

# Release Notes: Release Ready

SabreSonic CSS Digital Connect

Shop & Book, Manage Your Booking, Modify Trip Options

Version 3.3



#### Software version 3.3

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Release Notes

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# Introduction

# **1.1 Document Overview**

This document contains release notes information for *SabreSonic*® *CSS Digital Connect v3.3*. Read this document so that you are aware of changes to the solution.

# **1.2 Release Identification**

Release Version	Type (Major, Minor, Maintenance, or Patch)	Date	Approved By	Description of Change
3.3	Minor	August 2017	Joyce Schofield	

# **Release Features**

# **2.1 Summary of Features**

*Digital Connect* v3.3 includes the following new and enhanced features by using *Digital Connect* 3.3 services:

# 2.2 Ancillaries

# 2.2.1 Ancillary bundles with Seats in the Manage Your Booking – Modify Trip Options flow

Currently in the Manage Your Booking – Modify Trip Options flow (MYB: MTO) we are offering for sale:

- Ancillaries (including standalone);
- Ancillary bundles (including standalone) without Seats;
- Premium chargeable seats.

This feature will support selling Ancillary Bundles with Seats in the Manage Your Booking – Modify Trip Options flow (MYB: MTO). Passenger will be able to purchase Ancillary Bundles with Seats no Ancillary Bundle with Seat or a Premium Seat was purchased in the original booking. Ancillary Bundles with Seats

There will be also an option to remove selected Ancillary Bundles with Seats before purchase if they were added in the MYB:MTO Flow. There will however not be an option to refund or cancel previously purchases ones.

Please note:

- 1. Ancillary Bundle with Seat cannot be added if the passenger previously purchased Ancillary Bundle with Seat or a Premium Seat.
- 2. Premium Seat associated with Ancillary Bundle with Seat cannot be removed after purchase.
- 3. If Ancillary Bundle with Seat is selected then *Digital Connect* will return Premium Seats as available with an 100% discounted price, meaning \$0 on it and all other free seats will be blocked (unavailable)

The API will be changed to reflect retrieve, offer and select Ancillary Bundle with Seat functionalities in the MTO flow.

#### 2.2.1.1 Prerequisites

- The airline must be a subscriber of Dynamic Retailer.
- Ancillary Bundle with Seat must be filed via ATPCO and/or Merchandising Manager.
- The aircraft seat map must be configured to display Premium (paid) Seats.
- The airline must have Ancillary Bundle with Seat enabled.

- The MYB:MTO flow must be initialized via the Ancillary\_MTO flow. Ancillary Bundle with Seat will not be returned if the flow is initialized via the Seats\_MTO flow.
- The passenger does not have Ancillary Bundle with Seat in the original booking for all segments/portions.
- The passenger does not have a Premium Seat in the original booking for all segments/portions.

#### 2.2.1.2 Limitations

- 1. Ancillary Bundle with Seat will be offered on a sector and portion level.
- 2. Change of gauge flight will not be supported.

# 2.2.1.3 Highlights

Both workflows are supported:

- Workflow 1: ancillaries -> seats -> purchase;
- Workflow 2: seats -> ancillaries -> purchase.

- 1. The airline retrieves PNR information and initializes Manage Your Booking Modify Trip Options (MYB:MTO) Flow (with verification of MYB Rules) by calling:
  - a. /pnr/mto/ancillaries for Ancillaries flow where the passenger can managed ancillaries and seats;
- 2. The airline calls /pnr/mto/products/ancillaries GET to obtain list of ancillaries available for the currently selected itinerary.
  - New feature Ancillary Bundle with Seat are filtered out either per passenger/segment or passenger/portion.
     The Airline formats information about available ancillary bundles with seats to the passenger.
- 3. When the passenger selects bundle(s) the airline calls /pnr/mto/products/ancillaries POST. The airline validates if there is no conflict in selected single ancillaries and bundles (the same benefit cannot be selected twice by the passenger).
- 4. The airline calls /products/mto/seats GET to obtain seat map for the currently selected itinerary. If the passenger has selected seat bundle(s) as part of /products/mto/ancillaries POST, then GET seat json response will return "premium.seat.not.selected.for.seat.bundle" warning message to indicate that Premium seat has to be selected by the passenger.
- 5. When the passenger selects (the premium) seats, the airline calls POST /pnr/mto/products/seats to add seats selected by the passenger to the itinerary. If no premium seat being selected as part of POST /pnr/mto/products/seats, the response will return "premium.seat.not.selected.for.seat.bundle" warning message to indicate that Premium seat has to be selected by the passenger.
- 6. When the passenger indicates that shopping is complete the airline obtains available payment options for the current itinerary by calling /pnr/mto/paymentOptions GET. The airline can format the information for display to the passenger.

<sup>2.2.1.3.1</sup> Workflow 1 (seat bundle reservation via /products/mto/ancillaries POST first, then seat selection):

- 7. When the passenger selects form of payment, completes the payment and decides to purchase, the airline initiates the purchase and ticketing process by calling /pnr/mto/purchase POST. If payment/refund is successful, the PNR and other supporting documents are issued/refunded, and the airline's application receives results indicating success.
- 8. The response indicates whether the purchase is successful. The airline formats this information for display to the passenger.
- 9. The airline can call /pnr GET to retrieve PNR details, which can be formatted for display to the passenger.

#### 2.2.1.3.2 Workflow 2 (seat selection first, then seat bundle reservation):

- 1. The airline retrieves PNR information and initializes Manage Your Booking Modify Trip Options (MYB:MTO) Flow (with verification of MYB Rules) by calling:
  - a. /pnr/mto/seats for Seat flow where the passenger can managed ancillaries and seats;
- 2. The passenger shops for flights and builds an itinerary.
- 3. The airline calls /pnr/mto/products/seats GET to obtain seat map for the currently selected itinerary.
- 4. When the passenger selects (the premium) seat, the airline calls POST /pnr/mto/products/seats to add seats selected by the passenger to the itinerary.
- 5. The airline calls /pnr/mto/products/ancillaries GET to obtain list of ancillaries available for the currently selected itinerary.
  - b. New feature Seat Bundles are filtered out either per passenger/segment or passenger/portion. The Airline formats information about available ancillary bundles to the passenger.
- 6. When the passenger selects bundle(s) the airline calls /pnr/mto/products/ancillaries POST. The airline validates if there is no conflict in selected single ancillaries and bundles (the same benefit cannot be selected twice by the passenger) and if there is no conflict in selected premium seat and bundle.
- 7. The airline initiates the purchase and ticketing process by calling /pnr/mto/purchase POST; if payment/refund is successful, the PNR and other supporting documents are issued/refunded, and the airline's application receives results indicating success.
- 8. The response indicates whether the purchase is successful. The airline formats this information for display to the passenger.
- 9. The airline can call /pnr GET to retrieve PNR details, which can be formatted for display to the passenger.

# 2.2.1.4 Error handling

If 4G command fails to add seat to the segment to which the Seat Bundle is associated the *Digital Connect* will retain the original seat selection.

# 2.2.1.5 API Modifications

Service Name	Operation	Change
/pnr/mto/products/ancillaries	GET	GET - filters out Seat Bundles per passenger/segment or passenger/portion,

	POST	single and multiple bundles, single and multiple passengers.
		POST - Array of Messages has been added.
		New message warning type code has been added: premium.seat.not.selected.for.seat.bundle
/pnr/mto/product/seats	GET POST	GET - filters out Seat Bundles per passenger/segment or passenger/portion, single and multiple bundles, single and multiple passengers.
		New message has been added: No premium seat available.
		POST - Array of Messages has been added.
/pnr/mto/paymentOptions	GET POST	Array of Messages has been added.
/pnr/mto/purchase	POST	Array of Messages has been added.

# 2.3 Dynamic Retailer

# 2.3.1 Flight Promotions

Airlines create promotions to increase sale and acquire new customers. By discounting existing fares they encourage people to travel. Certain routes or flights can be managed better and create higher revenue if they get promoted.

Digital Connect v3.1 enabled managing of Promo Codes via Dynamic Retailer Flight Promotions.

This feature introduces an option of tour code override and additional remark input to the PNR.

• If the tour code field is provided - it will be stored in remarks and sent in Ticketing command during purchase and stored in the VCR (for BNPL tour code will be read from the remark and used during purchase in MYB: BNPL).

• If additional remark field is provided - it will be added to the PNR.

Before that feature has been introduced during purchase – in B2C and B2C: BNPL tour code (retrieved by /purchase POST RS: *DocumentPaymentDetails.tourCode*) was not taken from downline system – promo code was being sent as a tour code. Now there is an option to override tour code with code provided by the airline.

Both new fields are optional - if not provided, no action needed from Digital Connect.

This functionality is applicable to the following flows:

- The Revenue Booking Flow (B2C);
- The Revenue: Book Now Pay Later Flow (B2C: BNPL);
- The Manage Your Booking Book Now Pay Later Flow (MYB: BNPL).

#### 2.3.1.1 Prerequisites

- Dynamic Retailer needs to be activated with Flight Promotions.
- Dynamic Retailer Flight Promotions has to be configured.
- Tour code/ additional remark needs to be defined in the Flight Promotions UI.
- Pricing via SE Reprice.

#### 2.3.1.2 Limitations

• Points as a Form of payment is not supported for bookings with Flight Promotions.

# 2.3.1.3 Highlights

- 1. In the standard Revenue Booking flow (B2C) during POST /purchase operation Digital Connect verifies whether additional tour code override or remarks are present in RepriceContext element in RepriceRS. These elements can be configured in Flight Promotions UI. If the elements are present then the remarks and tour code override remark are being added to the reservation. Additionally the tour code is passed in the Ticketing command instead of the promo code.
- 2. In the Revenue Booking Book Now Pay Later flow (B2C: BNPL) (when the reservation is put on hold) during POST /purchase operation Digital Connect verifies whether additional tour code override or remarks are present in RepriceContext element in RepriceRS. These elements can be configured in Flight Promotions UI. If the elements are present then the remarks and tour code override remark are being added to the reservation.
- 3. In the Manage Your Booking Book Now Pay Later flow (MYB: BNPL) the tour code override is retrieved from on-hold booking remark. If present it is passed in the Ticketing command as a tour code during POST /purchase call.

# 2.4 Loyalty

# 2.4.1 An option to purchase ancillaries in fixed points

When this feature is implemented *Digital Connect* will allow the price of ancillaries in points to be defined as a fixed points, or dynamic conversion based on the OC fee filing ancillaries with fixed type of conversion. Airlines will be able to simplify their OC filing and use the same cash price across all points of sale, whilst achieving the desired price in points as well.

The feature will solve the calculation problem as conversion and rounding logic will be done on downline system side (QueryAncillaries and GetSeatMap services). This will be for both the Dynamic Conversion as well as Fixed Price Ancillaries. *Digital Connect* will be using points in the TotalFee Section as is presented from downline system in both cases.

Digital Connect needs to read:

• TotalFee,

- Cash,
- Points,
- Discounts in cash,
- Discounts in points.

In terms of the payfields segment the conversion ratio (Item-Rate) is affected as below:

- For Fixed Points Ancillaries it should be sent as 0.0. This is for base fare for Ancillaries.
- For Dynamic Awards for Ancillairies it should be sent as it is received from the downline system.
- For Ancillaries taxes it should be sent as it is received from the downline system for both Fixed Price and for Dynamic Awards.

This functionality works in the following flows:

- Points in the Revenue Booking Flow (B2C);
- The Redemption Booking Flow (RBE);
- The Manage Your Booking Modify Trip Options Flow (MYB: MTO);
- The Manage Your Booking Frequent Flyer Upgrade Flow (MYB: FQTU);
- The Manage Your Booking Change Itinerary Flow (MYB: CI) date/flight/route changes;
- The Manage Your Booking Cancel Refund Flow (MYB: CR) ticket refunds.

#### 2.4.1.1 Prerequisites

The airline needs to upload ACD (Award Conversion Data) file with ancillaries filed with Y fixed type conversion.

# 2.4.1.2 Highlights

Airlines can support passenger paying with fixed points for ancillaries and/or seats (as a single or multiple Form of Payment) in the Revenue Flow (B2C) with the following sequence of *Digital Connect* service calls:

- 1. The airline obtains search criteria from the passenger and submits a /products/air/search request, POST operation to get a list of flights matching the search criteria.
- 2. Airline UI displays the returned flights to the passenger on the Flights page.
- 3. After the passenger selects one or more flights, the airline submits the /products/air POST operation to add the flight(s) to the itinerary and store the itinerary in the session.
- 4. The airline prompts passenger for passenger details e.g. passport information.
- 5. The airline uses /passengers POST to add passenger to the itinerary.
- 6. The airline calls /products/ancillaries GET to obtain list of ancillaries available for the currently selected itinerary (returned as per configuration cash only, points only or cash or points). The Airline formats information about available inventory and sold out ancillaries to the passenger.
- 7. When the passenger selects ancillaries, the airline calls /products/ancillaries POST and validates the quantity of the ancillaries selected by the passenger if equal or lower than available inventory. If the validation is successful this operation adds ancillaries to the reservation.

- The airline calls /products/seats GET to obtain seat map for the currently selected itinerary (returned as per configuration cash only, points only or cash or points).
   The Airline formats information about the seat map and available seats to the passenger.
- 9. When the passenger selects seats, the airline calls POST /products/seats to add seats selected by the passenger to the itinerary.
- 10. The airline can call /products GET operation to obtain a current list, with prices of products that the passenger has added to the itinerary and use this information to build and display a shopping cart.
- 11. When the passenger indicates that modified shopping is complete, the airline calls the /paymentOptions GET service to obtain available forms of payment (including Award FOP dependent on configuration could return LP or/and FF award payment, but the passenger cannot pay with Award without switching to points). If the passenger previously switched to points, only Award will be returned.
- 12. The passenger supplies frequent flyer credentials, and the airline uses the /login POST service to log the passenger in (login can be done at any previous stages).
- 13. The airline uses /login GET service to retrieve the passenger profile details, including point balance.
- 14. The airline switches to points modes and made re-pricing by calling /product PUT.
- 15. The airline calls the /paymentOptions GET service to retrieves available forms of payment. In POINTS mode the results will include only award payment types (dependent on configuration - could return LP or/and FF award payment).
- 16. When the passenger selects type of payment, the airline calls GET /paymentOptions/details/AWARD to obtain ancillary toggles (possible cash/points options per ancillary/seat group). In addition, this service also returns the current (selected or initial) current ancillary/seat toggle statuses.
- 17. The passenger can set the proper amount the EMDs (ancillaries and seats) by using toggles (points or cash without any division). The airline calls /paymentOptions/details/award POST and provides information about toggles positions. The response will indicate if the passenger selection is being saved.
- 18. If Multiple forms of payment identified based on user selection, the POST /paymentOptions is required to obtain the second cash payment options with residual cash values. In request AWARD payment has to be sent with correct points amount based on current user selection (done via POST /paymentOptions/details/AWARD).
- 19. Airline calls /purchase POST to initiate the payment and ticketing process. The process will confirm that the passenger's point balance is sufficient to pay for the itinerary. If user did not switch to points then error will be returned "Award FOP not allowed".
- 20. If payment is successful, the PNR and other supporting documents are issued, and the airline's application receives results indicating success.
- 21. The airline can call /pnr GET to retrieve PNR details, which can be formatted for display to the passenger.

# 2.4.1.3 API Modifications

JSON schema was not affected by this feature. No changes involved.

# 2.4.2 Flat Fee Upgrade with points

*Digital Connect* v3.3 introduces new functionality that gives airlines additional flexibility in their loyalty programs. Frequent Fliers will now have an ability to purchase a cabin upgrade using their awards points only.

Flat Fee Upgrade Flow (FFU) gives passengers an option to upgrade their existing booking to a higher cabin class for a flat fee. The flat fee amount is in most cases cheaper than the actual upgrade amount and usually more restrictive as the airline can decide to enforce the fare rules of the original fare rather than the fare rules associated with the higher cabin. FFU feature allows passengers to purchase an upgrade if seats are available in a dedicated booking class. This flow allows airlines to maximize revenue by selling available seats in higher cabins.

Currently *Digital Connect* offers only cash payment in the FFU flow. When this feature is implemented airlines will have an option to enable award payments (loyalty points) for Flat Fee Upgrades. Flat Fee Upgrade flow can be either configured as cash or points so passengers on the Payment page (on the airline's UI) does not have an option to decide how he wants to pay for his upgrade, the airline defines the form of payment.

# 2.4.2.1 Prerequisites

- Airline must enabled either FFU or FQTU can't enable both.
- The airline needs to map the booking classes for the relevant upgrade booking class.
- The airline needs to file upgrade as OC/AE in ATPCO/Merchandising Manager.

#### 2.4.2.2 Limitations

- FFU will be supported only on own airlines' carrier will not be supported for codeshare or interline carriers.
- All passengers in the PNR must be upgraded as *Digital Connect* does not support split PNR functionality.
- Airline must file ancillary per segment and not itinerary part
- Only EMD-A (associated with the flight) can be issued for the upgrade.
- Only free of charge seats are supported in the new upgraded cabin.

#### 2.4.2.3 Error handling

Added warnings:

- For FFU upgrade flow can be paid only with points where carrier has configured as points only payment.
- Upgrade host command executed "WC" and upgrade is successful, host sees this as a change in flight and removes all AE items for that specific flight.
- Upgrade host command executed "WC" and upgrade is successful, host sees this as a change in flight and removes all AE items [including paid seats] for that specific flight.

Added messages:

• Booking contains insurance. If passenger decides to upgrade their itinerary they need to call the airline to have insurance manually modified.

# 2.4.2.4 Highlights

#### 2.4.2.4.1 The Manage Your Booking - Upgrade flow (MYB-FFU)

- 1. The airline calls /pnr service GET operation that returns information for the PNR specified in the parameters.
- 2. When the passenger clicks the Upgrade link *Digital Connect* calls /pnr/upgrade GET and evaluates status of upgrade segment e.g. confirmed upgrade, no upgrade selected. Then FFU flow will be initialized. If all the rules checks pass, the airline calls /pnr/upgrade/offers GET and shops for any upgrade offers available. The airline UI re-direct the passenger to the Upgrade page where the upgrade offers are displayed.
- 3. *Digital Connect* retrieves the available upgrade AE items filed through ATPCO or Merchandising Manager. The airline can control AE item availability also by tier level.
- 4. For each available upgrade AE item, *Digital Connect* retrieves the associated upgrade booking classes (rbdMapper) and checks their availability for the requested segments performing an upgrade command via host.
- 5. If there is availability for the upgrade booking class, *Digital Connect* returns the upgrade offers (represented by ancillaries). *Digital Connect* receives offers per segment, so the exact prices applied to the itinerary are known. Additionally, if there is no confirmed offer for the particular segment, *Digital Connect* returns information why there is no upgrade offers returned.
- 6. If the passenger is not logged in and the passenger makes the selection the airline shows the login component and prompts the passenger for the login credentials (the passenger needs to be logged in before selection of any FFU upgrades as this is a points-only flow). The airline calls /login POST to log in passenger to his FF account and to retrieve the passenger's points balance.
- 7. When the passenger selects the upgrade option, *Digital Connect* calls POST /pnr/upgrade/offers to select an upgrade offer. *Digital Connect* validates if the passenger is logged in and has sufficient point balance for the selected upgrade offer(s).
- 8. The airline calls /pnr/upgrade/products/seats GET to obtain seat map only for the new confirmed cabin class upgrades.
- 9. When the passenger selects seats *Digital Connect* calls POST /pnr/upgrade/products/seats to add new seats selected by the passenger.
- 10. The airline can call /pnr/upgrade/products GET operation to obtain a current list, with prices of upgrades (confirmed) that the passenger has added to the itinerary and uses this information to build and display the shopping cart.
- 11. When the passenger indicates that shopping is complete the airline obtains available payment options for the current itinerary by calling /pnr/upgrade/paymentOptions GET. FFU flow is either configured as cash or points so the passenger on the payment page does not have an option to decide how he or she wants to pay for the upgrade, the airline defines the form of payment

On the Payment Page the airline can inform the passenger which of the selected upgrades are currently confirmed and that the passenger's point balance will be charged for these. Airline UI can also indicates which upgrades are not currently available and that passenger has been added to the waitlist.

- 12. When the passenger selects points as the type of payment, the airline calls GET /pnr/upgrade/paymentOptions/details/AWARD to obtain ancillary toggle that have only points option active.
- 13. When the passenger selects form of payment, completes the payment and decides to purchase, the airline initiates the purchase by calling /purchase POST. If authorization is successful, the /pnr/upgrade/purchase service will add remarks to the PNR and Issue EMD-A's for the confirmed upgrade.
  - a. Response shows upgrade in the currency they used (Points only)
  - b. Error handling for failed purchases
- 14. The purchase response also contains information about the status of the requested upgrade (UpgradeInfo section in the PNR). The airline will be able to display a message reminding the passenger that he/she is on the upgrade waiting list, and a message stating the number of miles that will be redeemed if the requested upgrade is confirmed.

# 2.4.2.5 API Modifications

Service Name	Operation	Change
/pnr/upgrade/purchase	POST	Added objects AwardPayment.

# 2.4.3 Upgrade flow (FQTU/FFU) - Shopping cart enhancement

*Digital Connect* v3.3 will bring an enhancement of the existing shopping cart feature. That extension will expose the upgraded cabin and booking class information with a reference to the existing original cabin and booking class data currently exposed in the shopping cart.

There will be *UpgradeProductInformation* section with appropriate data as per contract - dedicated implementation according to offer status (waitlisted or confirmed indicator):

- In the Itinerary information for confirmed upgrades this update will provide the upgraded cabin and booking class information;
- For waitlisted offers, itinerary will remain unchanged.

If the payment authorization is successful purchase service will add the flight and date details to FFU/FQTU upgrade remarks.

This functionality will work in the following flows:

- Manage Your Booking Change Itinerary Flow (MYB: CI);
- Manage Your Booking Modify Trip Options Flow (MYB: MTO) MTO flow displays the option to purchase upgrade and if passenger selects will be redirected to FFU/FQTU flow, no ability to merge upgrade and existing MTO flow.

• Manage Your Booking – Book Now Pay Later Flow (MYB: BNPL).

#### 2.4.3.1 Highlights

- 1. The passenger can retrieve a booking either by supplying basic PNR information or by logging in to a Frequent Flyer account.
- 2. When the passenger clicks the Upgrade link *Digital Connect* calls /pnr/upgrade GET and evaluates again if the passenger can proceed with upgrade flow. If all the MYB rules checks pass, the airline calls /pnr/upgrade/offers GET and shops for any upgrade offers available. Check configurations and if retrieved offers should be presented in point or in cash.
- 3. *Digital Connect* retrieves the available upgrade AE items filed through ATPCO or Merchandising Manager. The airline can control AE item availability also by tier level.
- 4. For each available upgrade AE item, *Digital Connect* retrieves the associated upgrade booking classes (rbdMapper) and checks their availability for the requested segments performing an upgrade command via host.
- 5. If there is availability for the upgrade booking class, *Digital Connect* returns the upgrade offers (represented by ancillaries). *Digital Connect* receives offers per segment, so the exact prices applied to the itinerary are known.
- 6. If there is no confirmed offer for the particular segment, *Digital Connect* returns information why there is no upgrade offers returned.
- 7. If the passenger is not logged in and the passenger makes the selection the airline shows the login component and prompts the passenger for the login credentials (the passenger needs to be logged in before making all selects of any FFU upgrades as this is a points-only flow). The airline calls /login POST to log in passenger to his FF account and to retrieve the passenger's points balance.
- 8. When the passenger selects the upgrade option, *Digital Connect* calls POST /pnr/upgrade/offers to select an upgrade offer. *Digital Connect* validates if the passenger is logged in and has sufficient point balance for the selected upgrade offer(s) including waitlisted segment(s).
- 9. The airline calls /pnr/upgrade/products/seats GET to obtain seat map only for the new confirmed cabin class upgrades.
- 10. When the passenger selects seats *Digital Connect* calls POST /pnr/upgrade/products/seats to add new seats selected by the passenger.
- 11. The airline can call /pnr/upgrade/products GET operation to obtain a current list, with prices of confirmed upgrades that the passenger has added to the itinerary and uses this information to build and display the shopping cart.
- 12. When the passenger indicates that shopping is complete the airline obtains available payment options for the current itinerary by calling /pnr/upgrade/paymentOptions GET. Response will indicate that only points are available as the form of payment as the FQTU is points-only flow. On the Payment Page the airline can inform the passenger which of the selected upgrades are currently confirmed and that the passenger's point balance will be charged for these. Airline UI can also indicates which upgrades are not currently available and that passenger has been added to the waitlist.
- 13. When the passenger selects points as the type of payment, the airline calls GET /paymentOptions/details/AWARD to obtain ancillary toggle that have only points option active.

- 14. When the passenger selects form of payment, completes the payment and decides to purchase, the airline initiates the purchase by calling /purchase POST. If authorization is successful, the /purchase service will add remarks to the PNR and Issue EMD-A's for the confirmed upgrade.
- 15. The purchase response also contains information about the status of the requested upgrade (UpgradeInfo section in the PNR). New enhancement additional information about original and upgraded booking class for Travel Part will be added:
  - a. UpgradeProductInformation.originalBookingClass;
  - b. UpgradeProductInformation.originalCabinClass;
  - c. UpgradeProductInformation.selectedBookingClass;
  - d. UpgradeProductInformation.selectedCabinClass;
  - e. UpgradeProductInformation.status.

Service Name	Operation	Change	
/pnr/upgrade /pnr/upgrade/products	GET GET	Added information about original and upgraded booking class for Travel Part:	
/pnr/upgrade/purchase	POST	<ul> <li>UpgradeProductInformation.originalBookingClass (string, optional): Original booking class of the travel part.</li> </ul>	
		<ul> <li>UpgradeProductInformation.originalCabinClass (string, optional): Original cabin class of the travel part. ENUM = ['Economy', 'PremiumEconomy', 'Business', 'First']</li> </ul>	
		<ul> <li>UpgradeProductInformation.selectedBookingClass (string, optional): Booking class of the upgraded travel part.</li> </ul>	
		<ul> <li>UpgradeProductInformation.selectedCabinClass (string, optional): Cabin class of the upgraded travel part. ENUM = ['Economy', 'PremiumEconomy', 'Business', 'First'].</li> </ul>	
		<ul> <li>UpgradeProductInformation.status (string, optional): Status of the upgrade offer. ENUM = ['CONFIRMED', 'REJECTED', 'NOT_OFFERED', 'WAITLISTED', 'ALREADY_WAITLISTED', 'ALREADY_CONFIRMED', 'NOT_REQUESTED']</li> </ul>	

#### 2.4.3.2 API Modification

# 2.5 Offload standalone

For airlines that have implemented this feature that enhancement gives an option to offer an Offload for passengers, even if the reservation is not an IROP affected and airline does not use IROP functionality.

Passengers will be able to perform an Offload in order to make changes in the reservation (please note that currently reservation with the CKIN status cannot be modified online).

# 2.5.1 Highlights

*Digital Connect* v3.3 brings changes in the configuration and validation to make the Offload service independent from the IROP.

Offload standalone service can be enabled via mutation rules: OFFLOAD\_GUEST and OFFLOAD\_LOGGEDIN.

Sample configuration to enable:

```
<MutationRule name="OFFLOAD_GUEST">
<expression>alwaysTrue</expression>
</MutationRule>
```

Additionally there will is a patch script that is disabling (setting mutation rule with expression *alwaysFalse*) this service for previous Airlines/Storefronts that have been using IROP.

#### 2.5.1.1 API Modifications

JSON schema was not affected by this feature. No changes involved.

# 2.6 Online Companion Fares

Airlines offer multiple ways to incentivize passengers to purchase airfares. One of these ways is through a companion fare which is a promotional airfare under which a second ticket (for the same flight and for the same date) is sold at a discount. A discount can be a percentage off, like 50% to 100% or a flat rate such as \$99.

Airlines offer this for Economy and Business class to boost booking in markets and during times of the year where travel purchases may be historically lower.

By using this feature airlines will be able to file fares for companion fare discounts and their travelers will be able to purchase those itineraries online:

- Airline will control when companion fares will be offered and any restrictions associated with the fare.
- Companion fare restrictions, such as companion fare not eligible on already discounted fares, are controlled by inventory systems. No manipulation of fare returned will be performed by *Digital Connect*.

While Sabre has supported the IATA standard Passenger Types for companion fares, CMA and CMP, the online booking channel did not fully support all of the display requirements to disclose the companion fare. With this enhancement search request accepts new passenger types, CMA & CMP and use those for shopping. The service will return flights that have companion fares filed. If both companion and non-companion fares are filed, service will only return the companion fares, or service will return all adult

fares if no companion fares are filed and an indicator that no companion fares were found. Only the air portion of travel will use the CMA/CMP passenger types. All other items (insurance, ancillaries, seats, cars, etc.) will use the ADT passenger type.

- The service only handles the CMA/CMP combination for adult passengers in a booking. Both must be present and no other adult passenger type can be present. This will limit companion fares to a single one per booking. Children and infants can accompany a companion booking based on the same restrictions in place for the airline.
- Passenger types cannot be mixed in a booking so all travel must be of companion fares (for adults) or standard adult fares. This functionality will prevent mixed fares from appearing within the same itinerary, i.e. an outbound flight has companion fares and an inbound flight has adult fares, the adult fares will not be offered.

This functionality applies to the following flows:

- The Revenue Booking Flow (B2C) including Book Now Pay Later (BNPL);
- The Manage Your Booking Book Now Pay Later Flow (MYB: BNPL);
- The Manage Your Booking Cancel and Refund (MYB: CR): A companion booking can be cancelled within the restraints of the current services. For full functionality of a cancellation, the travel bank creation functionality must be completed.
- The Manage Your Booking Modify Trip Options Flow (MYB: MTO).

# 2.6.1 Prerequisites

- Airline has filed companion fares using the standard IATA passenger types of CMA and CMP.
- Airline has activated AER in support of any cancel within *Digital Connect*. Exchanges are out of scope.

# 2.6.2 Limitations

- Metasearch is not supported.
- Strike through pricing and mark up pricing is not supported.
- Interline and codeshare flights are not supported.
- Redemption bookings are not supported.
- Upsell and upgrade are not supported.
- Post booking upgrades: FFU and FQTU are not supported
- Exchanges are not supported.
- Agency bookings are not supported.
- Negotiated fares are not supported.
- Bundled itineraries are not supported.
- Fare basis codes are not supported for pricing of companion fares. This limits the ability to offer companion fares on multiple brands.

# 2.6.3 Highlights

When a shopping request is made:

- 1. If only companion fares are returned from IntelliSell then all fares are returned by *Digital Connect*.
- 2. If both companion fares and adult fares are returned by IntelliSell then only companion fares are returned by *Digital Connect* with a message indicating that adult fares were removed from the results.
- 3. If only adult fares are returned by IntelliSell then adult fares are returned by *Digital Connect* with a message indicating that no companion fares were found and full fares are being returned. This allows a booking to be continued.

# 2.6.3.1 The Revenue Booking flow (B2C):

- 1. The airline obtains search criteria from the passenger and submits a /products/air/search request, POST operation to get a list of flights matching the search criteria.
  - a. Search Flight API has been updated to accommodate passing of companion passenger types: CMA (adult with companion) and CMP (adult companion).
    - i. Maximum of two adult passengers allowed in a companion fare booking (both must be present): CMA and CMP.
    - ii. No other adult passenger type can be in the booking. This includes adult, military, senior, etc.
  - iii. Children and infants can be included up to current rules and limitations.
  - iv. New passenger types should be added in the PassengerTypes table.
  - 2. Airline UI displays the returned flights to the passenger on the Flights page.
  - 3. After the passenger selects one or more flights, the airline submits the /products/air POST operation to add the flight(s) to the itinerary and store the itinerary in the session.
    - a. For companion fares it has to be priced by brand (doesn't support by farebasis code). The configuration (sat.passenger.companion.ignoreFareBasisCodeInReprice) has to be enabled to ignore farebasis code being passed in SE RepriceRQ.

Note: For airlines utilizing *Digital Connect* and own their own UI, the airline will facilitate the messaging and navigation of where the passenger lands if there are no fares available for the CMA and CMP passenger types.

- 4. The airline prompts passenger for passenger details e.g. passport information.
- 5. The airline uses /passengers POST to add passenger to the itinerary.
  - a. For a companion fare search type the passenger type has to be CMA and CMP, not Adult.
  - b. The airline will also have an ability to add configuration for CMA/CMP specific passenger type to make the certain field in passenger service as required or not.
- 6. The airline calls /products/ancillaries GET to obtain list of ancillaries available for the currently selected itinerary.

The airline formats information about available ancillaries to the passenger.

a. Ancillary shopping can be done as adult or companion based on a configuration (sat.passenger.companion.ancillaries.shopByCompanionType). If this configuration is disabled, then ancillary shopping will be done based on the passenger type specified in configuration "sat.passenger.companion.fallbackPassengerType", by default it is "ADT".

- b. Regardless of ancillary shopping is done by adult or CMA/CMP passenger type, the JSON response for GET ancillary will be converted it to CMA/CMP (to support the requirement when ancillaries are not filed for companion passenger types and airlines wants to sell ancillaries with adult price without any discounts compare to airfare).
- 7. When the passenger selects ancillaries the airline calls /products/ancillaries POST to add ancillaries selected by the passenger to the itinerary.
  - a. In order to successful POST of ancillary, passenger types CMA/CMP has to be added in SSR.json.
  - 8. The airline calls /products/seats GET to obtain Seat Map for the currently selected itinerary. The airline formats Seat Map to the passenger.
  - 9. When the passenger selects seats, the airline calls POST /products/seats to add seats selected by the passenger to the itinerary.
    - a. Similar to ancillaries, an airline can choose to offer seats with an adult or companion fare. This can be accomplished by configuration (sat.passenger.companion.seats.shopByCompanionType=false).
    - b. GetSeatMapRS with ADULT will be converted to CMA/CMP in GET /products/seats JSON response.
  - 10. The airline can call /products GET operation to obtain current list, with prices of products that the passenger has added to the itinerary and use this information to build and display a shopping cart.
    - a. Baggage information in products/cart will have passenger types as CMA/CMP. Similarly, products will have base fare breakdown for passenger types CMA/CMP, same apply for seats and ancillaries also. There will not be ADT or ADULT passenger type returned in any scenarios if it's a companion itinerary.

Note: For airlines utilizing *Digital Connect* and own their own UI, the *Digital Connect* solution will provide the data to support the price breakdown in the cart and payment summaries.

- 11. When the passenger indicates that shopping is complete the airline obtains available payment options for the current itinerary by calling /paymentOptions GET. The airline can format the information for display to the passenger.
- 12. When the passenger selects their form of payment, completes the payment and decides to purchase, the airline initiates the purchase and ticketing process by calling /purchase POST. If authorization is successful, the /purchase service will create a PNR, EMD(s), etc.
  - a. The PNR will have passenger type as CMA and CMP instead of ADT for companion itineraries..
- 13. The response indicates whether the purchase is successful. The airline formats this information for display to the passenger.

# 2.6.3.2 Error handling

1. Shopping Request /products/air/search POST

If passenger types include other adult passenger types in the request, then *Digital Connect* displays an error message enabling the airline to communicate to their passengers (via Airline UI) that these passenger types are not combinable with other passenger types.

2. Display Fares /products/air POST

The following error message will be returned in select flight response (/products/air POST) when a companion fare is sent to re-price and the response is for a different passenger type (other than CMA/CMP):

```
"status": "Complete",
"type": "BusinessLogic",
"errorCode": "ERR.SSW.PRICING.UNABLE_TO_REPRICE",
"timeStamp": "2017-04-24T14:39:26",
"message": "No companion fares were returned."
}
```

- If there are no fares available for those passenger types, then *Digital Connect* displays an error message enabling the airline to communicate to their passengers (via Airline UI) that companion fares are not available for the search criteria submitted.
- If there are no fares available for those passenger types, then *Digital Connect* displays the standard adult fares for the search criteria submitted by the passenger and shows warning message that "no CMA/CMP fare available ADT fare applicable".

Note: For airlines utilizing *Digital Connect* and own their own UI, the airline will facilitate the messaging and navigation of where the passenger lands if there are no fares available for the CMA and CMP.

# 2.6.3.3 Blocking post-booking flows:

- New rule has been created to support enabling or disabling B2C: Upgrade, B2C: Upsell, MYB: CI and MYB: FFU/FQTU flows. For this feature the configuration needs to be disabled and a message needs to be shown to the passenger to contact the Call Center.
- PNR will hold the CMA/CMP passenger types to use this rule.

Service Name	Operati on	Change
/passengers	POST	<ul> <li>@IPassengerValidationConfiguration.PassengerValidationConfigurationSource(type = "CMA"),</li> <li>@IPassengerValidationConfiguration.PassengerValidationConfigurationSource(type = "CMP") })</li> </ul>
products/air/search	POST	Request will accept CMA/CMP passenger types and validate that both are present and no other adult types. Response will always return fares by PAX type when a companion search is done.
/products/ancillaries	GET POST	Companion passenger types are not supported by ancillaries so <i>Digital Connect</i> will convert CMA/CMP passenger types into ADT for QueryAncillaries.

# 2.6.4 API Modifications

/products/seats	GET POST	Companion passenger types are not supported by ancillaries so <i>Digital Connect</i> will convert CMA/CMP passenger types into ADT for getSeatMap.	
/products/insurance	GET POST	Companion passenger types are not supported by ancillaries so <i>Digital Connect</i> will convert CMA/CMP passenger types into ADT.	
/purchase	POST	UpdateReservation – pass companion types CMA/CMP GetReservation – parse the response containing passenger information of CMA/CMP.	
/pnr	GET	Service will parse the companion passenger types and pass them in the response.	
/pnr/mto/ancillaries	GET	Service will check the passenger type and price breakdown.	
/pnr/mto/products/ ancillaries/search	GET	Companion passenger types are not supported by ancillaries so <i>Digital Connect</i> will convert CMA/CMP passenger types into ADT for QueryAncillaries.	
/pnr/mto/products/anc illaries	POST	Companion passenger types are not supported by ancillaries so <i>Digital Connect</i> will convert CMA/CMP passenger types into ADT.	
/pnr/mto/products/sea ts	GET	Companion passenger types are not supported by ancillaries so <i>Digital Connect</i> will convert CMA/CMP passenger types into ADT.	
/pnr/mto/products/sea ts	POST	Companion passenger types are not supported by ancillaries so <i>Digital Connect</i> will convert CMA/CMP passenger types into ADT.	

# 2.7 Online Insurance Offers in Post Booking flows

When this feature is implemented airlines will be able to offer and sell insurance via *Digital Connect* services independently from the purchase workflow via a standalone micro-service exposed in JSON format.

New JSON service will be based on existing /products/insurance with existing common elements added to the request.

This functionality will be available for the following flows:

- Revenue Booking Flow (B2C) after purchase (Confirmation Page),
- Manage Your Booking Modify Trip Options Flow (MYB: MTO).

# 2.7.1 Prerequisites

Insurance Vendors must be configured in Merchant Travel Service (MTS) and enabled in *Digital Connect.* This is necessary because retrieving and booking insurance involves transactions with Sabre Merchant Travel Services during which insurance quote and sell requests are sent to MTS.

# 2.7.2 Limitations

- The airline cannot be the Merchant of Record and the vendors must be configured and activated via MTS.
- Booking multiple policies in a single booking is out of scope as it is not supported by Merchant Travel Service (MTS) system.
- Booking insurance on a leg level is currently not supported as vendors in Merchant Travel Service (MTS) currently support selling Insurance on a reservation level only.
- Booking Insurance for one of multiple passenger in the reservation is not supported. Insurance will be added to all Seated passengers in the reservation.

# 2.7.3 Highlights

New insurance services are stateless and do not depend on flow. Services must be called without flows execution ID.

Airlines can provide an option to search and purchase insurance offer in post booking flows with the following sequence of *Digital Connect* calls:

- 1. The airline uses the /pnr service to enable the passenger to retrieve passenger's reservation. It returns PNR data for provided input parameters that identify the PNR.
- 2. Airline calls POST /dc/insurance/shop to determine via MTS Insurance Service if any insurance products are available for the itinerary. *Digital Connect* returns available insurance offers.
- 3. After passenger selects an insurance offer airline must call POST /dc/insurance/book to purchase insurance and add it to the PNR.
- 4. Insurance segment gets added to the PNR.
- 5. PNR will be queue placed into successful queue.

Service Name	Operation	Change
/dc/insurance/search	POST	New service that will query MTS and return all applicable insurance offers.
/dc/insurance/book	POST	New service that will book and purchase selected insurance offer.
/products/external	POST DELETE	This service was enhanced to accommodate the Insurance elements. To show the amount and product name.
/products/mto/external	POST DELETE	New service that will add products to the cart.

# 2.7.4 API Modification

# 2.8 Post-booking Operations

This section covers the services airlines use to give passengers access to booked itineraries to update them, cancel, refund or exchange. *Digital Connect* v3.3 adds and enhances the-functionality in this area in the following ways:

# 2.8.1 Cancel and Refund (Manage Your Booking: Cancel and Refund flow) - In Path Profile Creation including Travel Bank

*Digital Connect* v3.3 services will introduce an enhancement to the Manage Your Booking: Cancel and Refund Flow (MYB: CR) that allows airlines to support Travel Bank (BT) and Customer Insight (CI) in path profile creation during Cancel and Refund flow.

When a passenger cancels a flight, *Digital Connect* checks airline configuration to determine how to handle a refund. If the Form of Payment (FOP) used to pay for flights was Travel Bank or if the booking cannot be refunded to the original form of payment and the airline has configured the refund to be made to Travel Bank, *Digital Connect* will offer Travel Bank as the only possible way of receiving the refund. Passengers who can get a refund to Travel Bank only and do not possess an account but have CI account will be able to create BT account during Cancel and Refund flow. Passengers who do not possess CI and therefore BT account will be able to create both of them during Cancel and Refund flow.

Thanks to this functionality the passenger will be able to create an account without leaving the refund page (on the airline's UI) and will not have to start the refund process from the beginning but simply continue with the refund after an account creation.

#### 2.8.1.1 Prerequisites

- The airline needs to activate Customer Insight.
- The airline needs to activate Travel Bank.
- No additional setup is required for existing Travel Bank users.

# 2.8.1.2 Highlights

This feature will be active by default for existing Travel Bank clients.

#### 2.8.1.2.1 Passenger doesn't have account in Customer Insight (CI) and Travel Bank (BT)

- 1. Airline must call /pnr/cancelAndRefund to initialize Manage Your Booking Cancel and Refund Flow (MYB:CR).
  - a. Airline can ask the passenger for the final agreement to the presented refund targets.
  - b. Airline has to set the 'confirmed' flag to 'true' in order to have this call processed correctly. If not error message will be sent.
- 2. Airline must call /pnr/cancelAndRefund/cancel to send request to Automated Exchanges and Refunds to cancel the reservation and process refunds. Passenger will be informed if there is any refund to Travel Bank.
  - a. This functionality requires Refund targets data already stored in the session.

- 3. Airline calls POST /profile (with 'autologin' flag) to create a new profile.
  - a. CI account is created with data provided by the passenger.
- 4. Airline calls POST /pnr/cancelAndRefund/confirm to confirm cancellation request and proceed with cancellation.
  - a. *Digital Connect* v.3.3 will create BT account automatically. BT account will be linked with passenger's CI account.
- 5. Airline can display cancel confirmation to the passenger.

#### 2.8.1.2.2 Passenger has an account in Customer Insight (CI) but doesn't have Travel Bank (BT):

- 1. Airline must call /pnr/cancelAndRefund to initialize Manage Your Booking Cancel and Refund Flow (MYB: CR)
  - a. Airline can ask the passenger for the final agreement to the presented refund targets.
  - b. Airline has to set the 'confirmed' flag to 'true' in order to have this call processed correctly. If not, then error message will be sent.
- 2. Airline must call /pnr/cancelAndRefund/cancel to send request to Automated Exchanges and Refunds to cancel the reservation and process refunds. Passenger will be informed if there is any refund to Travel Bank.
  - a. This functionality requires Refund targets data already stored in the session.
- 3. Airline calls POST /login to allow passenger to log in into CI account
- 4. Airline calls POST /pnr/cancelAndRefund/confirm to confirm cancellation request and proceed with cancellation.
  - a. *Digital Connect* v.3.3 will create BT account automatically. BT account will be linked with passenger's CI account.
- 5. Airline can display cancel confirmation to the passenger.

#### 2.8.1.3 Error handling

If POST /pnr/cancelAndRefund/confirm encounters errors creating BT account:

- remarks are added to the PNR;
- the PNR is not sent to the Automated Exchange and Refund system for refund processing;
- the PNR is placed in the Failed Refund Queue;
- Digital Connect sends an error message that BT account was not created and/or not linked to CI.

Errors that will be returned:

#### **ProfileException and ProfileSystemException:**

```
{
   "status": "Incomplete",
```

```
"type": "Application",
"errorCode": "ERR.SSW.CANCEL.PROFILE",
"timeStamp": "2016-03-09T10:35:27",
"message": "<e.getMessage()>" // dependent on the exception cause
},
```

#### **TravelBankException:**

```
{
   "status": "Complete",
   "type": "BusinessLogic",
   "errorCode": "ERR.SSW.CANCEL.TRAVEL_BANK",
   "timeStamp": "2016-03-09T10:35:27",
   "message": "Problem with travel bank occurred."
},
```

#### 2.8.1.4 API Modification

No changes in Digital Connect API.

# 2.8.2 Context Shopping in the Exchange path

Context Shopping in the Exchange path has not been returning amount for change fee taxes. *Digital Connect* returned price breakdown in following way:

- Fare (including change fee base);
- Taxes (including change fee taxes);
- Total.

Due to that breakdown, *Digital Connect* was not able to present correct amount for change fee (including change fee tax). With change in Ticketing (Exchange Context Shopping webservice) *Digital Connect* v3.3 gets correct amounts from Exchange Context Shopping service. To accommodate correct amounts received from Ticketing there were contract changes in /pnr/exchange/products/air/search service (change fee & change fee tax amounts need to be added).

When this feature is implemented amounts will be returned in the following way:

- Fare difference base  $\rightarrow$  fare
- Fare difference taxes  $\rightarrow$  taxes

- Change fee base  $\rightarrow$  changeFeeBase
- Change fee taxes  $\rightarrow$  changeFeeTaxes
- Total amount  $\rightarrow$  total

#### 2.8.2.1 Prerequisites

- Interline Branded Fares are required.
- Intellisell rules allowing Exchange Context Shopping.

#### 2.8.2.2 Highlights

Please find below an example Exchange scenario for full Round Trip Exchange:

- 1. The passenger retrieves a booking either by supplying basic PNR information or by logging into the his/her account.
- 2. The /pnr/exchange service GET operation initializes the Exchange process, checks (validates) MYB rules (separate for logged-in and guest user) and returns information for the PNR specified by the parameters (PNR locator, first name, last name and email required fields are configurable). If the PNR is found all the flight details will be returned (including the payment details).
- 3. The passenger selects both legs to be exchanged (there is no JSON call here).
- The airline calls pnr/exchange/products/air/search POST to obtain the list of available flights with their prices (an exchange type defined as *both*). Response will contain modified structure for the amount:

```
fare (ApiPrice, optional): Fare sum up according to currencies.
taxes (ApiPrice, optional): Taxes sum up according to currencies.
totalMandatoryObFees (ApiPrice, optional): Price sum up of
mandatory Ob Fees according to currencies.
changeFee (ApiPrice, optional): Change fee. Applicable for
Exchange Context Shopping. - NEW ELEMENT
changeFeeTax (ApiPrice, optional): Change fee tax. Applicable for
Exchange Context Shopping. - NEW ELEMENT
total (ApiPrice, optional): Price sum up according to currencies.
```

The airline can format the information for display flight matrix for the 1<sup>st</sup> leg to the passenger.

5. The passenger selects 1<sup>st</sup> leg flight option.

The airline sends the follow-up call to pnr/exchange/products/air/search POST with *selectedOfferRef\** to obtain the list of available 2<sup>nd</sup> leg flights with their prices. Follow-up call is also being sent with an exchange type defined as *both*.

*\*selectedOfferRef* - provides information about the selected offer, which is further used to check availability and to calculate prices. This is validated against already existing reservation and fare rules category 31. Information about all already selected offers is required in order to send valid follow-up exchange context shopping calls.

Response will contain changed structure for the amount:

fare (ApiPrice, optional): Fare sum up according to currencies. taxes (ApiPrice, optional): Taxes sum up according to currencies. totalMandatoryObFees (ApiPrice, optional): Price sum up of mandatory Ob Fees according to currencies. changeFee (ApiPrice, optional): Change fee. Applicable for Exchange Context Shopping. - NEW ELEMENT changeFeeTax (ApiPrice, optional): Change fee tax. Applicable for Exchange Context Shopping. - NEW ELEMENT total (ApiPrice, optional): Price sum up according to currencies.

The airline can format the information for display flight matrix for the  $2^{nd}$  leg to the passenger.

- 6. The airline submits pnr/exchange/products/air POST to add selected flights to the itinerary. *Digital Connect* sends 1st call to AER (AER\_RQ, Action: Exchange)
- 7. The passenger can continue exchange flow by adding/removing seats and ancillaries, according to the airline's exchange shopping sequence. Product cart is updated accordingly.
- 8. When the passenger indicates that exchange shopping is completed the airline obtains available payment options for the current itinerary by calling pnr/exchange/paymentOptions GET.

The airline can format the information for display to the passenger.

- 9. When the passenger selects form of payment, completes the payment and decides to purchase, airline calls /pnr/exchange/purchase POST to initiate and complete exchange process (old VCR(s) are being exchanged, new VCR(s) are issued for the requested flights and dates, EMD(s) are either refunded, re-associated or forfeited). The /purchase service will add also remarks to the PNR.
- 10. The response indicates whether the exchange process is successful. The airline formats this information for display to the passenger.

Service Name	Operation	Change
/pnr/exchange/products/air/search	POST	Prices Object - Added 2 new fields for change fee and fee tax:
		<ul> <li>@ApiModelProperty("Change fee. Applicable for Exchange Context Shopping.")</li> </ul>
		private ApiPrice changeFee;
		<ul> <li>@ApiModelProperty("Change fee tax. Applicable for Exchange Context Shopping.")</li> </ul>
		private ApiPrice changeFeeTax;
		Offer Object - Added 2 new fields for change fee and fee tax:
		<ul> <li>@ApiModelProperty("Change fee. Applicable for Exchange Context Shopping.")</li> </ul>
		private ApiPrice changeFee;
		<ul> <li>@ApiModelProperty("Change fee tax. Applicable for Exchange Context Shopping.")</li> </ul>
		private ApiPrice changeFeeTax;

# 2.8.2.3 API Modifications

Note: In case of partial exchange (only one leg being exchanged) or One Way trips, there will be no follow-up calls.

# 2.8.3 Exchanges (Manage Your Booking: Change Itinerary flow)

Digital Connect v3.3 introduces an enhancement in the Manage Your Booking: Change Itinerary flow:

• An enhancement of /pnr/exchange/products service in the Exchange flow - passenger reference has been added for ancillaries and seats.

Before that feature has been implemented /pnr/exchange/products service in the Exchange path was inconsistent with other flows and did not include proper price breakdown for ancillaries and seats. Due to that gap there was a problem e.g. with providing information about discount for the particular passenger, if multiple passengers get different discounts.

For airlines that have implemented this enhancement an exchange products breakdown has been extended with passenger reference for seats and for ancillaries - thanks to that change passenger-specific information (such as a discount per passenger amount) is being provided by *Digital Connect* in a proper way.

#### 2.8.3.1 Highlights

There is an activation script to activate extended exchange product breakdown.

#### Model before a new implementation (an example for Seats):

New model (an example for seats):

```
- subElements
- BASE
- TAX
- DISCOUNT
```

#### 2.8.3.2 API Modifications

- There was no changes to the model, separate implementation per version.
- The configuration is needed for switch to old/ new version of an exchange products service (backward compatibility).
- Enhanced /pnr/exchange/products service includes Passenger reference in "ANCILLARY" and "SEATS" section.

# 2.9 Shopping

This section covers the services airlines use to display available flights and other products to passengers and to build itineraries from passenger selections. *Digital Connect* v3.3 adds and enhances the functionality in this area in the following ways.

# 2.9.1 Enablement of shopping capabilities via SE/DC

*Digital Connect* v3.3 introduces an enhancement of shopping response that will provide airline with following information:

- Miles flown per segment.
- Duration of:
  - Leg;
  - Segment;
  - Stop airports:
    - Flight time to the stop airport;
    - Layover duration at the airport.

Information if flight is subjected to governmental approval. Flights might exist already in schedule, while they are still not yet officially approved – then this information is included in schedules and returned by shopping

- ID of departure and arrival terminal.
- There will be new capabilities to send preferred operating airline in the shopping request:
  - To avoid situation when price shown in the ribbon is lower than any price in the flight matrix. That may happen when codeshare flights with connection have lower price than direct flights. When codeshare connections are not configured in current LCS, flights might be shown on the ribbon but are missing in the flights matrix.
  - To solve this problem, there will be additional information sent in shopping request preferred operating carrier. This will be either configuration-driven or request-driven.

- Configuration:
  - NONE do not send operating carrier;
  - ALL always send operating carrier;
  - DEFINED list of origins/destination when operating carrier will be sent;
  - DOMESTIC send operating carrier for domestic routes.
- In case the route is marked in master routes configuration as interline interline partners will always be sent, even if the configuration is set to NONE.
- Operating carrier in request will override configuration. As operating carrier code is considered storefront airline code (2-letter IATA code).

This functionality works in the following flows:

- The Revenue Booking Flow (B2C);
- The Redemption Booking Flow (RBE);
- The Manage Your Booking Change Itinerary Flow (MYB: CI) including Loyalty Exchanges.

#### 2.9.1.1 Prerequisites

• Correct settings of Intellisell rules to return all required information.

#### 2.9.1.2 Highlights

#### 2.9.1.2.1 Additional information - The Revenue Booking Flow (B2C)

- 1. The airline calls /products/air/search POST to obtain the list of available flights to the passenger. The response will now contain:
  - a. distance (segment level);
  - b. departure terminal (segment level);
  - c. arrival terminal (segment level);
  - d. subjectToGovernmentApproval (segment level);
  - e. preferred operating carrier (whole itinerary level);
  - f. elapsedTime, duration (stopAirport level).
- 2. The passenger selects a flight.
- 3. The airline submits /products/air POST to add selected flight to the itinerary.
- 4. The airline fills shopping cart data /products. The response will now contain:
  - a. Amount of miles flown per segment.
- 5. The airline prompts passenger for passenger details e.g. passport information.
- 6. The airline uses /passengers POST to add passenger to the itinerary.

- 7. The passenger can continue shopping by selecting seats and ancillaries, according to the airline's shopping sequence.
- 8. The airline uses /products/seats operations to show passengers the seats available on the flights they have exchanged and to add any seats selected by the passenger to the itinerary
- 9. Product cart is updated.
- 10. When the passenger indicates that shopping is complete the airline obtains available payment options for the current itinerary by calling /paymentOptions GET. The airline can format the information for display to the passenger.
- 11. When the passenger selects form of payment, completes the payment and decides to purchase, the airline initiates the purchase and ticketing process by calling /purchase POST. If authorization is successful, the /purchase service will create a PNR, EMD(s), etc. The response will now contain:
  - a. distance (segment level);
  - b. departure terminal (segment level);
  - c. arrival terminal (segment level);
  - d. subjectToGovernmentApproval (segment level);
  - e. elapsedTime, duration (stopAirport level).
- 12. The response indicates whether the purchase is successful. The airline formats this information for display to the passenger.
- 13. The passenger specifies a PNR for review.
- 14. The airlines submits a /pnr GET request. The airline can format the information for display to the passenger. The response will now contain:
  - a. distance (segment level);
  - b. departure terminal (segment level);
  - c. arrival terminal (segment level);
  - d. subjectToGovernmentApproval (segment level);
  - e. elapsedTime, duration (stopAirport level).

#### 2.9.1.3 API Modifications

Service Name	Operation	Change	
/products/air/search	POST	New fields:	
/products/air/search/latest	GET	SegmentOfferInformation. flightsMiles -	
/pnr/exchange/products/air/search	POST	Mileage distance per segment.	
/products/air	POST	• Flight.departureTerminal - Departure terminal	
/products	GET	ID.	
/purchase	POST	• Flight.arrivalTerminal - Arrival terminal ID per	
/pnr	GET	each segment.	
/pnr/exchange/products	GET	ItineraryPart.totalDuration - Total duration of	
/pnr/exchange/purchase	POST	leg.	

		Segment.duration - Segment duration (including stop airports).
		<ul> <li>StopAirport.elapsedTime - Flight time from departure airport to layover airport expressed in minutes.</li> </ul>
		<ul> <li>StopAirport.duration - Duration time at the stop airport(s).</li> </ul>
		<ul> <li>Segment.subjectToGovernmentalApproval - Flag indicating that this flight is subjected to government approval.</li> </ul>
/products/air/search	POST	New field:
/pnr/products/air/search	POST	<ul> <li>AirSearch.preferredOperatingCarrier - Operating carrier code to be sent to shopping as the preferred one.</li> </ul>

# 2.10 Travel Agencies

# 2.10.1 Profiles registration and management

*Digital Connect* v3.3 brings an enhancement of Agency Portal feature (create and manage account for Agency) delivered in 3.1 release.

When this feature is implemented, airline will have an ability to offer agency and agent registration for their customers. Agencies and agents will also have an option to modify their accounts.

Scope of work in release 3.3 (1<sup>st</sup> phase of Agency Portal implementation):

- Agency creation enhancement;
- Agent account creation process done by an Agency:
  - For standard user,
  - For super-agent.

Super user agent has more privileges comparing to standard user. Super user will have an access to manage reservations created by any agent within the same agency, while the standard user access is limited to own reservations (an option to create and retrieve bookings is not in the *Digital Connect* v3.3 scope).

- Manage Agency account enhancement;
- Manage Agent accounts:
  - By an Agent,
  - By an Agency
  - Agency has privileges to create and manage own account, as well as agents' accounts;
  - Agency apart from a standard account modification can change the status of the agent's account from inactive to active and vice versa.
- Search for an Agent account(s);
- Login Retrieve authenticated account details:
  - Agency,
  - Agent.

## 2.10.1.1 Prerequisites

- Agreement with CI (Customer Insight) to offer an ability to store Agencies and Agents profiles.
- Agreement with AMS (Agency Manager) to offer Agency Credit Limit as a form of payment in the web application (that information will be kept in the profile).

## 2.10.1.2 Highlights

## 2.10.1.2.1 Creating and managing Agencies

Agency profile can be created and modified with the following sequence of *Digital Connect* v3.3 service calls (from the UI perspective):

- 1. On the Agency Login page, the airline Administrator clicks the **Enroll Agency** link and the Enroll Agency page opens (on the airline UI).
- 2. The Administrator provides all the necessary agency information and clicks **Enroll Now**. Call to the /profile/agency POST is being sent (with in-line and after-submit validation to detect any errors). IATA number is being sent in the UniqueId field (if configured) during Agency creation in the ProfileCreateRq (CustomerInsight).
- 3. If all the information was provided correctly, *Digital Connect* response shows a successful message in the /profile/agency POST response and sends a confirmation email to the Administrator, if enabled. The agency is created in the Customer Insight (CI), as inactive, and does not have any funds assigned to it in the Agency Manager (AMS). Airline Admin needs to change the market in AMS, Activate the account using STAN and assign ACL funds in AMS system.
  - a. The Administrator accesses the Agency Management System from the Community Portal and changes the agency market to an active appropriate market.
  - b. The airline Administrator logs in to an active STAN (active and editable) version, goes to Agencies tab and searches for the agency. He can search by agency name, IATA number, and state (active and inactive).
  - c. From the search results, the Administrator selects the agency. The Agency Information window opens. The Administrator changes the agency status to active, assigns the password and saves the changes. The airline updates the agency's profile information with a /profile/agency PUT request. In-line and after-submit validation is applied to the page.

If the airline enabled confirmation email, after activating and updating the agency account, the agency Administrator receives two confirmation emails, one containing the user name, and another one containing password.

d. The airline Administrator can retrieve all the agencies created and update the agency-related information such as Administrator information and agency information. The airline can decide what fields are available for editing.

- e. The Airline Administrator logs in to the Agency Management System. The Administrator can now assign funds and credit limit to the agency.
- 4. The Agency Administrator can now log in to the Administrator Portal (with loginID and password). The airline logs the agency in with the /login/agency POST service. *Digital Connect* consumer can send request to Agency Management System to view balance and list of transactions of Agency credit limit account.

POST request has to be sent to externalLoginData.url with follow parameters:

```
SIDEUSERNAME=externalLoginData.loginID
SIDEPASSWORD=externalLoginData.passwordHash
login=true
emailpass=false
```

- 5. After successful login the airline retrieves the agency profile with the /profile/agency GET service and displays the agency profile information.
- 6. When the Administrator clicks the logout link the airline calls /login/agency DELETE to remove from the session the agency information. If the agency is successfully logged out the response returns the result of the logout operation.

## 2.10.1.2.2 Creating agents' profiles

The Agency Administrator can create an account for each of your their travel agents in the Agency Administrator portal. The Agency Administrator can grant agents a regular user or super user rights and based on them decide what information is available to an agent.

Agency Administrator can add agent(s)' profiles with the following sequence of *Digital Connect* v3.3 service calls:

- 1. The Agency Administrator logs in to the Administrator Portal (with *loginID* and *password*). The airline logs the agency in with the /login/agency POST service.
- 2. After successful login the airline retrieves information of the authenticated agency like balance and credit limit with the /login/agency GET service (if the account was created in AMS).
- 3. Logged in Administrator goes to the **Add an agent** tab. *Digital Connect* checks the configuration to determine which fields on that page are mandatory to be filled.
- 4. After the Administrator provides the agent's information and clicks **Create Account** call to the /profile/agency/agents POST is being sent (with in-line and after-submit validation to detect any errors). *Digital Connect* sends the ProfileCreate request to the profile system. The profile system returns a ProfileCreate response.
- 5. If all the information was provided correctly, *Digital Connect* response shows a successful message in the /profile/agency POST response and sends a confirmation email to the agent, if enabled. The agent profile is created.
- 6. The agent himself can now log in to the Agent Portal (with *loginID* and *password*). The airline logs the agent in with the /login/agency/agents POST service.

*Digital Connect* consumer can send request to Agency Management System to view balance and list of transactions of Agency credit limit account.

POST request has to be sent to externalLoginData.url with follow parameters:

SIDEUSERNAME=externalLoginData.loginID

```
SIDEPASSWORD=externalLoginData.passwordHash
login=true
emailpass=false
```

- 7. After successful login the airline retrieves the agent profile with the /profile/agency/agents GET service and displays the agent profile information.
- 8. When the travel agent clicks the logout link the airline calls /login/agency/agents DELETE to remove from the session the agent information. If the agent is successfully logged out the response returns the result of the logout operation.

# 2.10.1.2.3 Updating Agent's profile by Agency

Airline Administrator can search for agent(s) and updates their profile(s) with the following sequence of *Digital Connect* v3.3 service calls:

- 1. The Administrator logs in to the Administrator Portal (with *loginID* and *password*). The airline logs the agency in with the /login/agency POST service.
- 2. After successful login the airline retrieves information of the authenticated agency like balance and credit limit with the /login/agency GET service (if particular Airline has an agreement with AMS and Agency does have an account created in AMS).
- 3. Logged in Administrator opens the **Manage Agents** tab and searches for agent(s) by providing required data (depending on the airline configuration it could be agent's *firstName* and/or *lastName*, *pageNumber* and *elementsPerPage*) in the /profile/agency/agents/search GET request. That service validates user eligibility in order to search for agent's accounts and then allows to perform the search for agent's accounts. For the search to return results, the agency must have existing agents assigned to it.
- 4. *Digital Connect* sends the ProfileRead request, reads the ProfileRead response and remembers all the profiles returned by the profile system. *Digital Connect* shows the profiles (the number of results is defined in the *pageNumber* and *elementsPerPage*) together with information about the profile status.
- 5. After the Administrator clicked **Make Changes** next to the selected agent call to /profile/agency/agents GET is being sent with selected agent's *id* in the request. *Digital Connect* opens the **Manage Agent** page. The page contains agent information retrieved from the profile system.
- 6. When the Administrator clicks **Update** airline sends a call to /profile/agency/agents PUT, *Digital Connect* remembers the changes made to the profile and sends the ProfileUpdate request to the profile system.
- 7. If all the information was provided correctly, *Digital Connect* response shows a successful message in the /profile/agency/agents PUT response and sends a confirmation email to the travel agent, if enabled. The agent profile is updated.
- 8. When the travel agent clicks the logout link the airline calls /login/agency/agents DELETE to remove from the session the agent information. If the agent is successfully logged out the response returns the result of the logout operation.

## 2.10.1.2.4 Updating Agent's profile by Agent

The portal for travel agents makes it possible for agents to create and manage passenger's reservations (bookings are not in *Digital Connect* v3.3 scope). Those reservations can then be made available to the passengers for viewing or modification. The Agent portal is also a useful tool for tracking agents' activity.

Airline travel agent can retrieve and updates his/her profile(s) with the following sequence of *Digital Connect* v3.3 service calls:

- 1. The travel agent logs in to the Agent Portal (with *loginID* and *password*). The airline logs the agent in with the /login/agency/agents POST service.
- 2. After successful login the airline retrieves information of the authenticated agent's agency like balance and credit limit (if applicable for particular airline and agency) with the /login/agency GET service.
- 3. After successful login the airline retrieves the agency profile with the /profile/agency/agents GET service and displays the agency profile information.
- 4. The travel agent can update the agent's profile-related information. The airline can decide what fields are available for editing.
- 5. When the Agency Administrator clicks **Update**, call to /profile/agency/agents PUT is being sent and if the response is successful *Digital Connect* remembers the changes made to the profile and sends the ProfileUpdate request to the profile system.
- 6. If all the information was provided correctly, *Digital Connect* response shows a successful message in the /profile/agency/agents PUT response and sends a confirmation email to the travel agent, if enabled. The agent profile is updated.
- 7. When the travel agent clicks the logout link the airline calls /login/agency/agents DELETE to remove from the session the agent information. If the agent is successfully logged out the response returns the result of the logout operation.

## 2.10.1.2.5 Agency forgotten password

Airlines can offer an option to reset agency profile password with the following sequence of *Digital Connect* v3.3 service calls:

- 1. Airline displays a prompt for agency login (login data credentials).
- 2. The Administrator supplies login (*username*) and click **Forgot password** link
- 3. The airline sends /profile/agency/resetPasswordKey POST with the *username* as a parameter. The airline retrieves the agency profile and email address (if found). In the response the airline gets "resetPasswordKey".
- 4. The airline sends an email with a reset password link.
- 5. The Administrator provides the new password. The airline calls /profile/agency/resetPassword POST with new password and "resetPasswordKey" (to match it with a proper profile).

#### 2.10.1.2.6 Agent forgotten password

Airlines can offer an option to reset agent profile password with the following sequence of *Digital Connect* v3.3 service calls:

- 1. Airline displays a prompt for agent login (login data credentials).
- 2. The agent supplies login (*username*) and click **Forgot password** link
- 3. The airline sends /profile/agency/agents/resetPasswordKey POST with the *username* as a parameter. The airline retrieves the agent profile and email address (if found). In the response the airline gets "resetPasswordKey".
- 4. The airline sends an email with a reset password link.

5. The travel agent provides the new password. The airline calls /profile/agency/agents/resetPassword POST with new password and "resetPasswordKey" (to match it with a proper profile).

#### 2.10.1.3 Error handling

1. Other agency tries to modify not his agent

/login/agency

```
"status": "NotProcessed",
"type": "Application",
"errorCode": "ERR.SSW.PROFILE.NOT_ALLOWED",
"timeStamp": "2017-05-17T12:41:54",
"message": "You cannot modify an agent account which is not
associated to your agency."
```

2. Agent tries to modify other agent

/login/agency

```
"status": "NotProcessed",
"type": "Application",
"errorCode": "ERR.SSW.PROFILE.NOT_ALLOWED",
"timeStamp": "2017-05-17T12:41:22",
"message": "Modifying another agent account is not permitted."
```

3. Agent tries to modify fields allowed only for agency admin

/login/agency/agents

```
{
"status": "NotProcessed",
"type": "Validation",
"errorCode": "ERR.SSW.CLIENT.INVALID_REQUEST",
"timeStamp": "2017-05-16T17:20:38",
"message": "Validation error",
-
"details": {
-
"agentProfile.profileType": [
"field.allowed.only.for.agency.admin"
],
-
"agentProfile.profileStatusActive": [
"field.allowed.only.for.agency.admin"
],
-
"agentProfile.password": [
"validation.field.required"
```

## 2.10.1.4 API Modifications

}

Service Name	Operation	Change
/profile/agency	GET POST	AgencyCreditLimitInfoobjectusedtoreturnshow balance form toexternal system - Newfieldhasbeenadded:externalLoginData(ExternalLoginData)-Datarequiredtologinandviewagencycreditlimitinformationexternally.
		PassengerDetails object replaced by AgencyContactDetails object (maidenName field has been removed).
/profile/agency	POST	Request:
	PUT	<ul> <li>PassengerDetails object replaced by AgencyContactDetails object (maidenName field has been removed).</li> </ul>
		• emails validation has been changed
		Response:
		PassengerDetails object replaced by AgencyContactDetails object (maidenName field has been removed).
/login/agency	GET POST	AgencyLoginResult -AgencyCreditLimitInfohas been added -object used to return showbalance form to external system -New fieldhasbeenadded:externalLoginData (ExternalLoginData)-Data required to log in and view agencycredit limit information externally.
/profile/agency/agents	POST	New service has been added. Creates an agent profile.
/profile/agency/agents	GET	New service has been added. Retrieves an agent profile.
/profile/agency/agents	PUT	New service has been added. Updates an agent profile.
/login/agency/agents	POST	New service has been added. Authenticates agent in the current conversation.
/login/agency/agents	GET	New service has been added. Retrieves authenticated agent's information.
/login/agency/agents	DELETE	New service has been added. Logs out the agent user.

/profile/agency/agents/search	GET	New service has been added. Searches for agency's agents.
/profile/agency/agents/resetPasswordKey	POST	New service has been added. Requests for a change password key to be sent to the user's email.
/profile/agency/agents/resetPassword	POST	New service has been added. Resets the password, valid change key must be present.

# **Defect Fixes**

# 3.1 Summary of Defect Fixes

• Lowest fare on ribbon is higher than in matrix.

# 3.2 Defect 1

#### iCRM/Siebel SR#:

1-1RBZA99

#### Title:

Lowest fare on ribbon is higher than in matrix

#### **Description:**

Discrepancies between the ribbon and the branded matrix. The ribbon shows a higher price, which changes depending on the day passenger has selected (in the ribbon).

#### **Resolution:**

Departure date of a return trip was used to be consistent with downlines. There are no longer discrepancies between the ribbon and the branded matrix.

# **Contacting Customer Care**

# 4.1 About Sabre Airline Solutions Customer Care

*Sabre Airline Solutions*<sup>®</sup> maintains the *Sabre*<sup>®</sup> *Global Customer Care* help desk that is available for all customers 24 hours a day, 7 days a week. *Customer Care* analysts facilitate the resolution of issues, questions, and requests for *Sabre Airline Solutions* products and services.

When you contact *Customer Care*, an analyst collects specific information about the issue, opens a service request in the tracking system, and then documents the issue to track handling and resolution. This logging and tracking process facilitates complete and accurate communication, which improves the resolution process, implementation process, and design of future enhancements to ultimately prevent recurrence of the issue.

*Customer Care* analysts manage all service requests throughout the service request's life cycle, from beginning to end. The analysts are committed to resolving all service requests in a professional and timely manner. They coordinate with subject matter experts to resolve issues and escalate as needed to ensure resolution. The analyst does not close a service request until it is fully resolved and communicated back to you.

# 4.1.1 Sabre Community Portal / eService Tool

Sabre Airline Solutions maintains the Sabre® Community Portal at community.sabre.com that offers:

- Access to the eService tool, from which you can submit and track service requests.
- Access to Sabre hosted applications.
- Training and documentation information.
- Application release notes and patches.
- User forums, news, and events.

## 4.1.1.1 Registering for Community Portal Access

Access to the *Community Portal* is generally provided within 24 to 48 business hours. If your organization has a Delegated Administrator to approve the request, your access may be granted faster.

## **To register for Community Portal access**

- 15. Go to community.sabre.com.
- 16. Click New Account.

The New User Registration page appears.

- 17. Enter required information.
- 18. Click Submit.

Once your request is approved, you will receive an email with additional information. Follow the instructions within this email to complete the registration process.

#### 4.1.1.2 Requesting Access to eService

Access to eService is generally provided within 24 hours.

**Note** You should only enter low or medium impact issues in the eService tool. If you have a high or critical impact level issue, you must call *Customer Care* for immediate attention. If you use eService to submit a critical impact level request, the service request will be excluded from time-to-resolution calculations.

#### **To Request Access to eService**

- 1. Login to community.sabre.com.
- 2. On the Home page, in the Support Services-eService tool area, click Request Access.

Customer eService Tool	
The eService module allows you to submit Service Requests through the Sabre Community Portal Request Access	If you don't have toll-free access, send us your phone number and we'll call you back.

# 4.1.2 Telephone

**Note** To ensure the most expedient response, you must submit all critical and high impact issues directly by phone to *Customer Care*.

Call *Customer Care* at the following toll free number for your country:

Country	Toll Free Number
Antigua	888-832-4738
Argentina	0800-666-1664
Australia	1-800-081-993
Austria	800-291-705
Bahamas	1-800-389-0417
Bahrain	800-00-002 (WSC 5050)
Belarus	880-0114 PIN 375
Belgium	0800-77-029
Bolivia	800-10-0350
Brazil	0800-891-9210
Brunei	800-013 PIN 673
Canada	1-866-598-1706
Chile	800-412555
China	4001-202-315

Country	Toll Free Number
Colombia	01-800-954-1326
Cyprus	800-96110
Czech Republic	800-700-117
Denmark	808-85884
Egypt - Cairo	7955-770 PIN 5670
Egypt - Other	02-7955-770 PIN 5670
El Salvador	800-0000-0011
Estonia	800-12-122 PIN 5047
Finland	0800-914-860
France	0800-909-657
Germany	0800-181-7245
Greece	00800-16-122-055-533
Hong Kong	800-908-742
Iceland	800-8667
India	000-800-100-6116
Indonesia	001-803-016-1722
Ireland	1-800-657-198
Israel	1-809-246-033
Jamaica	1-866-402-6835
Japan	0053-116-0811
Korea	0030-813-1943
Malaysia	1-800-813-609
Malta	800-90112 PIN 356
Mexico	01-800-123-8537
Netherlands	0800-023-2237
New Zealand	0800-450-960
Norway	800-18-798
Pakistan	00800-9004-4226
Panama	00800-226-0662
Paraguay	009-800-598-1-0004
Peru	0800-52-226
Philippines	1-800-111-00338 or 1-800-111-00339
Poland	800-900-807

Country	Toll Free Number
Russia	810-800-240-31012
Saudi Arabia	1-800-11 PIN 5671
Singapore	800-101-1651
South Africa	0800-980-981
Spain	900-995-926
Sweden	0200-285-836
Switzerland	0800-894-354
Tahiti	888-832-4738
Thailand	<ol> <li>Dial 1-800-000-133 (AT&amp;T)</li> <li>Wait for the recording asking for the number you are dialing.</li> <li>Dial 888-832-4738.</li> </ol>
Trinidad and Tobago	888-870-9002
UAE	800-035-702-569
UK	0800-0288446
Uruguay	2518-6642
USA	1-888-421-8889 or 1-800-677-0856
Venezuela	0800-100-3851
Vietnam	<ol> <li>Dial 1-201-0288 (AT&amp;T Toll Free Number).</li> <li>Wait for the recording asking for the number you are dialing.</li> <li>Dial 866-947-8059.</li> </ol>
Countries with no-toll free service	+1 770 261 0080 (toll call).

You can also use the **Call Me** button when you need a *Customer Care* analyst to call you back. You can access the **Call Me** button from the following two locations on the *Community Portal*:

- On the Home page, in the Support Services-eService tool area.
- On the Contacts page, in the **Customer Care** area.

When calling in an issue, the *Customer Care* analyst will ask a number of basic questions to initiate a diagnosis of the issue. Questions may include:

- What is your name and telephone number?
- What is a valid email address?
- What is an alternate contact name and telephone number?
- What is your company name?
- What is the issue description?
- Which application and module were you using when the error occurred?

- What is the applications version number?
- What is the <u>impact on your company's operations</u>?
- Is the application completely disabled?
- Have you restarted the application?
- What error messages are you encountering, if any?
- What sequence of events (keystrokes/button clicks) led to the issue?
- Has the issue occurred before? If Yes, when?
- Does the issue occur on other workstations?
- Have you rebooted the workstation? (Cold/Warm)
- What logon ID were you using?

# 4.2 Customer Impact Levels

When you submit a service request, you specify the level of impact that the issue causes to your business. The following table defines the customer impact levels:

Impact Level	Conditions	
1 – Critical	System failure causes extreme business impact to operationally critical procedures.	
	<ul> <li>Key personnel are unable to perform operational tasks due to system outage.</li> </ul>	
	<ul> <li>Current business practices cannot be performed due to system failure and continued work stoppage has severe financial consequences.</li> </ul>	
	• Time critical functionality necessary to continue operations and resolution must be made as soon as possible.	
	• 90 – 100% of users are impacted by system failure.	
2 – High	System failure causes significant business impact.	
	• Workaround exists, but is impractical or labor intensive for extended outage duration.	
	The financial consequence is significant.	
	• 50 – 90% of users are impacted by system failure.	
3 – Medium	Impact to system is noticeable, but has little or no consequence to productivity.	
	Issue exists in a non-business critical function.	
	Workaround exists or is not necessary.	
	Less than 50% of users are impacted.	
4 – Low	Functional impact is negligible or non-existent.	
	Functionality (or system change) not necessary for business to continue.	

# 4.2.1 Severity Levels

After you submit a service request, a *Customer Care* analyst reviews it and sets the severity level according to the following guidelines:

Severity Level	Description
1	A complete loss of service. The system is inoperable. Work cannot continue.
2	A severe loss of service. Issue affects a critical business function. However, work can continue in a restricted operating mode.
3	A moderate loss of service. A workaround is available.
4	No loss of service. Issue is minor. No workaround is required.

# 4.2.2 Product Availability Levels

All products are classified into the following product availability levels:

Availability Level	Application Type	Description
High	Real time and operational (such as, crew tracking/assignment applications).	Any outage or issue that has a major impact on a customer's ability to conduct day-to-day business operations.
Normal	Business management/planning (such as, planning and scheduling and yield management applications).	Any outage or issue that can potentially affect a customer's ability to conduct day- to-day business operations.