#### \*Authentication & authorization

For dbpm authentication flow, first we need to enter credentials i.e username and password

Then get RSA keys for encryption using SHA256 algorithm , then encrypt the password and sent it to MS along with RSA key , decrypt password and authenticate with LDAP in MS side

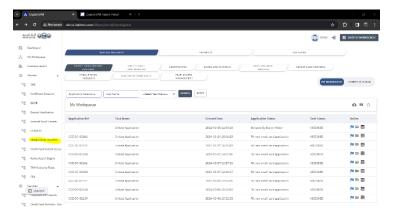
Authorization flow, with user logged in get the user details from SQL DB , then get the entitlement details from postgres DB , then get the streamwise inboxes i.e customer , payment and services and then the processes coming under those categories, get the activity codes from postgres DB which user has access to and list them so that u

ser can claim it.

#### \*Exposed processes, services and business reports flow

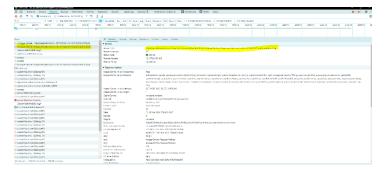
Process: first when click on process , based on entitlement values from DB, it has process definition id, based on that specific process definition id is called, in that application status and first task related details will be there, then start process sdk call happen in that call , it will create process and first task , then based on that route provided during the entitlement creation the routing takes place

--clicked on a process



--following service calls are happening

Initially process definition call



## Then process is being called i.e first task is being created



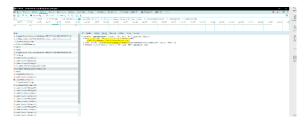
# Response:-



# Then application reference is being created:



## Response:-



### Task id is being created:

#### Response:



Service: in the case of service based on entitlement values, if the user has access to more thatn one country then the popup will show , and the routing takes place based on the route provided during the entitlement creation

Reports: For business report configuration for each process is done from dbpm backoffice,

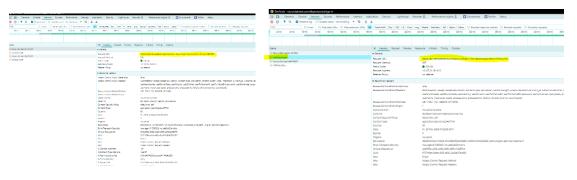
Once report link is clicked, based on the country defined in entitlement for report, the country dropdown will be shown, once country is selected, matching applications in next dropdown is

shown , then in next dropdown the report configured for that process and country will be shown , when user selected report and clicked on search we get data based on that, and also there is other entities like application reference, instance id , customer name , account number etc to filter the data

--clicked on business report

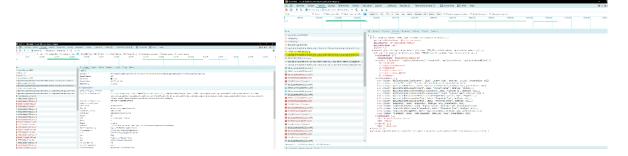


- --following services are being called
- \*favourites i.e the reports that is being favourites and application list access that user has



From sord db the column related details are being fetched for the selected report

# Response:



When clicked on search the following service call will happen:





## DBPM with core framework(MS & UI) & SDK features

I)process; it is used to add and update and also modify the process instance details

II) task which is related to process task, there is various entities inside that:

- 1) **search tasks** which is used to search tasks based on the users, and also there is other entities like customer name, account number to search task based on that,
- 2) **manage task** it is used to move application from one stage to another for eg from branch maker to checker, and also if all stages are completed we can close the application with help of mange task
- 3) **claim/release** it is used to assign the task to a user from a group users that has task has been assigned, application will be in a shared pool before a user claiming that task, and with use of claim the task can be put back to the pool
- 4) **Reassign** it is used to reassign the task to another user,
- 5) Assigned users it is the group of users which has been assigned a task

III) **Process definition**, it is used to add and update and modify the process code, countrycode and definition id

IV) **Proces Audit** it is used for adding process based comment by users, for example who called manage task in each stage, who closed application etc.

#### Micro Frontend architecture -

Main UI - BPM UI - Routes UI - Proces

s Applications

Main ui is the main container in which host the BPM ui, it will have all the details of applications in dbpm, if new application is there, first entry point need to be given in main ui

BPM ui – it has all framwework related uis like dashboard, workqueue, business reports, processes, services, etc. it will communicate to specific processes through routes

Routes ui – it is bridge bw bpm ui and process applications,

Process application ui – here is we add business logic

#### **Back-office admin module**

**1)Calendar management** it has 2 categories, calendar config and holiday config, calendar config is used to add / modify / delete work schedules and work timings per process per country, holiday config module is used to add/modify/delete holiday schedules per process per country

- **2)Entitlement management** it is used to define and add details in db based on process, services, business report and related process definition ids and routes and country codes
- 3)Process definition it is used to add and modify and update process definion ids
- **4)Process inspector** it is used to monitor applications, we can know the completed steps, active steps and also can update data, release task, reassign task and terminate application
- **5)Reports config** it is used for configuration of business report, and adhoc report configuration is there, it is used to send the report to recipient emails based on specific dates or daily or weekly or monthly

**6)Utilities**: this is used to create different utilities

- I. Audit report: it is used to get all the audits of applications
- II. Sor management utility: it is used to update application data, which will be updated in sor
- III. Instance management utility: it is used terminate, complete any process instance
- IV. Lookup management: it is used to sync lookup data from MS so that application can use these values
- V. System config :it is used to add or update or delete process related constants
- VI. ECM archival: it is used to manually archive documents for any applications

## \* Conventional & semi digital account opening process overview and demo

# --semi digital

- a) Pull application from mobile and start process
- b) For cross border the application need to be approved by related branch checker or RM
- c) For regular application will be moved for data verification
- d) Then goes to cou safewatch maker, then goes to safewatch checker
- e) If the customer is high risk, there is different category of risks (H1, H2, H3 and Medium risk) if H1then it will be moved to district managers, after that it will be again send for data verification then the same flow
- f) if H2 and H3 then it will be send to head of network, then it will be send to compliance maker, then to compliance checker then the account opening process will be finished
- g) If medium risk then, then it will be send to BAT manager, then the flow will goes to video conference maker after approving it goes to video conference checker then the account opening process will be finished
- h) For cou safewatch checker flow if they rejects then the flow ends or if further details is required, then its send back again for data verification

# --conventional

- a) flow starts from branch maker
- b) then flow moves to branch checker
- c) if approved from branch checker its checks for risk
- d) if Medium risk then flow goes to branch manager
- e) for further details it moves to branch maker then goes to branch checker further details then to branch manger
- f) branch manger approves COU safe watch maker then COU safe watch checker

- g) if any escalation goes to compliance maker from there it goes to compliance checker then approve and check Risk then its send to compliance maker and compliance checker
- h) if not escalation check Risk
- i) if H2/H3 then goes head of network then goes branch maker for further details then to branch checker and then back to head of network
- j) if risk is H1 then its send to district manager for further details its send to branch maker and then to branch checker and then back to branch manager
- k) for both flows above from compliance checker if its approved then its send for upload signature flow and from branch manger also if approves send to upload signature flow
- l) then its send to BAT maker verify documents if approved then flow is complete
- m) or else for escalation its send to BAT checker if approved flow is complete
- n) else its send to branch maker and checker and send back to BAT checker

### \*Fully digital flow

- a) Pull application from mobile and start process
- b) First flow is branch maker
- c) Then to branch checker
- d) Then check the risk
- e) If low risk and Mis risk then send to BAT manager and approves, account activated
- f) Else high risk goes to branch manager, after manger approves flow is completed, account is activated

### Mobile KYC:

- Initialize mobile banking
- Cou maker and cou checker flow
- Safewatch flow
- Compliance approval

## **Branch KYC:**

- KYC processing
- COU safe watch
- Archive document
- Compliance approval

### **COU KYC:**

- Maker product maintenance (branch maker flow)
- Review entry product (Branch Checker flow)