

MASKING METRICS RELEASE RULE TESTING AUTOMATION

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AGENDA

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Innovation Use Case

MOTF Release Rule Testing Automation is done to improve the existing process of manually doing a sample check of data for release rule application. In order to ensure incorrect data is not exposed to end users, its important to test if the release rules are getting applied correctly. It enables the testing of 1000's of data rows over 50+ Excel sheets in a matter of minutes.

Hassle Free

The testing app only needs to have the input excel, and the metric name which is being tested. That's it !

No Need for users to install Python

All the python code is covered inside the python based UI. Its packaged in the independent exe file which can be executed in any Windows system.

Separate analysis file from data file

The analysis is given separately in a new file for each sheet. This is done to keep data file neat and clean.

Detailed analysis for each release rule and pin-pointing errors


The app is coded to generate flag for each release rule and highlight the exact data row in out-put for which release rules are failing

Existing Process Background

- Existing Unit test/QA method consists of manual checks
- With parallel clients deployments number of implementations are high
- On an average it takes 25-30 minutes per report for sample set check
- Its not possible to manually check all the data rows for all metrics



Innovation in Brief

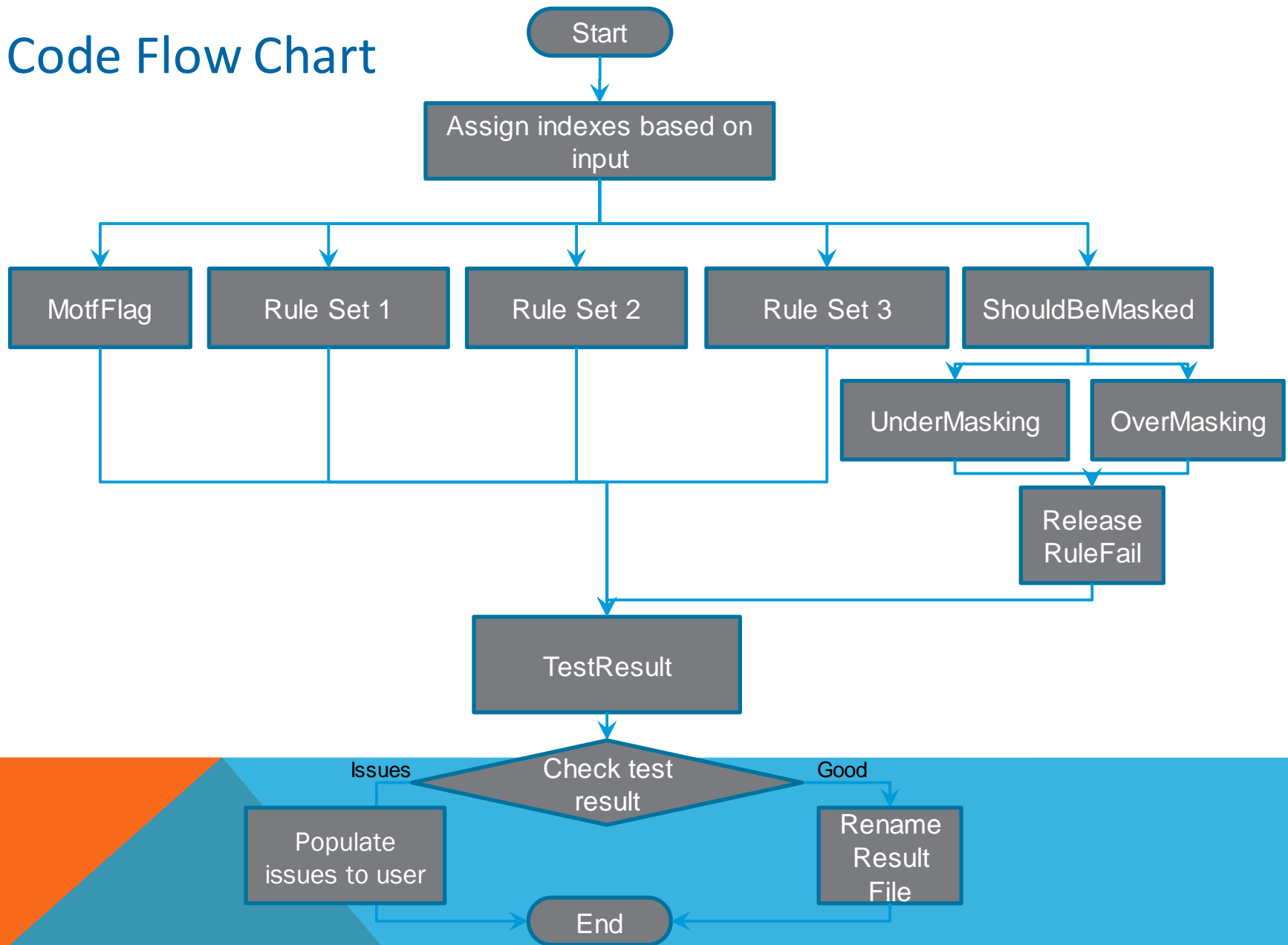
- The App is created to reduce time consumption in manually checking the data for multiple rules (part of 3 rule sets)
 - All the data rows are checked so that high accuracy is ensured
 - It can check Multi-level reports as well
 - The flag populated for Release Rule fail can be filtered to select impacted rows out of all the data rows
 - To check instances of individual release rule failing, the respective flag column can be filtered
 - If there is no release rule failure, the result file is renamed as “_good”. This way all the testing can be done w/o even going through a single sheet !
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Implementation Details

- The required excel export of report with required levels, MOTF metric and its components (user needs to do Rt. Click>drill to components) needs to be provided to app (can also be drag-dropped on exe)
- The metric to be checked needs to be provided
- Based on the metric name, the code determines the components of the metrics
- Based on the release rule components, for each release rule, it is checked if it is failing
- If any of the release rule implementation fails, its respective fail flag is set to 1
- This failure information is highlighted in UI to pin-point the issue
- Finally the result excel file is created at the same location as data file with “_result”

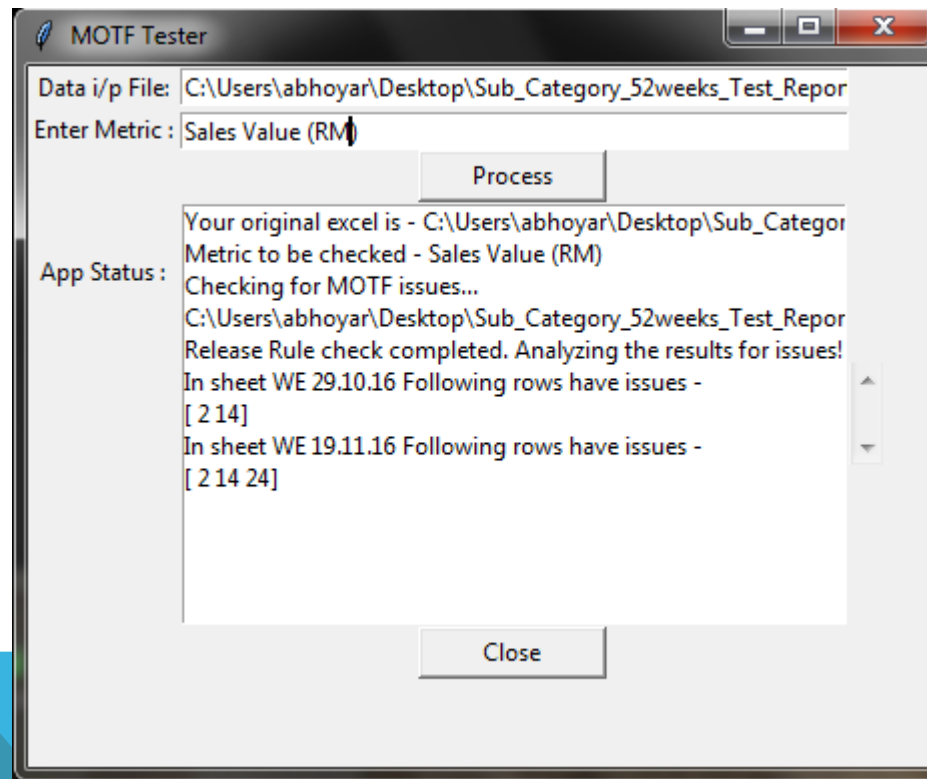
name

Code Flow Chart



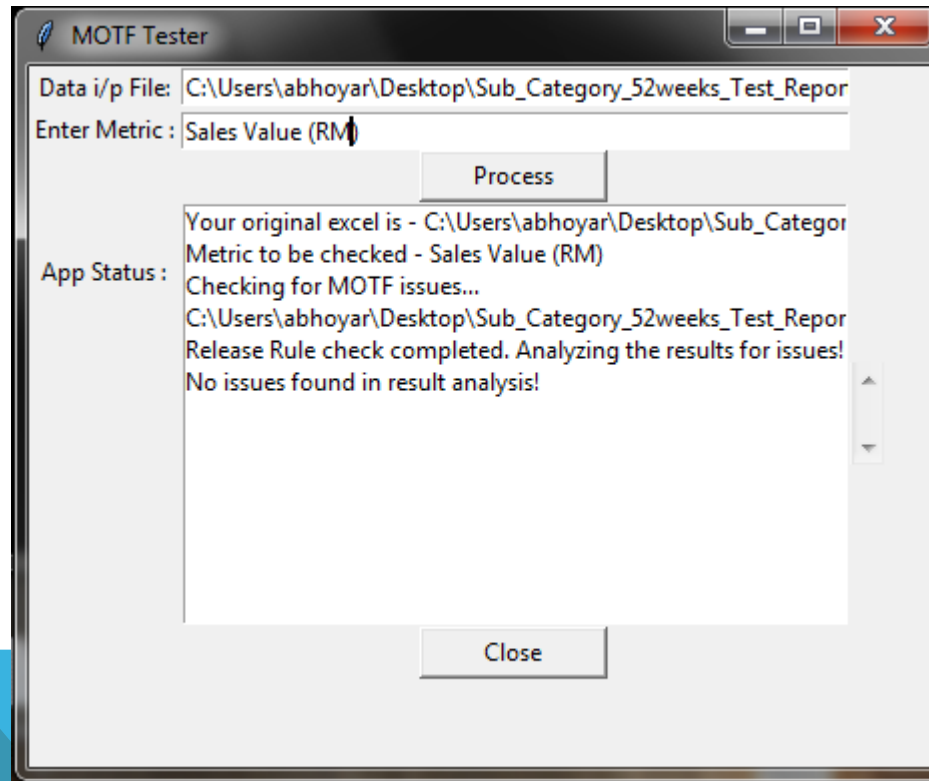
Screenshots

- The screenshot shows issues highlighted with sheet name and exact rows in that sheet



Screenshots (continued)

- The screenshot shows o/p for excel w/o issues



Screenshots (continued)

- The screenshot shows various flags generated after release rule check (in the o/p excel). They highlight the specific case failures -

Motfflag	VetoPositive	PairDelete	VetoNegative	ShouldBeMasked	UnderMasking	OverMasking	ReleaseRule	TestResult
▼	Fail ▼	Fail ▼	Fail ▼	▼	▼	▼	Fail ▼	▼
0	1	0	0	0	0	0	0	1
0	0	1	0	0	0	0	0	1
1	0	0	0	1	1	0	1	1
0	0	0	1	0	0	0	0	1
1	0	0	0	0	0	1	1	1
1	0	0	0	0	0	1	1	1
1	0	0	0	0	0	1	1	1
0	0	0	1	0	0	0	0	1
0	0	0	1	0	0	0	0	1
1	0	0	0	0	0	1	1	1
1	0	0	0	0	0	1	1	1
1	0	0	0	0	0	1	1	1
1	0	0	0	0	0	1	1	1
0	0	0	1	0	0	0	0	1
0	0	0	1	0	0	0	0	1

Innovation Impact

- No chances of missing data
- Turnaround time of 2-3 minutes for 52 sheet export report w/500+ rows per sheet
(Rules not tested earlier at this scale)
- No manual intervention
- Pin-pointing of issues for faster debugging



Thank You for reading!
For more details reach out to -
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