NGI UC for Manage and Apply Product Display Order

Use Case Specification

(Avail.32ab)

Author: Nguyen Van Binh

Document version: 1.1

Document Date: 2015-Feb-10

Approvals

|  |  |  |  |
| --- | --- | --- | --- |
| Version | Approved By | Signed | Date |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

Revision History

|  |  |  |  |
| --- | --- | --- | --- |
| Date | Version | Description | Author |
| 2014-Jul-30 | 0.0a | Initial Draft | Nguyen Van Binh |
| 2014-Aug-15 | 0.0b | Major updates from peer review | Nguyen Van Binh |
| 2014-Aug-22 | 0.0c | Additional updates from peer review | Nguyen Van Binh |
| 2014-Aug-26 | 0.0d | Updated the flow for applying penalty and sorting per Tim’s comments | Nguyen Van Binh |
| 2014-Sep-11 | 1.0 | PDR Drop version; minor edits | Richard Winstel |
| 2015-Feb-10 | 1.1 | Amended to use HA agreements instead of MICT and elaborated for development | Fereidoun Hamisi |

Contents

1. Overview 3

**1.1** **Brief Description / Background** 3

1.2 References 3

1.3 Story Mapping 4

2. Actors 4

**2.1** **Primary Actors** 4

**2.2** **Secondary Actors** 4

3. General Preconditions 4

4. General Post Conditions 4

5. Basic Flow of Events 5

**5.1** **Basic Flow 1 – Apply Routing Sort Penalties Rules** 5

6. Alternate Flows 7

**6.1** **Alternate Flow 1 – Subscriber Routing Sort Penalties Rule Not Exists** 7

7. Exception Flows 7

8. Sub Flows 8

**8.1** **Sub Flow 1 – Assign Routing Sort Penalties** 8

9. Special Requirements 10

**9.1** **Subscriber Parameter** 10

**9.2** **Routing Sort Order in Simulate Availability** 10

10. Assumptions, Issues & Future Use Case Considerations 11

11. Elaborations 11

11.1.1 Test Cases 14

12. Additional Information 15

12.1 HIAS processing for availability sorting at time of writing 15

12.2 SITA RES functionality for product offering sorting 16

NGI UC for Manage and Apply Product Display Order

# Overview

## **Brief Description / Background**

This use case describes the functional requirements for a HIAS Subscriber to manage the order in which routings are displayed in the responses to requests for city pair availability from Sales & Service and external systems (GDS and OA - Other Airlines).

The managed order of the routings may also be used by any other city pair product offering in HIAS, for example to support passenger re-accommodation by Origin-Destination in the future phases.

In SITA Reservations mainframe system, host airlines can control their default, biased displays of availability, timetable and schedule information for city pair product offerings. Many user parameters are used to define the sorting priority for each type of routing to be returned in the airline preferred displays. The airline can also define a list of preferred OA partners, either Alliance members or non-alliance airlines, and OA flights and city pairs. This list is used in combination with the user parameters so as to define the sorting order for OA services in the product offering responses. The Additional Information section of this Use Case details the user parameters and how they control the sorting order of product displays.

In HIAS, each SITA Subscriber can manage, with business rules, the order in which they desire their city pair product offering. This includes availability for their flights and OA services to be sorted in the default biased responses to host and external requests. Business rules are to assign a sorting penalty value for each routing in a response to a city pair product offering request. Routings with less penalty values are sorted above those with greater penalty values.

These business rules will be maintained in Horizon Administrator as HA Agreements on a per subscriber bases. As such these need to be setup and managed using HA and are outside the scope of this use case. Additional information is provided in the Elaboration section to help and facilitate this activity.

Basic Flow 1 of this Use Case describes the internal processing in HIAS that enforces the product offering sorting rules.

### References

|  |  |  |
| --- | --- | --- |
| **Ref. ID** | **Reference** | **Version** |
| [1] | IAS Story Detail AVAIL.12 – Define Sorting Rule | 0.1 |
| [2] | IAS Story Detail AVAIL.13a – Apply Default Sorting Rule | 0.1 |
| [3] | IAS Story Detail AVAIL.11ab - Response Sorting including EDIFACT | 1.1 |
| [4] | System BDD for Product Offering (TBD) |  |
| [5] | Document referring to how to setup agreements in HA |  |
| [6] | BDD for Process Product Display Order (Avail.32) | 1.0 |
| [7] | Availability Product Sorting Order.xlsm | 1.0 |

### Story Mapping

The Use Case breaks into the following stories:

|  |  |  |  |
| --- | --- | --- | --- |
| Tag | Description | Flows | Section |
| Avail32ab | Manage and Process Product Sort Display Order | Basic Flow 1 Sub Flow 1 Alternate Flow 1 | §5.1 §8.1  §6.1 |
|  |  |  |  |

# Actors

## **Primary Actors**

The Actors are as follows:

1. A system service for
   1. Basic Flow 1 – Apply Product Offering Sort Order

## **Secondary Actors**

None

# General Preconditions

* The airline is an Allocation and Availability (Full HIAS) Subscriber.
* Actor is logged into the system
* Actor is authorized to perform the functionality in this use case

# General Post Conditions

* None

# Basic Flow of Events

## **Basic Flow 1 – Apply Routing Sort Penalties Rules**

|  |  |
| --- | --- |
| Specific Preconditions | * System has generated the routings for the response to a request for City Pair Product Offering, which is Availability. * The system has fetched the Subscriber parameter *Default\_Routing\_Sort\_Order*. |

| Activity | Alternate / Exception Flow Name |
| --- | --- |
| 1. The system fetches the HA agreement that contains the penalties associated with various routing options for this subscriber. **See Ref [6].** |  |
| 1. System assigns Sort penalty for the routing based on the routing type, using the penalty schemes setup in HA agreements   **Sub Flow 1 – Assign Routing Sort Penalty** | **Sub Flow 1** |
| 1. System loops to Step 1 until all routings are processed |  |
| 1. When the city pair product offering request does NOT contain a request type for unbiased display, system joins Step 7. |  |
| ***Steps 5 to 6 are for sorting the response to an unbiased request type.***   1. When there is a sorting instruction in the city pair product offering request,   - If the sorting instruction is “By Elapsed Time, system sorts the routings by the routing elapsed time, then by total penalties, in ascending order, then by departure time.  - If the sorting instruction is “By Departure Time, system sorts the routings by the routing departure time, then by total penalties, in ascending order.  - If the sorting instruction is “By Arrival Time, system sorts the routings by the routing arrival time, then by total penalties, in ascending order, then by departure time.  System joins Step 9.  *Note: a sorting instruction in a city pair product offering request can be by Departure Time, or by Arrival Time or by Elapsed Time.* |  |
| 1. When there is not any sorting instruction in the city pair product offering request, system uses the Subscriber parameter *Default\_Routing\_Sort\_Order*   - If the default sorting parameter is “By Elapsed Time, system sorts the routings by the routing elapsed time, then by total penalties, in ascending order, then by departure time.  - If the default sorting parameter is “By Departure Time, system sorts the routings by the routing departure time, then by total penalties, in ascending order.  - If the default sorting parameter is “By Arrival Time, system sorts the routings by the routing arrival time, then by total penalties, in ascending order, then by departure time.  System joins Step 9.  *Note: See section Special Requirements for the description and requirement for the above Subscriber parameters.* |  |
| ***Steps 7 to 8 are for sorting the response to a biased request type.***   1. When there is a sorting instruction in the city pair product offering request,   - If the sorting instruction is “By Elapsed Time, system adds the routing elapsed time, in number of minutes, to the routing total penalty. System sorts the routings by the total penalty, in ascending order, then by departure time.  - If the sorting instruction is “By Departure Time, system adds the routing departure time, in number of minutes, to the routing total penalty. System sorts the routings by total penalty, in ascending order.  - If the sorting instruction is “By Arrival Time, system adds the routing arrival time, in number of minutes, to the routing total penalty. System sorts the routings by total penalty, in ascending order, then by departure time.  System joins Step 9.  *Note: a sorting instruction in a city pair product offering request can be by Departure Time, or by Arrival Time or by Elapsed Time.* |  |
| 1. When there is not any sorting instruction in the city pair product offering request, system uses the Subscriber parameter *Default\_Routing\_Sort\_Order*   - If the default sorting parameter is “By Elapsed Time, system adds the routing elapsed time, in number of minutes, to the routing total penalty. System sorts the routings by the total penalty, in ascending order, then by departure time.  - If the default sorting parameter is “By Departure Time, system adds the routing departure time, in number of minutes, to the routing total penalty. System sorts the routings by total penalty, in ascending order.  - If the default sorting parameter is “By Arrival Time, system adds the routing arrival time, in number of minutes, to the routing total penalty. System sorts the routings by total penalty, in ascending order, then by departure time.  *Note: See section Special Requirements for the description and requirement for the above Subscriber parameters.* |  |
| 1. System returns the sorted routings to the invoking UC/Flow. |  |
| 1. Flow ends |  |

|  |  |
| --- | --- |
| Specific Post Conditions | * Routings of the response to a city pair product offering request have been sorted as per the Subscriber Routing Sort Penalties rules |

# Alternate Flows

## **Alternate Flow 1 – Subscriber Routing Sort Penalties Rule Not Exists**

|  |  |
| --- | --- |
| Specific Preconditions | * The system has performed the following Steps:   + Step 1 for Basic Flow 1 |

| Activity | Alternate / Exception Flow Name |
| --- | --- |
| 1. System detects no Subscriber Routing Sort Penalties rule |  |
| 1. When the city pair product offering request includes a sorting instruction, system first sorts the routings by the requested sorting instruction. When the sorting instruction is not “By Departure Time”, then system further sorts the routings by departure date/time. System joins Step 4. |  |
| 1. When no sorting instruction is requested, system sorts the routings by the default order set by Subscriber parameter *Default\_Routing\_Sort\_Order* |  |
| 1. Flow rejoins Step 7 for Basic Flow 2 |  |

|  |  |
| --- | --- |
| Specific Post Conditions | * System sorted the routings by the sorting instruction in the request, if any, or by the default order. |

# Exception Flows

None

# Sub Flows

## **Sub Flow 1 – Assign Routing Sort Penalties**

|  |  |
| --- | --- |
| Specific Preconditions | * The system has performed the following Steps:   + Step 2 for Basic Flow 1 |

| Activity | Alternate / Exception Flow Name |
| --- | --- |
| 1. System sets the Total Penalty for the routing to zero. |  |
| ***Steps 2 to 6 are to assign Routing Penalty to the routing.***   1. System calculates the Number of stops penalty for the routing by multiply the number of stops enroute by the Penalty for Number of stops in the selected business rule.   Number of stops = Number of Legs – 1  Number of stop penalty = Number of stops x Penalty for number of stops  System adds the Number of stops penalty to the routing Total Penalty. |  |
| 1. System sets the Number of flights penalty to the number of flight segments making up the routing.   System adds the Number of flights penalty to the routing Total Penalty. |  |
| 1. System determines Marketing and Operating carrier for each segment in the routing. |  |
| 1. When the Marketing carrier of at least a segment in the routing is the Subscriber (host) airline and the Marketing carrier of at least a segment in the routing is an OA, system assigns the Interline penalty for the routing with the Interline Routing penalty set in the business rule:   - If there is at least a Host segment is operated by the Host airline, the Interline Operating penalty is assigned.  - If none of the segments in the routing is operated by the Host airline, the Interline Marketing penalty is assigned.  System adds the Interline penalty to the routing Total Penalty.  System joins Step 7. |  |
| 1. When the Marketing carriers of all segments in the routing is not the Subscriber (host) airline, system assigns the OA Routing penalty for the routing with the OA Routing penalty set in the business rule:   System adds the Interline penalty to the routing Total Penalty. |  |
| ***Steps 7 to 12 are to assign Carrier Penalty to the routing.***   1. When the Operating or Marketing carrier of any segment in the routing is an OA (Other Airline) that is defined as a Specific Carrier in the business rule, system adds the Specific Carrier penalty set for that OA in the business rule to the routing Total Penalty.   If there is more than 1 Specific Carrier in the routing, system selects the lowest Specific Carrier penalty in the business rule to add to the Total Penalty.  System joins Step 13. |  |
| 1. When the Operating or Marketing carrier of a segment in the routing is an OA (Other Airline) that is defined as a Sub-host carrier of the Subscriber, system adds the Sub-host penalty set in the business rule to the routing Total Penalty.   System joins Step 13. |  |
| 1. When the Operating or Marketing carrier of a segment in the routing is an OA (Other Airline) that is defined as a Preferred Partner of the Subscriber, system adds the Preferred Partner penalty set in the business rule to the routing Total Penalty.   *Note: System references the Preferred Partners defined in Horizon Administrator (HA)*  System joins Step 13. |  |
| 1. When the Operating or Marketing carrier of a segment in the routing is an OA (Other Airline) that is defined as a Code Share Partner of the Subscriber, system adds the Code Share Partner penalty set in the business rule to the routing Total Penalty.   *Note: System references the Code Share Agreements in Horizon Administrator (HA). The OA is a Code Share Partner if any Code Share agreement with that OA is assigned to a host flight.*  System joins Step 13. |  |
| 1. When the Operating or Marketing carrier of a segment in the routing is an OA (Other Airline) that is a member of the same Alliance as the Subscriber, system adds the Alliance penalty set in the business rule to the routing Total Penalty.   *Note: System references the Alliance data in Horizon Administrator (HA).*  System joins Step 13. |  |
| 1. When the Operating or Marketing carrier of a segment in the routing is an OA (Other Airline), system adds the Other Airline penalty set in the business rule to the routing Total Penalty.   System joins Step 13. |  |
| 1. System returns the routing Total Penalty |  |
| 1. Flow re-joins invoking Flow/Step |  |

|  |  |
| --- | --- |
| Specific Post Conditions | * System calculated the total sort penalty for a routing |

# Special Requirements

## **Subscriber Parameter**

Subscriber parameter *Default\_Routing\_Sort\_Order* must be created for the Subscriber to define to default sorting order for routings returned to a city pair product offering request.

|  |  |
| --- | --- |
| Parameter | Description |
| *Default\_Routing\_Sort\_Order* | Defines the default order by which routings in a response to a city pair based product offering request are sorted.   * Elapsed Time (default): routings are sorted by elaborated elapsed time penalty value which is the sum of routing penalty, carrier penalty and elapsed time of each routing. * Elapsed Time On Connection Only: connection routings are sorted by elaborated elapsed time penalty value. Non-stop and direct routings are sorted by departure time then by elaborated elapsed time penalty value. **This is currently out of scope of this use case.** * Departure Time: routings are sorted by departure time then by elaborated penalty value. * Arrival Time: routings are sorted by arrival time then by elaborated penalty value. |

## **Routing Sort Order in Simulate Availability**

The Simulate Availability shall apply the Routing Sort Penalty rules, with the options to select the rule statuses (Active Only, or Active and Draft, or None).

The “Sort By” selection in the Simulate Availability shall have an additional sort order:

* Departure Time (current): to simulate as if a request contains a sorting instruction by Departure Time. Routings are sorted by the sort penalty rule then by departure time.
* Arrival Time (current): to simulate as if a request contains a sorting instruction by Arrival Time. Routings are sorted by the sort penalty rule then by arrival time.
* Elapsed Time (New):
* Neutral (New): will ignore the Routing Sort Penalty rules, default to an unbiased sorting where the sort order is by departure time regardless of routing types.

# Assumptions, Issues & Future Use Case Considerations

**Assumptions**

* It is assumed that the system has processed an incoming product offering request and been able to determine:
  + Whether the request is for city pair based, such as daily schedule request, city pair availability request.
  + Whether the request is for a unbiased (non-sorted) response, or with specific type of display (Direct, Non Stop, By Departure Time, By Elapsed Time, By Arrival Time), or for a default carrier biased routing without any specific type of display.

**Issues**

* None

**Future Considerations**

* The entire Availability Family use cases will be reviewed and updated.
* Availability sorting rules to take into account the requester POS information as part of the rule conditions.

# Elaborations

The purpose of this use case is to provide alternative displays of product availability depending on the subscriber’s preferences. Display of availability may be required due to a number of reasons but is commonly needed by Sales & Service and other external systems such as GDS and Other Airlines. The order of the displayed availability is typically biased in order to present the most beneficial product to the subscriber, higher in the list. Therefore this use case can be summarised as providing different sorting preferences for the display and presentation of the alternative travel options available.

The sorting rules will depend on the subscriber’s preferences which are defined by providing a scoring scheme based. The penalties depend on the specific travel options such as the number of stops, the marketing and operating carriers for each part of the travel option among others. These penalty points will be stored in HA as HA agreements on a per subscriber basis and need to be used before every sort request. To provide an efficient means accessing these values they should be fetched from HA at start-up and cached in web logic.

In order to measure the performance of the sorting process we must have the capability to optionally enable diagnostics that dump the time it takes to sort flights during a request. The expectation is that in all cases, it is possible to sort 1 week of city pair availability within 1ms.

The sorting of availability upon a request is optional. A request may not require any sorting at all as this may be useful for other functionality such as Multi-day In the cases where it is requested but not defined the system falls back to a default sorting order which is also specified in HA. A subscriber parameter namely, *Default\_Routing\_Sort\_Order* is used to hold this value.

The following flow chart shows the outline of how the availability sorting is performed based on the subscriber’s parameter as setup in HA.

Additionally the request for product availability display may be a biased or unbiased request. As discussed above this will affect how the products are sorted based on their departure and arrival time.



Currently the availability search and sorting is performed by the *InventoryEnquirer* service. The *SearchForFlightAvailability* operation performs this task. An optional indicator namely, *BiasedDisplayInd*, has been added to the *Searchinfo* element of the input to the operation to show whether a biased or unbiased list is requested. It is this service that needs to be extended to implement this use case.

The core task of this use case is calculating the total penalties associated with each one of the travel options offered. To perform this, the following activities need to take place for each travel option considered:

* Get the subscriber’s specific penalty points for the various carries and options from HA. This needs to be done only once for all travel options and must be cached in WebLogic for efficient access.
* The current process fetches routing from coherence for host and will determine routing using Djikstra for OA+Host. This results in the list of travel options.
* At the point of sorting we ALREADY have a list of travel options. State this is a prerequisite
* Use the legs, segments and the associated operating and marketing carriers. HIAS already has this data in the sched.seg cache in WebLogic.
* Calculate and aggregate the penalty points for each city pair.
* Sort the travel options based on the total penalties calculated.
* It is possible that the request for the travel options specifies a maximum page size. That means that once the options are sorted they are they are accessed one page at a time with the ability to do move downs.

A spreadsheet (see ref[7]) has been provided to demonstrate the above for a simple scenario. As can be seen, for each travel option the legs and their respective operating carriers, the segments and their respective carriers are needed to compute the total penalty based on the rules defined in the flows above.

### Test Cases

Definition of Done (DoD) requires that all of the following tests have been created and passed. Note that for all the test cases below the prerequisite is that the list of travel options have already been constructed.

|  |  |  |  |
| --- | --- | --- | --- |
| **Ref** | **Precondition** | **Scenario** | **Post-condition** |
| 1 | A number of travel options are selected with 2, 3 and 4 stops.  Biased sorting requested | **All operated and marketed by the subscriber. Biased sorting requested** | Calculate the total penalty points for each travel option and return the sorted travel options according the biased rule. |
| 2 | A number of travel options are selected with 2, 3 and 4 stops.  Unbiased sorting requested | **All operated and marketed by the subscriber. Unbiased sorting requested** | Calculate the total penalty points for each travel options and return the sorted travel options according the unbiased rule. |
| 3 | A number of travel options are selected with 2, 3 and 4 stops.  Biased sorting requested | **A mix of various operated and marketed legs and segments. Biased sorting requested** | Calculate the total penalty points for each travel options and return the sorted travel options according the biased rule. |
| 4 | A number of travel options are selected with 2, 3 and 4 stops.  Unbiased sorting requested | **A mix of various operated and marketed legs and segments. Unbiased sorting requested** | Calculate the total penalty points for each travel option and return the sorted travel options according the unbiased rule. |
| 5 | A number of routes are selected with 2, 3 and 4 stops.  No sorting instruction specified | **A mix of various operated and marketed legs and segments. Use the default sorting rule.** | No specific sorting rule selected. Output must be according to HA parameter  *Default\_Routing\_Sort\_Order.* |
| 6 | A number of travel options are selected with 2, 3 and 4 stops.  Biased sorting requested with a maximum page size set | **A mix of various operated and marketed legs and segments. Biased sorting requested. Maximum page size set** | Calculate the total penalty points for each travel option and return the sorted options according the biased rule. Only return the next page size worth of travel options upon every request until they are all exhausted. |

# Additional Information

Please note that this section has been added for completeness and reference purposes only. It has no direct impact on this story or the use case.

# HIAS processing for availability sorting at time of writing

Ref [3] - IAS Story Detail AVAIL.11ab - Response Sorting including EDIFACT v1.1 already outlines a major part of the requirements in this UC. However, that Story only enforces the fixed sorting order as shown in the below table. The routing types in red are excluded or not fully supported.

| Sort Order | Routing type | In scope for this story |
| --- | --- | --- |
| 1 | Host Non-Stop | Yes |
| 2 | Host Direct | Yes |
| 3 | Host Non-stop and Direct Codeshare | Yes |
| 4 | Pool (joint operation) Direct | **No (1)** |
| 5 | Host Operating to Host Operation connection | Yes |
| 6 | Host Operating to Codeshare Connection | Yes |
| 7 | Host with interline connection | Yes |
| 8 | Pool + Interline connection | **No (1)** |
| 9 | Interline non-stop and direct | **No (2)** |
| 10 | Interline to Interline connection | **Limited (3)** |

The Story also outlines the sorting within each routing type but is limited to the following fixed hierarchy:

* 1. The number of stops
  2. Departure time (default), arrival time or elapsed time as requested.

# SITA RES functionality for product offering sorting

Product displays (Schedule, Timetable, and Availability) can be completely biased (in the favor of the airline) or completely unbiased (impartial or neutral).

A biased display always gives favoured treatment to the airline by showing the flights first in the displays, regardless of the departure time.

An unbiased display lists all flights in departure time sequence without any consideration of the airline operating the flight.

User may request the totally unbiased display functions ZA, ZS, ZD and ZF that do not consider the user parameters above.

1. **User parameters**

Display order is controlled by the User Parameters URDPR1 - URDPR9. The displays are usually biased in favour of the SITA Reservations Host Airline. The usual display order is outlined in the following chart.

|  |  |
| --- | --- |
| Type | Description |
| A | Host Airline non-stop flights displayed first. |
| B | Host Airline direct flights (those that make at least one stop) displayed second. |
| C | Host Airline sponsored Pool flights displayed third. |
| D | Host-to-Host connecting flights displayed fourth. |
| E | Host to Pool connecting flights displayed fifth. |
| F | Host to Other Airline (OA) connecting flights displayed sixth. |
| G | Host sponsored Pool to OA connecting flights displayed seventh. |
| H | OA non-stop and direct flights displayed eighth. |
| I | OA to OA connecting flights displayed last. |

Within each of these priorities, flights appear in departure time sequence, from earliest to latest departure time. The display order may be modified to instead give higher priority to flights with fewer connections (user parameter URDPRX) or flights with shorter elapsed flight time (user parameter URDPRE).

User parameter URDPRE also allow host airline to define whether the sorting by elapsed time apply to all types of routings or only to connections.

User parameter URDPRM (range 0 to 1, default 0 ) is used for controlling the display priority of host marketing flights. When URDPRM = 1, host code share marketing flights have lower priority than host non-marketing flights in the display of Availability, Date Schedule and Timetable. For all routings, (direct and connection) the higher the fraction of host non-marketing flight the higher the display priority. If host marketing flight priorities of two routings are the same, the display priority is determined according to other display user parameters URDPR1 – 9, URDPRX and URDPRE.

For Oneworld Alliance airlines, user parameter URDPRO may be used (requires to turn of user parameter URDPRM) to control display order for host operating, host marketing and Oneworld member services. When URDPRO = 1, the host non-marketing flights will be displayed on the first page followed by the host code share marketing flights and ONEWORLD members flights in the Availability, Date Schedule and Timetable for all routings (direct and connection). If all type of routing co-exists, the display priority is determined according to other display user parameters URDPR1 - 9, URDPRX and URDPRE. The current POOL: table shall be used to identify ONEWORLD members' code.

1. **POOL table**

The Pool Flight Table (POOL:) defines which interline flights are pool flights. After pool flights entered into the Pool Flight Table, their priority is determined by user parameters. The following parameters specifically relating to pool flights:

URDPR3 - Pool direct flights.

URDPR6 - Host airline to pool and pool to host airline connections

URDPR8 - Pool to interline and interline to pool connections.

Pool flight association between the SITA airline and partner is established via POOL: Table entries identifying 4 categories:

* All OA airline flights
* Specific OA Airline and Flight number
* All OA airline over a City pair
* Specific OA Airline and flight number over a city-pair

The host airline can use this POOL table to identify all flights of a preferred partner, e.g., SkyTeam, OneWorld alliance, etc., for preferred availability and timetable displays.

The host airline can define a dual airline code flight using POOL table.

The change to the availability/schedule/timetable display is not immediate; it will be visible only after the weekly OAG tape load.

Example of a POOL table

POOL:L/A

POOL FLIGHT TABLE - ALL

AIRLINE/CITY PAIR

BA LHRCHI BA LHRDAL BA LHRGIG BA LHRLAX

Double airline code (dual designator).

⇨

BA LHROSA BA LHRPHL BA LHRPHX BA LHRSCL

BA LHRSFO BA LHRWAS BA LHRYUL BA LHRYYZ

DJ ADDJIB DJ DIRJIB DJ JIBADD DJ JIBDIR

HA RK ABJADD HA RK ABJFIH HA RK ABJNBO HA RK ADDABJ

HA LH ADDFRA HA DJ ADDJIB HA KQ ADDNBO HA IF ADDSXF

HA RK FIHABJ HA LH FRAADD HA DJ JIBADD HA RK NBOABJ

LH FRACHI LH FRAGIG LH FRAJFK LH FRALAX

LH FRAOSA LH FRAPHL LH FRAPHX LH FRASCL

LH FRASFO LH FRAWAS LH FRAYYZ

AIRLINE/FLIGHT NUMBER

BA HA 123

AIRLINE/FLIGHT NUMBER/CITY PAIR

BA 005 / LONOSA BA 073 / LONYYZ BA 095 / LONYUL

BA 283 / LONSFO BA 293 / LONMIA BA 293 / LONSCL

LH 401 / JFKFRA LH 403 / JFKFRA LH 428 / FRAATL

LH 537 / ADDFRA