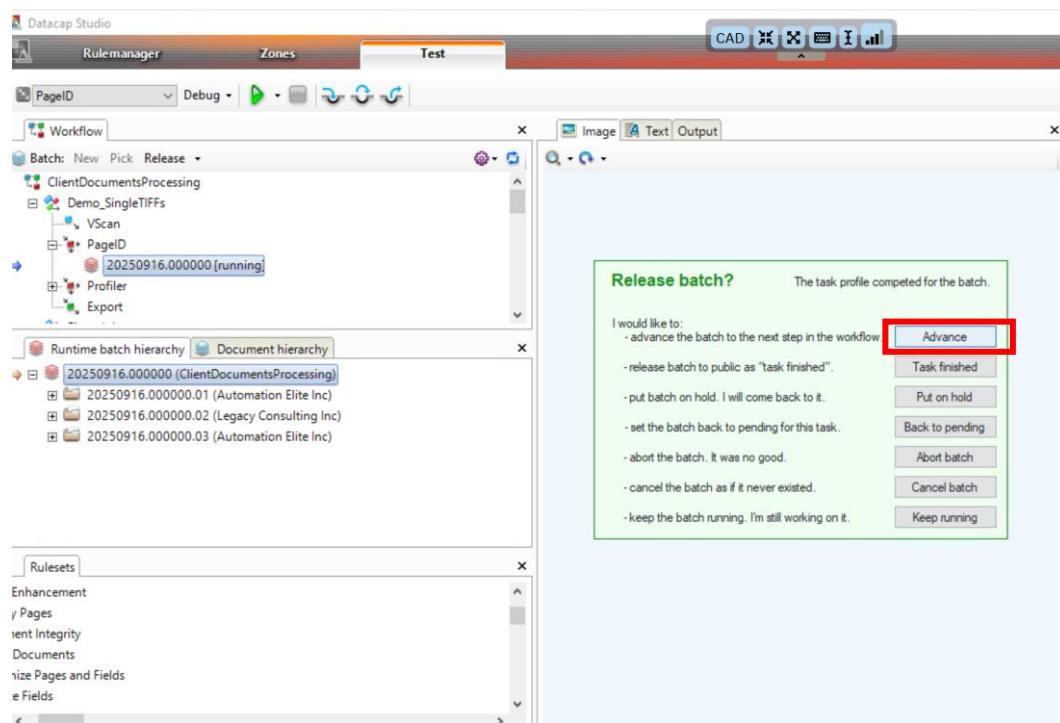


_5. Now **PageID** ruleset is processing for recognition and classification of the documents.



_6. Once the PageID is successfully completed you can see the documents get **classified**. Click Advance to move from PageID task to Profiler where we are extracting the fields from the documents.

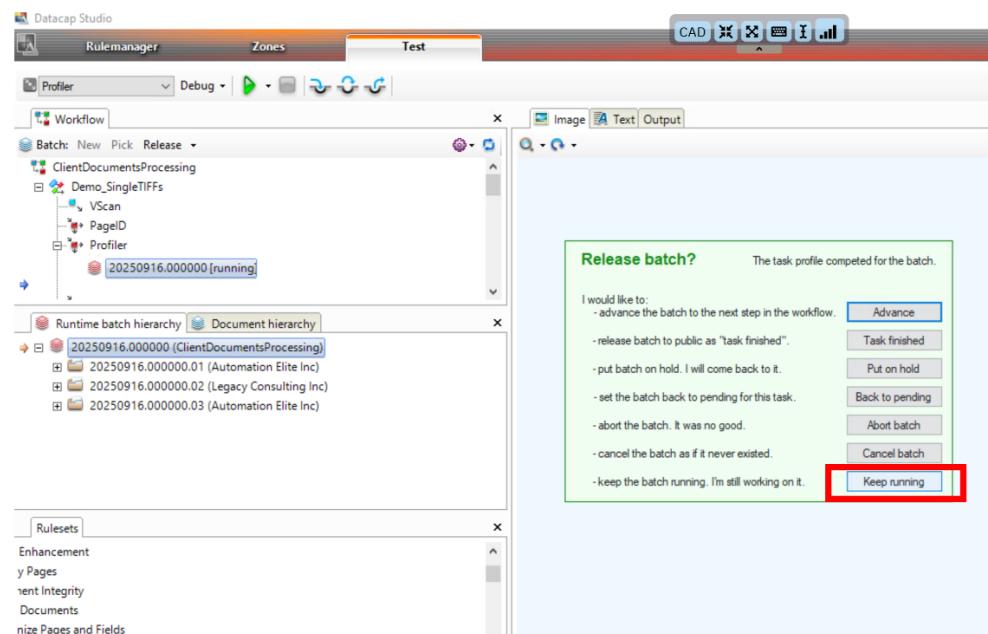
Note: you must click the green **Play** button to start the process.



- We will be covering the following steps for completing the Profiler task:

7. Profiler Task Completion:

- Once the Profiler task is successfully completed, click **Keep running** to keep the process active for the moment.



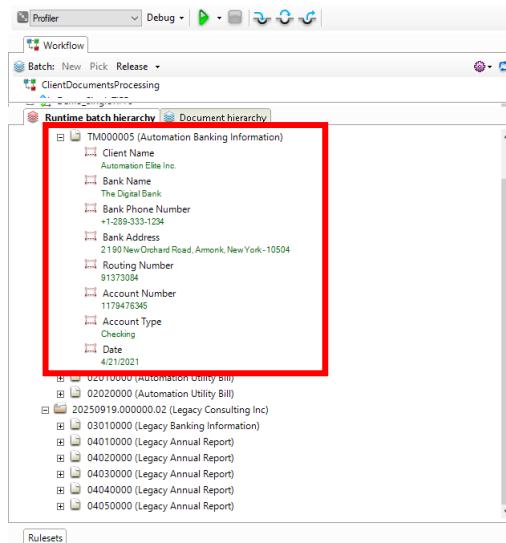
2. Create Verify Ruleset:

- Open the Navigator Desktop.
- Create a verify ruleset to validate the extracted fields and document.
- This ruleset will be used to verify that the fields extracted are accurate and the document complies with your validation criteria.

3. Export Document with Fields:

- After verification, use the **Export to FileNet** connector.
- This exports the document along with its verified fields into your FileNet repository.

_8. You can view the extracted fields by expanding each **document folder** in the **Runtime Batch Hierarchy** to verify the results.



_9. You can open the **processed batch** from path C:\Datacap\ClientDocumentsProcessing\batch and view the extract.json file, which contains the **Legacy Banking Information** response returned by **Watsonx.ai LLM** (for today's date and running batch). You may view the same from the studio as well where you will find it in Document Hierarchy.

This PC > Local Disk (C:) > Datacap > ClientDocumentsProcessing > batches > 20250916.000000				
	Name	Date modified	Type	Size
	0201000.cco	9/16/2025 8:11 PM	CCO File	17 KB
	0201000.tif	9/16/2025 8:09 PM	TIF File	11 KB
	0201000.txt	9/16/2025 8:11 PM	Text Document	1 KB
	0201000.xml	9/16/2025 8:14 PM	XML Document	10 KB
	0201000_layout.xml	9/16/2025 8:11 PM	XML Document	63 KB
	0201000c.xml	9/16/2025 8:11 PM	XML Document	13 KB
	0201000-Extract.json		JSON File	1 KB
	0301000.cco		CCO File	37 KB
	0301000.tif		TIF File	26 KB

```

1  {
2      "Client Name": "Legacy Consulting",
3      "Bank Name": "XYZ Bank",
4      "Bank Phone Number": "+1-213-111-7890",
5      "Bank Address": "887 Cypress Rd, Garden Grove, CA 92840",
6      "Routing Number": "32043559",
7      "Account Number": "7250512345",
8      "Account Type": "Checking",
9      "Date": "5/10/21"
10 }

```

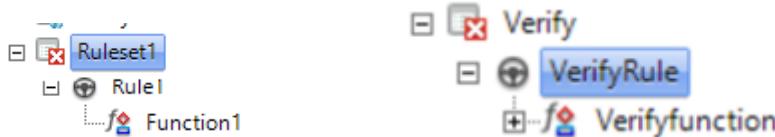
3.2.2.8 Document verification

Create verify Ruleset(Rules, and Functions) for the ClientDocumentsProcessing app with Datacap Studio

In this section, you will create a verify ruleset with the necessary rules and functions to validate the extracted document fields before exporting the document and its properties and saving them to FileNet.

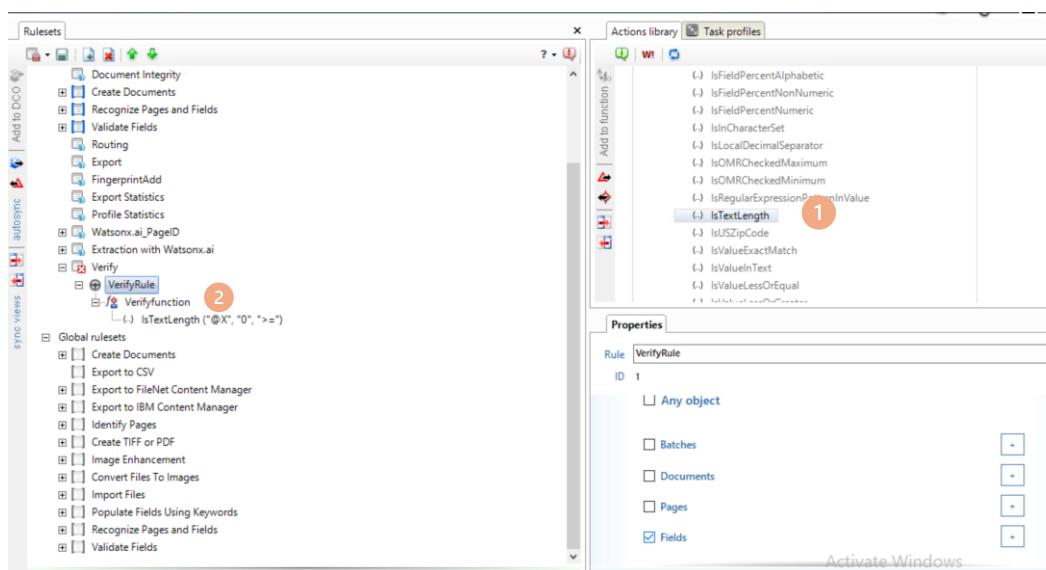
_1. Add another new ruleset to ClientDocumentsProcessing application

_2. Rename **Ruleset1**, **Rule1**, and **Function1** to **Verify**, **VerifyRule**, and **VerifyFunction** respectively, as shown below.

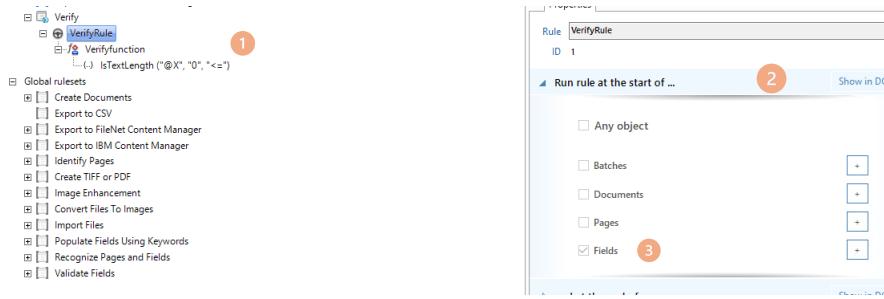


_3. Add **IsTextLength** from *ValidationsAndTextAdjustments* action library and add the following parameters

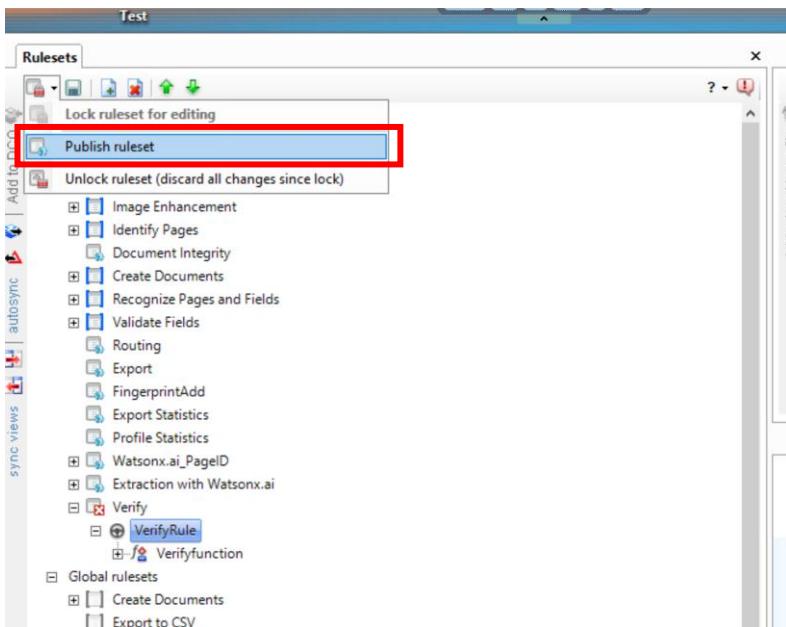
- String Target = “@X”
- String Length=“0” and
- String ComparisonOperator= “>=”



_4. Click on the **Verify Rule** and check the **Fields value** under ‘Run rule at the start of ..’ from the **Properties** panel on the right as shown below:



_5. Save and publish the verify ruleset.

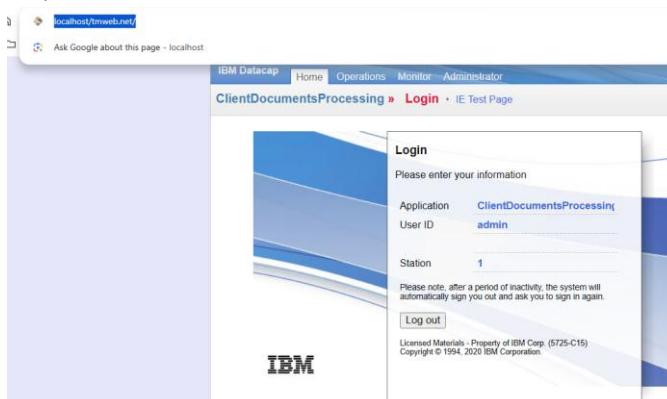


3.2.2.9 Map verify Ruleset to Task Profile Workflow

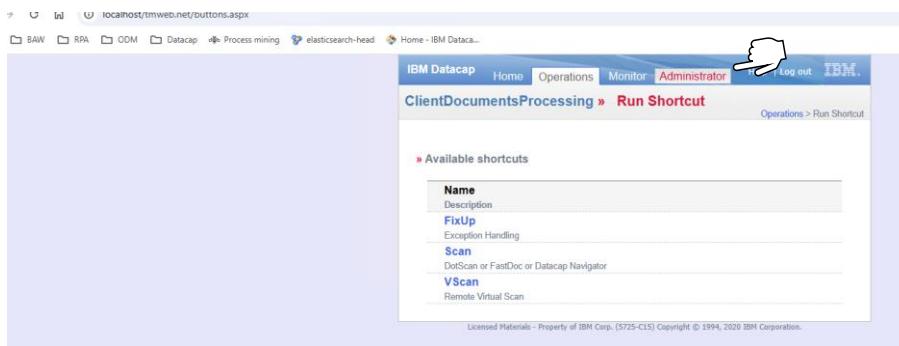
Before editing Task Profiles, you must lock them by clicking the lock icon on the Task Profiles tab.

If verify task is not available in the task profiles, you can create it from tmweb url <http://localhost/tmweb.net/> or you can also do it later from navigator desktop exercise. [Skip this section for the moment.](#)

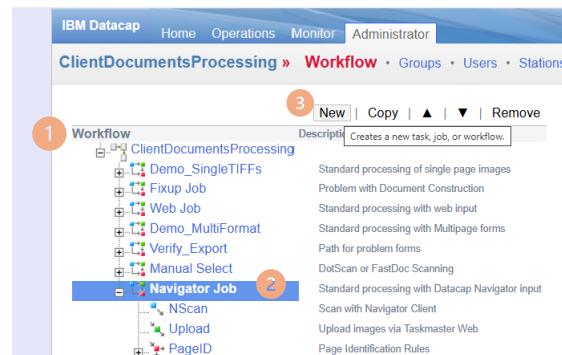
_1. Login the **tmweb.net** by selecting **ClientDocumentsProcessing** with login credentials **admin/admin** and **station 1**.



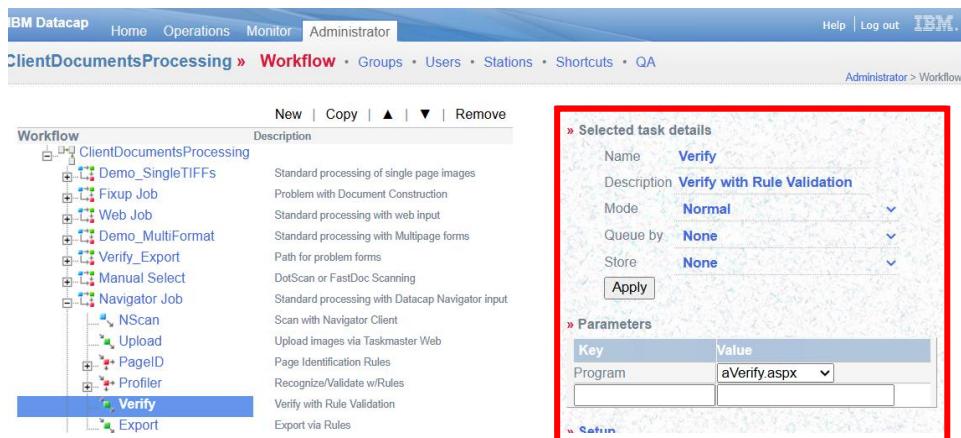
_2. Click on the **Administrator** Tab



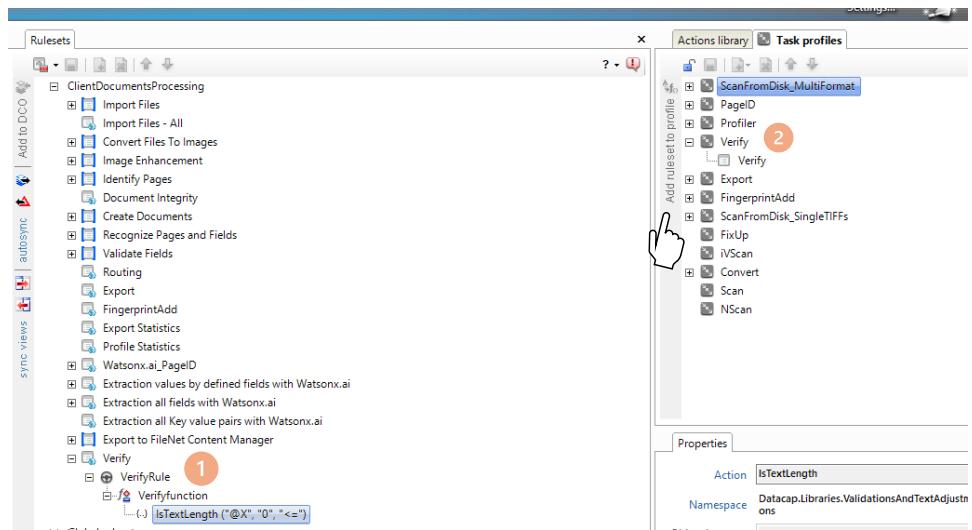
_3. Click on the **workflow** on the left panel and select the Navigator Job where you want to add to the workflow task profiles. For the same, click on **New**.



_4. Give the **task details** (*Name, Description, Mode and Program*) as shown below and click **Apply**.



_5. You can now click the **lock icon** and map the verify ruleset to the verify task in the task profiles by clicking on **Add ruleset to profile**.

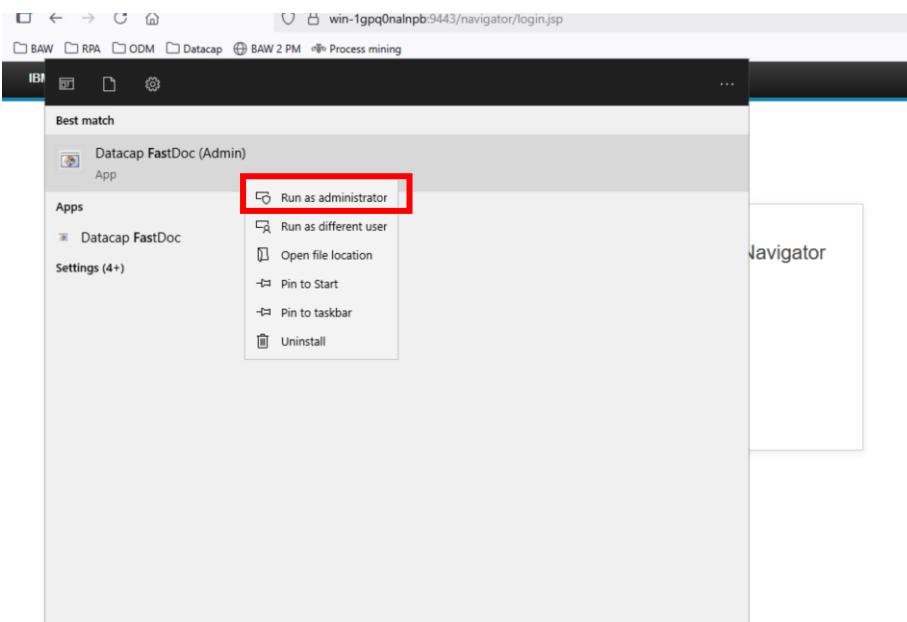


_6. Save the changes, and then click the lock icon again to unlock the task profiles.

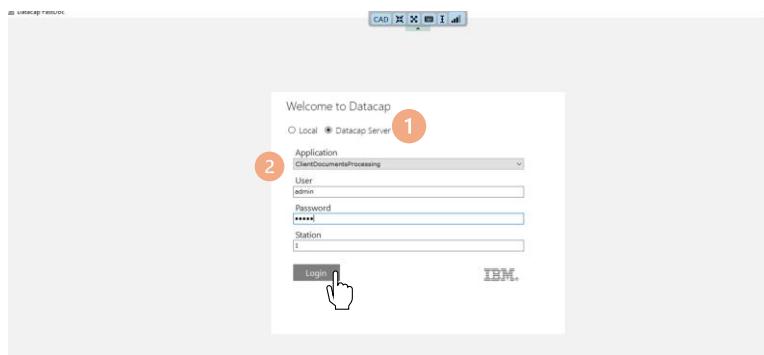
3.2.2.10 Export configuration to FileNet content Manager repository

In this section, you will configure **FileNet Content Manager** to **export client documents** after they have been processed using **Datacap** and **Watsonx.ai**.

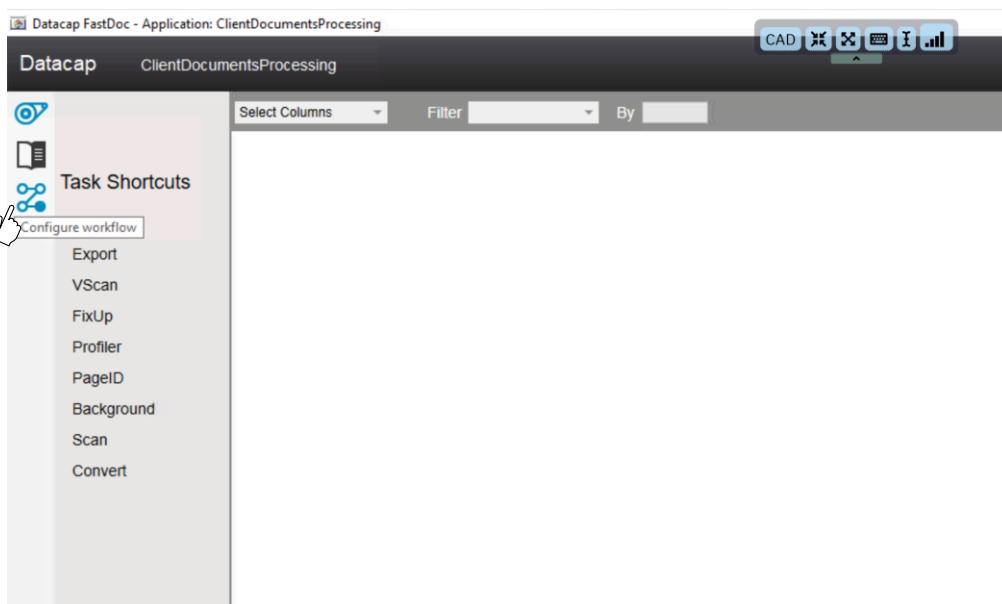
_1. Open the **Datacap FastDoc Admin application** from the **Windows Start menu**, Run as administrator.



_2. Select the **Datacap Server**, choose the **ClientDocumentsProcessing** application, and set the **Station ID** to **1**. Log in using the credentials **admin/admin**.



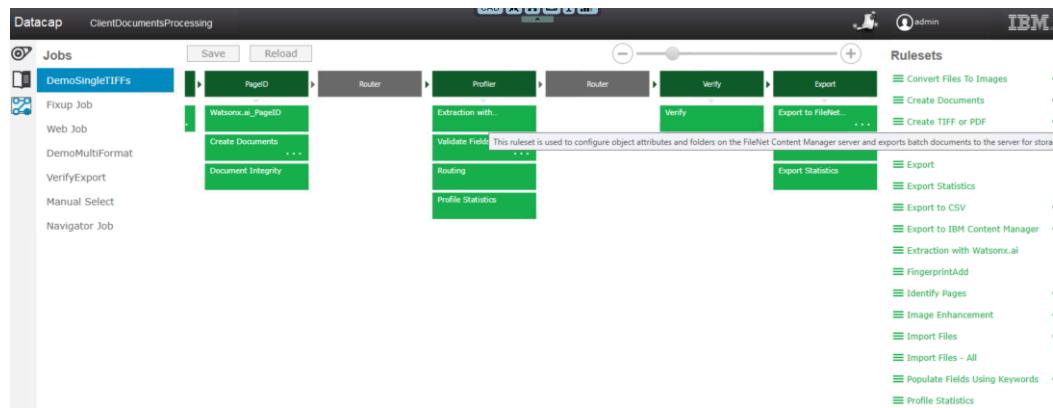
_3. Click on the **Workflow** icon  [Configure workflow](#) to view the existing workflow configured for the **ClientDocumentsProcessing** application.



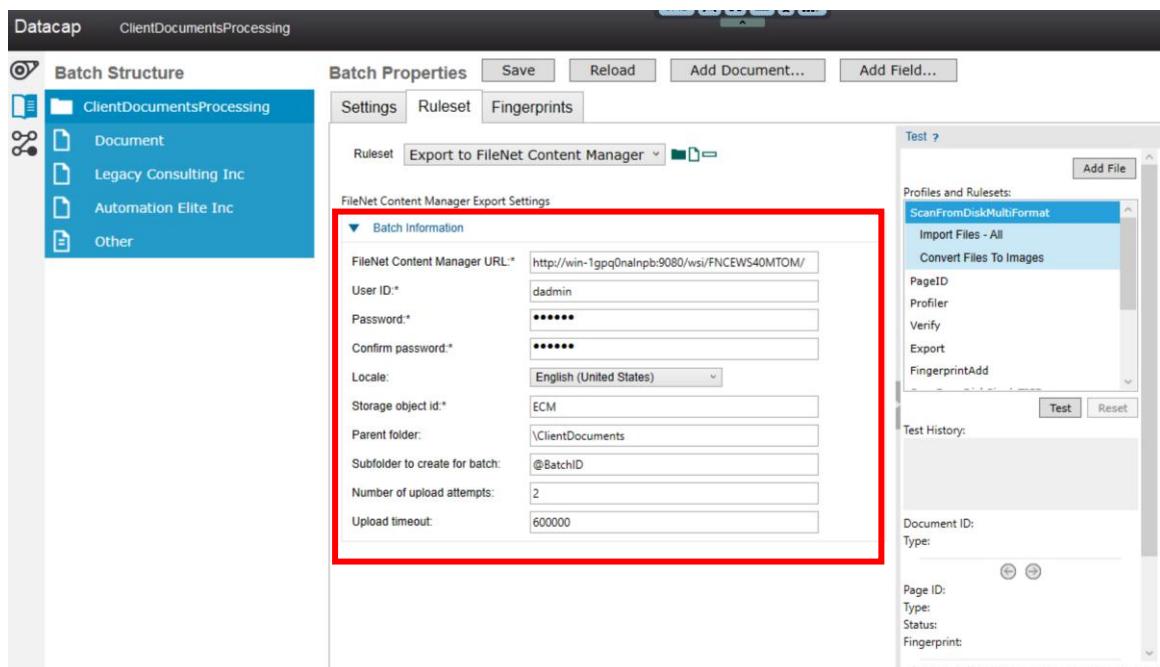
_4. Drag and drop the **Export to FileNet Content Manager** ruleset from the **Rulesets** panel to the **Export** task profile.



_5. You will now see **Export to FileNet** listed under the **Export** task profile.



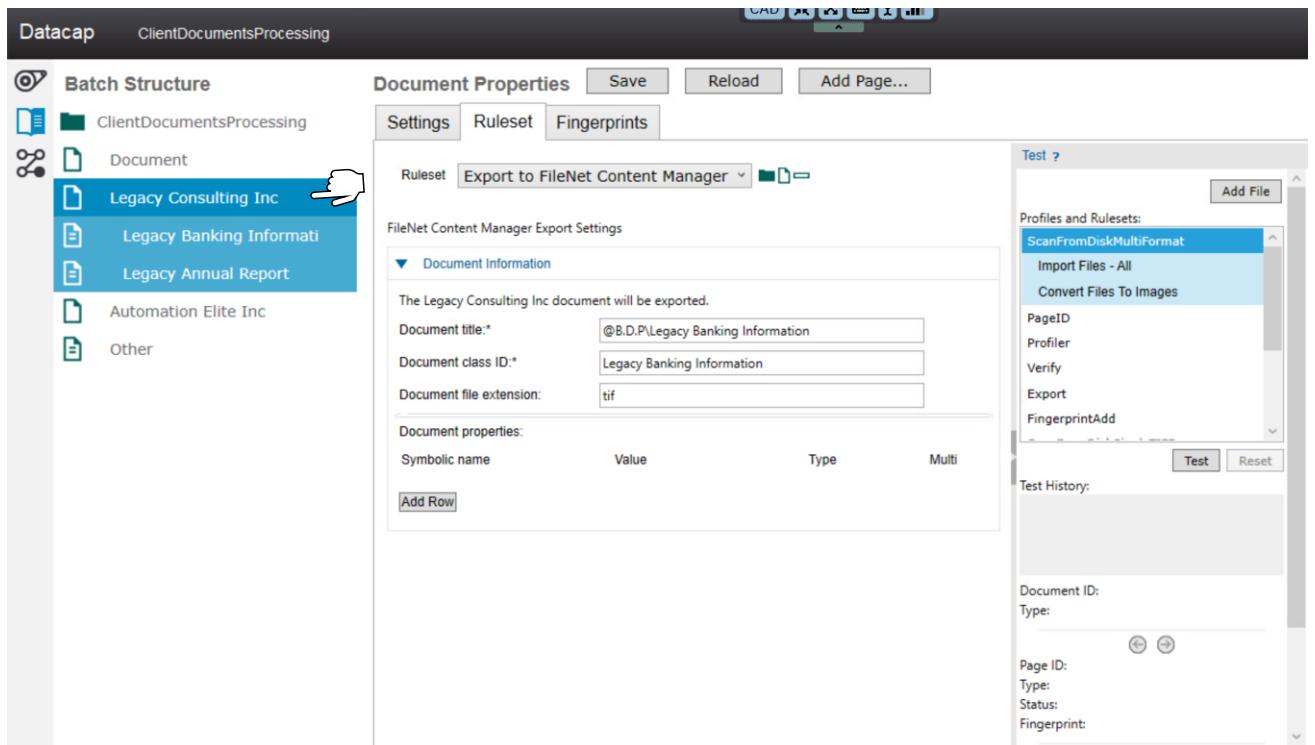
- _6. If prompted to save, simply click **Save** to confirm and proceed.
- _7. Double-click on **Export to FileNet**, and you will see the **FileNet connection settings** window open.
- _8. Provide the **FileNet connection settings** including *URL*, *UserID (dadmin)*, *Password (dadmin)*, *Object Store*, *Folder*, *Subfolder*, and *Upload Timeout* as shown below.
URL <http://win-1gpq0nalnpb:9080/wsi/FNCEWS40MTOM/>



- _9. To proceed, click on **Legacy Consulting Inc** under the **Batch Structure** section in Datacap FastDoc Admin. This will allow you to configure and manage the batch structure for this specific client, including defining document types, pages, and associated rulesets.

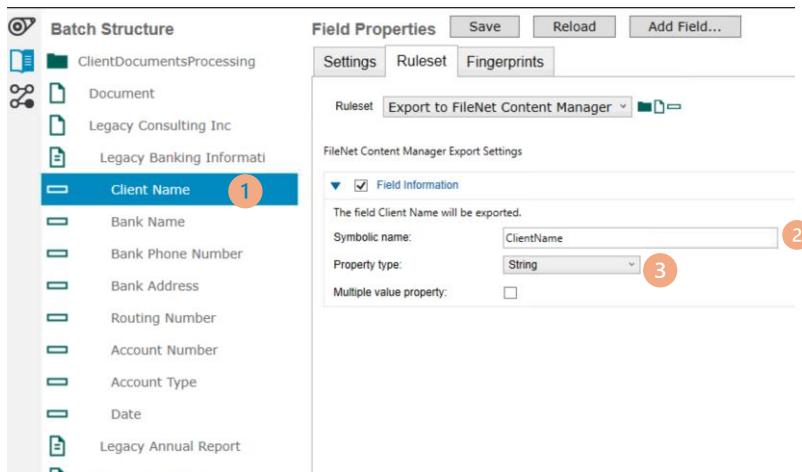
- Provide the document title, document class ID, and file extension details for the Legacy Consulting Inc document class within the batch structure as illustrated below.

You will create a document class in IBM FileNet with the same name and properties as defined in the Datacap application.

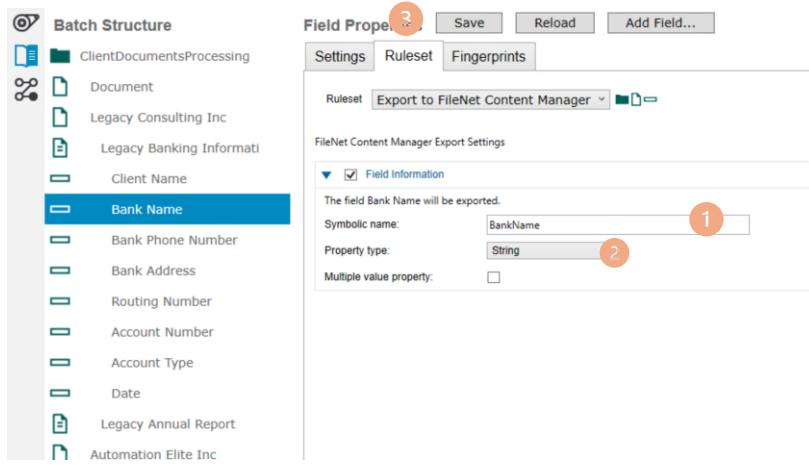


_10. Expand the Legacy Banking information section in the left Panel of documents under Legacy Consulting Inc until you reach the **fields** related to **Legacy Banking information**. Then, select the '**Client Name**' field and provide the Ruleset information as demonstrated below.

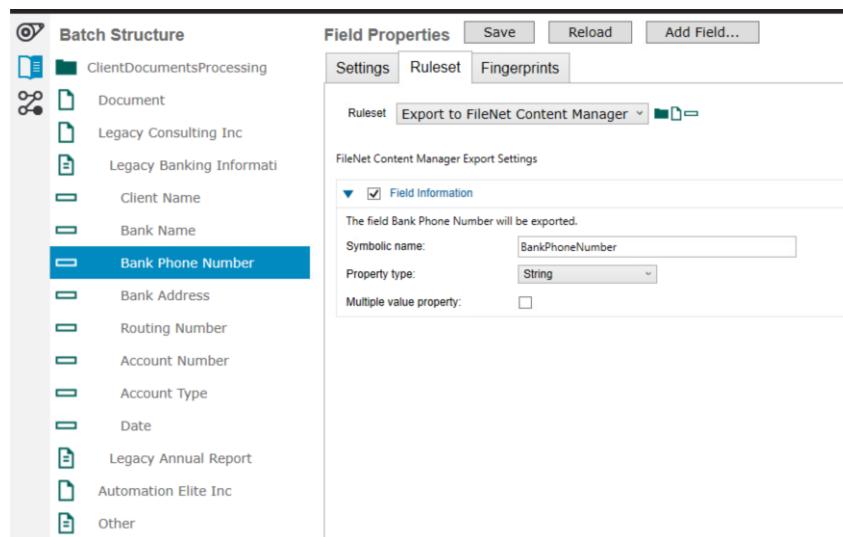
- check the Field Information and note the symbolic name as '**ClientName**' and the property type as '**String**'



_11. Select the **Bank Name** field and provide the Ruleset information as demonstrated below. check the Field Information and note the symbolic name as '**BankName**' and the property type as '**String**'.



_12. Select the **Bank Phone Number** field and provide the Ruleset information as demonstrated below. check the Field Information and note the symbolic name as `BankPhoneNumber` and the property type as **'String'**

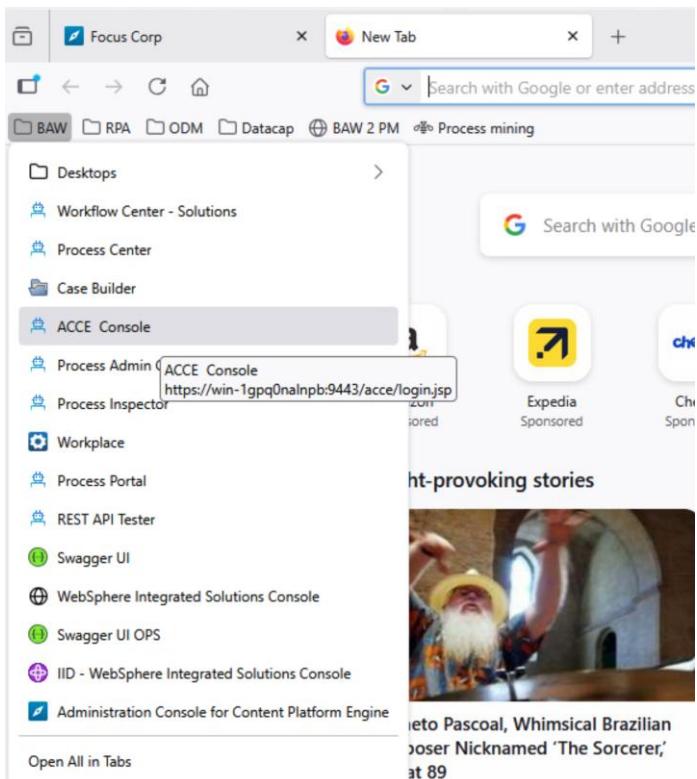


You've mapped three fields so far due to time constraints, but it's entirely up to you—feel free to continue the same process for all remaining fields to ensure thorough and consistent mapping across your dataset.

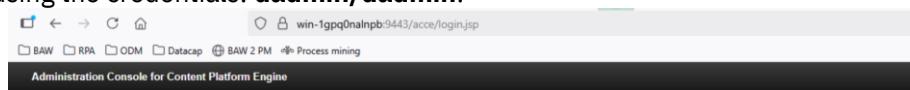
You have successfully configured the FileNet connection, document and field details, and added the Export to FileNet Ruleset to the Export Task profiles.

Next you are going to configure the Document Class and its properties in the FileNet content repository using the ACCE console.

_1. Log in to the ACCE console using the BAW bookmarked favorite in Firefox, then click on **ACCE Console**.



Log in using the credentials: **dadmin/dadmin**.



Welcome to Administration Console for Content Platform Engine

User Name

Password

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If you're unable to access the ACCE Console and encounter a message indicating restricted access or service issues, refer to **point no. 2** in the instructions to initiate the **WebSphere services** and restore functionality, otherwise continue from **point no 3**.



Unable to connect

Firefox can't establish a connection to the server at win-1gpgq0nalnpb:9443.

- The site could be temporarily unavailable or too busy. Try again in a few moments.
- If you are unable to load any pages, check your computer's network connection.
- If your computer or network is protected by a firewall or proxy, make sure that Firefox is permitted to access the web.

[Try Again](#)

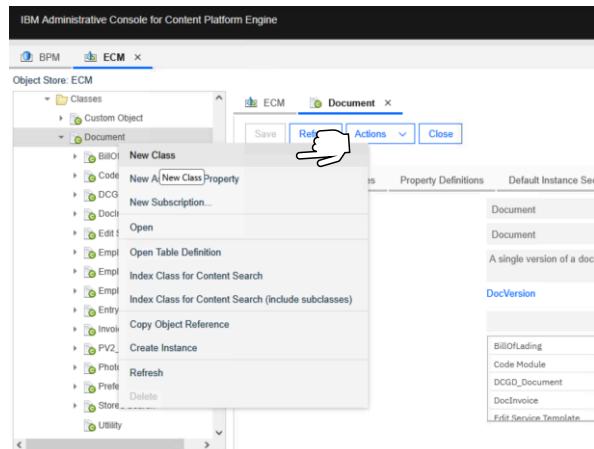
Navigate to your **Desktop** and open the folder named **BA Runtimes**. Inside the folder, run the file titled “**BAW Server START.cmd**”. Once the services have successfully started, you will see the following confirmation message displayed on your screen.



Note: It might take few minutes to start this service.

_2. Click on **ECM Object Store** from the left-hand menu.

_3. In the left-hand menu, under **Classes**, click on the Document folder, right-click it, and select **Add New Class**.



Add the **Display Name** and **Symbolic Name**. The Symbolic Name should match the one you provided while configuring the FileNet connection from the FastDoc App.

ECM Document x New Document... x

< Back Next > Finish Cancel

* Display name: ①

* Symbolic name: ①

Existing symbolic names:

Description: ①

LegacyBankingInformation

LegacyBankingInformation

Annotation

AsyncUpgradeQueueItem

AuditConfigurationEvent

BillOfLading

CancelCheckoutEvent

ChangeClassEvent

ChangeStateEvent

CheckinEvent

CheckoutEvent

ChoiceList

ClearDefinition

Activation

Go to 5

_4. Click **Next**, then **Next** again, and finally click **Finish**.

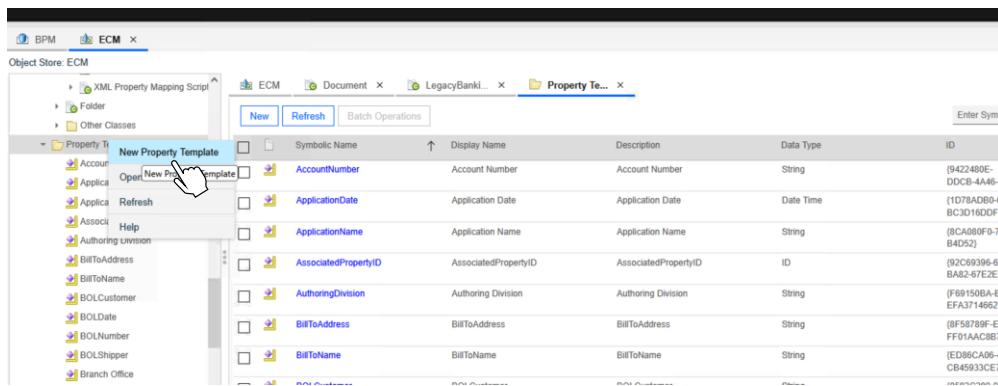
ECM Document X New Document... *

< Back Next > Finish Cancel

Summary

Name	Value
Display name	LegacyBankingInformation
Symbolic name	LegacyBankingInformation
Description	LegacyBankingInformation
Class Properties	

_5. Right-click on **Property Templates** in the left-hand menu and select **New Property Template**.



_6. Enter **ClientName** as both the *Display Name* and *Symbolic Name* and **Enter** and click **Next**. Ensure that the symbolic names match those used in your previous steps during the **Export to FileNet configuration** from the FastDoc app.

Symbolic Name	Display Name	Description	Data Type	ID
AccountNumber	Account Number	Account Number	String	(9422480E-DDC8-4A46-8
ApplicationDate	Application Date	Application Date	Date Time	(1D78ADB9-64-BC3D180DFB
ApplicationName	Application Name	Application Name	String	(8CA080F9-7A-B4D052)
AssociatedPropertyID	AssociatedPropertyID	AssociatedPropertyID	ID	(92C8939E-6C-BA82-67E2E2
AuthoringDivision	Authoring Division	Authoring Division	String	(F69150B4-B2-EFA37149627-
BillToAddress	BillToAddress	BillToAddress	String	(BF58799F-E3-FF61AACB7F
BillToName	BillToName	BillToName	String	(ED86CA04-41-CB45933CE7E

_7. Enter the **Data Type** as **String** and click on **Next**.

_8. Select 'Single' value and click **Next**.

Choose whether the object property can hold a single value or multiple values. Most properties are single value, but if the property will contain a list, then choose multi-value.

Single (1)

Multi (2)

List order:

- Non-unique and ordered values (such as lines in address) (3)
- Unique and ordered values (such as the list of primary colors) (4)

Set other attributes (5)

Click **Finish** once you have verified all the details.

Name	Value
Display name	ClientName
Symbolic name	ClientName
Description	ClientName
Data type	String
Assign choice list	False
Assign marking set	False
Single or multi-value	Single
List order	Non-unique and ordered values (such as lines in address)
Set other attributes	False

Create the remaining properties such as **BankName**, **BankPhoneNumber**, and others as needed.

* Display name: (1)

Existing names:

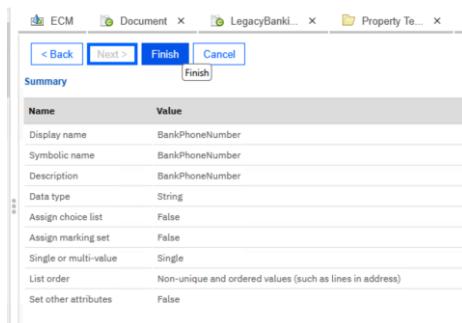
- Account Number
- AccountNumber
- Activity Stream Extended Settings
- Activity Stream Gadget URL
- Activity Stream Generation Enabled
- Activity Stream HTTP Endpoint URL
- Activity Stream Ignored User Ids
- Activity Stream Retrieval URL
- Anonymous Download Count
- App Id

* Symbolic name: (2)

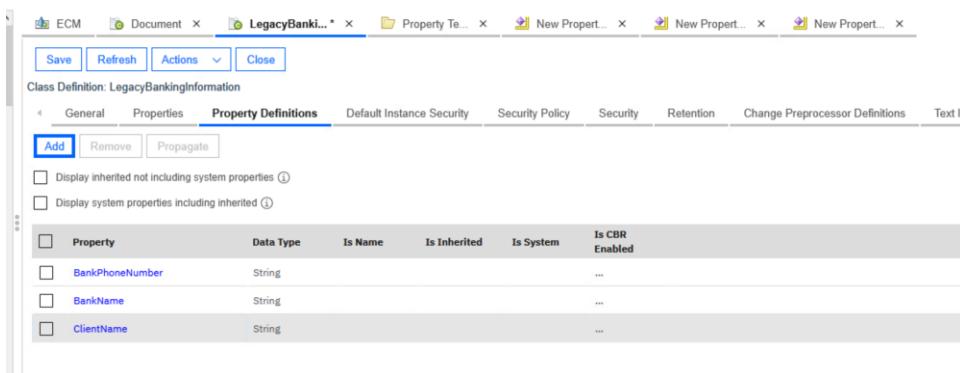
Description: (3)

Activate WiFi
Go to Settings (4)

Name	Value
Display name	BankName
Symbolic name	BankName
Description	BankName
Data type	String
Assign choice list	False
Assign marking set	False
Single or multi-value	Single
List order	Non-unique and ordered values (such as lines in address)
Set other attributes	False

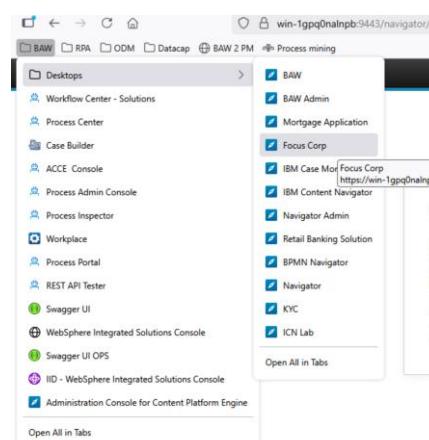


_9. Map the newly created properties to **LegacyBankingInformation** by clicking on **Property Definitions**, adding the newly created properties, and then saving the document class as shown below.

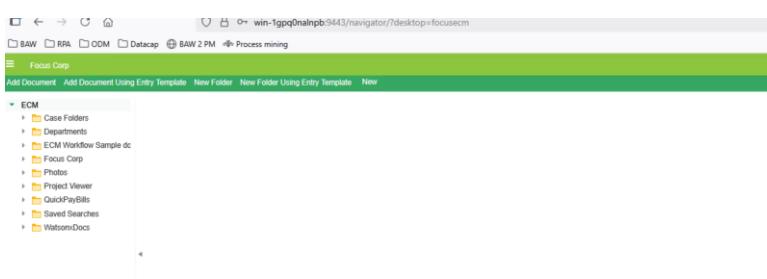


Now, you are going to create a folder under **ECM** to export the Datacap-processed batches into the **ECM repository** within **FileNet Content Manager**.

_10. Log in to the **Focus Crop** desktop by navigating through the **BAW bookmark** → **Desktops** → **Focus Crop**.



Login with **dadmin/dadmin**.



11. Click on New Folder.

The screenshot shows the ECM interface with a sidebar containing links like Case Folders, Departments, ECM Workflow Sample dc, Focus Corp, Photos, Project Viewer, QuickPayBills, Saved Searches, and WatsonDocs. The main area displays a table of folders with columns for Name, Modified By, and Modified On. A hand cursor is positioned over the 'New Folder' button in the top right corner of the interface.

Enter the **Name** as “**ClientDocuments**”, matching the name used earlier during the **Export to FileNet** configuration in the **FastDoc App**.

New Folder
The values that you enter for the folder properties can be used to find the folder later.

General

* Save in: ECM

Properties

* Class: Folder

*Folder Name: ? ClientDocuments

Activate Windows
Go to Settings | Add

You have successfully configured **FileNet** and **Datacap** to export processed documents using **Datacap + watsonx.ai**.

3.3 Exercise 3: Datacap Navigator (optional)

For this exercise you will require the following IDs and passwords:

Tool	User ID	Password
IBM Content Navigator	dadmin	dadmin
IBM Datacap Navigator	admin	admin

3.3.1 Datacap Navigator System Overview

Business Automation Navigator provides a user interface for Datacap. It is bundled in CloudPak for Business Automation. The user accesses the system using a web browser.

Datacap includes a plugin component that operates within Content Navigator. **Content Navigator** accesses and executes the core Datacap services using the *Datacap Windows Server* (formerly wTM). Datacap Windows Service runs as a Microsoft Windows service that presents RESTful web services endpoints that expose the Datacap capabilities.

Datacap uses its **Rulerunner service** to execute image processing in background, on servers. Rulerunner executes image cleanup, conversion, OCR, validation rules and other functions.

Datacap stores work-in-process images and data files on a File System and process tracking data in a database. Users are authenticated using LDAP or Active Directory.

Completed documents are stored in a *FileNet Content Management repository*.

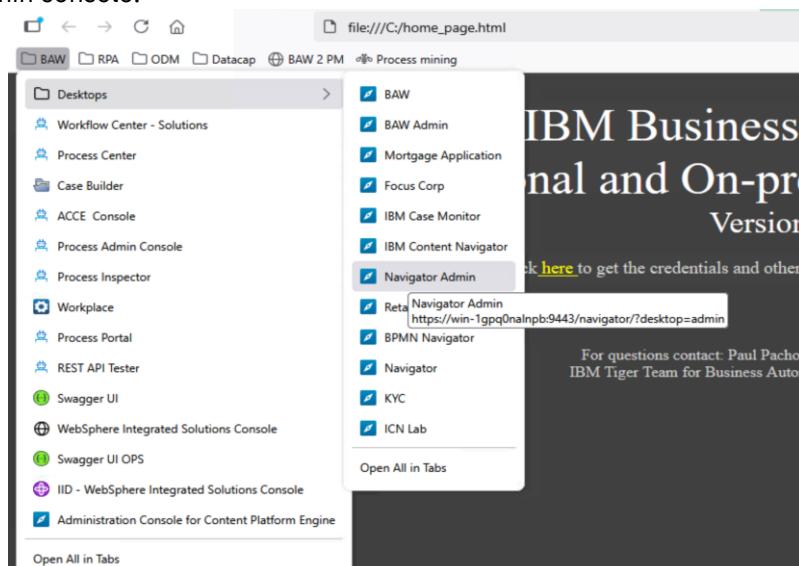
3.3.2 Datacap Navigator Introduction – Step by Step Instructions

To get started, you first need to create Datacap repository and desktop that uses the **ClientDocumentsProcessing application** which you created in the previous exercises.

To configure on IBM Navigator execute the following steps:

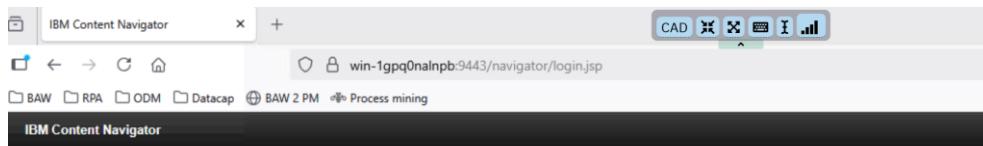
Open **Chrome** or **Firefox** on the VM, where all the required **URLs** and **user credentials** are pre-configured and **bookmarked** for easy access.

_1. Click the **BAW Bookmarks** (Favorites) folder, then select **Desktops**, and click on **Navigator Admin** to open the admin console.



_2. Login to the **Navigator Admin** desktop using the provided **credentials** to access the administration console.

Credentials:- dadmin/dadmin



_3. Select '**Repositories**' from the left-hand side.

_4. Click on New Repository and select '**Datacap Application**' from drop down.

_5. Enter the following configuration parameters:

A screenshot of a configuration dialog titled "New Repository". The "General" tab is active. The "Display name" field contains "ClientDocumentsProcessing". The "ID" field contains "ClientDocumentsProcessing". The "Datacap wTM URI" field contains "http://localhost:8070/ServiceWTM.svc". The "Application" dropdown menu is open, showing options like "GoldenDemo", "FormTemplate", "LearningTemplate", "Transaction", "WatsonaiRedaction", and "ClientDocumentsProcessing". The "Default Station" dropdown menu is also open, showing the same list of applications. At the bottom, there are "Save and Connect..." and "Save" buttons.

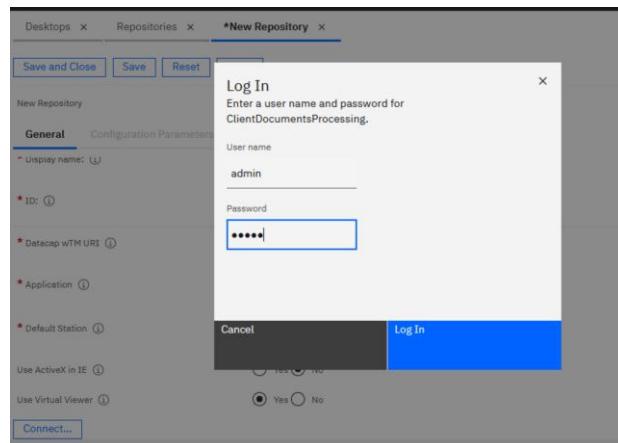
- The '**Display name**' is what we are going to call our new repository. This is not creating a “true” repository, but simply creating a pointer to an application. By putting a “dc” in front, it helps administratively to distinguish Datacap application from actual repositories.
- The “**ID**” is automatically set for you.
- The “**Datacap wTM URL**” is the address to the **wTM service** (which presents RESTful web services endpoints that expose the Datacap capabilities).

- For the “**Application**”, select the “**ClientDocumentsProcessing**” you created earlier in previous exercises. Note it may take a second or two for the wTM service to recognize. If you do not see your application listed, verify your Datacap wTM URL is correct.
- Select **No** for “**Use ActiveX in IE**” and **Yes** for “**Use Virtual Viewer**”.

The screenshot shows the 'New Repository' configuration dialog with the 'General' tab selected. The 'Display name' field contains 'ClientDocumentsProcessing'. The 'ID' field contains 'ClientDocumentsProcessing'. The 'Datacap wTM URI' field contains 'http://localhost:8070/ServiceWTM.svc'. The 'Application' dropdown is set to 'ClientDocumentsProcessing'. The 'Default Station' dropdown is set to '1'. Under 'Use ActiveX in IE', the 'No' radio button is selected (marked with a red circle containing the number 5). Under 'Use Virtual Viewer', the 'Yes' radio button is selected (marked with a red circle containing the number 6). At the bottom left is a 'Connect...' button.

_6. Click **Connect**.

_7. Login to the Datacap server with user **admin** and password **admin** and click on Log In.



You can leave all the default columns to display to the users in job monitor under configuration parameters. These selected columns can later be edited in the user settings.

Desktops X Repositories X *New Repository X

Save and Close **Save** **Reset** **Close**

New Repository

General Configuration Parameters

* Display name: <small>(i)</small>	ClientDocumentsProcessing
* ID: <small>(i)</small>	ClientDocumentsProcessing
* Datacap wTM URI <small>(i)</small>	http://localhost:8070/ServiceWTM.svc
* Application <small>(i)</small>	ClientDocumentsProcessing
* Default Station <small>(i)</small>	1
Use ActiveX in IE <small>(i)</small>	<input type="radio"/> Yes <input checked="" type="radio"/> No
Use Virtual Viewer <small>(i)</small>	<input checked="" type="radio"/> Yes <input type="radio"/> No

_8. Click **Save and Close**.

You can either **copy** an existing desktop or **create a new one**; the steps below demonstrate how to **copy a desktop** from the existing **Datacap desktop** configuration.

_9. Click on “**Desktops**” on the left-hand side.

_10. Right-click on the existing “**Desktop**” with the **dcgd** ID and select **copy**.

Desktops **1** Repositories Sync Services FileNet Content Manager Content Manager OnDemand Viewer Maps Plug-ins Menus Labels Themes Icon Mapping Settings Role-based Redactions Role-based Desktop Administration

Desktops X Repositories X

You can create multiple desktops to give different users access to the content they need. For example, you can create a desktop that only allows users to search for content or a desktop that gives user

New Desktop **Edit** **Copy** **Delete** **Refresh** **Export** **Import** **Close**

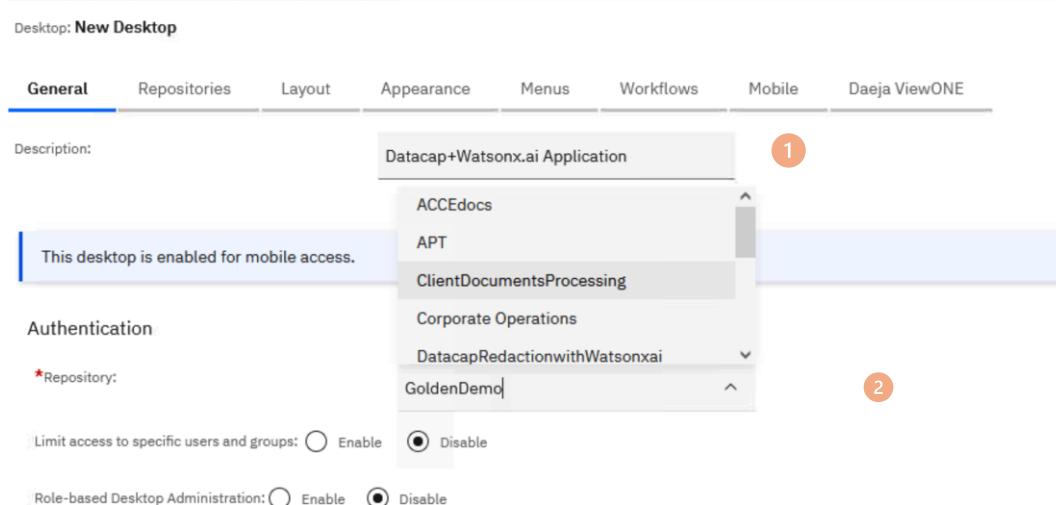
2

Name	ID	Description
Admin Desktop	admin	Desktop for users with administrative privileges
Case Monitor	bawmonitor	IBM Business Automation Workflow
Datacap	datacap	Default desktop for Datacap Navigator
Datacap Admin Desktop	dcadmin	Datacap Navigator administration feature and Datacap Dashboard feature
Datacap Advanced Desktop	dcAll	Default desktop for Datacap Navigator, Datacap Navigator administration feature, and Datacap
Edit 2 Copy 3 Launch Desktop 4 Lab 5 Export 6 Delete 7 Focus Demo 8 Focus New 9 Focus Ecm 10 Focus Case Engine 11 Focus Workflow	dcgd	Datacap Golden Demo
Focus Demo	dcQuickLaunch	Default desktop for Datacap Navigator with the quick launch pane
Focus New	focusnew	Used for the ICN lab
Focus Ecm	focusecm	New ICN Layout
IBM Administrative Console for Content Engine	acce	The desktop for IBM Administrative Console for Content Engine
IBM Business Automation Workflow	baw	Default desktop for IBM Business Automation Workflow Case Client

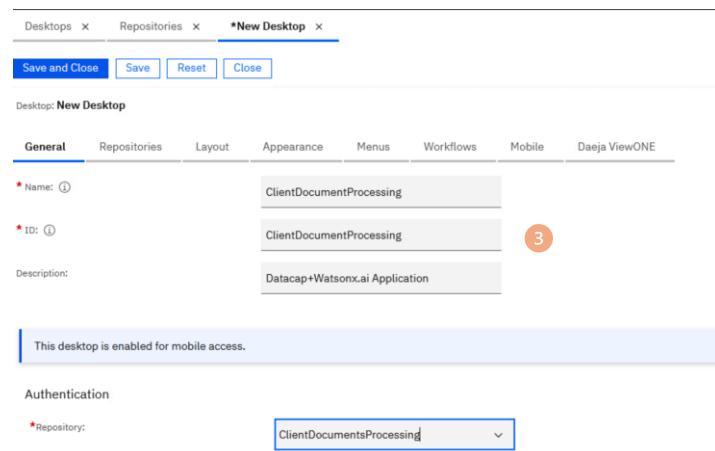
_11. It opens the New Desktop option.

_12. Select **ClientDocumentsProcessing** as the repository name for authentication.

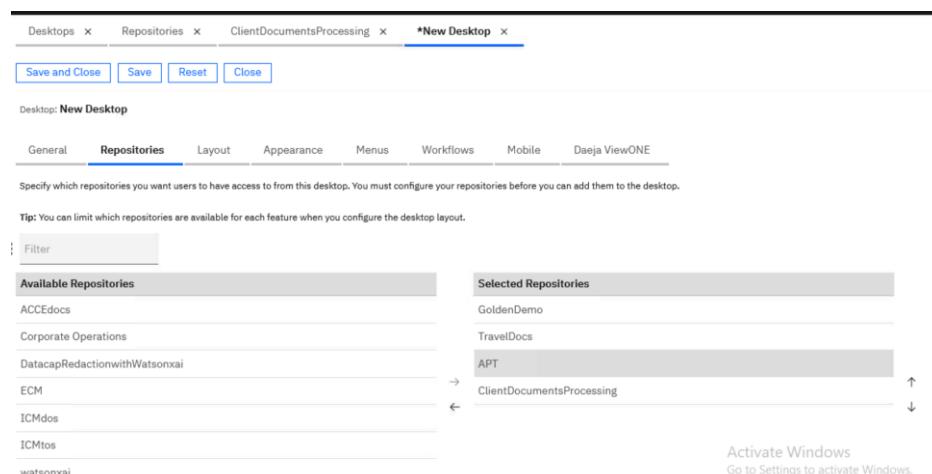
- **“Repository”:** From the drop down arrow select the ClientDocumentsProcessing repository created previously. This will be the default repository (application) when the desktop loads.



- **“Name”:** Add the Name you want to specify for your desktop. To make administration a bit easier, try and name it something like the repository name.
- **“ID”:** The ID you would like to call when loading the desktop in the URL.
- The rest can be kept as default.



_13. Click on “**Repositories** Tab”. The Repository from the General tab will already appear in the **Selected Repositories**.



_14. From the “Selected Repositories” list, remove all repositories except “ClientDocumentsProcessing Repo”—specifically, deselect **GoldenDemo**, **TravelDocs**, and **APT**. Then, click the arrow to move them to the “Available Repositories” section.

The screenshot shows the 'Repositories' tab selected in the top navigation bar. Below it, a tip states: "Tip: You can limit which repositories are available for each feature when you configure the desktop layout." A 'Filter' input field is present. On the left, the 'Available Repositories' list contains: ACCEdocs, APT, Corporate Operations, DatacapRedactionwithWatsonxai, ECM, GoldenDemo, ICMdos, and ICMtos. On the right, the 'Selected Repositories' list contains: ClientDocumentsProcessing. A blue-bordered arrow icon is positioned between the two lists, indicating the direction for moving items.

_15. Go to the “Layout” tab.

The screenshot shows the 'Layout' tab selected in the top navigation bar. In the 'Layout' section, the 'Layout' dropdown is set to 'ecm.widget.layout.NavigatorMainLayout'. Under 'Displayed features', three checkboxes are checked: 'Datacap Main Page', 'Datacap Dashboard Page', and 'Datacap Admin Console'. To the right, a 'Feature configuration' panel displays the message: 'Select a feature to configure'.

_16. You will see that the “Display feature” options are already selected, inherited from the previously copied Datacap desktop.

_17. Click **Save and Close**

You can create multiple desktops to give different users access to the content they need. For example, you can create a desktop that only allows users to access the ClientDocumentsProcessing application.

New Desktop **Edit** **Copy** **Delete** **Refresh** **Export** **Import** **Close**

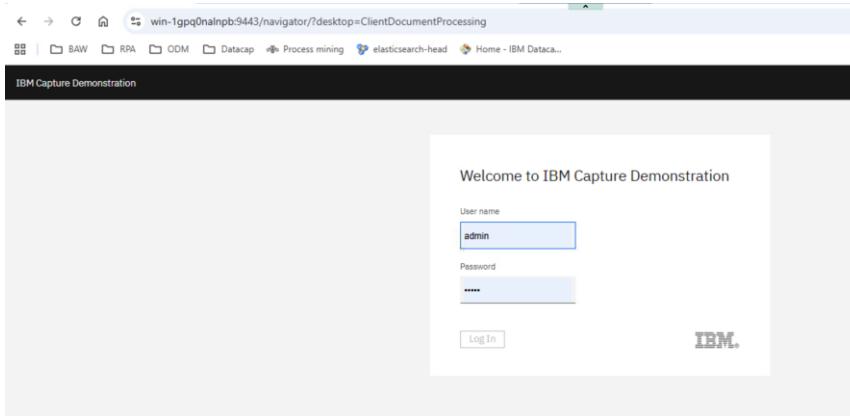
Name	ID
Admin Desktop	admin
Case Monitor	bawmonitor
ClientDocumentsProcessing	ClientDocumentsProcessing

■ Login to the newly created Datacap desktop configured for the ClientDocumentsProcessing application.

_18. Copy and paste the following URL into your web browser to access the **ClientDocumentsProcessing** desktop:

<https://win-1gpg0nalnpb:9443/navigator/?desktop=ClientDocumentProcessing>

Credentials are **admin/admin**



_19. The Datacap view displays:

<https://win-1gpg0nalnpb:9443/navigator/?desktop=ClientDocumentProcessing>

The screenshot shows the IBM Capture Demonstration interface with the 'ClientDocumentsProcessing' tab selected. On the left, there are navigation icons for Scan, Verify, and FixUp. The main area displays a table of jobs with columns: Queue, Batch, Job, Task, Status, Job Start, Job Time, Operator, Station, Docum..., and Pages. There are three entries in the table:

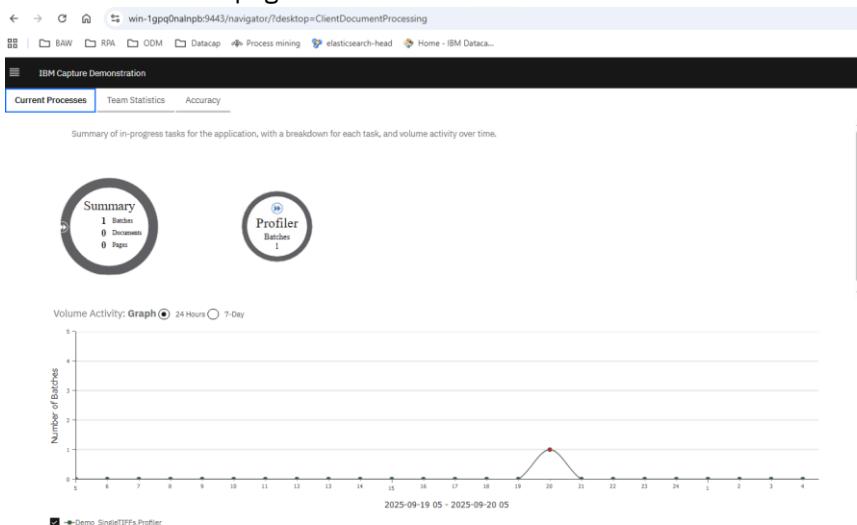
Queue	Batch	Job	Task	Status	Job Start	Job Time	Operator	Station	Docum...	Pages
3	20250916.000000	Demo_SingleTIFFs	Profiler	running	9/16/2025, 8:08 PM	0	admin	1	0	0
2	20250915.000001	Demo_SingleTIFFs	Export	aborted	9/15/2025, 9:09 PM	277	admin	1	0	0
1	20250915.000000	Demo_SingleTIFFs	Profiler	hold	9/15/2025, 8:37 PM	2383	admin	1	0	0

On the right, there are 'Properties' and 'System Properties' sections. The 'Properties' section shows 'Class: Queue' and 'Batch: 20250916.000000'. The 'System Properties' section shows 'System Properties'.

Click on the **hamburger menu** to access the **Datacap Main Page** for business users and the **Datacap Admin Console** for administration. Since you're logged in as **admin/admin**, you have full privileges, which is why you can see both the **Admin Console** and the **Dashboard** page, where statistics are displayed.

The screenshot shows the IBM Capture Demonstration interface. The main area displays a table of jobs with columns: Queue, Batch, Job, Task, Status, Job Start, Job Time, Operator, Station, Document, and Pages. There are three entries in the table. The navigation pane on the left has a 'Datacap Admin Console' link highlighted with a blue box. The top right corner shows 'ClientDocumentsProcessing'.

_20. Check the Dashboard page to show the statistics



_21. Click on the down arrow to expand the Navigation Pane and select “Datacap Admin Console”

- On the opening Administration console, click “Users” on the left
- Click “New User”. Use **dadmin / dadmin** as Name and password:

The screenshot shows the Datacap Admin Console 'New User' creation form. The left sidebar is expanded to show 'Users' (marked with a red circle with '1'). The main form has tabs for 'General', 'Permissions', and 'Privileges'. The 'General' tab is active, showing fields for 'Name' (p8admin), 'Description', 'Password' (marked with a red circle with '3'), and 'Retype Password'. Buttons at the top right include 'Save and Close', 'Save', 'Reset', and 'Close'. A notification bar at the top right says '*New User x 2'.

_22. Switch to the “Permissions” and “Privileges” tab and allow this user to have all permissions and privileges:

The screenshot shows two side-by-side configuration panels. Both panels have tabs at the top: 'General', 'Permissions' (which is highlighted with a red box), and 'Privileges' (which is also highlighted with a red box). The left panel is titled 'Specify permissions to one or more applications and tasks.' and lists various 'Applications and Tasks' with checkboxes. The right panel is titled 'Specify privileges to one or more components or functions.' and lists various 'Component' items with checkboxes. In both panels, every item has its checkbox checked.

Applications and Tasks	Description
MGApp	Process Single Page TIFFs
Demo_SingleTIFFs	Process Single Page TIFFs
VScan	Run VScan Rules
Profiler	Recognize/Validate w/Rules
Verify	Verify with Rule Validation
Export	Export via Rules
Demo_WebScan	Import TIFFs from TMWeb
iVScan	Taskmaster Web VScan task
Upload	Upload images via Taskmaster Web
Profiler	Recognize/Validate w/Rules
Verify	Verify with Rule Validation
Export	Export via Rules
Demo_MultiFormat	Multi format images
VScanMulti	VScan for multiple formats

Component
Job Monitor
View Job Monitor
More than one Job Monitor
Delete batches
Status change or rollback
Priority or operator change
Batch attributes change
Change Job Attributes
Save layout or set filter
Administrator
Workflow
User groups
Users
Change passwords

_23. Click “Save and Close” and logout of Datacap Navigator.

3.3.3 Overview of new Datacap Desktop

_1. Open Firefox and enter the url for the newly created desktop:

<https://win-1gpg0nalnpb:9443/navigator/?desktop=ClientDocumentProcessing>

_2. Log in with User name: **dadmin** and password: **dadmin**

We are using an account with administration privileges. Your end users can be restricted using Datacap security features so that they only can access the capabilities that are authorized to use.

_3. The Datacap view displays:

Review the screen and its primary sections:

This page is configurable and has four primary sections. For a particular desktop you can configure which panels will display.

- **Job Monitor** – A list of the batches that are being processed by Datacap.

Queue ID	Batch	Job	Task	Status	Job Start	Job Time	Operator	Status	Documents	Pages
11	20250914 100000	Demo_Single File	Import	instd	9/16/2025, 9:54 AM	2025	admin	1	0	0
10	20250914 000007	Navigator Job	Export	Job done	9/16/2025, 9:54 AM	1	admin	1	1	1

Job Monitor

System Properties

Queue ID: 10
Job Name: Navigator Job
Job Time: 1
Operator: admin
Batch Directory: C:\Datacap\ClientDocuments\processing\batches\10\20250914_000007
Job Start Time: 9/16/2025, 9:54 PM
Station: 1
Task Status: Job done
Task Name: Export
Task Start Time: 9/16/2025, 9:57 PM

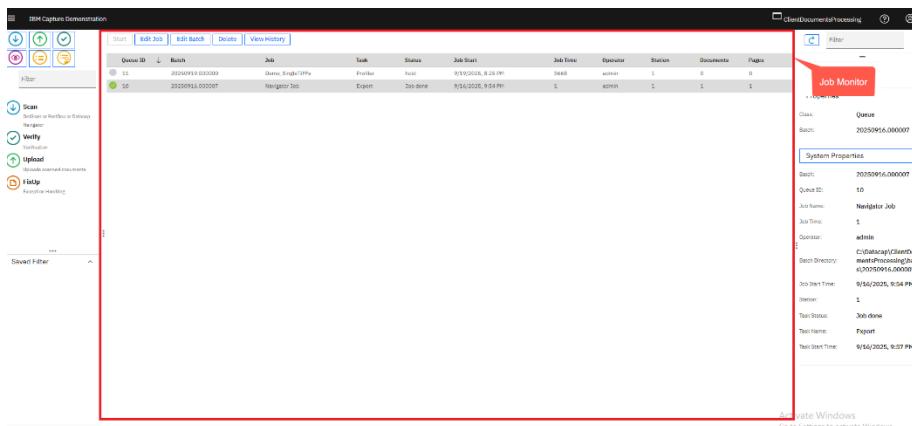
- **Quick Launch Panel** – A single icon for each major type of task. This gives users a quick and easy list that launches tasks.

IBM Content Navigator

Datacap Main Page

Quick Launch

- **Shortcut Panel** – A list of all the Datacap shortcuts. This gives the user a list of all the tasks that they are authorized to run.
- **Detail Panel** – Shows a thumbnail view and associated properties of the respective image when an item is selected in the Job Monitor.



- Click on the first item in the Job Monitor list.
- Click on the blue triangle next to “System Properties”.

Note: You can expand and collapse the panels by clicking on the grey dots at the edge of the panels. You can also grab the edge of the panels and drag to resize the width.

If you skipped mapping the **verification ruleset** to the **Verify** task profile in step **1.10.2.3.2**, you can configure a new **Verify task** from the **Datacap Admin Console** within **Datacap Desktop** with following steps.

_4. Click on **Workflows**, then select the **ClientDocumentsProcessing** workflow name from the list under **Workflows**.

_5. Click on the Jobs tab.

Name	Description
Demo_SingleTIFFs	Standard processing of single page images
Fixup Job	Problem with Document Construction
Web Job	Standard processing with web input
Demo_MultiFormat	Standard processing with Multipage forms
Verify_Export	Path for problem forms
Manual Select	DotScan or FastDoc Scanning
Navigator Job	Standard processing with Datacap Navigator input
New Job	New description here

_6. Click on the **Navigator job** and select **Edit**, since this job will be used when processing batches as a **business user** in the Navigator interface.

Jobs	
<input type="button" value="New Job"/> <input type="button" value="Edit"/> <input type="button" value="Refresh"/> <input type="button" value="Delete"/>	
Name	Description
Demo_SingleTIFFs	Standard processing of single page images
Fixup Job	Problem with Document Construction
Web Job	Standard processing with web input
Demo_MultiFormat	Standard processing with Multipage forms
Verify_Export	Path for problem forms
Manual Select	DotScan or FastDoc Scanning
Navigator Job	Standard processing with Datacap Navigator Input

_7. Click on the **New Task** button under the **Tasks** tab.

The screenshot shows the 'IBM Capture Demonstration' interface. On the left, there's a sidebar with links: Workflows, Groups, Users, Stations, Shortcuts, Panels, and Redaction Reasons. The main area has tabs: Workflows, ClientDocumentsProcessing, and Navigator Job. Under Navigator Job, there are two tabs: General and Tasks. The Tasks tab is active, showing a list of tasks: General, Tasks, New Task, Edit, Refresh, Delete, Move Up, and Move Down. A yellow note at the bottom says: "Note- changes made in the task order are saved automatically."

_8. Enter the following details as shown in the screen: Name the task **Verify** and select the program **verify.js**.

The screenshot shows the 'Verify' task configuration screen. It has tabs: General, Advanced, and Layout. The General tab is selected. The fields are: Name (Verify), Description (Verify with Rule Validation), Mode (Normal), Queue by (None), Store (None), and Program (Verify.js).

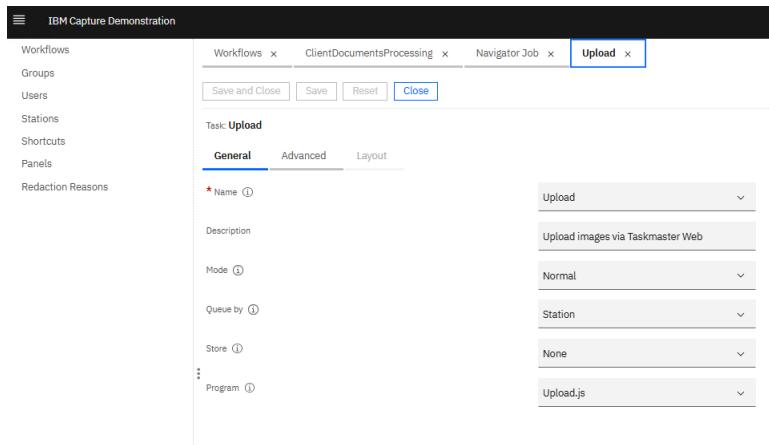
_9. Click the Move Up button to position the Verify task before the Export task.

Workflows		Workflows x ClientDocumentsProcessing x Demo_MultiFormat x Verify x	
		<input type="button" value="Save and Close"/> <input type="button" value="Save"/> <input type="button" value="Reset"/> <input type="button" value="Close"/>	
Job: Demo_MultiFormat		<input type="button" value="New Task"/> <input type="button" value="Edit"/> <input type="button" value="Refresh"/> <input type="button" value="Delete"/> <input type="button" value="Move Up"/> <input type="button" value="Move Down"/>	
Tasks		<input type="button" value="New Task"/> <input type="button" value="Edit"/> <input type="button" value="Refresh"/> <input type="button" value="Delete"/> <input type="button" value="Move Up"/> <input type="button" value="Move Down"/>	
Note- changes made in the task order are saved automatically.			
Name	Description	Mode	
VScanMulti	New description here	Batch creation	
PageID	Page Identification Rules	Router	
Profiler	Recognize/Validate w/Rules	Router	
Verify	Verify with Rule Validation	Normal	
Export	Export via Rules	Normal	

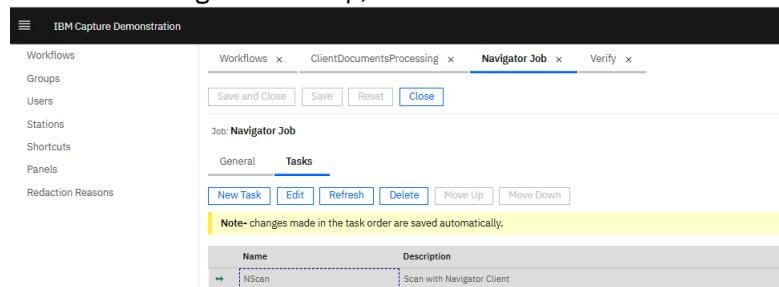
_10. Click on the **New Task** button under the **Tasks** tab to add an **Upload Task** to the workflow. This task is required when scanning and processing sample documents from the **Datacap Navigator Desktop** in later sections.

_11. Name the task **Upload** and select the program **upload.js**.

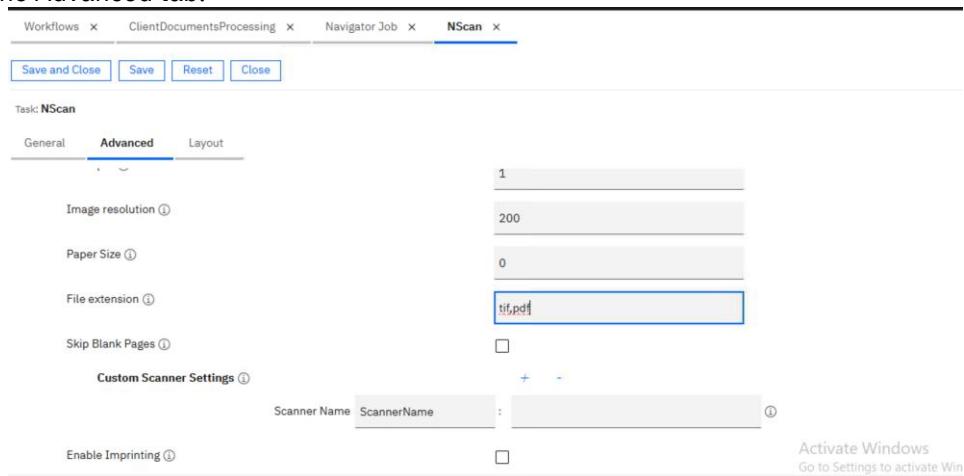
_12. Click the Save and Close buttons once you have entered all the details, as shown below.



_13. Go to the Navigator Job and click on the Nscan Task; since you will upload sample PDF documents to scan and process later from the Navigator desktop, be sure to add file extensions **tif** and **pdf**.



_14. Click **Advanced**, search for **File Extension**, and ensure that you add the extensions **tif** and **pdf** in all relevant fields within the Advanced tab.



_15. Make sure your Navigator job workflow follows the order, mode, and program exactly as shown below.

The screenshot shows the 'IBM Capture Demonstration' application window. In the top navigation bar, there are tabs for 'Workflows', 'ClientDocumentsProcessing', 'Navigator Job' (which is selected), and 'Upload'. Below the tabs are buttons for 'Save and Close', 'Save', 'Reset', and 'Close'. A note at the top says 'Note- changes made in the task order are saved automatically.' The main area is titled 'Job: Navigator Job' and contains two tabs: 'General' and 'Tasks'. The 'Tasks' tab is selected, showing a table of tasks:

Name	Description	Mode	Program	Queue By
NScan	Scan with Navigator Client	Batch creation	Scan.js	None
Upload	Upload images via Taskmaster Web	Normal	Upload.js	Station
PageID	Page Identification Rules	Router	rulerunner.exe	None
Profiler	Recognize/Validate w/Rules	Router	rulerunner.exe	None
Verify	Verify with Rule Validation	Normal	Verify.js	None
Export	Export via Rules	Router	rulerunner.exe	None

_16. Once you have added the file extensions, click **Save** and then **Close** to apply the changes.

3.3.4 RuleRunner Setup

In this section you are going to configure Rulerunner for background processing capability.

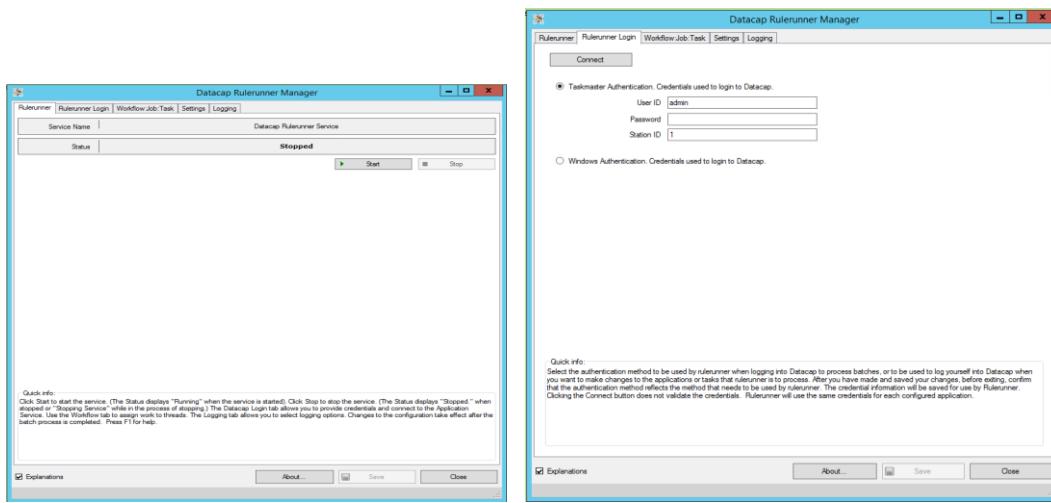
The Rulerunner service runs all tasks that do not require operator intervention, such as image cleaning, conversion, recognition, classification, and export to content repositories, such as FileNet Content Manager, IBM Content Manager, and other Content Management Interoperability Services (CMIS) compliant repositories.

Up to now you have manually processed tasks (Scan, Profile, Export) for your batches. With the Rulerunner service configured, tasks that do not require operator intervention can be processed in the background.

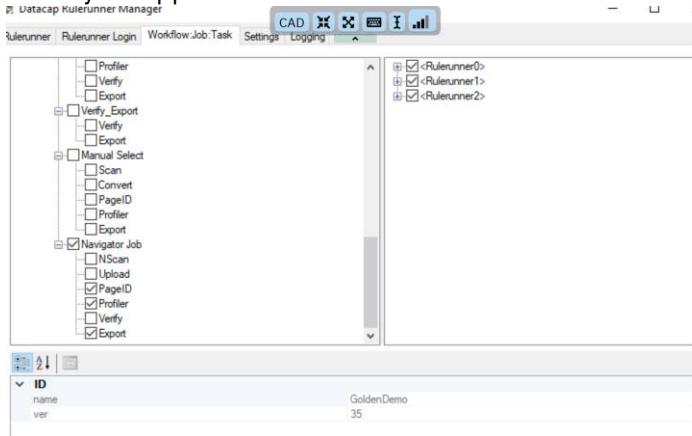
Rulerunner is normally run on a separate server for performance reasons. Multiple instances can be run on multiple servers and each instance can be configured to run multi-threaded for a multi-core processor. This helps complete the document processing faster and simultaneous processing results also in better resource usage.

Start RuleRunner Configuration – Step by Step

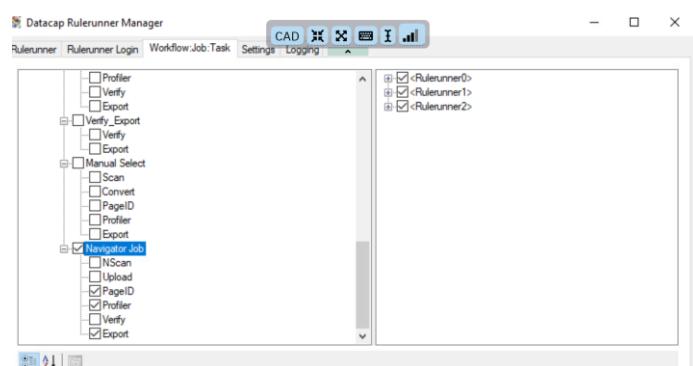
1. From the Workstation start menu select **Datacap Rulerunner Manager**.
2. The Rulerunner Manager interface comes up. If your status is Running, click the stop button.
3. Click on the “Rulerunner Login” tab.
4. At the login screen enter admin for user id and admin for password. Station ID should be “1”.



5. Click on Connect and select the “Workflow Job: Task” tab.
6. On left side are all the applications shown that are configured for Datacap. Click in the check box to the left of your application (CilentDocumentsProcessing). The tree will expand showing all the jobs created under your application.



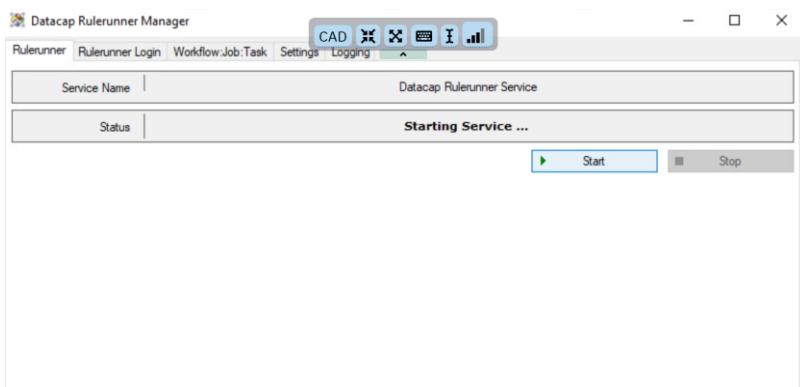
7. Select the **Navigator Job** and check only the following options to run as background tasks: **PageId**, **Profiler**, and **Export**.
Then, drag and drop the **Navigator Job** onto the right-hand side, placing it on one of the **RuleRunner** threads.



8. You will see the selected tasks running in the background after you scan and upload a document from the **Navigator Desktop**.



9. Click **Save**, then start the **Rule Runner** server.



3.3.5 Scanning Documents

One of the primary functions of Datacap is scanning paper documents. Content Navigator supports the operation of scanners from the web browser. Scanners that use an industry TWAIN driver can be operated.

For this exercise, we don't have a scanner attached. Therefore, in this section we will use the import feature to simulate scanning. Datacap lets you select pre-scanned images from your computer's files in a manner similar to scanning documents.

Start Scan Task – Step by Step Instructions

- 1) Open Firefox and enter your Datacap Navigator desktop URL again
- 2) Login as **dadmin** with password **dadmin**.
- 3) Click on the **Scan** icon in the Quick Launch menu.

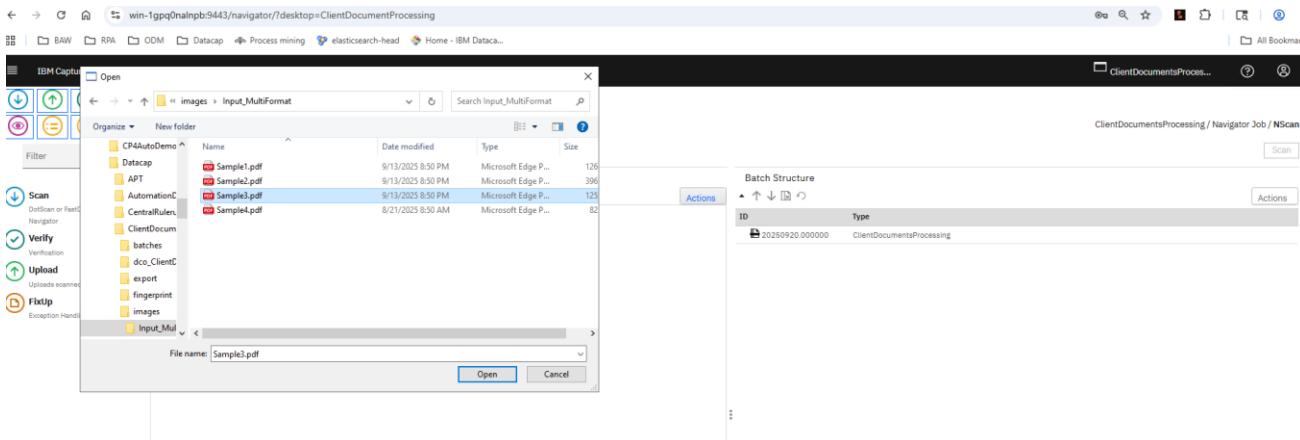


The scan task screen displays.

The screenshot shows the IBM Content Navigator interface. The top navigation bar includes 'IBM Content Navigator', a user profile for 'admin', and a help icon. Below the navigation bar, the 'Datacap Main Page' is selected. The main content area has tabs for 'Job Monitor' and 'NScan'. The 'NScan' tab is active, indicated by a blue underline. On the left, there's a sidebar with categories like 'Input', 'Scanned', 'Verify', and 'Batch'. The 'Input' section is highlighted with a red box and contains a 'Browse...' button. The 'Scanned' section is highlighted with a purple box and shows 'Scanned Pages (0/0)' with a message 'No images to display'. The 'Batch Structure' section is highlighted with a yellow box and shows a table with one row: ID 20180628.000000 and Type MGApp. A yellow callout bubble points to the 'Batch' section.

There are 3 sections:

- 1) Input Panel: Location of documents to be specified
 - 2) Scanned Pages: Image Viewer
 - 3) Batch Structure: The list of scanned pages
-
- 4) Click on the **Browse** button. (Note if necessary navigate to the folder "C:\Datacap\ClientDocumentsProcessing\images\Input_MultiFormat")
-
- 5) Click on **Sample3.pdf** on the file list and then click on the **Open** button



This returns to the Scan Task screen which shows the selected folder name and file next to the Browse button.

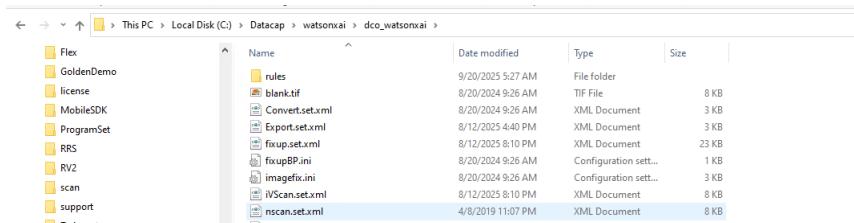


Click on the **Scan** button.

The image will be uploaded into the system and displayed on the screen. The “Batch Structure” shows a list of the pages that were scanned. The “Image Viewer” will always display the last image.

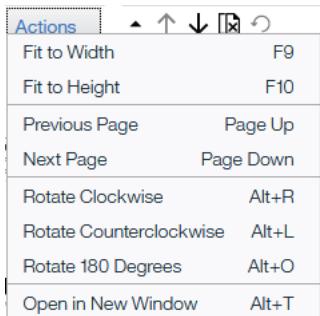
Troubleshooting:

It might be, that the buttons “Scan” and “Submit” are greyed out or that the preview of the scanned document is not shown. Copy the nscan.set.xml file from working datacap DCO folder to your Datacap application DCO folder



The screenshot shows the Datacap Navigator Job / NScan interface. At the top, there are buttons for 'Submit', 'Hold', and 'Cancel'. Below that, a 'Source' dropdown is set to 'Import from Directory' with a path of 'C:\Datacap\ClientDocumentsProcessing\images\Input_MultiFormat\Sample3.pdf'. On the right, a 'Batch Structure' pane lists items: '20250920.000000' (Type: ClientDocumentsProcessing) and 'TM000001' (Type: Other). The main area displays a scanned document titled 'Banking Information' from 'Focus Corp'. The document contains fields for Client Name (Legacy Consulting), Bank Name (XYZ Bank), Bank Phone Number (+1-213-111-7890), Bank Address (887 Cypress Rd, Garden Grove, CA 92840), Routing Number (32043559), Account Number (7250512345), and Account Type (Checking, Savings, Other). A magnifying glass icon is visible in the top right corner of the document view.

You can zoom in and zoom out by clicking on the magnifying glass buttons
 From the “Actions” button of the image viewer you can fit the image into your frame, manipulate the image or move forward and backward in the batch.



6) Click on the **Submit and click **upload icon** from left menu.**



This saves the batch and you are returned to the job monitor.

We have configured this desktop to automatically upload the images to the Datacap server. Note: This automatic upload can be turned off from the navigator desktop.

Hint:

If the button is greyed out, please refer to “Troubleshooting” of step 6”.

7) Notice that your batch is in the list. The batch is at the “Profile” task and is pending (your batch number and id may be different).

The screenshot shows the Datacap Rulerunner interface. On the left, there are icons for Scan, Verify, and Upload. The main area displays a table with one row of data:

Que...	Batch	Job	Task	Status	Job Start	Job T...	Oper...	Station	Docu...	Pages
10	20250916.000007	Navigator Job	PageID	pending	9/16/2025, 9:54 PM	0		0	1	

On the right, the properties pane shows:

- Class: Queue
- Batch: 20250916
- System Properties

We have set up Datacap Rulerunner in the previous exercise to automatically process this task in the background.

- 8) Click on the refresh button to see update to the job monitor.

The server processes the batch: runs OCR, validates data, and creates separate documents; each containing one or more pages.

Notice the status changes from pending to running as the background processes execute.

When the batch is ready, the Task to perform will change to “Verify” and the status will change to pending.

The screenshot shows the IBM Capture Demonstration interface. The table data is identical to the previous screenshot:

Queue ID	Batch	Job	Task	Status	Job Start	Job Time	Operator	Station	Documents	Pages
32	20250920.000000	Navigator Job	Verify	pending	9/20/2025, 8:06 AM	0		0	1	1

3.3.6 Verify a Batch

At this point Datacap has processed the scanned images. It did the following steps in background:

- Enhanced the images
- Identified the types of pages
- Assembled the pages into documents
- Read data from the images using Optical Character Recognition (OCR)
- Flagged images and data that require human review (Verify)

This exercise walks through the human review or “Verify” task.

Since we are reading data from paper documents the results may not be 100% accurate. For example, pages may be damaged, users can enter invalid information on paper or simply cross out or erase information on the paper.

As a result, the system checks the data and flags fields that need human review. To be conservative, the system may flag some fields that are actually OK. When you configure the system, you can set the threshold for the acceptable level of confidence.

Fields that are low confidence are displayed in yellow. Fields that have errors are displayed in red.

The operator reviews each page to correct any problems. If a page has no problems the system can be configured to skip it, so that the user only reviews problems.

Start the Verify task – Step by Step instructions

- 1) Double click on your batch that is pending for “Verify”.

The screenshot shows the 'Verify' tab of the IBM Capture Demonstration interface. On the left, there's a sidebar with icons for Scan, Verify, Upload, and Filter. The main area has tabs for Job Monitor, Verify, Submit, Hold, Previous Page, Next Page, Previous Problem, Next Problem, Next Low Confidence, and Run Validations. The 'Verify' tab is active. A large central area shows a scanned document titled 'Banking Information' from 'Focus Corp'. The document contains fields for Client Name (Legacy Consulting), Bank Name (XYZ Bank), Bank Phone Number (+1-213-111-7890), Bank Address (887 Cypress Rd, Garden Grove, CA 92840), Routing Number (32043559), Account Number (7235012345), and Account Type (Checking). Below the form, there's a note about authorizing Focus Corp to withdraw monthly services fees. To the right of the form is a 'Field Details' panel with sections for Client Name, Bank Name, and Routing Number. Further right is a 'Batch Structure' table with one entry:

ID	Type	Status
0209900.000000	ClientDocumentsProcessing	OK
0209900.000000.01	Legacy Consulting Inv	OK
PM000001	Legacy Banking Information	Problem

The scan task screen displays. There are 3 sections:

- Image Viewer: Image Viewer
- Field Details: Data entry panel
- Batch Structure: The list of scanned document and pages

Observe that the system has lifted data from the scanned images. You may also see that some fields are highlighted yellow. This indicates that the system is not fully confident that the data is correct, therefore it is marked for you to verify. You can move to the next problem or entry with low confidence within a batch via the buttons at the top.

[Submit](#) [Hold](#) [Previous Page](#) [Next Page](#) [Previous Problem](#) [Next Problem](#) [Next Low Confidence](#) [Run Validations](#)

Above each field is a “snippet”. A snippet is a small cutout area of the image where the data is located. This lets you see the image data easily without looking at the image display.

On the right is the list of documents and the pages inside of the documents. The system determined where each document started and what pages were contained in each document. Documents and pages are marked as “OK” or “Problem”. The operator is only required to look at the problem areas. If your data in the fields are correct (no low confidence nor validation error) it does not need to be changed.

- 2) Click on **Submit** once you have verified the image.

[Submit](#) [Hold](#) [Previous Page](#) [Next Page](#) [Previous Problem](#) [Next Problem](#) [Next Low Confidence](#) [Run Validations](#)

- 3) Click OK to finish the batch

[Submit](#)

All documents are complete. Do you want to finish batch?

[OK](#) [Cancel](#)

When the Job Monitor redisplays, the batch will now show that it is pending for the “Export” task.

The screenshot shows the IBM Capture Demonstration interface. In the center, there is a table with columns: Queue ID, Batch, Job, Task, Status, Job Start, Job Time, Operator, Station, Documents, and Pages. A single row is selected, showing Queue ID 12, Batch 20250920.000000, Job Navigator Job, Task Export, Status pending, Job Start 9/20/2025, 8:06 AM, Job Time 0, Operator admin, Station 1, Documents 1, and Pages 1. Below the table, there are several icons for actions like Scan, Edit Job, Edit Batch, Delete, and View History. On the left, there's a sidebar with a 'Scan' section containing 'Dotlan or FastDoc or Datacap Navigator'.

The “Export” task outputs the data to a Datacap database and stores the Document in FileNet.

When the Export is completed, the status will change to Job Done.

This screenshot is identical to the previous one, except the status of the selected job has changed from 'pending' to 'Job done'. The rest of the interface, including the table data and sidebar, remains the same.

Note: You have to refresh your monitor to see Job Done.



3.3.7 Viewing Results in Repository

_1. Log in to the **Focus Corp** application using the bookmarked favorite under **BAW → Desktops**.

The screenshot shows the IBM BAW desktops interface. On the left, there is a sidebar with various application icons. One icon for 'Focus Corp' is highlighted with a blue box. To its right, a modal window titled 'Focus Corp' displays a login form. The form includes fields for 'User name:' (with 'dadmin' entered) and 'Password:' (with '*****' entered), and a 'Login' button at the bottom. The URL for the login page is https://win-1gpq0nalnpb:9443/navigator/?desktop=focusecm.

_2. Click on the ClientDocuments from the left hand menu and you can see folders list

The screenshot shows the Focus Corp interface. The left sidebar has sections for ECM, Case Folders, ClientDocuments, Departments, and others. The 'ClientDocuments' section is expanded, showing sub-folders like ECM Workflow Sample doc, Focus Corp, Photos, Project Viewer, QuickBills, Saved Searches, and WatsonDocs. The main content area shows a table titled 'ClientDocuments' with a single row. The row contains a folder icon and the name '20250918.000005'. There are also 'Actions' and 'New' buttons at the top of the table.

_3. Click on **Batch**, then open the exported document as shown below.

The screenshot shows the Focus Corp ECM interface. On the left, there's a navigation sidebar with options like Case Folders, ECM, Departments, and WatsonDocs. The main area shows a list of documents in the 'ClientDocuments' folder. One document, 'tm000001', is selected. To the right, a detailed view of the document is shown, including its properties. The properties panel lists the following information:

Class:	LegacyBankingInformation
Document Title:	tm000001
ClientName:	Legacy Consulting
BankPhoneNumbe	+1-213-111-7890
BankName:	XYZ Bank

_4. You can view the document properties that were extracted using the **watsonx.ai LLM model**.

The screenshot shows the Focus Corp ECM interface with the same document 'tm000001' selected. A new window titled 'Focus Corp Viewer - Google Chrome' is open, showing the extracted banking information. The viewer interface includes fields for Client Name, Bank Name, Bank Phone Number, and Bank Address. The properties panel on the right is identical to the one in the previous screenshot.

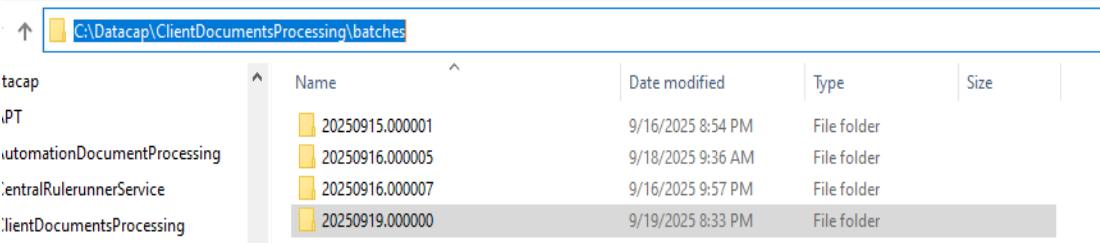
_5. Log out and close the browser.

4. Troubleshooting

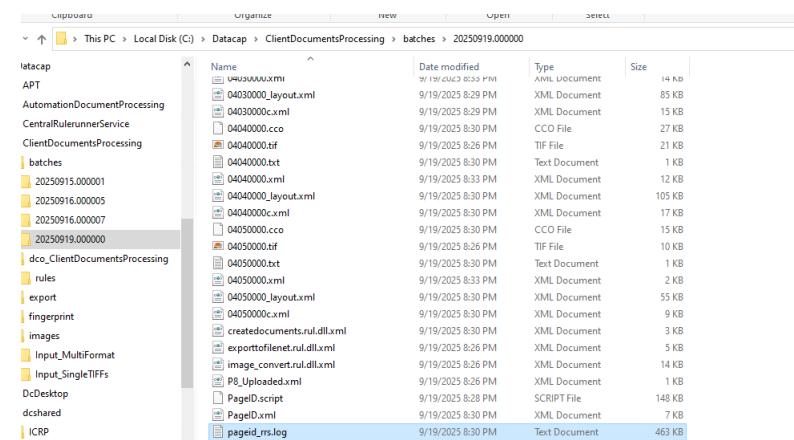
In this section, you will explore how to **troubleshoot issues** related to **classification and extraction failures** when using **Watsonx.ai**, including verifying whether the prompt was properly sent to the model. You can also **validate the prompt and its response** using the **Watsonx.ai Free Form Style tile** for further analysis.

If you get stuck or encounter with an issue at the **classification stage**, navigate to the batch folder at `C:\Datacap\ClientDocumentsProcessing\batches`, then open the specific **problem batch folder**, which is named using the format **YYYYMMDD.HHMMSS**.

_1. For example, if the batch **20250919.00000** encountered a problem at the **classification stage**, open that specific batch folder to begin troubleshooting.

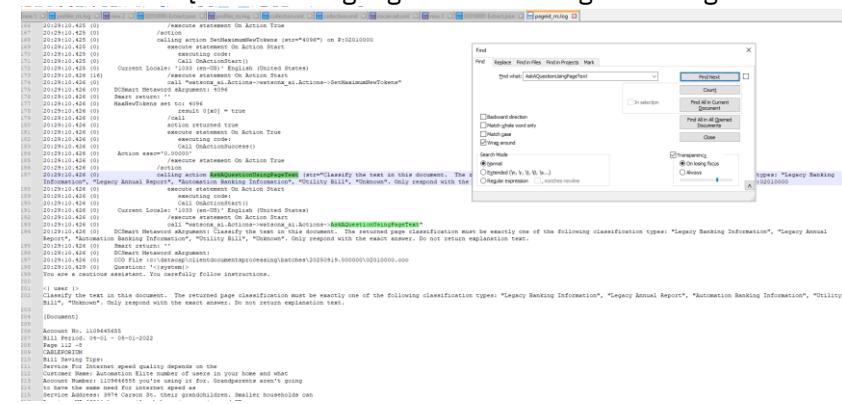


_2. Open the **PageID_rrs.log** file in notepad++ which is located within the batch folder, where the **recognition** and **Watsonx.ai PageID ruleset** were defined, to review the classification process and identify any issues.



When **enhanced logging** is enabled in the `watsonx.ai_PageID.ruleset`, you can view the **prompt sent** and the **response received** from the **Watsonx.ai SaaS platform**, allowing you to verify the interaction details for troubleshooting or validation.

_3. Search for `AskAQuestionUsingPageText` in the PageID rrs log



_4. Check the **prompt** that was sent and the **response** received from **Watsonx.ai** by reviewing the log file (e.g., **PageID_rrs.log**), to ensure the request was correctly formatted and the model returned the expected output.

```
20259110.426 (0)    CCL File :c:\datcap\clientdocumentsprocessing\Batches\20250919.00000\02010000.ccl
20259110.429 (0)    Question: <system>
you are a cautious assistant. You carefully follow instructions.

[ user >
classify the text in this document. The returned page classification must be exactly one of the following classification types: "Legacy Banking Information", "Legacy Annual Report", "Automation Banking Information", "Utility Bill", "Unknown". Only respond with the exact answer. Do not return explanation text.

Document]
account No. 1109646555
bill Period: 04-01 - 05-01-2022
age 122 - 6
amount 122
bill Saving Tips:
service For Internet speed quality depends on the
customer Name: Automation Elite number of users in your home and what
account Number: 1109646555 you're using it for. Grandparents aren't going
to have the same needs as internet speed
service address: 3574 Carson St. their grandchildren. Smaller households can
ansing, MI 48911 have Cars web browsing, music, and HD.
bill Bill Period Due On 04-01-2022 05-05-2022 - 05-01-2022 streaming gaming, download and by speed. HD using video Email, as little streaming web as 18 browsing, for Mbps three of
ervices can be achieved with as little as 30
Mbps of download speed
method of payment: Various ways to Pay:
previous Balance $ 60.05 You may pay your bill by sending a check
sing the enclosed return envelope. You may
ayment Received - $ 60 .05 also opt to pay with your credit or debit card
ew Charges - see details $ 62.76 via our website. You can also enroll your
ocal Account Due $ 62.76 card convenience. For auto debit option for your
local account.
bill Period 04-01-2022 - 05-01-2022
bill Due On 05-05-2022
ABLEPORIUM Amount Due. $ 62.76
ableporium
6 BOX
Enclosed
mpano Beach, Florida 33060 US
hill Automation Elite
974 Carson St.
ansing, MI 48911

End1

20259110.429 (0)    Bearer response was deserialized
20259110.429 (0)    refresh not supported, type: Bearer, expiration: 1758342547
20259110.429 (0)    Obtained api token
20259110.460 (14)  Bearerkey factory
20259110.460 (14)  Bearerkey build
20259110.460 (0)    Bearer build post
20259110.460 (406)  token received
20259110.476 (0)    API-Complete-Token: 416
20259110.476 (0)    Bearer response was deserialized
20259110.476 (0)    refresh not supported, type: Bearer, expiration: 1758342548
20259110.476 (0)    Building Client
20259110.476 (0)    Building Client
20259110.476 (0)    Model: "microsoft/mistral-small-3-1-24b-instruct-2503", URL: "https://us-south.ml.cloud.ibm.com/ml/v1/text/generation?version=2023-05-29", decode: 'greedy', Temp: 1.0, mTokens: 4096, TimeOut: 0, PID: 1023b96a-9139-427d-bfde-37e4141bba20
20259110.476 (0)    Added bearer and ID
20259110.476 (0)    Starting ping pong request
20259111.246 (198)  Response: Status: 1:1, Content: System.Net.Http.StreamContent, Headers:
{
    Connection: keep-alive
    Server-Timing: on�id=desc-1e207b22700f76ca
    Pragma: no-cache
    X-RateLimit-Limit: 8
    X-RateLimit-Remaining: 8
    X-Request-ID: e645ff0f022cc5b2de825a7a6b6c1f16c
    X-Xss-Protection: 1; mode=block
    X-Xss-Protection: 1; mode=block
    X-Request-Limit-Period: 1000
    X-Request-Limit-Reset: 7
    X-Request-Limit-Reset-After: 125
    Strict-Transport-Security: max-age=31536000; includeSubDomains
    Strict-Transport-Security: max-age=31536000; includeSubDomains
    X-Frame-Options: DENY
    Referrer-Policy: strict-origin
    X-Content-Type-Options: nosniff
    Content-Security-Policy: default-src 'none'; script-src 'self'; connect-src 'self'; img-src 'self'; style-src 'self'; frame-ancestors 'none'; form-action 'self';
    of-cause-status: DYNAMIC
    CF-NAY: 101e3acd3dd5d04+1AD
    Cache-Control: no-store, no-cache, must-revalidate, no-cache
    Date: Sat, 20 Sep 2025 03:25:11 GMT
    Server: cloudflare
    Content-Length: 1136
    Content-Type: application/json
}
20259111.265 (0)    Response Body: {"model_id": "microsoft/mistral-small-3-1-24b-instruct-2503", "model_version": "1.0.0", "created_at": "2025-05-20T03:29:11.222Z", "results": [{"generated_text": "Utility Bill", "generated_token_count": 3, "input_token_count": 615, "stop_reason": "eos_token"}]}, "system": "Warnings": [{"message": "This model is a Non-IBM Product governed by a third-party license that may impose use restrictions and other obligations. By using this model you agree to its terms as identified in the following URL.", "id": "disclaimer_warning", "more_info": "https://dataplatform.cloud.ibm.com/doc/content/vg/analyze-data/fm-models.html?context=ug"}, {"message": "In future implementation, the parameter 'parameters.decoding_method' will be ignored and set automatically.", "id": "param_deprecation", "more_info": "https://dataplatform.cloud.ibm.com/doc/content/vg/analyze-data/fm-models.html?context=ug"}, {"message": "The value of 'parameters.time_limit' for this model must be larger than 0 and not larger than 10ms; it was set to 1ms.", "id": "time_limit_range", "more_info": "https://dataplatform.cloud.ibm.com/doc/content/vg/analyze-data/fm-models.html?context=ug"}, {"message": "This API is legacy. Please consider using '/ml/v1/text/chat' instead.", "id": "api_legacy"}]}
20259111.266 (0)    API-Complete: 836
20259111.266 (0)    Full results:
[
    {
        "generated_text": "Utility Bill",
        "generated_token_count": 3,
        "input_token_count": 615,
        "stop_reason": "eos_token"
    }
]

Activate Windows
Go to Settings to activate Windows.
```

_5. Sometimes, you may encounter errors if the API Key, Project ID, or Model Name are not passed in the correct order during the call, or if you're out of tokens, or if the selected model is not available in the region where your Project ID was created.

_6. For example, if the batch **20250919.00000** encountered a problem at the **extraction stage**, open that specific batch folder to begin troubleshooting, then open the **Profiler_rrs.log** file and search for **errors**, as well as the **prompt request** and **response** from Watsonx.ai.

If your prompt does not meet your requirements, you can **tune or refine it** directly on the **Watsonx.ai platform**, using the **Free Form Prompting** interface as shown below.

_7. You can tune your prompt by copying it from the **PageID_rrs.log** or **Profiler_rrs.log** files and refining it directly on the Watsonx.ai platform.

_8. Copied the classification prompt from the **PageID_rrs log** and submitted it to generate a response from the LLM model for verification.

< user >
Classify the text in this document. The returned page classification must be exactly one of the following classification types: "Legacy Banking Information", "Legacy Annual Report", "Automation Banking Information", "Utility Bill", "Unknown". Only respond with the exact answer. Do not return explanation text.

[Document]

Account No. 1109645655
Bill Period. 04-01 - 05-01-2022
Page 112 -8
CABLEPORUM
Bill Saving Tips:
Service For Internet speed quality depends on the Customer Name: Automation Elite number of users in your home and what Account Number: 1109645655 you're using it for. Grandparents aren't going to have the same need for internet speed as Service Address: 3974 Carson St, their grandchildren. Smaller households can Lansing, MI 48911 have email web browsing, music, and HD Bill Bill Period Due On 04-01-2022 05-05-2022 - 05-01-2022 streaming gaming, download and by speed. HD using video Email, as little streaming web as 18 browsing, for Mbps three of devices can be achieved with as little as 30 Mbps of download speed.
Monthly Statement Summary Ways to Pay:
Previous Balance \$ 60.05 You may pay your bill by sending a check using the enclosed return envelope. You may Payment Received - \$ 60.05 also opt to pay with your credit or debit card New Charges - see details \$ 62.76 via our website. You can also enroll your Total Amount Due \$ 62.76 card convenience, for auto debit option for your 8 Account Number 1109645655
Bill Period 04-01-2022 - 05-01-2022
Bill Due On 05-05-2022
CABLEPORUM Amount Due. \$ 62.76
Bill Due On 05-05-2022
PO BOX 1108 Amount Enclosed
Pompano Beach, Florida 33060 US
Ihill Automation Elite

Clear output Generate

< user >
Page 112 -8
CABLEPORUM
Bill Saving Tips:
Service For Internet speed quality depends on the Customer Name: Automation Elite number of users in your home and what Account Number: 1109645655 you're using it for. Grandparents aren't going to have the same need for internet speed as Service Address: 3974 Carson St, their grandchildren. Smaller households can Lansing, MI 48911 have email web browsing, music, and HD Bill Bill Period Due On 04-01-2022 05-05-2022 - 05-01-2022 streaming gaming, download and by speed. HD using video Email, as little streaming web as 18 browsing, for Mbps three of devices can be achieved with as little as 30 Mbps of download speed.
Monthly Statement Summary Ways to Pay:
Previous Balance \$ 60.05 You may pay your bill by sending a check using the enclosed return envelope. You may Payment Received - \$ 60.05 also opt to pay with your credit or debit card New Charges - see details \$ 62.76 via our website. You can also enroll your 8 Account Number 1109645655
Bill Period 04-01-2022 - 05-01-2022
Bill Due On 05-05-2022
CABLEPORUM Amount Due. \$ 62.76
Bill Due On 05-05-2022
PO BOX 1108 Amount Enclosed
Pompano Beach, Florida 33060 US
Ihill Automation Elite
3974 Carson St.
Lansing, MI 48911

[End]
Utility Bill

Stop reason: End of sequence token encountered
Tokens: 590 Input + 4 generated = 594 out of 128000
Time: 0.3 seconds

Clear output Generate

_9. Copied the Extraction prompt from the profiler_rrs log and submitted it to generate a response from the LLM model for verification.

< user >
Account Number
7250512345
Account Type
Ø Checking × Savings Ø Other
By submitting this form, you authorize Focus Corp to withdraw the monthly services fee from the specified bank account.
Date
5/10/21

[End]
The following is a list of keys to find within the document. Please find only these keys and do not return any additional keys.

Client Name
Bank Name
Bank Phone Number
Bank Address
Routing Number
Account Number
Account Type
Date

Return the key value pairs in JSON format. Return only JSON in the following format. Do not include additional keys. Do not include additional text before or after the JSON.

```
{<assistant>:  
  "Client Name": "Legacy Consulting",  
  "Bank Name": "XYZ Bank",  
  "Bank Phone Number": "+1-213-111-7890",  
  "Bank Address": "887 Cypress Rd, Garden Grove, CA 92840",  
  "Routing Number": "1234567890123456",  
  "Account Number": "7250512345",  
  "Account Type": "Checking",  
  "Date": "5/10/21"}  
}
```

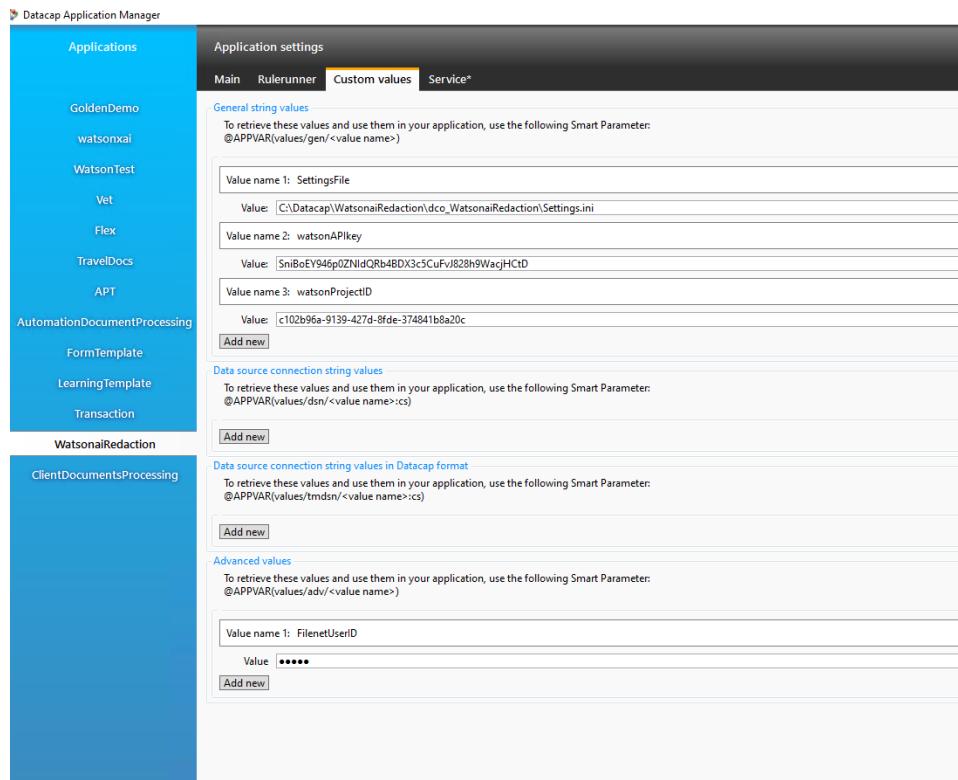
Stop reason: End of sequence token encountered
Tokens: 314 Input + 122 generated = 436 out of 128000
Time: 3.5 seconds

Clear output Generate

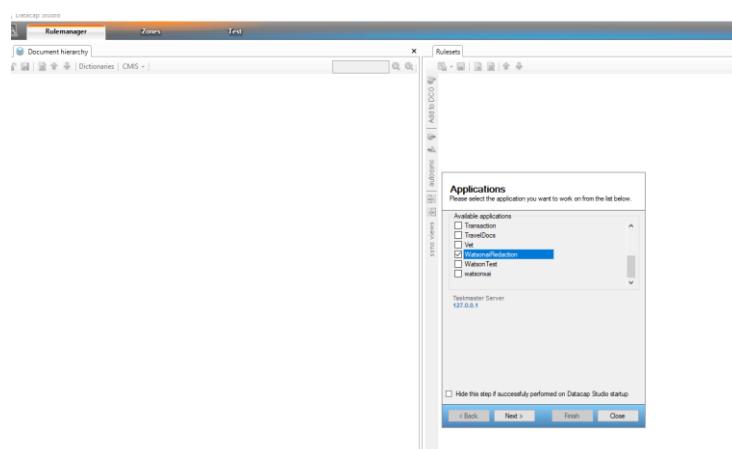
5. Explore Document Redaction with Watsonx.ai

The **WatsonxaiRedaction** application has been prepared to redact sensitive data from medical records, demonstrating how data redaction can be performed using the Watsonx.ai LLM model. You can open this application in **Datacap Studio** to explore the rulesets, rules, and functions implemented, see how the rules are mapped to the DCO, and test the application as part of this lab exercise for your hands-on awareness.

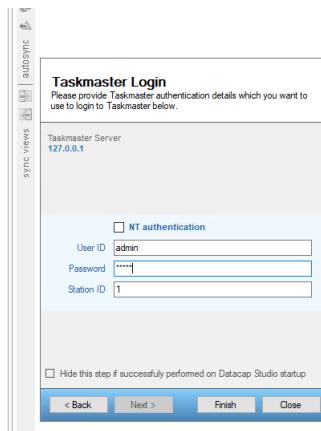
_1. Before testing the WatsonxaiRedaction app in Datacap Studio, you need to set the **ProjectID** and **APIKey and save changes** in the Datacap Application Manager under **watsonxaiRedaction** within the **Custom Values** section, as shown below.



_2. Login to watsonxaiRedaction app from the datacap studio.



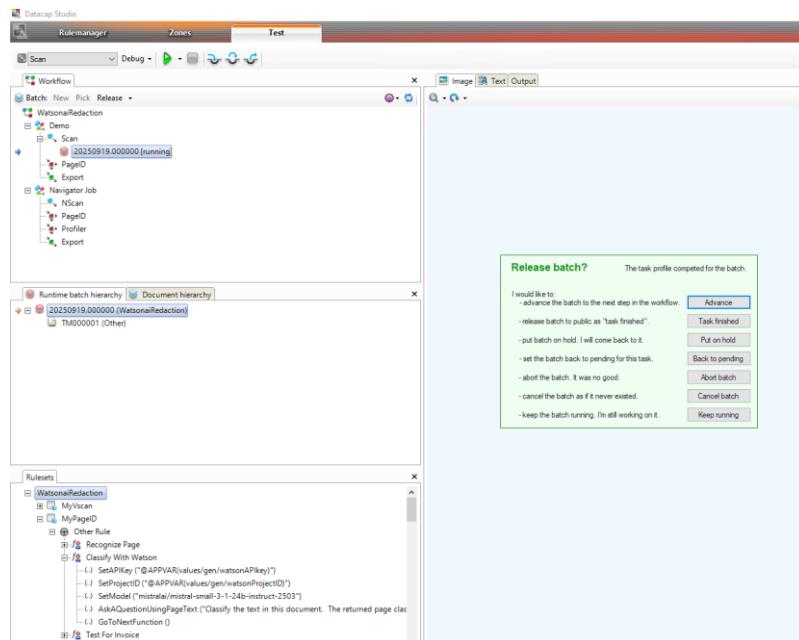
_3. Provide login credentials admin/admin and click finish



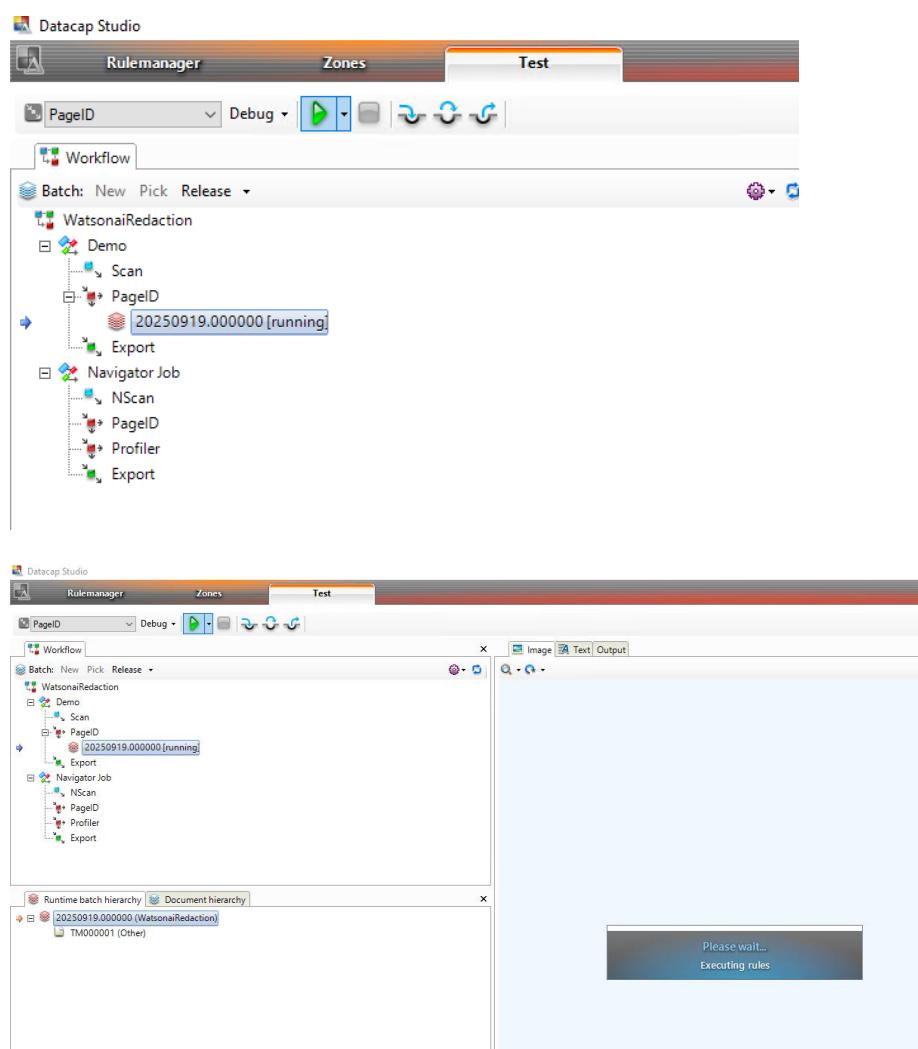
_4. Explore the rulesets, rules, and functions assigned to the task profiles (**PageID**, **Profiler**, **Export**) and their mappings to the DCO.

_5. Click on the **Test** tab to run the application after familiarizing yourself with how the application is created and how the workflow tasks are structured.

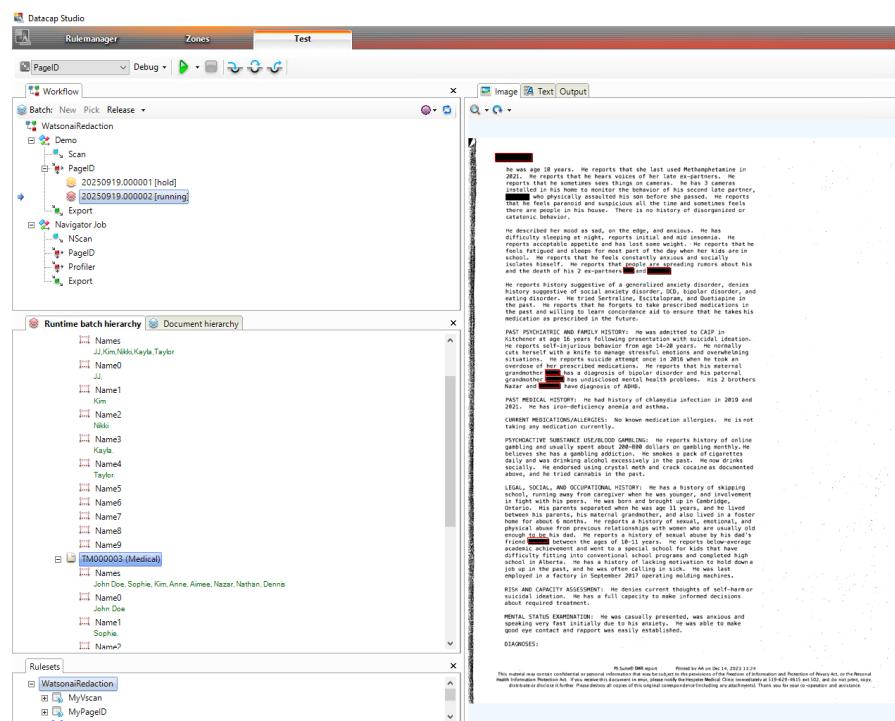
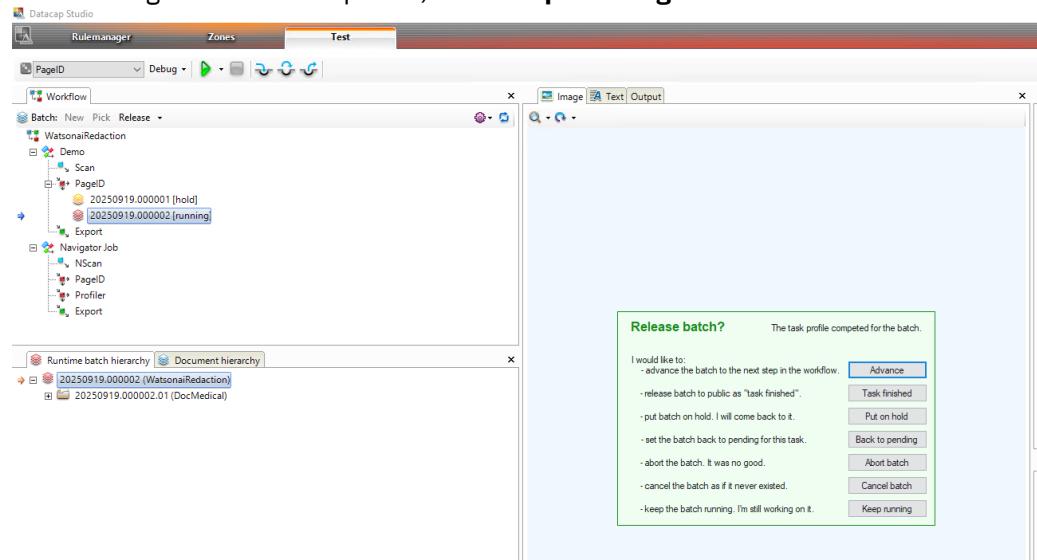
_6. Select **Scan** from the dropdown menu, then right-click on **Scan** and choose **New** and click green play button.



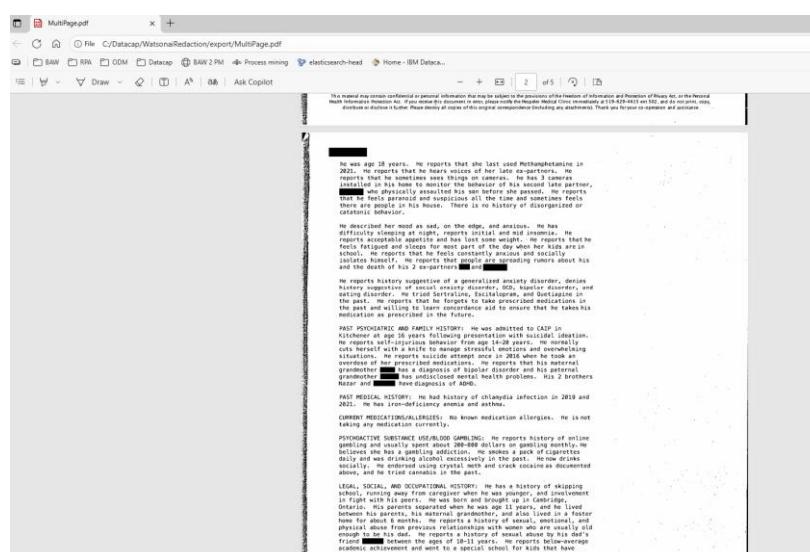
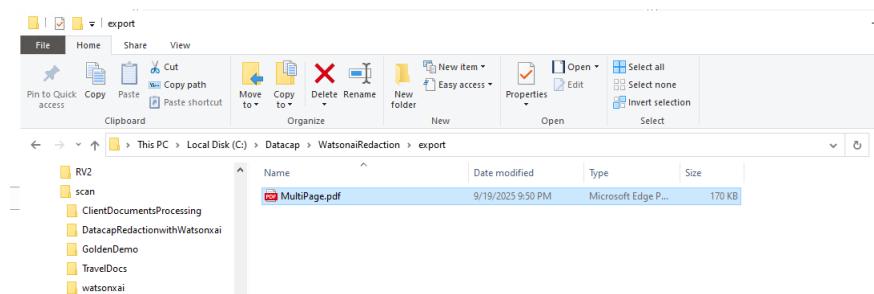
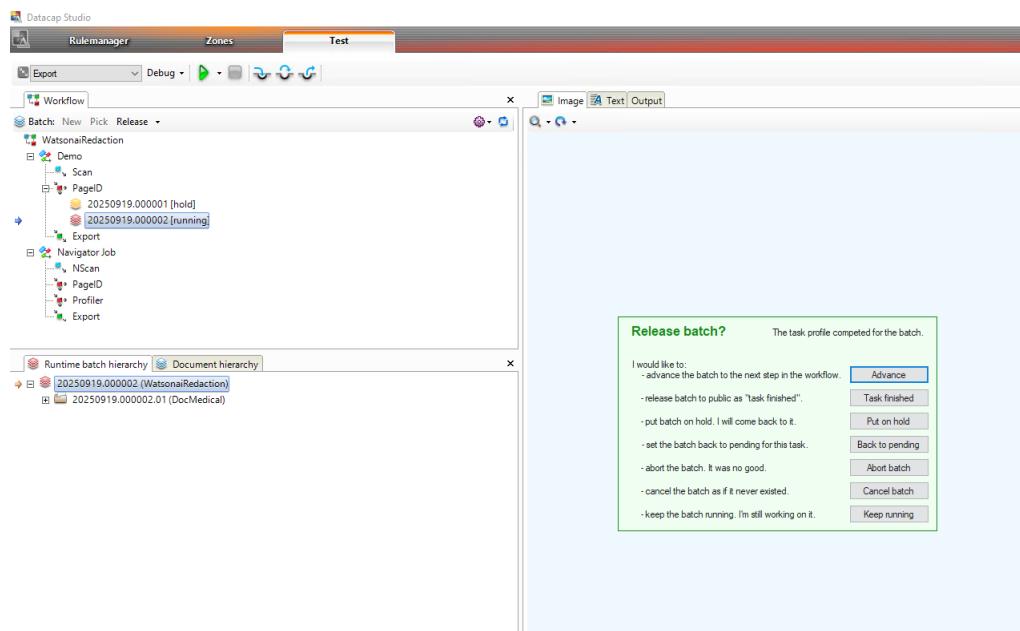
_7. Once the scan task is completed, click **Advance** to move to the PageID task, where recognition, classification, and redaction are performed on the sample document; then, click the green **Play** button to start the process.



_8. Once the PageID task is completed, click **Keep Running** for the moment to continue and view the document.



_9. Once you have completed the verification, select **Export** from the dropdown menu and click the **Play** button to execute the export ruleset.



6. Reference Links:

[watsonx.ai actions - IBM Documentation](#)
[AskAFreeFormQuestion - IBM Documentation](#)
[Datacap watsonx.ai Actions Best Practices](#)

**Congratulations you have successfully completed IBM Datacap+Watsonx.ai lab.
We hope you enjoyed it.**