IATA Financial Gateway Project

Loading the Airline sales files into IFG for processing

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Confidential

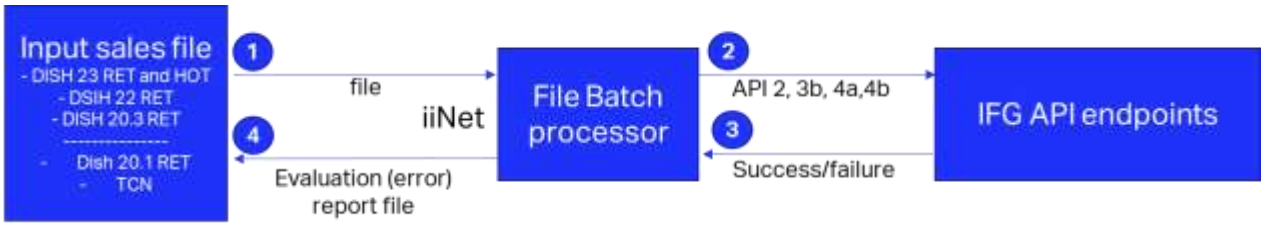
Introduction

Currently IFG Customers can report payment transactions to IFG using IFG API. In some specific cases Arline can not implement the API but able to provide the sales data in post-sales reporting files (RET / HOT / TCN) which would be possible to loaded to IFG for processing.

New developed Converter will process the input files and call regular IFG API input to sales to IFG using existing “non-IFG sales” flow. Details of such converter and related changes in IFG are described in the current BRD.

Requirements

Target process flow:



Current change request is to add a file batch processor to IFG allowing to convert sales from airlines received in the form of a file into the IFG APIs. It will operate at the entry of IFG before the API endpoints, and transactions sent through it will be processed like all other IFG transactions.

Reporting to IFG will be done as “non-IFG Sales”, so no API1 will be needed.

Input File

1. Input file can be received in one of the following file formats:
   DISH RET 20.1, 20.3, 22, 23, DISH HOT 23 and TCN.
   If delivered by phases – DISH RET 20.3, 22 and 23 are in the first phase.

2. Input file can contain transactions for multiple countries, each correctly identified inside each transaction.

3. The file naming follows the standard

   Example: XXddZZZLINK_YYYYMMDD_AAAC_sequence_ISOC

NAME	DESCRIPTION

XX	ISO Country Code
dd	File descriptor: ew: **single** country **DISH RET** file eg: **multi** country **DISH RET** file
ZZZ	ZZZ can be NDC of WEB (legacy NDCLink and Weblink files).
YYYYMMDD	File generation date
AAAC	Airline 3D code and its' check digit (Mod7).
Sequence	000 if it is the first file uploaded for this Airline in that date. An incremental number for next files sent for the same Airline at the same date.
ISOC	Optional, if provided all transactions in the file should related to the BSP country of ISOC and rejected in other case

4. If received file is not matching the given naming convention – notification should be sent to the IFG JRT support team to escalate it to IATA.

Processing

1. Any encountered error in the structure of the input file will result in rejecting the entire file, and any encountered errors in the integrity of the particular transaction will result in the transaction containing the error to be rejected only, while other accepted transactions will be processed.

2. Transactional data validations:

   Converter should support input of the following transaction types:
   - Electronic Tickets – transaction code **TKTT**
   - Direct Refunds – transaction code **RFND**
   - Cancelation (same day void) – transaction code **CANX**
   - Electronic Miscellaneous Document – Associated – transaction code **EMDA**
   - Electronic Miscellaneous Document – Standalone – transaction code **EMDS**

   Converter should support standard forms of payment acceptable in BSP, such as:
   - cash (CA)
   - EasyPay (EP, CCEP)
   - credit card (**CC**) , including CCAANNNN
   - exchanges (**EX**)
   - Miscellaneous (MSCC, MSCA, MSCCAANNN)

3. It should be possible to add airline-specific mapping (hard coding is acceptable) to rename the FOP or enrich / modify particular data field for this Airline.

4. All transactions in the file should be rejected if there is error in IT01 or IT0Z record (in case of RET).

5. In case of RET format files all the transaction set of the conjunction ticket should be rejected if there is any error in any of the transaction set.

6. To ensure the correct processing, transactions from the Input file should be submitted to IFG in the following order: first original tickets (API 2), then exchanges (API 4a), then cancellations (API 3b) and then refunds (API 4b). IFG process should be made assuming the reporting mode "non-IFG Sales"

7. Correct submission of IFG API should be made, including the construction of Conjunction tickets

8. When calling IFG API, parameter Channel should be sent to: "NDC" if ZZZ=NDC and "NONGDS" if ZZZ=WEB

Evaluation report

Results of each file processing are accumulated for all transactions and reflected in the below error reports send back to the sender (to iiNet).

Summary Report

The Summary Report provides information, in text format, on the number of transactions processed, the number accepted, and the number rejected transactions with description.

Naming Convention:

XXerAAAC_YYYYMMDD_sequence_original-file-descriptor

NAME	DESCRIPTION
XX	ISO Country Code
er	File descriptor for error report
AAAC	It is the Airline 3D code who previously sent the file plus check digit (Mod7).
YYYYMMDD	File generation date
Sequence	000, if it is the first file uploaded for this user in that date. An incremental number for next files sent for the same user at the same date.
Original-file descriptor	File descriptor of the original file i.e. ew, eg, et or ep

Report example:

IFG NDCLINK SUMMARY REPORT (for ZZZ=NDC) or IFG NDCLINK SUMMARY REPORT (for ZZZ=WEB) AIR LINE CODE: 206 NAME: “ ” DATE: 2007-03-07 TIME: 10:47:03
SUMMARY FOR: HCegNDCLINK_20070306_2063_001 (name of initial file)
Total of Read Transactions: 2 Total of Accepted Transactions: 0 Total of Rejected Transactions: 2 Percentage of Accepted Transactions: 0%
(errors based on the file processing)
Line: 4 TRNN: Record: IT0Z Element: # 2 RRDC
Record Counter Error: Incorrect IT0Z
Line: 2 TRNN: 000001 Record: IT02 Element: # 6 TDNR
Document Number
Error: Unknown ticket type
Line: 3 TRNN: 000002 Record: IT02 Element: # 6 TDNR
Document Number
Error: Unknown ticket type
(errors based on the IFG API response)
Document: xxxxxx Agent code: yyyyyy
Error: Not allowed FOP for this agent (from the API response)

Note, some errors will be based on the validation made by the Converter tool itself, and some errors will be based on the reply from IFG APIs (see above examples). As a result, all rejections should be present in the report. Analysis to be done to define how both Converter and IFG API rejections should be included in this report.

Please see attached the mock-up draft:

Error Flat File – "Machine Readable"

Machine Readable error flat report features the following structure:

Field	SIZE	Start Position
1. RCID	2	1
2. TRNN	6	3
3. AGTN	8	9
4. TDNR (including airline code)	15	17
5. Internal Field	15	32
6. Error Type	1	47
7. CODE	3	48

1. RCID: Record Identifier.
2. TRNN: Transaction Number
3. AGTN: Agent Code plus check digit.
4. Internal field: A brief description of the error containing line number+field name related with the error + element number
5. Error type: always 'E'
6. Code: Internal NDCLink error code.

Note that the last line of this file will always contain 'EOF'. In case of no errors, the file will only have 'EOF' indicator.

The machine-readable file name follows the same file naming convention as default 'er' file, followed by 'machine':

XXerAAAC_YYYYMMDD_sequence_original-file-descriptor_machine

Report example

```
0700000167230322012123456789O  000000011FCMI07E012
0700000267230322012123456789I  000000023FCMI07E012
EOF
```

Note, analysis to be done to define how both Converter and IFG API rejections should be processed to be included in this report similar as to the previous Evaluation report.

Impact on IFG Validations and business rules

1. New value “NDC” to be added to the channel: field in all IFG APIs. All IFG validations and functionality should be updated to process NDC similar as current “NONGDS” from the point of the agent’s validation checks in APIs.

2. Value “NDC” for Channel field to be added in all business rules containing the Channel filter.

Impact on Reports

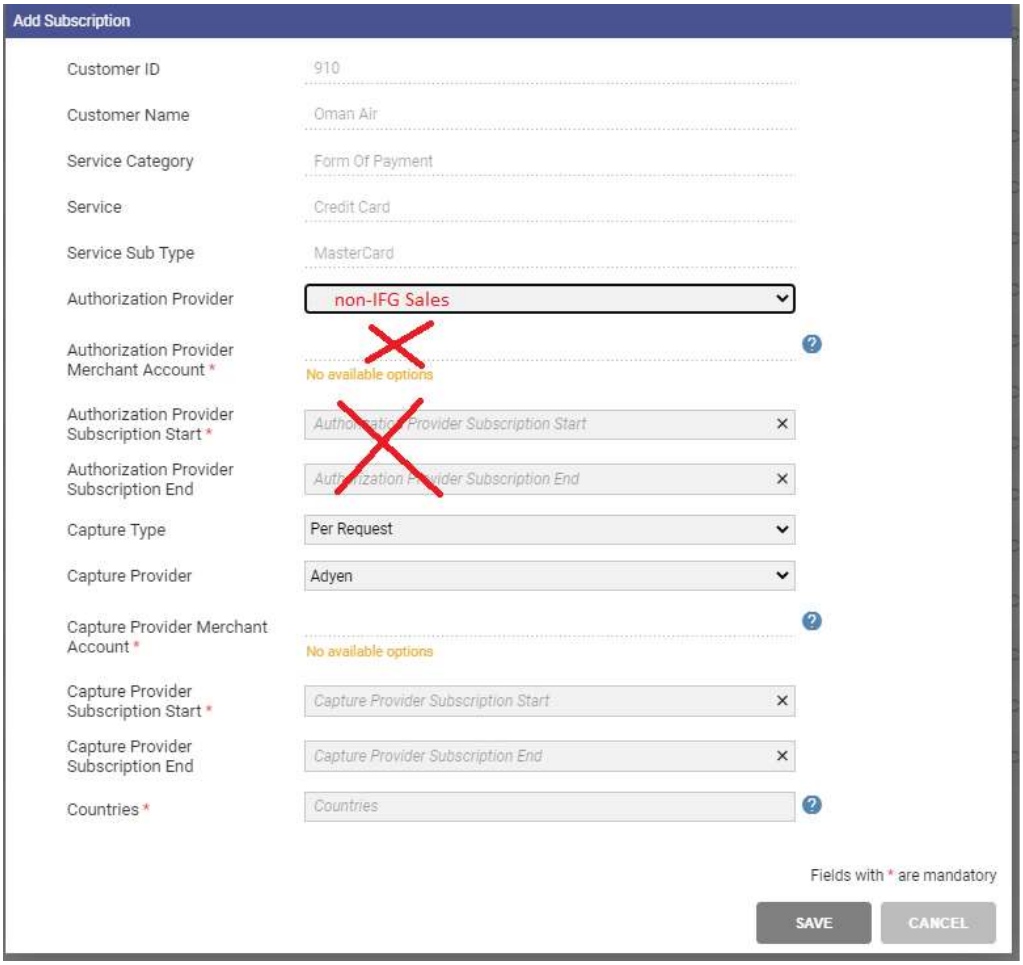
1. Result of the input file processing should be included in the Administrative Reports / File Interface reports. It should be possible to see the log of received files and retrieve the evaluation reports via Reports / Files module.

2. Value “NDC” for Channel field to be added in all reports containing the Channel filter.

Impact on IFG Subscriptions / Capture

We may need to be able to perform Capture for credit card transactions sent in this flow, which leads to enhancement of current process for “non-IFG Sales” where capture is not done today. The modification will be as following:

Subscription Management / Credit Cards subscription:

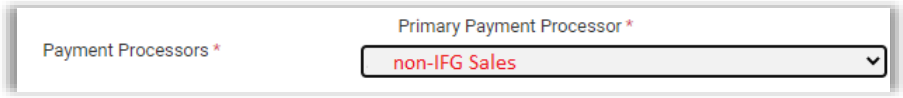


Add “non-IFG Sales” option in the list of Authorization Provider in case Airline has right to report non-IFG sales.

If selected – allow to select a Capture provider using the existing process.

Business Rules / cards rules

For airline has card subscription with the “non-IFG Sales” authorization – allow to select it as well in the list of Providers to define business rules:



If this rule exists it should be executed only for “non-IFG Sales” type of transactions.

All other Card rules (existing, allowing to select PSP/Account – should be updated to be used only for IFG Internal IFG sales transactions.

Transactions Reports/ Payment Status Report

To be updated to also include captures made for external non-IFG sales and be able to re-start capture for errors. Line should indicate that it was non-IFG sales capture.