Digital Business Automation Blue Demos 2018

Lab instructions for
6. Platform end-to-end scenario

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0 Introduction

The IBM Automation Platform for Digital Business is an integrated platform of five automation capabilities (shown in light blue) that help business people drive virtually all types of automation projects at speed and scale.

The platform can automate repetitive human tasks, content management, process workflows, data capture and business decisions with the platform's flexible, integrated capabilities.

These are supplemented by additional capabilities like Modeling, Analytics, etc. The platform can be deployed on-premises, on-cloud or in a hybrid mode depending on business needs.
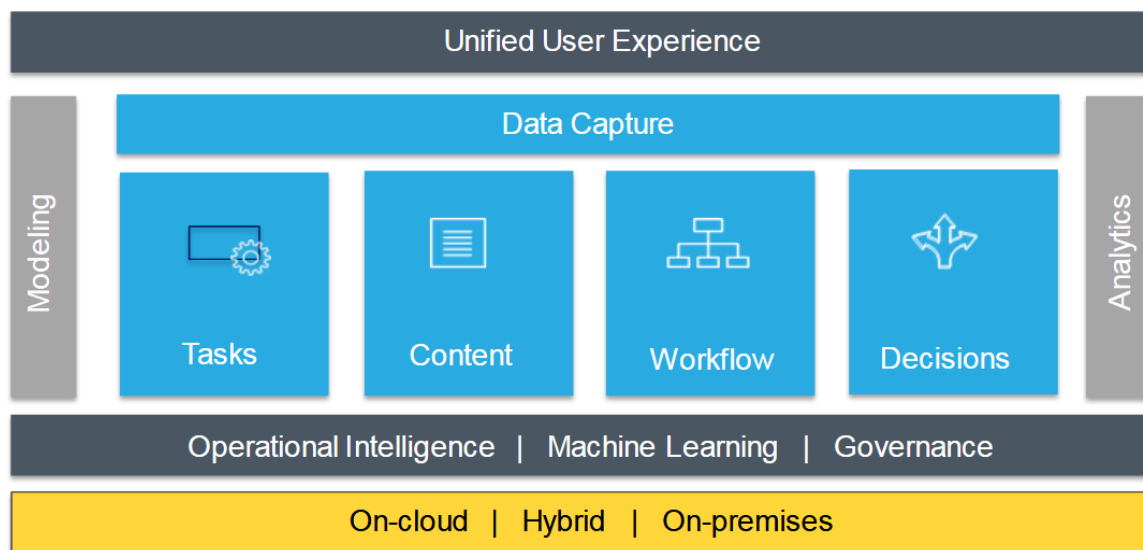
This scenario showcases how the combination of all capabilities included in the IBM Automation Platform for Digital Business can be used to build an end-to-end business solution that helps to digitize all aspects of business operations. You will either reuse one part of the end-to-end solution that you have built, build all parts yourself or alternatively run the scenario using the pre-built solution.

This lab focuses on the business-user/end-user experience and executing a mortgage application from start to end, not developing the solution itself. In contrast the other labs are the sub-scenarios that each contribute one aspect to the overall solution. They focus on developing parts of the end-to-end solution using individual pillars and therefore products of the platform. Where integration points to other products exists, these are also covered in the respective sub-scenario.

Duration: 30-45 minutes

0.1 Business Scenario

The specific use case is a simplified version of a **Mortgage Application solution** as part of Digital Bank X's mortgage business. Although intended to be realistic, it is fictitious and is meant for illustrative purposes only. It highlights selected business functions and technical integration points across the IBM Automation Platform for Digital Business.

0.1.1 Personas

To focus on the people involved in the end-to-end scenario five personas have been conceived that will be used to conceptualize the interactions and flow:

- **Max (Customer)**
  Requesting a mortgage from Digital Bank X. Sends documents (Mortgage application form and payslip) via mail/email.

- **Peter (Employee – Input Management Operator)**

  Input management operator works in the bank's team handling input channels (uses IBM Datacap and the Datacap Navigator).

- **Michelle (Employee – Mortgage Officer – Case Worker)**

  Mortgage officer that reviews mortgage application cases. She may request additional information from the client through the Customer Representative or trigger gathering of data from internal/external systems (works with IBM Business Automation Workflow and the Case Client).

- **Jack (Employee – Customer Representative – Call Center Agent)**

  Call center agent that communicates with clients. He will call Max to request documents about his financial background, specifically a current payslip (works with IBM Business Automation Workflow and the Case Client).

- **Marie (Employee – Lead Mortgage Officer – Case Worker)**

  Lead mortgage officer who makes the final decision about accepting or rejecting a mortgage request based on all information collected and tasks performed before (works with IBM Business Automation Workflow and the Case Client).

0.1.2 High-level business flow including system activities

As visualized in the picture below there are multiple steps and interactions involved in completing a mortgage application at Digital Bank X.

Step	Persona/System	Description
1	Max (Customer)	Max sends the signed Mortgage Application form to the bank via mail.
2	Peter (Input Management Operator)	The Mortgage Application form is scanned, OCRed and the fields extracted by the capture solution (IBM Datacap) deployed at Digital Bank X. Finally, the document and data are transferred into the Enterprise Content Management (ECM) system (IBM FileNet P8). Peter gets involved when the extraction of fields fail, data has been extracted with low confidence and/or defined validation rules for data fails. In these cases, Peter reviews the results and may resolve problems manually.
	ECM/BAW System	The bank's Mortgage Application solution (based on IBM Business Automation Workflow (BAW)) recognizes the new mortgage application being stored in the ECM system and starts a new Mortgage Case for it.
3 & 4	Michelle (Mortgage Officer)	Michelle sees the new mortgage case through a task in her in-basket and starts working on it by reviewing the data provided by Max. As information about the financial situation of Max is so far missing from the case Michelle asks a customer representative to request a recent payslip document as prove of income.
5	Jack (Customer Representative)	Jack sees the request for additional information from Michelle. He calls Max and asks him to send a recent payslip document.
6	Max (Customer)	Max sends the payslip document to the bank via mail.

7	Peter (Input Management Operator)	The payslip is scanned, OCRed and the fields extracted again before it is also stored into the ECM system. Peter again needs to manually resolve any problems during data recognition and extraction.
8	Michelle (Mortgage Officer)	Michelle sees that the payslip has arrived in the mortgage application case though a task in here in-basket. She reviews the information and decides that all information required from Max is not available. It is time for her to complete her task to trigger two automatic actions to gather additional data from back-end systems based on the information she collected.
9	Land Charge Register	The bank needs to know if a mortgage is already registered for the property or not. For this purpose, the land charge register can be checked. This is an application that offers a user-interface but no API to access it. As Digital Bank X wants to streamline its processes as much as possible and perform them also cost effectively the bank decided to automate this inquiry using IBM Robotic Process Automation (RPA).
9	Risk Management and Rating Solution	The bank has implemented an enterprise wide risk management and rating solution based on IBM Operational Decision Manager (ODM). Based on the previously collected information it derives a recommendation on either granting or rejecting the mortgage. Besides providing reasons for either recommendation it also provides some business metrics that further support making a final decision.
10	Marie (Lead Mortgage Officer)	Marie sees that she has a task in her in-basket to finally decide for a mortgage application case to approve or reject. She has all the information available that was collected before from Max and from the back-end systems (land charge register and corporate risk management and rating solution). By either approving or rejecting the mortgage she completes the mortgage application case.
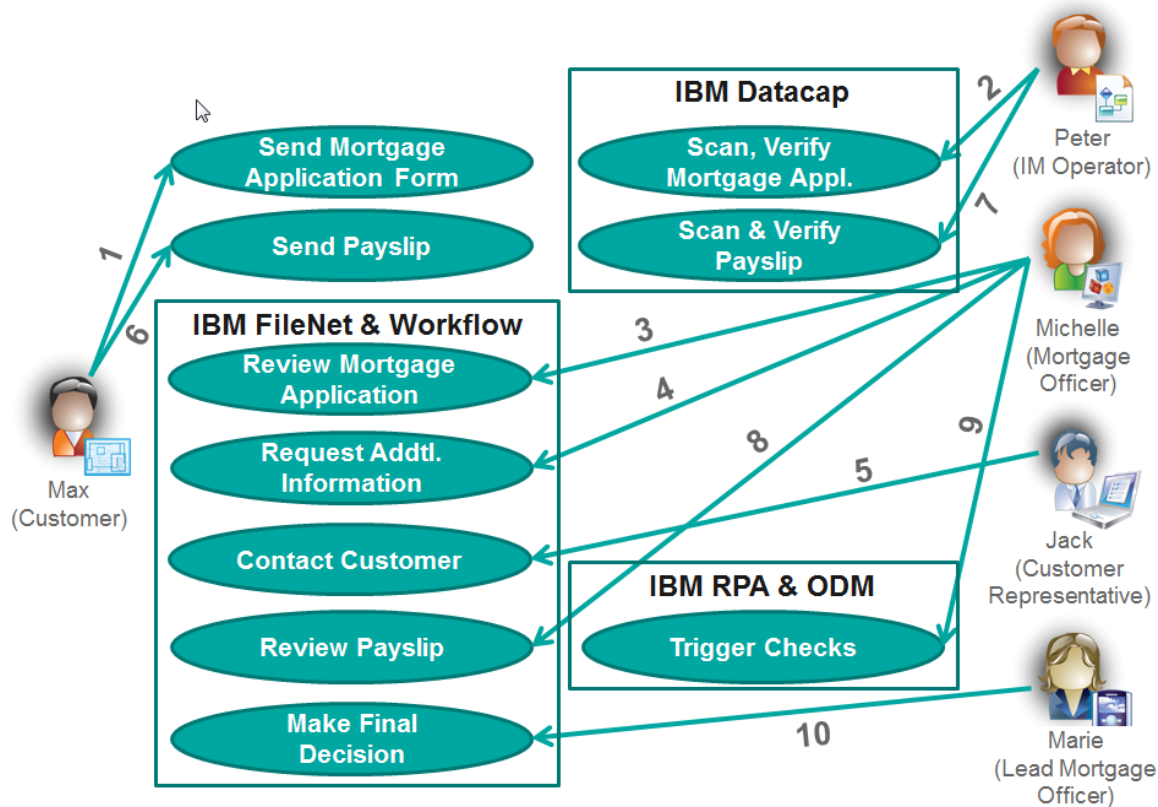
Notes on End-to-End Scenario:

- The documents sent by Max are available as TIFFs already. The capture part of the scenario is using these as we don't have physical scanners or a scan facility.

- In a production scenario the capture solution should mostly work without human intervention. For demonstration purposes Peter will always review the extracted fields.

- For simplicity, the correlation between the mortgage case and the submitted payslip is based on the client's name. In a production solution a unique identifier for the case would be used.

- The number and sequence of case tasks and work to be performed is only a sub-set of those that would realistically be performed. For example, the notification of the applicant about the missing payslip is not implemented.

0.2 Audience

Everybody interested in getting an idea how the combination all capabilities of the IBM Automation Platform for Digital Business can look like to digitize all aspects of business operations.

This scenario focuses on the end-user experience and business value of the platform, not the technical aspects of the integration between the products.

0.3 Prerequisites

- Access to https://bluedemos.com with your IBM ID.
- Link to the **shared box folder** https://ibm.box.com/s/aiwhfcfs7ms9spnrijwg8bzmk7ad6lsf.
- You **either** started already with **Template 7** and have all sub-scenarios already implemented,
  or
  you have started one of the **Templates 2 - 6** and have completely implemented it
  or
  you choose **Template 6 – Run end-to-end scenario**.

0.4 Objectives

1. Get an idea how an end-to-end solution to digitize a core business function can leverage the full capabilities of the IBM Automation Platform for Digital Business.
2. Get some familiarity with the end-user experience of selected products of the platform.

0.5 About this Lab

This lab is divided into two parts:

1) **Getting Started – Preparing for the execution of the end-to-end scenario**
   Describes how to prepare the environment to be able to execute the end-to-end scenario.
2) **Step by Step Instructions**
   Guides you in easy to understand steps through the end-to-end scenario performing all activities from applying for a mortgage to getting it approved or rejected.

1   Getting Started

1.1   Creating an environment and starting the VMs

Environment Creation
If you just want to run the end-to-end scenario without having implemented anything yourself, use **Template 6 – Run end-to-end scenario.**
Otherwise continue to work with your existing environment you used for the sub-scenario that you implemented.

1. If you started with **Template 7** and have implemented all sub-scenarios or you started with one of the **Templates 1-5** and have implemented the respective sub-scenario you have already registered for a session based on the respective template. Therefore, resume your existing environment and continue with step 11 below.

2. To work with **Template 6**, open https://bluedemos.com and login with your IBM ID.

3. Search for **IBM Digital Business Automation Blue Demos 2018** and select **IBM Digital Business Automation Blue Demos 2018 - Template 6 - Run end-to-end scenario**.

4. Click **Reserve a demo**.
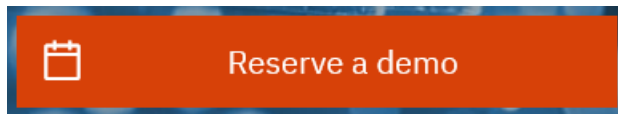
5. Provide the necessary information and click **Reserve demo**.

Start date:*	Start time:*	End date:*	End time:*
2018-07-26	1:00 pm	2018-07-27	6:00 pm

Timezone:*	Region:*
Europe/Berlin (CEST)	EMEA

User email address:*	Additional email:

Demo purpose:*	Customer name:*	Sales Connect ID:
Practice / Self-Education	NONE	

Comments:

This demo can be reserved for a maximum of 1500 hours and has an approximate duration of 30+ minutes

[Reserve demo] [Close]

6. After you click **Reserve demo** you'll get two emails, the second one once your reservation is **active** according to the information provided in step 5. This second email does also contain the link and password to access your demo environment.

Reservation Confirmation
IBM Blue Demos

<your_email> (<your_email>)
Demo: IBM Digital Business Automation Blue Demos 2018 - Template 6 - Run end-to-end scenario [EMEA]
07/26/2018 - 07/27/2018 01:00 PM CEST - 06:00 PM CEST

Your reserved demo has started. Use your web browser to access the demo at the following link.
https://cloud.skytap.com/vms/726cfbf96f785cae502fb4f918669efd/desktops
Password: <your_password>

7. Open the link and enter your password to access your environment. Click **Submit**.

Virtual machine access

Please enter the supplied password to access this virtual machine. If you need the password, contact your session administrator.

[Enter password] [Submit]

8. Your demo lab environment opens. It will look similar to the following screen:
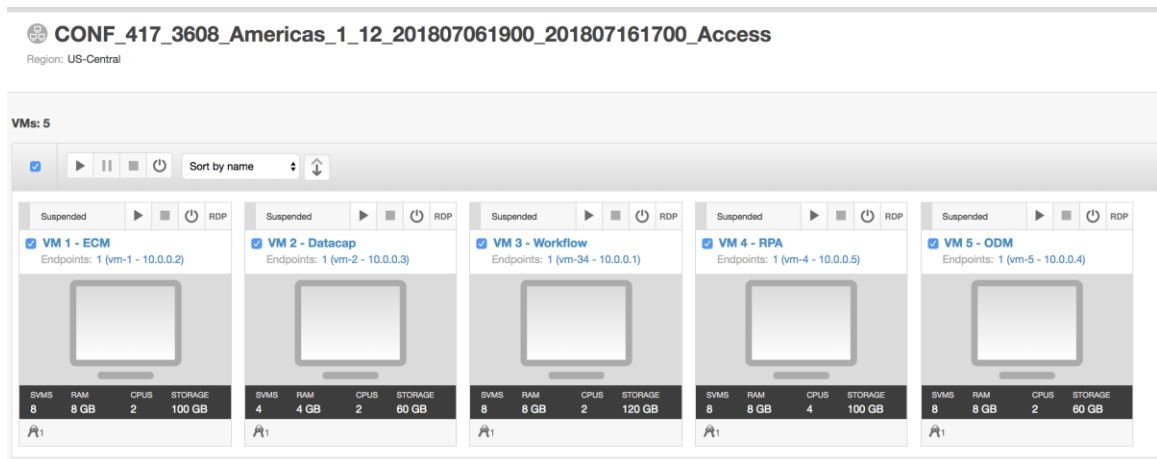
9. It consists of **five VMs**:

VM 1 – ECM: On this VM an IBM Filenet Content Repository and LDAP are installed. In addition, an IBM Content Navigator is installed.

VM 2 – Datacap: Here all Datacap tools are installed.

VM 3 – Workflow: This VM hosts IBM Business Automation Workflow.

VM4 – RPA: This VM hosts the RPA Bot Designer and RPA Bot Runner.

VM 5 – ODM: On this VM ODM is installed.

10. At this moment all VMs are in suspended state:
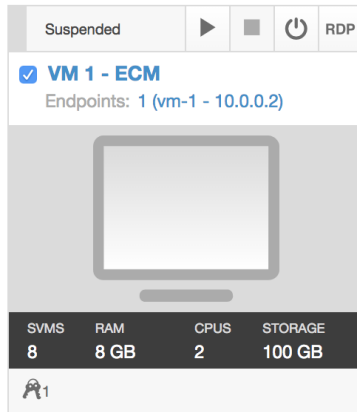
11. **Starting the VMs**
    For the **End-to-end scenario**, you require **all VMs**.

    In case your starting point is the completion of one of the sub-scenarios you may have already started one or more VMs. In that case please skip the instructions for the already started VMs and only perform them for the remaining VMs.

    Important: DO NOT use the Run VM(s) button.
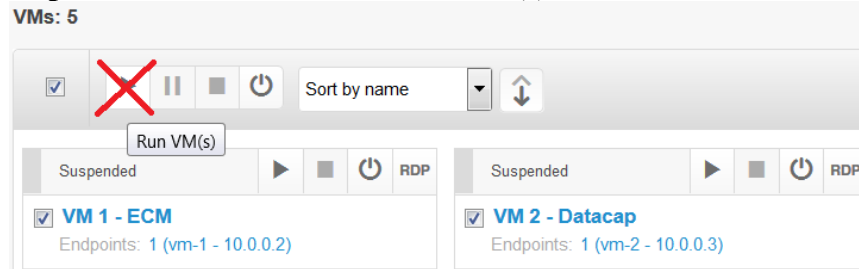
    For those VMs that are suspended, please **start them strictly in the following sequence**, confirming correct availability before continuing with the next VM:

    VM 1 – ECM → VM 3 – Workflow → VM 2 – Datacap → VM4 – RPA → VM 5 – ODM

    Start a VM by clicking the "play" button as shown below for VM 1 – ECM
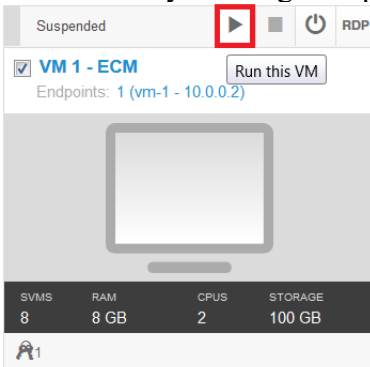
12. Wait until **VM** (here for example **VM 1 – ECM**) is started and the VM looks like this (starting should not take longer than 5 minutes):
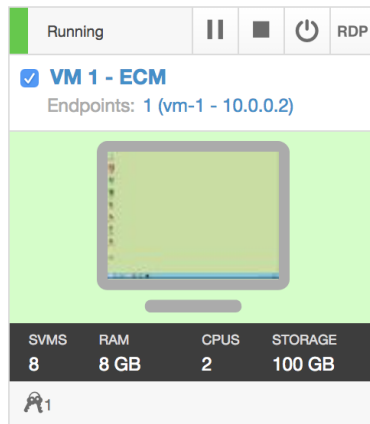
Hint: If the **icons are not shown** or **resuming / suspending of a VM takes too long**, refresh your Browser window.

13. To later on **resume or suspend a single VM**, click the **Play** icon or the **Pause** icon next to **Suspended** or **Running** of the mentioned **VM**, here for example **VM 1 – ECM**.
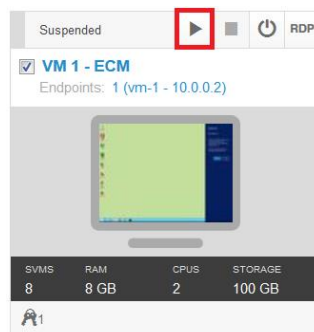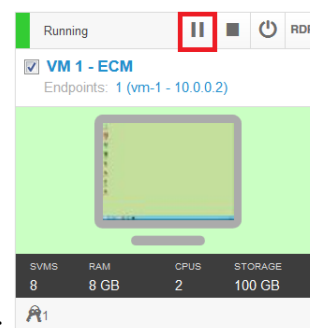
Resume: Suspend:

Note: To save resources, we kindly ask you to **suspend your entire environment when you are not using it for a longer period**, for example at the end of your day.

Note: You can also close the Browser tab / window on your local machine and even turn of your computer and **still resume and continue** your demo at a later time.

14. After you resume a suspended VM, **always open the VM's Desktop** after it is reported as **Running**. Access the Desktop

- either through the **Browser in the same tab** by clicking the image of the monitor (**Access this VM**),

- or through the **Browser in a new tab** by right-clicking the image of the monitor and opening the link in a new tab,

- or by clicking **RDP** to connect to it using a Remote Desktop Connection tool. This downloads a RDP file to your local machine that can be opened directly to view the environment.

  Note: Depending on the security settings of your local machine you will be able to use RDP. In case this does not work, use your Browser to access the Desktop.
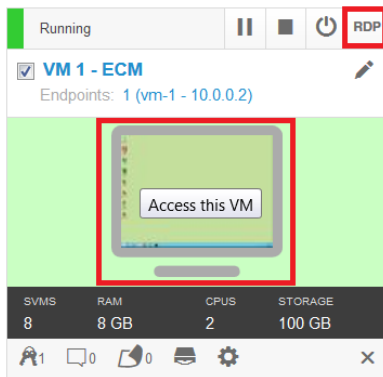
15. Access the Desktop of the VM (e.g. **VM 1 – ECM**).
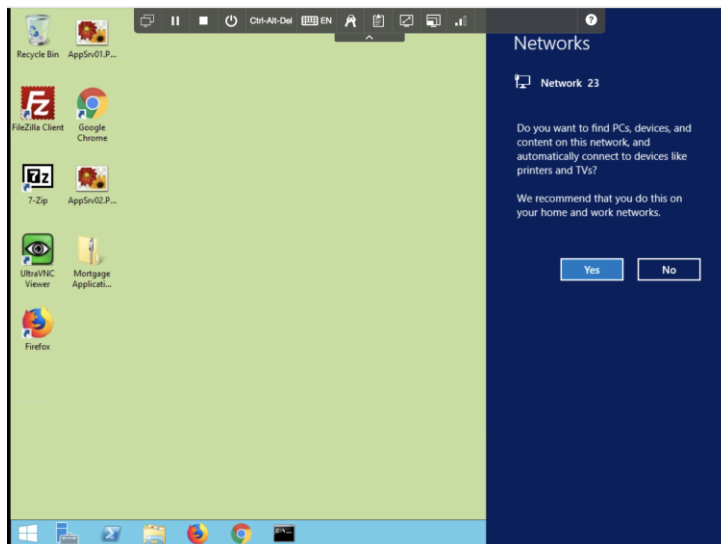
16. If there is the blue bar on the right-hand side as shown in the screen above, click there **No**.

17. Next, make sure the VM is **correctly connected to the network** before you proceed using it or starting any other VM. Check that the network icon at the bottom of the desktop shows connected.
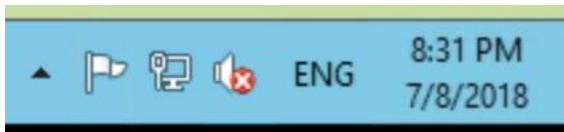
Connected: (Not connected:)

18. Once the network is successfully connected, you can **disconnect from VM 1 – ECM & VM 5 – ODM** as you don't need to access them as part of the end-to-end scenario.

   When you opened the Desktop

   - through RDP, simply close the Remote Desktop Connection tool.

   - through your Browser in a new tab, simply close the new tab.

   - through your Browser in the same tab, click the **Environment VMs** icon on the top, and select **View all VMs (5)**.
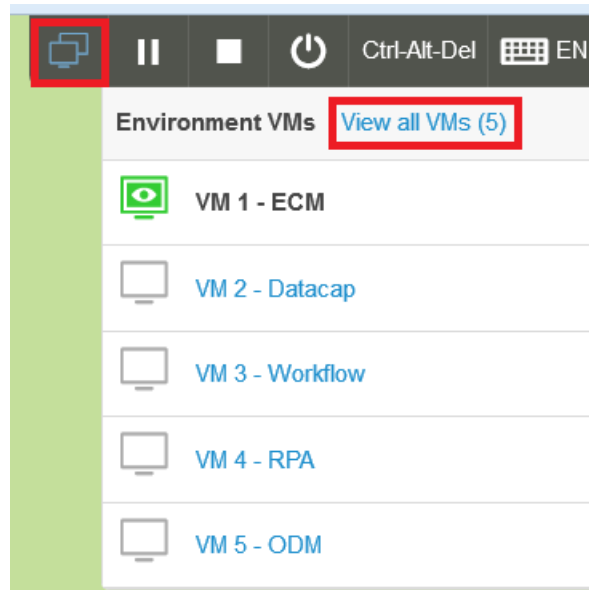
To change the resolution of the **RDP** Desktop to your liking, **right click on the Desktop**, select **Screen resolution** and update the resolution accordingly, or when you accessed the Desktop by Browner, click the **Fit to Window** icon or the **Change Resolution** icon.
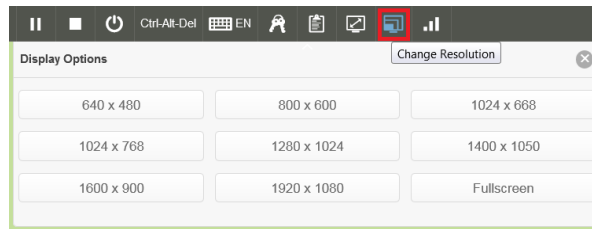
To change the keyboard to your liking, click the **ENG** icon at the bottom of the desktop and select your preferred keyboard.
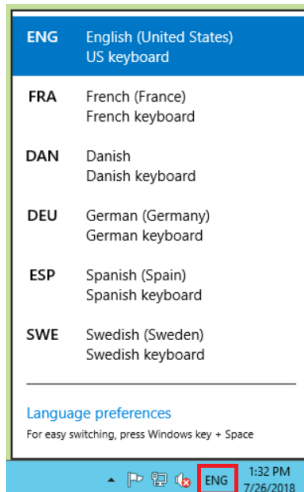
You are now ready to run through a quick walk through of the UIs you will require during this entire sub-scenario. This will also introduce you to some of the Workflow specific terms.

1.2 Preparing Datacap, Workflow & RPA VMs

You are going to prepare some data and open some user interfaces so that you can smoothly execute the end-to-end scenario.

Datacap VM

1. Open an Explorer window clicking on the Explorer icon at the bottom of the screen.
2. Create folder "**End2End Scenario Documents**" in the root of drive "C".
3. Open Firefox by clicking the Firefox icon at the bottom of the screen and open the Box URL https://ibm.box.com/s/pfm78t9225ews8h0ojovaxks7yf6zgqx.
4. Select all documents contained in the Box folder, click "Download" in the top right and save the ZIP file to the just created folder "c:\End2End Scenario Documents".
5. Extract the content of the ZIP file to the directory by right-clicking on it and selecting "7-Zip > Extract Here…".
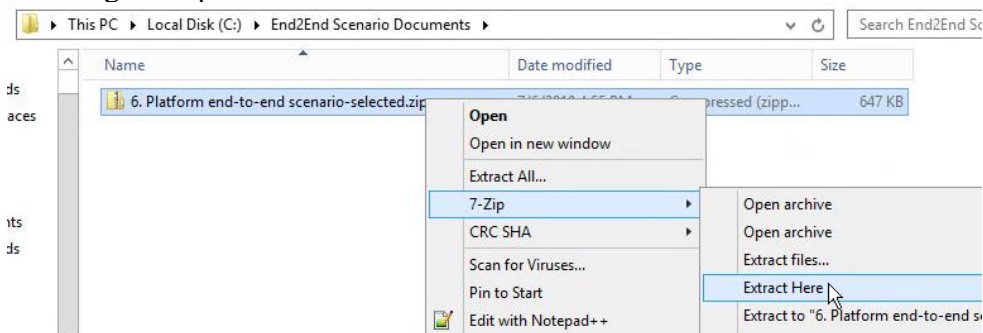
6. Open the "Datacap Navigator" by clicking the "ICN MGApp" icon on the desktop and login using "P8Admin/Think4me".
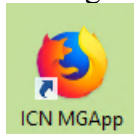
7. Select all batch jobs that are shown in the "Job Monitor" view and click "Delete" to remove them.
8. Start an instance of Google Chrome by clicking the icon at the bottom of the screen, open the Process Portal (https://vm-34.example.com:9443/ProcessPortal) and login using "bot1/passw0rd" (it is a zero not the character O).

Workflow VM

1. Open Firefox and open the "IBM Case Client" using the respective bookmark in the Firefox toolbar.
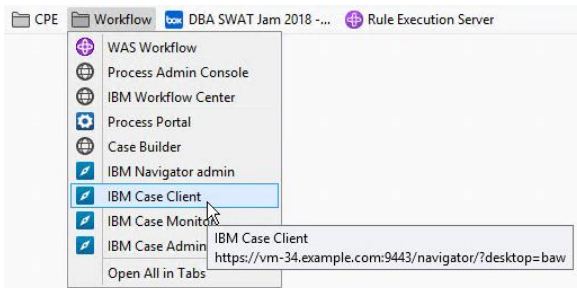
2. Login using "P8Admin/Think4me" (username is case sensitive!) which should be pre-filled. Make sure that the "Mortgage Officer" role is selected in the upper right corner.
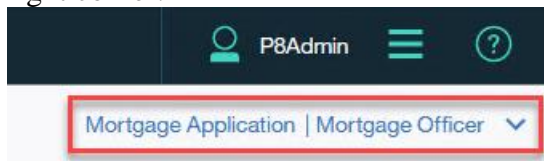
RPA VM

1. Normally the "Loop over IBM Business Automation Workflow tasks"-bot should already be running. You should therefore see a window like the following in the lower right corner of the desktop.
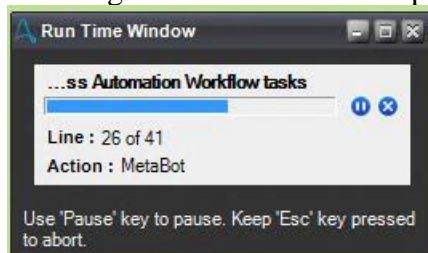
2. Due to the VM being suspended for a longer time it is possible that the bot fails. It then needs to be killed by clicking the blue "x" icon.

3. In this case you can start it manually again by using the "AA Enterprise Client 11.1.2" using "botrunner/passw0rd".
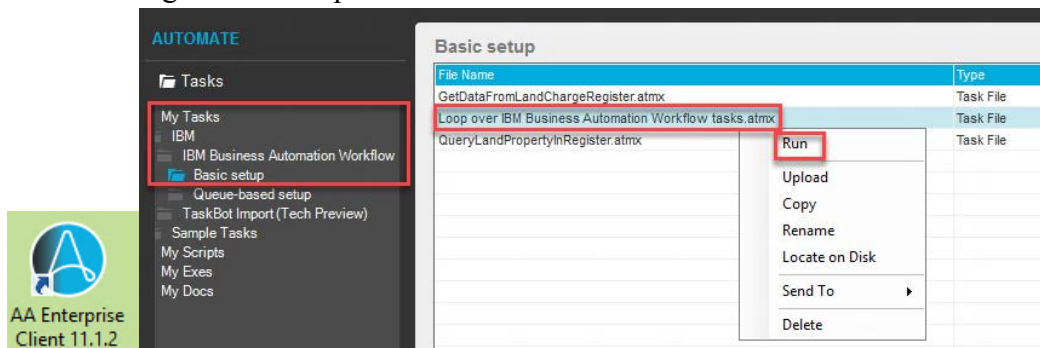
2 Running the End-to-End Scenario

You have previously downloaded a set of TIFF images to the Datacap machine. It contains five mortgage application forms and five matching payslips. The format is "loan-<#><name>.tif " and "payslip-<#><name>.tif" where <#> is a number from 1 to 5 and <name> the name of the client.

Using these TIFF images, you can run through the end-to-end scenario up to five times. The following steps will show this using the first set of TIFFs (loan-1JaneDoe.tif & payslip-1JaneDoe.tif).

The general flow is the same for all data sets. There are some differences in the verification step in Datacap as data extraction and validation has some failures for the mortgage application for Jane Doe. Similarly, the final step of handling the mortgage application shows different results of checking the land charge register and running the corporate risk management and scoring solution.

Please avoid to re-use the same *customer* multiple times. This will not work in the step when uploading the payslip to trigger the "Review Payslip" case task.
Background:
The reason is that the correlation between the case and the payslip document is the customer name. If two or more cases for the same customer exist, the payslip document will be moved to the first case even if it is already completed and will not trigger/enable the case task that is waiting for the payslip document to arrive in the case folder. This is a scenario limitation.

2.1 Mortgage Application Submission
(Datacap VM – Persona: "Peter" Datacap Operator)

Switch to "Datacap VM" and make sure the "Datacap Navigator" is launched.

Persona Peter
  (Datacap
  Operator)

As we don't have physical scanners available or a scanning center we have to manually handle the incoming mortgage application form in step 1 & 2. These would normally be performed without human intervention.

1. **Scan the Mortgage Application document (loan-1JaneDoe.tif) manually**
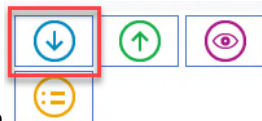
   • Click the blue scan icon ⊡ in the upper left corner.

- Select the file "**loan-1JaneDoe.tif**" by clicking "Browse" and selecting the file in the "**c:\End2End Scenario Documents**" directory (1)

- Click "Scan" (2) to start the virtual scan of the document.

Source: Import from Directory **1** | Browse... | C:\End2End Scenario Documents\loan-1JaneDoe.tif | **2** | Scan

- Submit the scan for further processing by clicking "Submit".

Submit | Hold | Cancel

2. **Observe new batch in "Job Monitor"; Task "Profiler", Status "pending"**

The Datacap rulerunner background service periodically polls for batch jobs that require handling and performs the configured tasks. In this case OCR is performed and the data extracted.

After some time click the "Refresh" icon until the batch is at task "Verify" with a status of "pending". This may take up to around a minute.

	Start	Edit Job	Edit Batch	Delete	View History		↻
	Queue ID ⌄	Batch	Job	Task	Status		
ⓘ	51	20180705.000003	Demo_Navigat orScan	Verify	pending		

3. **Start verifying the batch**
Double-click the batch to open it. You should see the following screen (with the "Field Details" column scrolled down a bit).

Image Viewer

Date: The 4/7/1079 date in the Date field must be between 1/1/1900 and 7/5/2018. X

Uniform Residential Loan Application

Field Details

Customer_Name

Jane Doe

Jane Doe

Date

04/07/1079

04/07/1079

Loan_Amount

100000

100000.00

Property_Address

304 East 10nd Street, 45202 Cincinnati, OH

304 East I0nd Street, 45202 C

- As can be seen from the first two circled areas the date as specified in the Mortgage Application form is invalid.You may notice that this is a typo and the year should be "**1979**". Please correct it in the field with the red background color on the right.

Date
04/07/1079
04/07/1979

- Scroll down a bit further in the middle column "Field Details" you will recognize that Datacap has marked the "Property Address" with a yellow background. This indicates that Datacap has low confidence in the data being extracted extracted correctly. Comparing the form and the recognized value you will see the the number "1" was not correclty recognized. In addition you can correct the "nd" into "th" so the street is correct.

Property_Address
304 East 10nd Street, 45202 Cincinnati, OH
304 East l0nd Street, 45202 (

- Click "Run Validations" again and observes that now all validations pass successfully and none of the fields are marked anymore.

| Submit | Hold | Previous Page | Next Page | Previous Problem | Next Problem | Next Low Confidence | Run Validations |

(i) Information

Task profile succeeded.

- Finally click "Submit" to finish working on this batch.

| Submit | Hold | Previous Page | Next Page | Previous Problem | Next Problem | Next Low Confidence | Run Validations |

4. **In the "Job Monitor" observe the batch job state changing to "Job done"**
   Click the "Refresh" icon until you see that the batch is completed with the result (document and extracted data) being exported (as a document with the respective document class, document properties and attachment into FileNet ECM).

It may again take some time for the Datacap rulerunner service to pick up the job.

Queue ID	Batch	Job	Task	Status
✅ 53	20180705.000005	Demo_Navigat orScan	Export	Job done

Troubleshooting Tips

When performing above tasks two known situations may in rare cases occur:

1. When submitting the scanned document you might see the following error message.
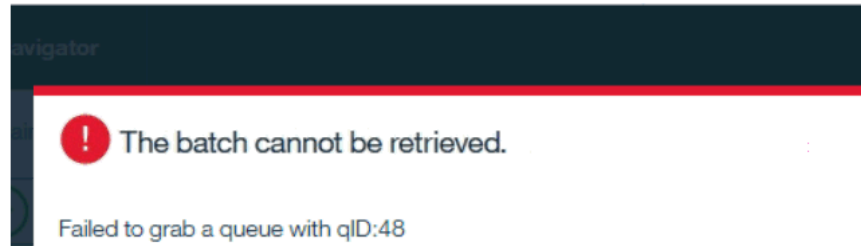
    Action: Close it and redo the previous steps to successfully scan and submit the job for further processing.

2. When submitting the scanned document, you might see the created batch in task "MSApp_Upload" with a status "pending". Even after refreshing a couple of times the batch does not move on to the "Verify" task.

Queue ID	Batch	Job	Task	Status	Job Start	Job Time
51	20180705.000003	Demo_Navigat orScan	MSApp_Uploa d	pending	7/5/2018, 10:05 AM	0

    Action: Delete the batch and redo the previous steps to successfully scan and submit the job for further processing.

2.2 Reviewing Mortgage Application and Requesting Payslip (Workflow VM – Personas: "Michelle" (Mortgage Officer), "Jack" (Customer Representative)

Switch to "Workflow VM" and make sure the "Case Client" is launched and the Mortgage Officer role is selected.

Personas

Michelle (Mortgage Officer)	**Jack** (Customer Representative)

1. **New work arrives in the "Mortgage Officer" in-basket**
   In the "Case Client" click on the "Mortgage Officer (0)" tab to refresh its content**.**
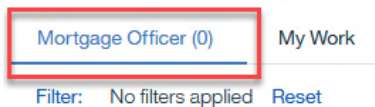
   You will see a new Mortgage case task "Review Mortgage Application" has been created for you. This is caused by the creation of a new Mortgage Application case based on the mortgage application form that has been scanned by Datacap and placed into the FiletNet ECM underlying the Workflow solution.
   You can already see some basic information like the loan amount.

2. **Opening the case and observe the information provided**
   As can be seen from the areas circled in red the key information that Datacap extracted from the mortgage application form is directly available as well as the scanned document itself. Yet the information about the financial situation (Net

income) of the applicant is missing (see area circled in blue on the left in the middle).

3. Request information about the income situation

The case solution offers an action "Comments" (button circled in blue at the top left) to add comments to a case. Write a comment to the customer representative to collect the missing information by asking the client to provide a recent payslip document.

Your job as mortgage officer is done for the moment. Use the action "Request Additional Information" (button circled in blue at the top towards the right) to finally hand the work over to a customer representative. This closes the task for you and your

in-basket will then be empty.

4. **Changing roles from Mortgage Officer to a Customer Representative**
    For the purpose of demonstration the same logged-in user has multiple roles. Now switch from the "Mortgage Officer" role to the "Customer Representative" role by clicking the small downward pointing arrow in the top right corner of the screen.
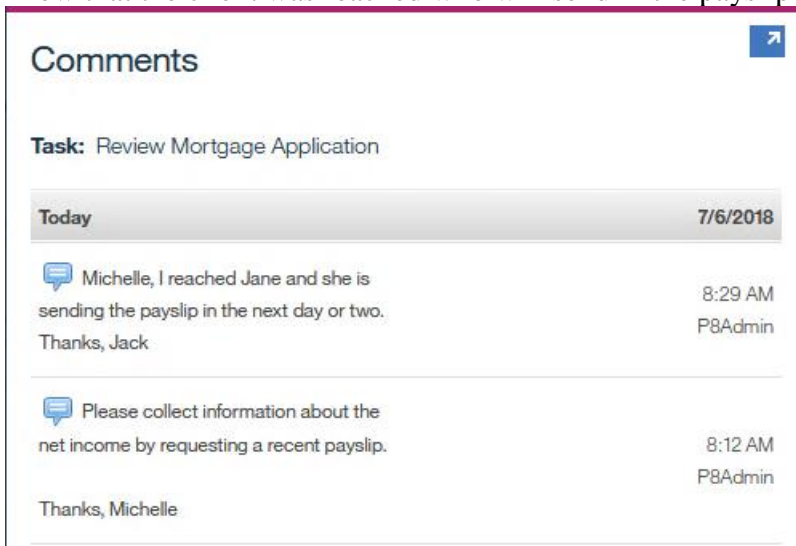
5. New work has arrived for the Customer Representative

You will see that in the customer representative's in-basket there is a task to collect additional information for a mortgage application. Therefore, open the task by clicking it.

Check the "Comments" that the mortgage officer has left for you.

The case would normally contain contact information of the client for the customer representative to call them and request that they send a payslip document as prove of their net income.

Once you have reached the customer click on the "Comments" button again letting the mortgage officer know that you reached the customer who is now sending in the payslip document ASAP.

Afterwards complete the task and you are done with the role of the customer representative.

The customer representative's in-basket is now empty.
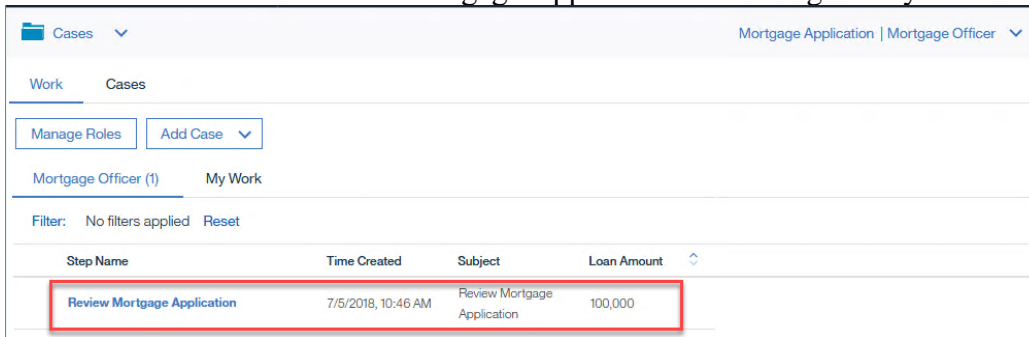
6. **Changing roles from Customer Representative back to Mortgage Officer**

Now switch the role again this time from the "Customer Representative" role back to the "Mortgage Officer" role by clicking the small downward pointing arrow in the top right corner of the screen.

You will see that the "Review Mortgage Application" task is again in your in-basket.

Open it and have a look at the comments where the customer representative lets you know that the client was reached who will send in the payslip shortly.
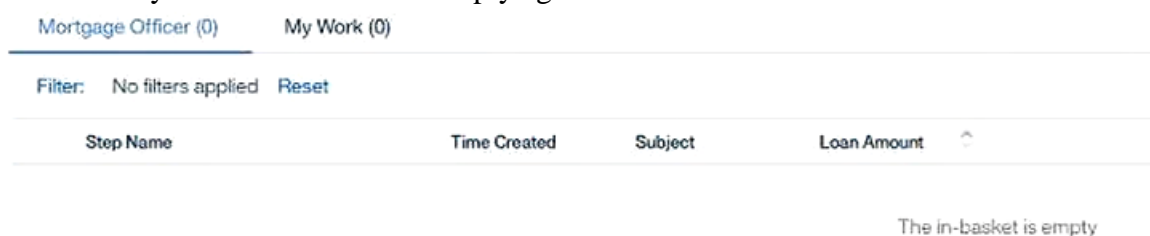
You can now complete your work on the task until the information about the net income (from a payslip document) arrives. Therefore, click the "Proceed" button.

As a result your in-basket is now empty again.

Open the Mortgage case by clicking "Cases > Search". You will see a Case that is in Case State "Working". Open it by clicking it and then selecting the "Tasks" tab. The "Review Mortgage Application" task has been completed. Four other tasks are in

"Waiting" state.

The "Review Payslip" task waits for the arrival of a payslip document for this specific mortgage case before it can be worked on. Until the payslip document arrives the whole Mortgage Application case is pending with no one having a task in their in-basket.

Close the Case by clicking the "Close" button and move back to the "Cases > Work" tab.

2.3 Mortgage Application Submission (Datacap VM – Persona: "Peter" Datacap Operator)

Switch to "Datacap VM" and make sure the "Datacap Navigator" is still launched.

Persona Peter
(Datacap Operator)

Reminder: As we don't have physical scanners available or a scanning center we have to manually handle the incoming payslip document in step 1 & 2. These would normally be performed without human intervention.
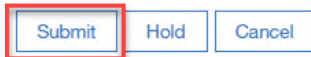
1. **Scan the Payslip document (payslip-1JaneDoe.tif) manually**

- Click the blue scan icon

- Select the file "**payslip-1JaneDoe.tif**" by clicking "Browse" and selecting the file in the "**c:\End2End Scenario Documents**" directory (1)

- Click "Scan" (2) to start the virtual scan

- Submit the scan for further processing by clicking "Submit"

2. **Observe new batch in "Job Monitor"; Task "Profiler", Status "pending"**

   Once submitted the new batch job should be shown in the "Job Monitor" at the task "Profiler" and a status of "Pending".

	Queue ID	Batch	Job	Task	Status	Job Start	Job Time
	58	20180705.000010	Demo_Navigat orScan	Profiler	pending	7/5/2018, 12:33 PM	0
✓	53	20180705.000005	Demo_Navigat orScan	Export	Job done	7/5/2018, 10:28 AM	2

   The Datacap rulerunner background service periodically polls for batch jobs that require handling and performs the configured tasks. In this case OCR is performed and the data extracted.

After some time click the "Refresh" icon until the batch is at task "Verify" with a status of "pending". This may take up to around a minute.

3. **Start verifying the batch**

Double-click the batch to open it. You should see the following screen (with the "Field Details" column scrolled down to the end).

- This time the scan worked without any validation issues nor Datacap having problems to recognize the text properly. As you can see (beyond other information) it captured the monthly net income from the payslip.

- Click "Submit" to finish working on this batch.

In a production scenario Datacap could have been configured in a way that the "Verify" task would have been skipped as there was no validation error and no problems recognizing the text.

5. **In the "Job Monitor" observe the batch job state changing to "Job done"**

Click the "Refresh" icon until you see that the batch is completed with the result (document and extracted data) being exported (as a document with the respective document class, document properties and attachment into FileNet ECM).

It may again take some time for the Datacap rulerunner service to pick up the job.

	Queue ID	Batch	Job	Task	Status	Job Start	Job Time
✓	58	20180705.000010	Demo_Navigat orScan	Export	Job done	7/5/2018, 12:33 PM	2
✓	53	20180705.000005	Demo_Navigat orScan	Export	Job done	7/5/2018, 10:28 AM	2

This concludes the work in Datacap for the end-to-end scenario.

2.4 Reviewing the Payslip document
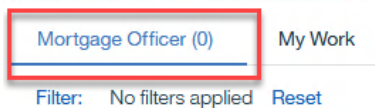##   (Workflow VM – Persona: "Michelle" Mortgage Officer)

Switch to "Workflow VM" and make sure the "Case Client" is launched and the "Mortgage Officer" role is selected.
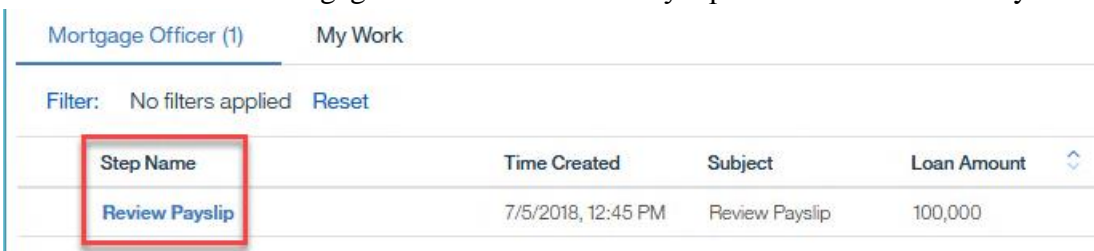
Persona Michelle
(Mortgage Officer)

1. **New work arrives in the "Mortgage Officer" in-basket**
   In the "Case Client" click on the "Mortgage Officer (0)" tab to refresh its content**.**

   You will see a new Mortgage case task "Review Payslip" has been created for you.

   This is caused by Datacap placing the scanned payslip document into the FileNet ECM repository where in turn an event handler moved it into the correct case folder based on the customer name as a simple correlator. The final step is that the "Review Payslip" case task defined a pre-condition of a payslip document being place in the case folder to become active.

2. **Verify that all required information is now available**
   Open the task and observe that the case now contains the information about the monthly net income that Datacap extracted from the payslip document**.** The payslip

document itself is also attached to the case. You can open it by simply clicking on it.

3. **Complete the case task to kick of the automatic case tasks to "score the mortgage application" and "request information from land charge register"**

As the mortgage officer you are done with your work of collecting the required information for the mortgage case. In case some more information would be required you could again "Request Additional Information" with the help of the Customer Representative.

What is missing to decide on the mortgage request is:
- Information of the bank internal risk management and scoring system if given the financial parameters the mortgage should be approved or rejected.

- Information from the land charge register if an existing mortgage on the property is blocking the mortgage request.

You would normally complete your current task by clicking "Proceed" at this point to trigger the two automatic case tasks that kick of backend processing to gather above mentioned information.

==Please wait for a moment and perform the first step of the following exercise first!==

2.5 Checking the Land Charge Register for an existing mortgage on the property (Datacap & RPA VMs – System: Land Charge Register)

For this part of the end-to-end demo you will use the RPA and the Datacap VMs. In this section we are observing how the integration between a Workflow solution and the land charge register application works using IBM RPA.

The land charge register is an old external application that just offers a web-based UI but has not API that can be called from the outside. Digital Bank X has decided to still automate this interaction by utilizing IBM Robotic Process Automation.

Switch to "Datacap VM" and bring the Chrome browser window into the foreground that has the "Process Portal" for user "bot1/passw0rd" open.
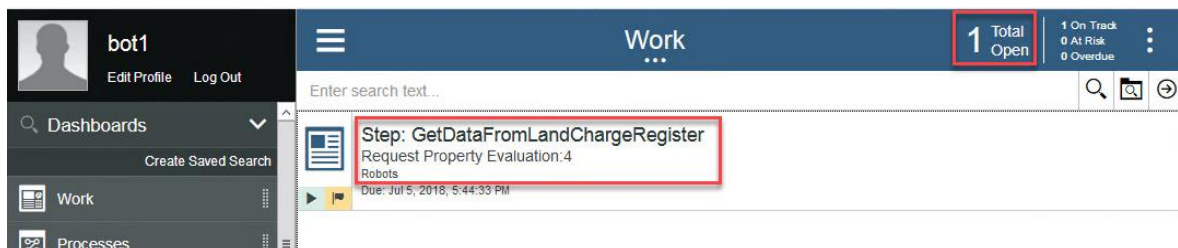
1. **Empty "bot1" work list**

   When logging into "Process Portal" with the technical user "bot1/passw0rd" just before you completed the Case task you will observe an empty work list.

   Now please go back to the "Workflow VM" and click "Proceed" to complete the Case task "Review Payslip".

2. **Bot task appears in the "bot" work list**

   Once you have completed the Case task in the background an automatic case task will start that in turn starts a process. This process contains a robot task to facilitate the integration between the workflow system and the land charge register via IBM RPA. Because of the robot task that gets created it will appear in the work list of the technical user "bot1".


   The browser showing the "bot1" work list cannot be opened on the RPA VM otherwise the automation may not work as it does not reliably open a new browser window. Therefore we are using the Datacap VM to look at the Process Portal!

Switch to "RPA VM".

Resuming the "Loop over … task" bot picks up the task

After resuming the "Loop over … task" bot, it will after some time poll the work list again and find the new bot task.

Note: It might take up to 80 seconds until the robot starts.
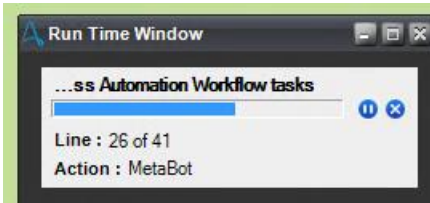

In the demo this can be observed by the message box that is shown for three second and shows the property address which is to be checked and got extracted from the robot task.

The task-specific bot gets started. It opens an Internet Explorer browser, logs in into Process Portal, starts a "CheckLandPropertyInRegister" process, claims the "Property Information" task, fills in the property address, clicks "Query" and retrieves the status of the checkbox which signifies if the property is blocked or not, before it closes the task and returns the result to the workflow server by completing the robot task with the respective result.

This may happen so quickly that you may not be able to observe everything yourself.

→

→
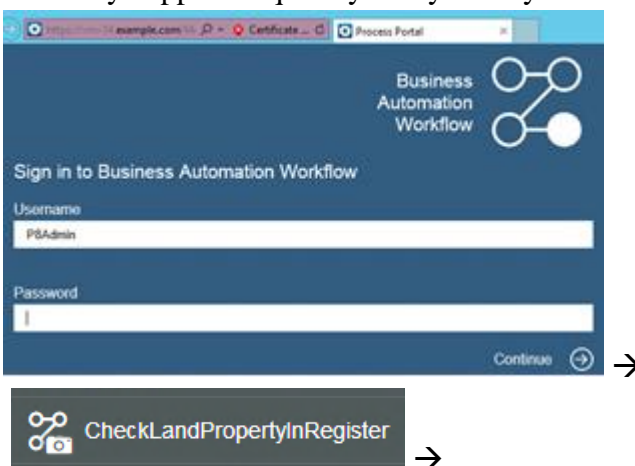
Claim Task

Step: Input PropertyInformation
CheckLandPropertyInRegister:6
All Users
Jul 5, 2018, 5:52:14 PM

This task is still unclaimed. When you open this task, it →

Step: Input PropertyInformation

Property Address

304 East 10nd Street, 45202 Cincinnati, OH

| Query | Exit |

→

Step: Input PropertyInformation

Property Address

304 East 10nd Street, 45202 Cincinnati, OH
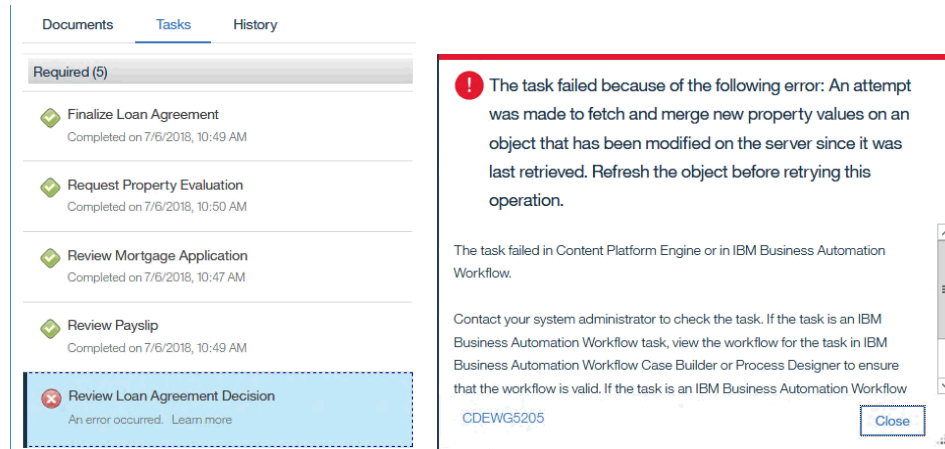
☐ Mortgage Blocked

| Query | Exit |

Troubleshooting Tips

After the RPA and ODM automatic case steps have completed two known situations may in rare cases occur. These result in the final Case task "Review Loan Agreement Decision" not being created and you fail to complete the final step 2.6:

1. **The "Review Loan Agreement Decision" Case task fails with below error**

A defect will be opened shortly to investigate this situation. At this point there nothing you can do for this case. Please use one of the other sets of sample data and try again.

2. **Even with the automatic Case tasks triggering RPA & ODM completed the final Case task "Review Loan Agreement Decision" remains in "Waiting …" state**
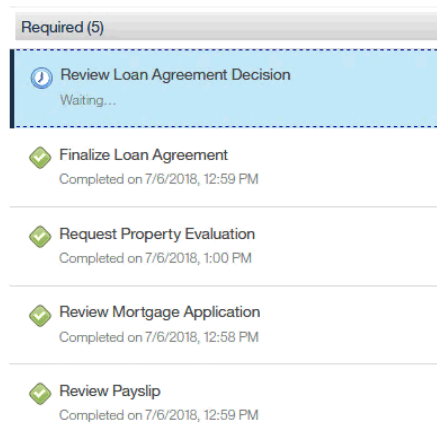
A defect will be opened shortly to investigate this situation. At this point there nothing you can do for this case. Please use one of the other sets of sample data and try again.

2.6 Making the final decision to approving or reject the mortgage application
(Workflow VM – Persona: "Marie" Lead Mortgage Officer)

Switch to "Workflow VM" and make sure the "Case Client" is launched. Switch to the "Work Dashboard" view.
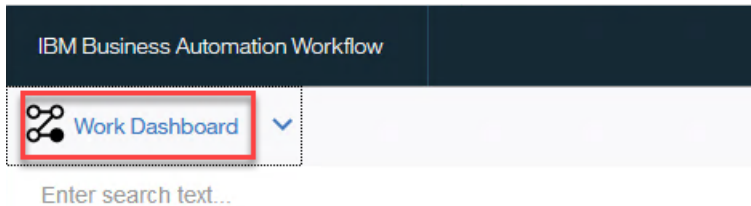

Persona Marie
(Lead Mortgage Officer)

1. **New work arrives in the "Lead Mortgage Officer" Work Dashboard**
   Acting now as the lead mortgage officer you notice that a new task has arrived for you in the "Work Dashboard" (which means you deal with a User Task originating from the process capability not a case task from the case capability). You have to make the final decision if the mortgage should be approved or not.
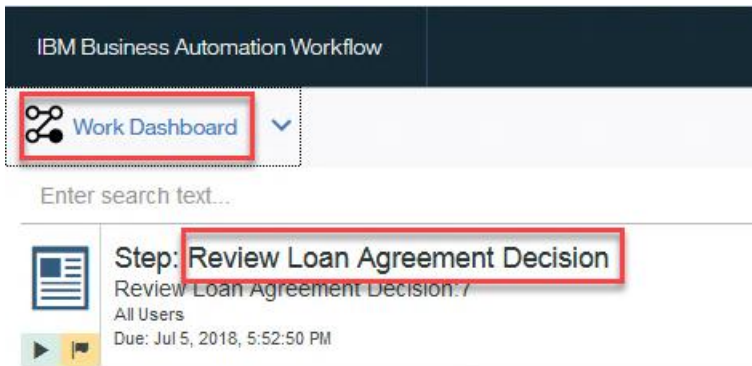
2. Reviewing the information

Click and claim the task to work on it. Review all information that is shown.

- The information shown in the box labelled "1" are the properties extracted from the two documents sent in and stored as properties of the Mortgage case.

- The information shown in the box labelled "2" is the result of running the query (using RPA) against the land charge register to determine if another loan record already blocks the property.

- The information shown in the box labelled "3" is coming from calling the bank's internal risk management and scoring system (implemented as two ODM services) to determine for the given financial parameters if the mortgage should be approved or rejected. In addition to this decision the reason for proposing rejection is returned.

- The information shown in the box labelled "4" are some indicators supporting the decision making for the Lead Mortgage Officer. These are computed by capabilities in the UI controls used in the form based on the field value of "Loan Amount" and "Purchase Price" as well as "Loan Amount" and "Net Income".

- Having all the information at hand you can now decide if you want to approve or reject the mortgage request using the checkbox in the area labelled "5".

- Finally click "Submit" to finalize your decision and closing the mortgage case for Jane Doe. As you are done with the user task your "Work Dashboard" shows an empty list.

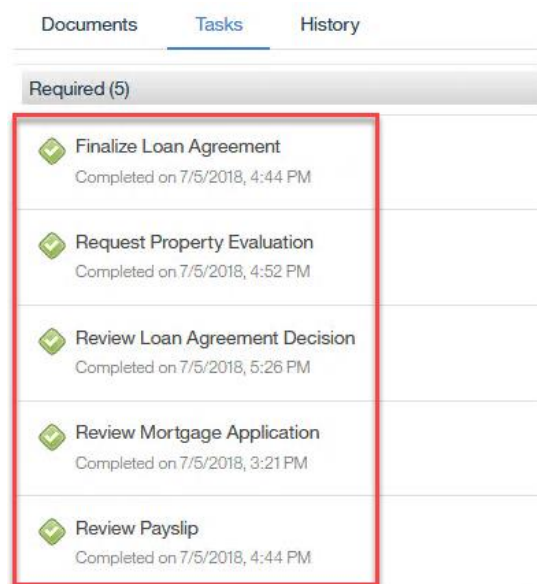3. **Verifying the case completed with all required Case tasks completed**
By searching for the case again in the "Cases > Search" view you can determine that the case is indeed "Complete".

Opening the case by clicking it and switching to the "Tasks" tab you can observe that all five required Case tasks are completed:

- "**Review Mortgage Application**" and "**Review Payslip**" have been two tasks that you as the Mortgage Officer have completed from your Case in-basket.

- "**Request Property Evaluation**" and "**Finalize Loan Agreement**" have been autmitically started after "Review Payslip" was completed and have triggered requests to two backend system using RPA to automate a web-based Land Charge Register and the bank's enterprise risk management and scoring service implemented using IBM ODM.

- "**Review Loan Agreement Decision**" was finally automatically started after the completion of the "**Request Property Evaluation**" and "**Finalize Loan Agreement**" case tasks. You as the Lead Mortgage Officer worked on this through the Work Dashboard as this is implemented as a "User Task" within the BPM capability of the Business Automation Workflow offering.

This concludes the end-to-end scenario.

Congratulations you have seen the power of the IBM Automation Platform for Digital Business in a simplified but realistic end-to-end scenario in action!