

Retry Optimization.

1. Recurring APS □ APS refers to Automated Payment System. Two types of APS exists.  
One time APS & Recurring APS.

One Time APS □ Customer provided one time authorization to deduct payment from their bank account (which is in our records). Customer can provide one time authorization either through Borrower Portal, or through Agent or through IVR.

Recurring APS □ Customer provided authorization to deduct payment on recurring basis at each given due date as per loan repayment schedule.

<https://adfdata.sharepoint.com/sites/OperationsAnalytics/Shared%20Documents/Forms/AllItems.aspx?id=%2Fsites%2FOperationsAnalytics%2FShared%20Documents%2F2024%5FProject%5FNotebooks%2F008%5FUplift%5FModel%5FBuilding&viewid=a9944fb1%2D4801%2D4cb1%2Dadb7%2Deac47c3ec2f6>

Transactions :

- Recurring APS
- One Time APS (initiated through IVR, through Agent, through Borrowing Portal)
- Main In Cheque (MIC)
- Debit Card Payments (Borrowing Portal, IVR, through Agent)

Payment Mode □ What is the current payment mode of Customers :

Recurring or One Time?

Retry -> If Recurring APS fails on a given due date, that means customer does not have sufficient balance in their bank account on due date, ADF has option to do a retry\*.

However, if Retry payment also fails, then ADF deactivates\* Recurring APS.

Generally once the customer is out of Recurring APS, there are higher chances of Charge off.

Charge off happens at end of each month. All customers who are 90+ delinquent\* are charged off.

For every payment failure, customers bank will charge them with failed payment charges. As per guidance from Compliance team we deactivate Recurring APS.

If the recurring APS needs to be activated, customer has to fill a form and submit it to ADF.

If we do Retry (Retry has about 43% success rate). So for remaining 57% loans we deactivate recurring APS.

If we do not do the Retry, payments collection is missed, but Recurring APS is active which will pull payment on next due date.

Which customers do we do the Retry vs which customers we do not do the Retry?

Customers whose retry success rate is LOW.

ACH Retry Success Prediction Model RSP 1.0 segments HIGH/LOW are used for this strategy.

High Segment -> Test (Do Not Retry ) / Control (Retry)

LOW Segment -> Test (Do Not Retry ) / Control (Retry)

Accounts are classified into different months based on the reversal date.

An account can be in our test strategy multiple times.

Each account falls into only one test month, based on their first reversal date.

What is Dynamic segment?

Based on checking if an account has enough balance for payment (using bav\_balance or bav\_funds).

Validifi product has coverage for Only 15% of account, these products does not have information for the rest of the accounts.

In Test group, it checks every day and immediately initiates Retry if account balance is sufficient to make payment.

In Control group, only one check is done and if balance is sufficient, Retry is initiated on T+4 day.

Comparison is done between test and control to check if checking everyday really makes any difference in outcome.

Base payment rate:  $\text{sum of base payment amount} / \text{sum of base due amount}$

Roll off dollar weighted:  $\text{sum of balances of customers who are 60+ dpd} / \text{principal balances of all customers at the time of reversal}$

Charged off dollar weighted: sum of charged off balance at reversal time / principal balances of all customers at the time of reversal

Retry Optimization Strategy.

## Documentation for onboarding (under process):

- Get access to Redshift:
  - Mail to dwbi team ( [dataenggprodsupport@applieddatafinance.com](mailto:dataenggprodsupport@applieddatafinance.com) )
  - Different schemas are available in redshift (like analyticsmart, datawarehouse etc.). Mention the schemas you need access to in mail.
  - Sample mail request format

<

To : [dataenggprodsupport@applieddatafinance.com](mailto:dataenggprodsupport@applieddatafinance.com)

Cc : [divvelasantoshkumar@applieddatafinance.com](mailto:divvelasantoshkumar@applieddatafinance.com) ;

[anilkumarkovuri@applieddatafinance.com](mailto:anilkumarkovuri@applieddatafinance.com)

Dear Team, I have newly joined collections analytics team. Please provide me the following access to redshift.

>

- Get approval from Santosh Divvela ( [divvelasantoshkumar@applieddatafinance.com](mailto:divvelasantoshkumar@applieddatafinance.com) )
  - Get approval from immediate manager
- Accessing Redshift to SQL workbench
  - Download Workbench zip folder from: [https://adfddata-my.sharepoint.com/:u:/g/personal/naveenkumars\\_applieddatafinance\\_com/EUpStex8bl5Bi8Dudlk0BJ0BUyBnjHqMsGuMg8ny1mchNQ](https://adfddata-my.sharepoint.com/:u:/g/personal/naveenkumars_applieddatafinance_com/EUpStex8bl5Bi8Dudlk0BJ0BUyBnjHqMsGuMg8ny1mchNQ)
  - Download JDBC Driver from: <https://s3.amazonaws.com/redshift-downloads/drivers/jdbc/2.1.0.30/redshift-jdbc42-2.1.0.30.jar>

- Install the SQL Workbench by unzipping File-1 and double clicking on 'sqlworkbench' jar file.
- Connect Redshift to Your SQL Workbench.

For more details go to: [Redshift Usage Guidelines - ADF](#)

- For access to SRE Support portal ( [SRE Support - Jira Service Management \(atlassian.net\)](#) )access, mail to System Support-India ( [support-IND@applieddatafinance.com](#) ).

Note : SRE Support portal is where tickets are raised for various requests on – serves/databases/installation of anaconda etc.,

- Install Mobax, and connect to analytics4:
  - Install latest version of MobaXterm portable edition (<https://mobaxterm.mobatek.net/download-home-edition.html> )
  - Open the application
  - Go to Session (Top left corner)
  - Go to SSH
  - In Remote host, put **analytics4.adfdata.net**. Specify your username
  - Use OpenVPN password to start session
- Raise request (SRE ticket) in SRE Support portal for installation of anaconda in /data2/<username> folder.
- Launch Screen
  - Use **screen** command to enter screen. Press backspace, if the screen blinks that means you're in screen
- Launch jupyter notebook
  - **jupyter notebook --port <port no.> --ip analytics4.adfdata.net**
  - Save the jupyter notebook link in OneNote

- Save all work/scripts in /data2/<username> folder and never in /data2/home/<username> folder
- Access of rds2 databases:
  - Raise request (SRE ticket) in SRE Support portal for read access of analytics2-rds databases. There are different schemas in rds2 (like batchjobs\_db, cl\_import, collections etc). Mention the name of schema you need access of in ticket.
  - To check connection, go to MobaX and enter command:  
**mysql -u <username> -h analytics2-rds.adfdata.net -p.** Enter password to check if it connects or not.

## Operation Analytics Sharepoint: [Click Here](#)

Screen commands

Screen -ls □ List available screens

Screen -r <screenname> □ reattach to specified screen

Screen -dr <screenname> □ deattach and reattach to specified screen

Once logged into screen

Ctrl + A + d □ detach screen

Ctrl + A +: quit □ terminate screen

Which python3 □ location of python being referenced