

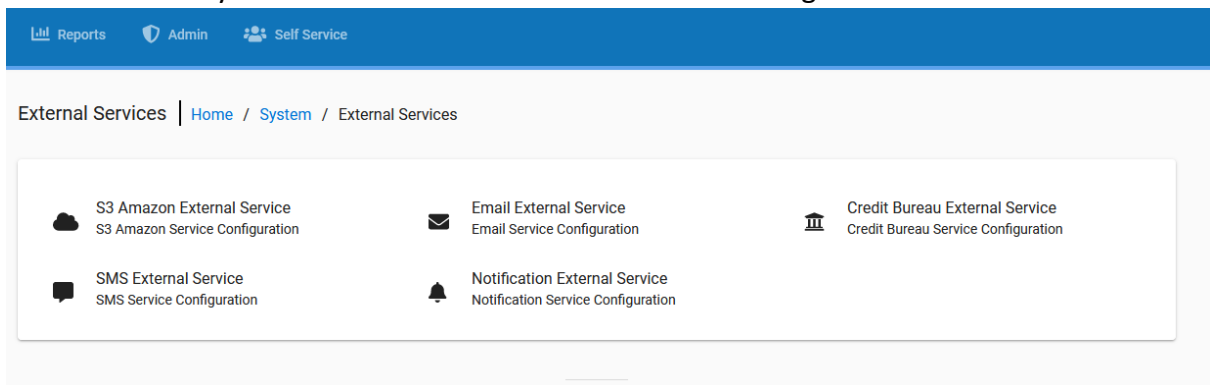
Documentation to use the Integrated Credit Bureau (Web-App Version):

1. Adding the Configurations.
2. Using the Credit Bureau which is mapped to Loan Product.
3. Using the Credit Bureau directly. (not-mapped with Loan Product).
4. Uploading the CreditReport to ThitsaWorks.

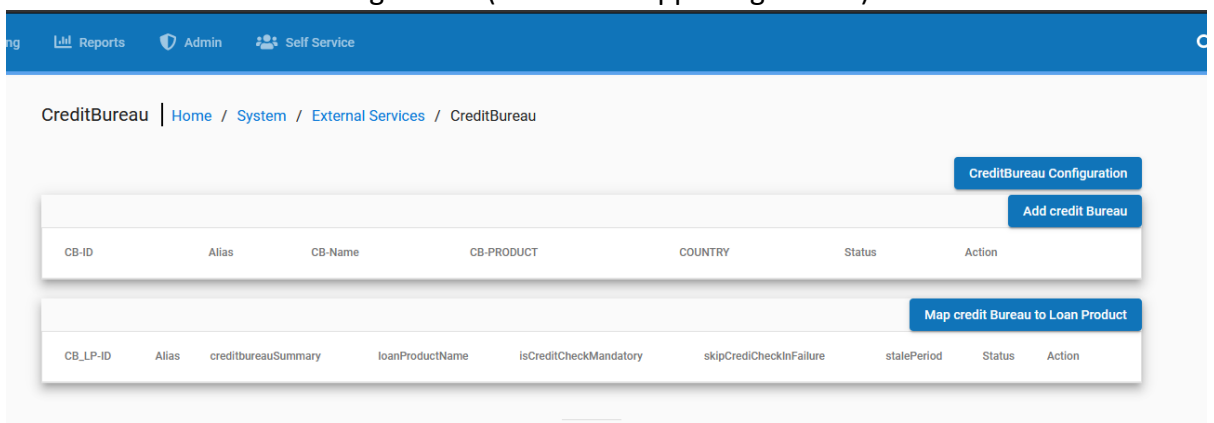
1. Adding the Configuration:

Configuration are the Credentials and URL's which are required to store before fetching or uploading the Credit Reports.

Go to Admin > System > External Service > Credit Bureau Integration.



Click on Credit Bureau Configuration (as seen on upper Right side.)



Select which Credit Bureau's Configuration to be added:

The screenshot shows a web application interface with a blue header bar containing navigation links: Reports, Admin, and Self Service. Below the header, a breadcrumb trail reads: CreditBureauList | Home / System / External Services / CreditBureau / CreditBureauList. The main content area features a form titled "Credit Bureau:". Inside the form, there is a dropdown menu labeled "Credit Bureau *" with the option "THITSAWORKS" selected. A blue "Submit" button is positioned at the bottom right of the form.

Add all the configuration, one by one :

The screenshot shows the same web application interface as above. The breadcrumb trail now includes a "1" at the beginning: 1 | Home / System / External Services / CreditBureau / 1. The "Credit Bureau:" form is open, displaying a dropdown menu titled "Credit Bureau Configuration *". The menu lists several configuration options: Password, SubscriptionId, SubscriptionKey, Username, tokenurl, and searchurl. The dropdown menu is currently open, showing these options.

accounting Reports Admin Self Service

1 | Home / System / External Services / CreditBureau / 1

Credit Bureau:

Credit Bureau Configuration *
 Password

Value *
 password

Description
 Credential to fetch/upload CreditReport

Add all the configuration including the URL's.

- Tokenurl : will be used to create the tokens.
- Searchurl: will be used to get the Unique Id from the NRC
- creditReporturl : will be used to fetch the CreditReport from the Unique Id.
- addcreditReporturl : will be used to Upload CreditReports to thitsaworks.

Note: while adding the configurations, Do **NOT** the white-space at the end of the value.

2. Using the Credit Bureau which is mapped to Loan Product:

❖ Description :

- Create the Alias of the Credit Bureau.
- Map it with the Loan Product.
- When the Client will apply for the loan with the Loan Product which is mapped to the Credit Bureau (and status: Enabled) then "Credit Report" Button will be seen on the Loan Application of the Client.
- Since the Credit Bureau is already mapped with that loan product. (So, the system knows to which Credit Bureau page the user should be re-directed to)
 This will make it easier for the User, to fetch the credit Report without Selecting the Credit Bureau.

Step 1:

Map the Credit Bureau with the Loan Product :

Go to > Admin > System > External Services > Credit Bureau Integration.

The screenshot shows the 'CreditBureau Configuration' page. At the top, there is a navigation bar with 'Reports', 'Admin', and 'Self Service' options. Below the navigation bar, the breadcrumb trail reads 'Home / System / External Services / CreditBureau'. On the right side, there are two buttons: 'CreditBureau Configuration' and 'Add credit Bureau'. The main content area contains two tables. The first table has columns: CB-ID, Alias, CB-Name, CB-PRODUCT, COUNTRY, Status, and Action. The second table has columns: CB_LP-ID, Alias, creditbureauSummary, loanProductName, isCreditCheckMandatory, skipCreditCheckInFailure, statePeriod, Status, and Action. A button labeled 'Map credit Bureau to Loan Product' is positioned to the right of the second table.

Click on: Add Credit Bureau Button > Give the Integrated Credit Bureau an Alias Name.

The screenshot shows the 'CreditBureauAlias' configuration form. The navigation bar at the top includes 'Reports', 'Admin', and 'Self Service'. The breadcrumb trail is 'Home / System / External Services / CreditBureau / CreditBureauAlias'. The form is titled 'Credit Bureau Alias:' and contains two input fields. The first field is labeled 'Alias *' and contains the text 'Thitsaworks Alias'. The second field is labeled 'Credit Bureau : *' and has a dropdown menu with the selected option '1 - THITSAWORKS - Myanmar'. At the bottom right of the form, there are two buttons: 'Cancel' and 'Submit'.

List of Alias of the Integrated Credit Bureau will be shown:

CreditBureau | [Home](#) / [System](#) / [External Services](#) / CreditBureau

[CreditBureau Configuration](#)

CB-ID	Alias	CB-Name	CB-PRODUCT	COUNTRY	Status	Action
1	Thitsaworks Alias	THITSAWORKS	1	Myanmar	●	Enable

[Add credit Bureau](#)

[Map credit Bureau to Loan Product](#)

CB_LP-ID	Alias	creditbureauSummary	loanProductName	isCreditCheckMandatory	skipCrediCheckInFailure	statePeriod	Status	Action
----------	-------	---------------------	-----------------	------------------------	-------------------------	-------------	--------	--------

Now, Map it with the Loan Product :

Click on “Map Credit Bureau to Loan Product” Button > Select the Loan Product and Credit Bureau and Add the details as shown below :

ting | [Reports](#) | [Admin](#) | [Self Service](#)

CreditBureauMapping | [Home](#) / [System](#) / [External Services](#) / [CreditBureau](#) / CreditBureauMapping

Mapping Credit Bureau with Loan Product:

Loan Product *
LoanProduct Myanmar

Credit Bureau Alias
Thitsaworks Alias

Credit-Check Mandatory

Skip Credit-Check

State *
7

[Cancel](#) [Submit](#)

List of Mappings of Credit Bureau with the Loan Product:

CreditBureau | [Home](#) / [System](#) / [External Services](#) / CreditBureau

[CreditBureau Configuration](#)

[Add credit Bureau](#)

CB-ID	Alias	CB-Name	CB-PRODUCT	COUNTRY	Status	Action
1	Thitsaworks Alias	THITSAWORKS	1	Myanmar	●	🔒 Disable

[Map credit Bureau to Loan Product](#)


CB_LP-ID	Alias	creditbureauSummary	loanProductName	isCreditCheckMandatory ↑	skipCrediCheckInFailure	stalePeriod	Status	Action
10	Thitsaworks Alias	1 - THITSAWORKS - Myanmar	LoanProduct Myanmar	true	false	7	●	🔓 Enable

Now Created the Client for the Loan with the Loan Product (Loan Product Myanmar) which was mapped to the Credit Bureau.

Since it was not enabled after Mapping, the Credit Report Button is still not visible.

Accounting | [Reports](#) | [Admin](#) | [Self Service](#)

General | [Home](#) / [Clients](#) / 1 / [Loans](#) / 1 / General

 ■ Loan Product: LoanProduct Myanmar(#000000001)
Client Name: client one

[+ Add Loan Charge](#)
[✓ Approve](#)
[Modify Application](#)
[✗ Reject](#)
[More](#)

General | [Account Details](#) | [Repayment Schedule](#) | [Loan Documents](#) | [Notes](#) | [Standing Instruction](#)

Loan Details

Key	Value
Disbursement Date	Not Available
Currency	US Dollar
Loan Officer	Unassigned

Enabling the Mapping(and status: green):

CreditBureau | [Home](#) / [System](#) / [External Services](#) / [CreditBureau](#)

[CreditBureau Configuration](#)

[Add credit Bureau](#)

CB-ID	Alias	CB-Name	CB-PRODUCT	COUNTRY	Status	Action
1	Thitsaworks Alias	THITSAWORKS	1	Myanmar	●	Disable


[Map credit Bureau to Loan Product](#)

CB_LP-ID	Alias	creditbureauSummary	loanProductName	isCreditCheckMandatory	skipCrediCheckInFailure	stalePeriod	Status	Action
10	Thitsaworks Alias	1 - THITSAWORKS - Myanmar	LoanProduct Myanmar	true	false	7	●	Disable

Now, Credit Report Button is enabled, Click on Credit Report Button:

Accounting | [Reports](#) | [Admin](#) | [Self Service](#) en-US

General | [Home](#) / [Clients](#) / [1](#) / [Loans](#) / [1](#) / [General](#)

 ■ Loan Product: LoanProduct Myanmar(#000000001)
Client Name: client one

[+ Add Loan Charge](#) [✓ Approve](#) [Modify Application](#) [✗ Reject](#) [Credit Report](#) [More](#)

General | [Account Details](#) | [Repayment Schedule](#) | [Loan Documents](#) | [Notes](#) | [Standing Instruction](#)

Loan Details

Key	Value
Disbursement Date	Not Available
Currency	US Dollar
Loan Officer	Unassigned

Re-direct to specific Credit Bureau's Page which is mapped to LoanProduct:

Enter the NRC Number to fetch the Credit Report:

To fetch the Reports, Enter the **Exact NRC** and Submit. for example: **12/KaMaRa(N)253426**

THITSAWORKS | [Home](#) / [Clients](#) / THITSAWORKS

Credit Report: ThitsaWorks

NRC *
12/KaMaRa(N)253426

Submit

Borrower Information.	Values
MainIdentifier	8113399260
Name	Aye Aye
NRC	12/KaMaRa(N)253426
Gender	Female
DOB	1991-05-22 1990-05-22
FatherName	U Aye Myint Maung
Address	
LastUpdatedDtm	Jul 8 2020 9:27AM

Credit Score	Values
Score	
Class	
Note	

Export TO CSV Click twice!

Open Accounts
ReportingDate : 2020-03-01
LoanGUID : 219FDCB9-9653-4D2F-A3D7-8401DDEFAB98
Institution : Demo 1
Division : YANGON
Township : THONGWA
PrincipalOutstandingAmount : 300000
TotalOutstandingAmount : xxxx
PrincipalOverdueAmount : 50000
TotalOverdueAmount :
DaysInDelay : 5
UpdatedDtm : Apr 24 2020 10:25AM
SortColumn : 2020-03-01T00:00:00

Export TO CSV Click twice!

Closed Accounts

ReportingDate : 2020-03-01

ClaimGUID : 9F2D8B97-AE60-443A-9546-663CDEB8650F

Name : aye

FatherName : U Aye Myint Maung

Division : YANGON

Township : YANKIN

WardVillage :

DisbursedDate : 2019-01-01

DisbursedAmount : 300000

WriteOffDate : 2020-01-01

PrincipalWriteOffAmount : 150000

Note : Run Away.

UpdatedDtm : Apr 24 2020 10:26AM

Status : Y

Institution : Demo 3

It also has the feature to export the OpenAccounts and ClosedAccounts in csv file. Click on "Export To CSV" button (twice).

Credit Score

Score

Class

Note

Open Accounts

ReportingDate : 2020-03-01


LoanGUID : 219FDCB9-9653-4D2F-A3D7-8401DDEFAB98

Institution : Demo 1

Export TO CSV Click twice!

Opening 12_KaMaRa(N)253426_OpenAccounts.csv

You have chosen to open:

 **12_KaMaRa(N)253426_OpenAccounts.csv**
which is: Microsoft Excel Comma Separated Values File (498 bytes)
from: blob:

What should Firefox do with this file?

Open with Excel (default)

Save File

Do this automatically for files like this from now on.

3. Using the Credit Bureau directly. (not-mapped with Loan Product).

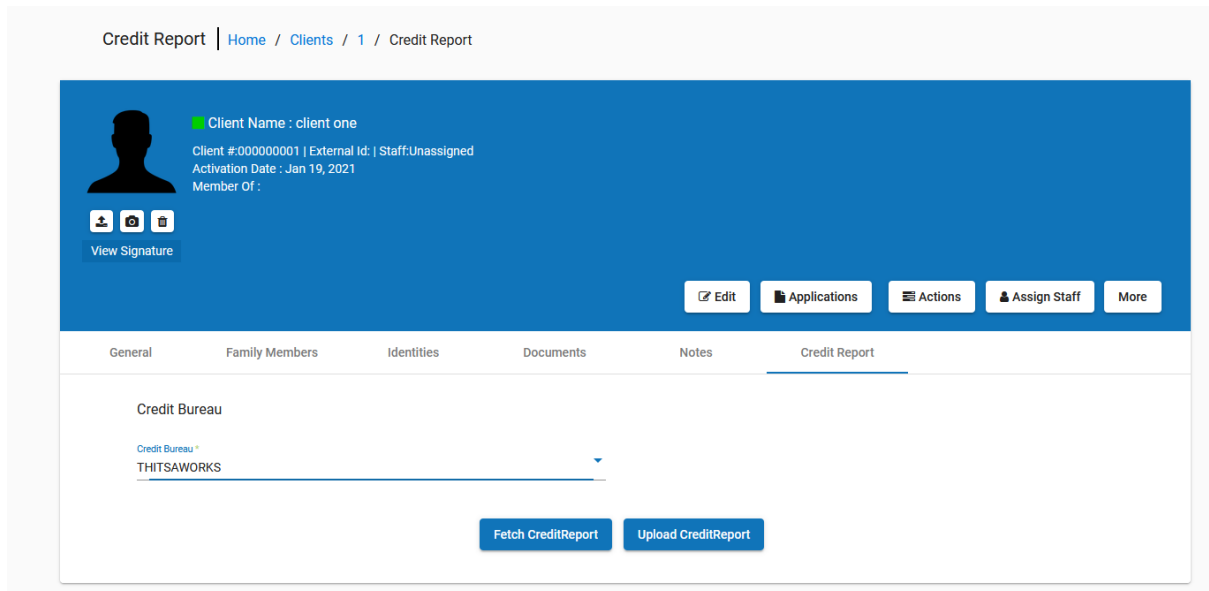
Go to Clients > Select any Client > Select Credit Report Tab > Select the Credit Bureau Name >

The screenshot shows a web application interface for a client's credit report. At the top, there is a breadcrumb trail: "Credit Report | Home / Clients / 1 / Credit Report". Below this is a blue header section containing a client profile card. The profile card includes a silhouette icon, the text "Client Name : client one", "Client #:00000001 | External Id: | Staff:Unassigned", "Activation Date : Jan 19, 2021", and "Member Of :". There are also icons for "View Signature" and a row of action buttons: "Edit", "Applications", "Actions", "Assign Staff", and "More". Below the header is a navigation bar with tabs: "General", "Family Members", "Identities", "Documents", "Notes", and "Credit Report". The "Credit Report" tab is selected. The main content area shows a "Credit Bureau" section with a dropdown menu currently displaying "THITSAWORKS". Below the dropdown are two buttons: "Fetch CreditReport" and "Upload CreditReport".

Clicking on Fetch Credit Report Button, which will redirect it to the Credit Report Page.

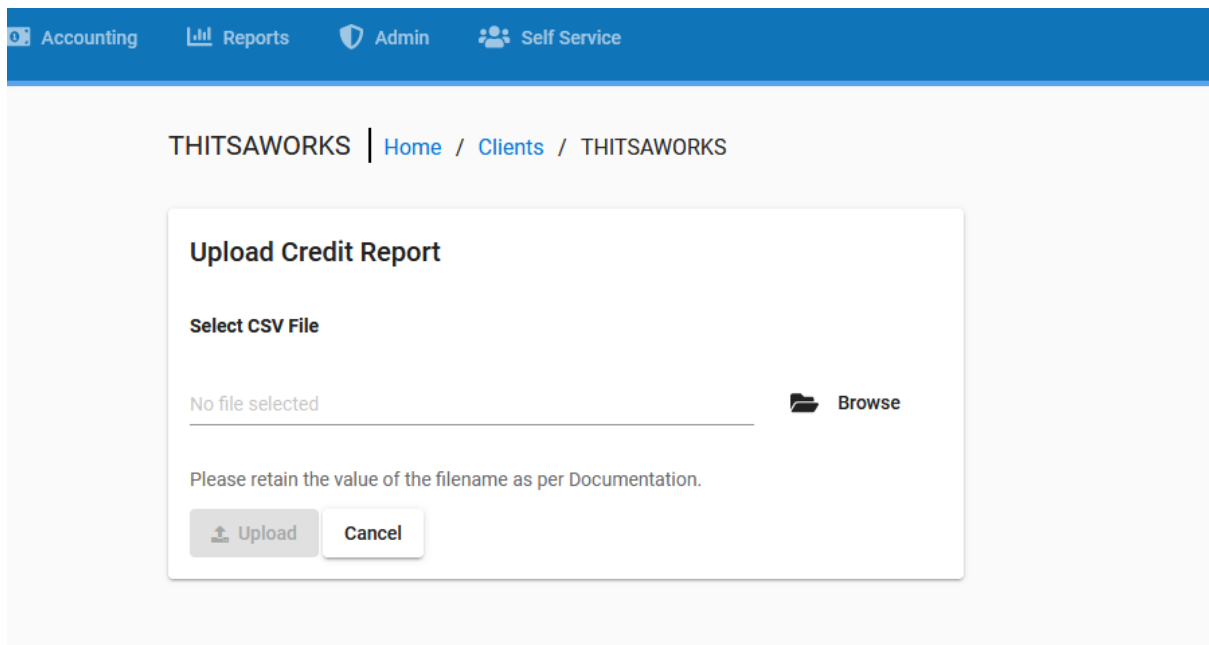
4. Uploading the CreditReport to ThitsaWorks.

Go to Clients > Select any Client > Select Credit Report Tab > Select the Credit Bureau Name > Click on "Upload CreditReport" Button > Re-direct to Upload Credit-Report Page



The screenshot shows the 'Credit Report' page for a client named 'client one'. The breadcrumb trail is 'Home / Clients / 1 / Credit Report'. The client details include: Client Name: client one, Client #: 000000001, External Id: Staff:Unassigned, Activation Date: Jan 19, 2021, and Member Of: . There are icons for download, share, and delete, and a 'View Signature' link. Action buttons include Edit, Applications, Actions, Assign Staff, and More. The 'Credit Report' tab is selected, showing a dropdown menu for 'Credit Bureau' with 'THITSAWORKS' selected. Below the dropdown are 'Fetch CreditReport' and 'Upload CreditReport' buttons.

Select the .csv file (which should follow the format of Credit Bureau's template) and click on the upload button.



The screenshot shows the 'Upload Credit Report' dialog box. The breadcrumb trail is 'THITSAWORKS | Home / Clients / THITSAWORKS'. The dialog has a title 'Upload Credit Report' and a section 'Select CSV File'. Below this, it says 'No file selected' and has a 'Browse' button with a folder icon. A note reads: 'Please retain the value of the filename as per Documentation.' At the bottom, there are 'Upload' and 'Cancel' buttons.

Invalid Request:

creditBureau.Configuration.CONFIGURATION-NAME.is.not.available.

The screenshot shows a web application interface with a blue header bar containing navigation links: Institution, Accounting, Reports, Admin, and Self Service. A dark notification bar at the top right displays the error message: "creditBureau.Configuration.USERNAME.is.not.available" with a "Close" button. Below the header, the breadcrumb "THITSAWORKS | Home / Clients / THITSAWORKS" is visible. The main content area is titled "Credit Report: ThitsaWorks" and contains a form with the label "NRC *" and the value "12/KaMaRa(N)253426". A blue "Submit" button is positioned below the form. At the bottom, a table displays "Borrower Information." and "Values". The table has two rows: the first row shows "MainIdentifier" and "Not Available".

Borrower Information.	Values
MainIdentifier	Not Available

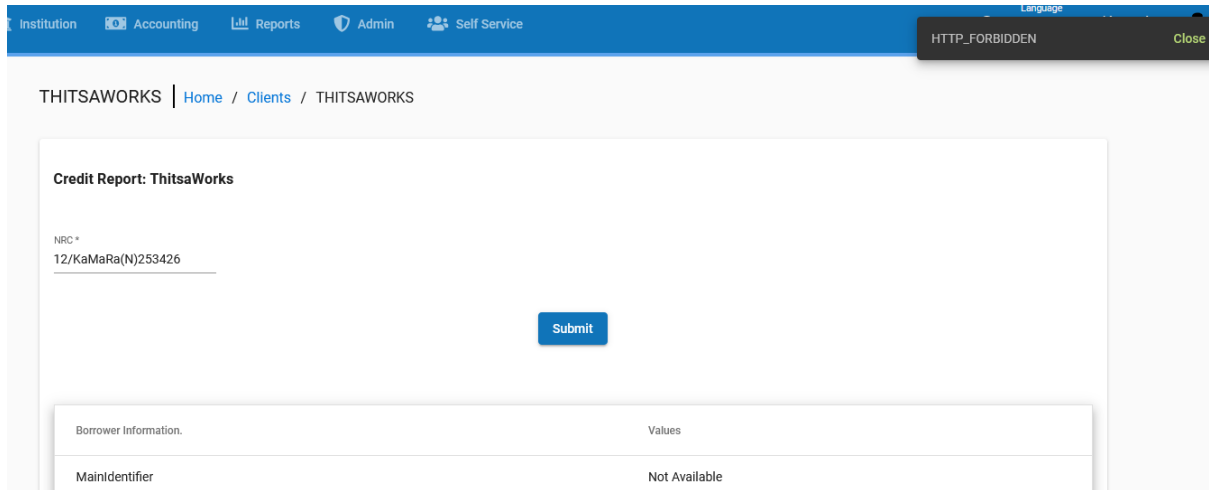
Configuration is missing, Here for Example: Configuration USERNAME is missing.

HTTP UNAUTHORIZED:

The screenshot shows the same web application interface as above, but with a different error message in the dark notification bar: "HTTP_UNAUTHORIZED" with a "Close" button. The rest of the page content, including the breadcrumb, title, form, and table, is identical to the previous screenshot.

This error will pop-up, when the configuration are not valid. (Mainly SubscriptionId and SubscriptionKey)

HTTP FORBIDDEN:



IP is not whitelisted. Contact THITSAWORKS to make your static IP Whitelisted.

More Errors as follows:

User Inactive:

When the User is Inactive over a period of time.

Account Inactive:

When the Account Inactive, then try using the Configurations of another Accounts.

Example: if currently there is use of mfi1 credentials then try using credentials of other mfi.

No record Found:

When there is no data of that particular NRC.

Invalid File Name:

Follow the template rules and make sure the File Name (for uploading) should be one of the following:

1. Active Loans.csv
2. Write Off.csv
3. CERP Loans.csv
4. Monthly active borrower count by township.csv
5. ThitsaID request form.csv

