

Release Notes: Release Ready

SabreSonic CSS Digital Connect

Version 3.5

Software version 3.5

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Template Version 4.9

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Introduction

1.1 Document Overview

This document contains release notes information for *SabreSonic*® *CSS Digital Connect v3.5*. Read this document so that you are aware of changes to the solution.

1.2 Release Identification

Release Version	Type (Version, Update, or Patch)	Date	Approved By	Description of Change
3.5	Version	May 2018	Joyce Schofield	

Release Features

2.1 Summary of Features

Digital Connect v3.5 includes the following new and enhanced features by using *Digital Connect* v3.5 services:

- Ancillaries
- Hotels
- Flight Shopping
- Payment and Fulfilment
- Pricing

2.2 Ancillaries

The services that provide the ability to shop for the ancillaries available for passenger-selected flights and process passenger selections of ancillaries have the following enhancement:

2.2.1 Ecommerce support of external non-air ancillary catalogs

Digital Connect v3.5 introduces an enhancement to allow airlines to sell 3rd party products such as insurance, hotels, cars, etc. in path and to offer one shopping cart solution.

This feature is designed to let an airline partner with any content aggregator to orchestrate necessary service calls so that an airline can not only book 3rd party products outside of the *Digital Connect* flow, but also remain the Merchant of Record by adding the 3rd party product to the *Digital Connect* flow as an ancillary with custom price and fulfilling it as an EMD.

This feature applies to the following paths:

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

2.2.1.1 Prerequisites

Airline will need to enable Modify Ancillary Price and provide specific list of ancillary codes that will be used to price and fulfill non-air ancillary content.

2.2.1.2 Limitations

Airline must be a Merchant of Record (MOR) for these ancillaries.

This feature is not available for Seat Shopping.

The currency used in the ancillary shopping call must be the same as the one use during ancillary selection call.

Booking flows where selling of external non-air ancillary catalogs will not be supported are:

- Agency Portal;
- The Redemption Flow (RBE);
- Supporting Points as a Form of payment in Flat Free Upgrade Flow (FFU) and Frequent Flyer Upgrade Flow (FQTU);
- Manage Your Booking Modify Trip Options Flow (MTO) with points as form of payment;
- Manage Your Booking Change Itinerary Flow (MYB:CI) for redemption bookings and revenue bookings;
- Stateless Ancillary Service.

2.2.1.3 Highlights

2.2.1.3.1 The Revenue 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.
- 2. Airline UI displays the returned flights to the passenger on the Flights page.
- 3. The passenger selects a flight.
- 4. 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
- 5. The airline prompts passenger for passenger details: first name/name/gender, date of birth, phone number, email address etc.
- 6. The airline uses /passengers POST to add passenger to the itinerary.
- 7. The airline calls /products/ancillaries GET to obtain list of ancillaries available for the currently selected itinerary.
- 8. After a user selects an ancillary the airline calls /products/ancillaries POST to add selected ancillaries to the itinerary.
 - a. in products/ancillaries service POST operation airline includes price of ancillary in the request based on actual price of the non-air ancillary (hotel, car, insurance, etc.)
 - b. optionally, the GET /products/ancillaries call is sent with new selected quantity.
 - c. when the consecutive POST /products/ancillaries call with new quantity is sent and:
 - i. if new price is not sent then the original price obtained from initial shopping request (GET /products/ancillaries) is used for the whole quantity;
 - ii. if new price is sent, the original price for the entire quantity is overridden with the new price sent in POST/products/ancillaries call.
- 9. The airline calls /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. New feature: the service ensures that the non-air ancillaries are added correctly with their new price.
- 10. The shopping cart is updated.
- 11. When the passenger indicates that shopping is complete the airline obtains available payment options for the current itinerary by calling GET /paymentOptions. The airline can format the information for display to the passenger.
- 12. When the passenger indicates that shopping is complete the airline obtains available payment options for the current itinerary by calling GET /paymentOptions. The airline can format the information for display to the passenger.
- 13. The confirmation page is displayed.
- 14. The airlines submit a /pnr GET request. The airline can format the information for display to the passenger.

2.2.1.3.2 Manage Your Booking – Modify Trip Options Flow (MYB: MTO)

- 1. The passenger retrieves a booking either by supplying basic PNR information or by logging into the passenger's account. If the passenger is logged in all their reservations are visible.
- 2. The /pnr service GET operation returns information for the PNR specified in the parameters. Airlines can prompt passengers for information that identifies a PNR, to retrieve the information and format it for display to the passenger (optional step).
- 3. 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 manage ancillaries.
- 4. The airline calls /pnr/mto/products/ancillaries GET to obtain list of ancillaries available for the currently selected itinerary.
- 5. After ancillary selection the airline calls /products/ancillaries POST to add selected ancillaries to the itinerary.
 - a. in products/ancillaries service POST operation airline includes price of ancillary in the request based on actual price of the non-air ancillary (hotel, car, insurance, etc.);
 - b. optionally, the GET /products/ancillaries call is sent with new selected quantity.
 - c. when the consecutive POST /products/ancillaries call with new quantity is sent and:
 - i. if new price is not sent then the original price obtained from initial shopping request (GET /products/ancillaries) is used for the whole quantity;
 - ii. if new price is sent, the original price for the entire quantity is overridden with the new price sent in POST/products/ancillaries call.
- 6. If ancillaries operation is successful, the airline calls /pnr/mto/products GET to update the selection associated to passenger and the shopping cart with new price of the selected non-air ancillaries.
 - a. New feature: the service ensures that the non-air ancillaries are added correctly with their new price.

- 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.
- 8. 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 is successful, the PNR and other supporting documents are issued, and the airline's application receives results indicating success.
 - a. The /pnr/mto/purchase POST service also adds specific remarks to the PNR on the price(s) of given ancillary(ies).
- 9. The response indicates whether the purchase is successful. The airline formats this information for display to the passenger.

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

- 1. The passenger retrieves a booking either by supplying basic PNR information or by logging into the passenger's account. If the passenger is logged in all their reservations are visible.
- 2. The /pnr/bnpl service GET operation returns information for the PNR specified in the parameters. Airlines can prompt passengers for information that identifies a PNR, to retrieve the information and format it for display to the passenger (optional step).
- 3. The airline retrieves PNR information and initializes Manage Your Booking Book Now Pay Later (MYB: BNPL) Flow (with verification of MYB Rules) by calling:
 - a. /pnr/bnpl/ancillaries for Ancillaries flow where the passenger can manage.
- 4. The airline calls /pnr/bnpl/products/ancillaries GET to obtain list of ancillaries available for the currently selected itinerary.
- 5. After ancillary selection the airline calls /pnr/bnpl/products/ancillaries POST to add selected ancillaries to the itinerary.
 - a. in /pnr/bnpl/products/ancillaries service POST operation airline includes price of ancillary in the request based on actual price of the non-air ancillary (hotel, car, insurance, etc.);
 - b. optionally, the GET /pnr/bnpl/products/ancillaries call is sent with new quantity;
 - c. when the consecutive POST /pnr/bnpl/products/ancillaries call with new quantity is sent and:
 - i. if new price is not sent then the original price obtained from initial shopping request (GET /pnr/bnpl/products/ancillaries) is used for the whole quantity;
 - ii. if new price is sent, the original price for the entire quantity is overridden with the new price sent in POST/pnr/bnpl/products/ancillaries call.
- 6. If ancillaries operation is successful, the airline calls /pnr/bnpl/products GET to update the selection associated to passenger and the shopping cart with modified price of the selected ancillaries.
 - a. New feature: the service ensures that the non-air ancillaries are added correctly with their new price.
- When the passenger indicates that shopping is complete the airline obtains available payment options for the current itinerary by calling /pnr/bnpl/paymentOptions GET. The airline can format the information for display to the passenger.

- 8. 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/bnpl/purchase POST.
 - a. If authorization is successful, the /pnr/bnpl/purchase POST service also adds specific remarks to the PNR about the price(s) of given ancillary(ies).
- 9. The response indicates whether the purchase is successful. The airline formats this information for display to the passenger.

2.2.1.4 API modification

Service Name	Operation	Change
/products/ancillaries	POST	Response will include new ancillary price. AncillaryOverridePrice object and errors added.
/pnr/mto/products/ancillaries	POST	Response will include new ancillary price. AncillaryOverridePrice object and errors added.
/pnr/bnpl/products/ancillaries	POST	Response will include new ancillary price. AncillaryOverridePrice object and errors added.

2.2.1.5 Fingerprint

Fingerprint validation is a general mechanism that can be used by various *Digital Connect* services. It prevents unauthorized modifications of JSON data. A user can define which data are sensitive and should be protected.

In *Digital Connect* v3.5 fingerprint will secure Ancillary price overriding. Each "ancillaryOverridePrice" element of an ancillary selection in /products/ancillaries POST contains "securityData" section ensuring that sensitive data (e.g. price) is not modified by an untrusted party after a client sends the request, i.e. prevents "man-in-the-middle" attacks.

AncillaryOverridePrice, being a client of fingerprint validator, provides input string for hash generation from the following data:

- ancillary subcode i.e. "0CE";
- base price (amount and currency);
- tax ancillary prices (amounts and currencies);
- timestamp.
- **Note** The ancillary code is not contained within ancillaryOverridePrice but it is retrieved from its ancestor.

2.2.1.5.1 Fingerprint creation procedure:

- 1. Base string creation.
- 2. Application of message authentication function on the input string (MAC with SHA-256 by default).
- 3. Representation of the final fingerprint and the output of the above operation in hex-encoded, 64-character string, such as:

e7541705e7c44f400afbda03e612f2e0876e4fffe0e54e379168b0c02e5ec308

2.2.1.6 PNR Remarks

In host remarks, the following elements will be added: the original price and the new price, an ancillary subcode, segment and for which passengers, as well as an indicator that the airline requested a price override.

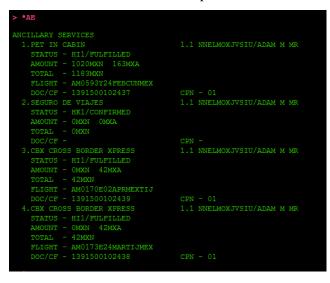
The remarks follow configuration or additional text qualifier passed by the API customer:

AOP /customer qualifier /groupcode /subcode /quantity /passenger(s) /id /{date}{O&D}{airline code}{flight number} /original total price (base+tax) /modified total price (base+tax)

• Remarks with old and new price:

> *YYGPMR					
YYGPMR					
1.1NNELMOXJVSIU/ADAM M MR*ADT					
1 AM 593Y 24FEB J CUNMEX*HK1 610P 750P /E					
2 AM 7Y 24FEB J MEXLHR*HK1 1125P 355P 25FEB S /E 3 AM 173E 24MAR J TIJMEX HK1 601A 1030A /E					
4 AM 173E 24MAR 5 TIOMER HKI 601A 1030A /E 4 AM 170E 02APR M MEXTIJ HKI 645A 839A /E					
4 AM 170E 02APR M MEXILO HKI 645A 659A /E TKT/TIME LIMIT					
1.T-31JAN-WVW5SSW					
2.TE 1392101766744-45 NNELM/A WVW5SSW 0343/31JAN					
3.TE 1391500102437 NNELM/A WWW55SW 0343/31JAN - PT					
4.TE 1391500102438 NNELM/A WVW55SW 0343/310AN - TS					
5.TE 1391500102439 NNELM/A WVW55SW 0343/310AN - TS					
VCR COUPON DATA EXISTS *VI TO DISPLAY					
PHONES					
1.WVW48-48-12345678X1-M					
2.wvw48-48-12345678x1-M-1.1					
3.WVW48-91-123456789X1-H-PURCHASER					
ANCILLARY EXISTS *AE TO DISPLAY					
PASSENGER EMAIL DATA EXISTS *PE TO DISPLAY ALL					
PRICE QUOTE RECORD EXISTS - *PQS					
AM FACTS					
1.SSR DOCS AM HK1/P/PL/ADAC24/PL/01JAN1990/M/12NOV2019/NNELMO					
XJVSIU/ADAM/MAJSTER					
AUV310/ADAM/MAU31ER					
REMARKS					
REMARKS					
REMARKS 1.H-AOP/TEXT1/PT/0BT/1PC/1.1/25FEBCUNMEXAM593/986.00MXN/1183.					
REMARKS 1.H-AOP/TEXT1/PT/0BT/1PC/1.1/25FEBCUNMEXAM593/986.00MXN/1183. 00MXN					
REMARKS 1.H-AOP/TEXT1/PT/0BT/1PC/1.1/25FEBCUNMEXAM593/986.00MXN/1183. 00MXN 2.H-AOP/-/99/AMS/1PC/1.1/195.00MXN/0.00MXN					
REMARKS 1.H-AOP/TEXT1/PT/0BT/1PC/1.1/25FEBCUNMEXAM593/986.00MXN/1183. 00MXN 2.H-AOP/-/99/AMS/1PC/1.1/195.00MXN/0.00MXN 3.H-AOP/-/TS/029/1PC/1.1/02APRMEXTIJAM170/299.00MXN/42.00MXN					
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REMARKS 1.H-AOP/TEXT1/PT/0BT/1PC/1.1/25FEBCUNMEXAM593/986.00MXN/1183. 00MXN 2.H-AOP/-/99/AMS/1PC/1.1/195.00MXN/0.00MXN 3.H-AOP/-TS/029/1PC/1.1/02APRMEXTIJAM170/299.00MXN/42.00MXN 4.H-AOP/TEXT2/TS/029/1PC/1.1/24MARTIJMEXAM173/299.00MXN/42.00 MXN 5.H-AUTH-FSS/AXUU18/3IJAN/01/1151/391/95322562 6.H-AUTH-APV/X54105/000/MXN64714					
REMARKS 1.H-AOP/TEXT1/PT/0BT/1PC/1.1/25FEBCUNMEXAM593/986.00MXN/1183. 00MXN 2.H-AOP/-/99/AMS/1PC/1.1/195.00MXN/0.00MXN 3.H-AOP/-TS/029/1PC/1.1/02APRMEXTIJAM170/299.00MXN/42.00MXN 4.H-AOP/TEXT2/TS/029/1PC/1.1/24MARTIJMEXAM173/299.00MXN/42.00 MXN 5.H-AUTH-PS/AXUU18/31JAN/U1/1151/391/95322562 6.H-AUTH-APV/X54105/000/MXN64714 7.H-AUTH-AVS SUCCESS-Y/ADDRESS AND ZIP/POSTAL MATCH/Y					
REMARKS 1.H-AOP/TEXT1/PT/0BT/1PC/1.1/25FEBCUNMEXAM593/986.00MXN/1183. 00MXN 2.H-AOP/-/99/AMS/1PC/1.1/195.00MXN/0.00MXN 3.H-AOP/-/TS/029/1PC/1.1/02AFRMEXTIJAM170/299.00MXN/42.00MXN 4.H-AOP/TEXT2/TS/029/1PC/1.1/24MARTIJMEXAM173/299.00MXN/42.00 MXN 5.H-AUTH-FSS/AXUU18/3IJAN/U1/11517391/95322562 6.H-AUTH-APV/X54105/000/MXN64714 7.H-AUTH-AVS SUCCESS-Y/ADDRESS AND ZIP/POSTAL MATCH/Y 8.H-AUTH-CSC MATCHED/Y					
REMARKS 1.H-AOP/TEXT1/PT/0BT/1PC/1.1/25FEBCUNMEXAM593/986.00MXN/1183. 00MXN 2.H-AOP/-/99/AMS/1PC/1.1/195.00MXN/0.00MXN 3.H-AOP/-/TS/029/1PC/1.1/02APRMEXTIJAM170/299.00MXN/42.00MXN 4.H-AOP/TEXT2/TS/029/1PC/1.1/24MARTIJMEXAM173/299.00MXN/42.00 MXN 5.H-AUTH-PS/AX0U16/31JAN/U1/1151/391/95322362 6.H-AUTH-APV/X54105/000/MXN64714 7.H-AUTH-AVS SUCCESS-Y/ADDRESS AND ZIP/POSTAL MATCH/Y 8.H-AUTH-CSC MATCHED/Y 9.H-FARE/NEG/YGB-YGB-EHNN0ACM-EHNN0ACM					
REMARKS 1.H-AOP/TEXT1/PT/0BT/1PC/1.1/25FEBCUNMEXAM593/986.00MXN/1183. 00MXN 2.H-AOP/-/99/AMS/1PC/1.1/195.00MXN/0.00MXN 3.H-AOP/-TS/029/1PC/1.1/02APMEXTIJAM170/299.00MXN/42.00MXN 4.H-AOP/TEXT2/TS/029/1PC/1.1/24MARTIJMEXAM173/299.00MXN/42.00 MXN 5.H-AUTH-PSS/AXUU18/31UAN/U1/1151/391/95322562 6.H-AUTH-APV/X54105/000/MXN64714 7.H-AUTH-AVS SUCCESS-Y/ADDRESS AND ZIP/POSTAL MATCH/Y 8.H-AUTH-CSC MATCHED/Y 9.H-FARE/NEG/YEB-YEB-EHNN0ACM-EHNN0ACM 10.H-FARE/NEG/AMT/1ADT/59565/3882/63447/MXN					
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• Issued AEs with overridden price



2.2.1.7 Error handling

Digital Connect v3.5 validates and sends error responses in cases such as:

- feature is disabled;
- requested ancillary is not allowed for price modification;
- invalid text qualifier;
- price is out of range;
- price modification with invalid currency scale;
- invalid currency;
- fingerprint errors e.g. timestamp is out of range;

etc.

To see the examples, please go to Digital Connect API Reference Online Documentation.

2.3 Hotels

Digital Connect 3.5 introduces a new feature that allows airlines to present hotel offers and subsequently allow customers to make a hotel reservation along with an initial booking or as an add-on post booking.

The solution will provide hotel offers for locations defined by an airport code only.

The services in *Digital Connect v3.5* will return a list of hotels, along with high-level information about them, based upon the location entered. The user can then select a specific hotel for more detailed information including pricing for all room types available. The response will also include hotel specific information, multiple descriptive data, photos, amenities, discounts, hotel fees and all other pricing data.

The passenger will have the ability to access the hotel cancellation policy for the room type that they are interested in. There will also be a service provided allowing the hotel to be added to the shopping cart as well as removing it.

Finally, the passenger will have the ability to purchase the hotel reservation through Tourico (which will be the Merchant of Record) using a credit card.

After booking the reservation, the hotel segment and hotel remarks will be added to the PNR which will be available in the post-booking flow.

This feature allows the airline to fulfill a passenger's need for accommodations while as they are making their air reservations.

This feature applies to the following paths:

- The Revenue Flow (B2C);
- Manage Your Booking Modify Trip Options Flow (MYB: MTO).

2.3.1 Prerequisites

The airline will need to have a contract in place with Tourico, the hotel vendor aggregator. However, the feature will be "on" by default; but hotel offers will only be returned if there is a contract in place between the airline and Hotel vendor.

2.3.2 Limitations

- 1. As Tourico is the Merchant of Record and doing the billing, only the credit cards supported by them will be usable. Credit card and currency data must be set up through a separate contract between the airline and Tourico.
- 2. No Multi-Form of Payment (MFOP).
- 3. No alternate forms (AFOP) of payment will be supported.
- 4. Airport code is required for searches.
- 5. The language of the hotel content will be handled by Tourico. Any hotel content that is not available in the requested language will be returned in the Tourico default for that hotel, usually English or the language of the country where the hotel is located.
- 6. Optional supplemental services are out of scope.
- 7. Optional (add-on) boardbases are out of scope.
- 8. No service will be created to pull an existing hotel reservation.
- 9. No service is provided to do online cancellation. All cancellations must be done through Tourico.
- 10. Two paths supported only the Revenue Flow (B2C) and the Manage Your Booking Modify Trip Options Flow (MYB: MTO).
- 11. The feature applies to round trips and one way only.
- 12. Multi-city is out of scope.
- 13. In the following flows:
- a. Manage Your Booking Change Itinerary Flow (MYB: CI);
- b. Manage Your Booking Cancel and Refund Flow (MYB: CR);

the user will be informed that they need to contact the hotel to cancel their hotel reservation. The CI and CR flows will not be restricted otherwise, and a hotel will not be bookable in the CI flow even if the customer has not previously booked a hotel. The user would need to add the hotel through the MTO flow after the itinerary is changed.

2.3.3 Error handling

2.3.3.1 Book Hotel

- In case any validation errors from client occur, the service returns response with validation error message, field(s) in error and message indicating search was not done.
- If downline error occurs, the service will return an error indicating if it was a downline business or technical error.
- If the DC service has a failure, it will return an error indicating if it was a business logic error or technical error.
- DC will return an error if the service is attempted to be used when it is not configured as on.

2.3.3.2 Search

- In case any validation errors from client occur, the service returns response with validation error message, field(s) in error and message indicating search was not done.
- If downline error occurs, the service will return an error indicating if it was a downline business or technical error.
- If the DC service has a failure, it will return an error indicating if it was a business logic error or technical error.
- DC will return an error if the service is attempted to be used when it is not configured as on.
- If no hotels are returned using the search criteria, an error message is returned indicating it.

2.3.3.3 Details

- In case any validation errors from client occur, the service returns response with validation error message, field(s) in error and message indicating search was not done.
- If downline error occurs, the service will return an error indicating if it was a downline business or technical error.
- If the DC service has a failure, it will return an error indicating if it was a business logic error or technical error.
- DC will return an error if the service is attempted to be used when it is not configured as on.
- If no hotel is found using the hotel id from the request, an error message is returned indicating it.

2.3.3.4 Cancellation Policy

• In case any validation errors from client occur, the service returns response with validation error message, field(s) in error and message indicating search was not done.

- If downline error occurs, the service will return an error indicating if it was a downline business or technical error.
- If the DC service has a failure, it will return an error indicating if it was a business logic error or technical error.
- DC will return an error if the service is attempted to be used when it is not configured as on.

2.3.3.5 External

No new error messages have been added.

2.3.4 Highlights

All the new hotels services are stateless and Tourico is the only supported provider.

Tourico Holidays is a travel distribution company that provides travel products in 6,271 destinations.

2.3.4.1 The Revenue Flow (B2C)

- 1. The airline calls /dc/hotels/search POST to search for hotels based upon airport code. All hotels that match search are returned with limited information.
- 2. The passenger selects a hotel.
- 3. The airline calls /dc/hotels/details POST for the specific hotel's detailed information combining two downline calls.
- 4. Optionally, Cancellation Policies /dc/hotels/cancellationPolicy POST is called to provide cancellation policies information.
- 5. When the passenger adds the hotel to shopping cart, /products/external POST is called.
- 6. The shopping cart is updated.
- 7. If the passenger wishes to remove hotel from shopping cart, the airline uses /products/external DELETE service.
- 8. When the passenger indicates that shopping is complete, the airline calls /dc/hotels/book POST to reserve the hotel property.

2.3.4.2 Manage Your Booking – Modify Trip Options (MYB: MTO)

- 1. The /pnr service GET operation returns information for the PNR specified in the parameters.
- 2. The airline calls /dc/hotels/search POST to search for hotels based upon airport code. All hotels that match search with limited data are returned.
- 3. The passenger selects a hotel.
- 4. The airline calls /dc/hotels/details POST for the specific hotel detail information combining two downline calls.
- 5. Optionally, Cancellation Policies /dc/hotels/cancellationPolicy POST is called to provide cancellation policies information.

- 6. When the passenger adds the hotel to shopping cart, /products/external POST is called.
- 7. The shopping cart is updated.
- 8. If the passenger wishes to remove hotel from shopping cart, /products/external DELETE is used.
- 9. When the passenger indicates that shopping is complete, the airline calls /dc/hotels/book POST to reserve the hotel property.

2.3.5 API modifications

Service Name	Operation	Change
/dc/hotels/search	POST	 Request Language results should be in; Currency for pricing information (supported currencies most be defined through Tourico) Airport Code of destination; Check-in date; Check-out date; Number of Adults; Number of Children (optional); Age of children (mandatory if the number of children is not equal to 0); Number of rooms requested (optional); Response Contains a list of all hotels in the search zone with general information, thumbnail image, minimum average nightly rate and an indicator of the lowest priced hotel.
/dc/hotels/details	POST	 Request Language results should be in; Currency for pricing information; Hotel ID (from /dc/hotels/search); Check-in date; Check-out date; Image size desired; Number of Adults; Number of Children (optional); Age of children (mandatory if the number of children is not equal to 0); Number of rooms requested (optional); Canadian tax breakdown. Response Provides detailed information about the hotel that includes full descriptive information, hotel property details, star level, GPS coordinates, and amenities.

		 It also provides information about the various room types that are available, which includes detailed pricing information, fees, discounts and facilities.
/dc/hotels/cancellationPolicy	POST	Request
		 Language results should be in;
		 Reservation ID (either this field or the following four fields are required. All fields cannot be sent.);
		• Hotel ID;
		 Room type ID;
		• Check-in date;
		• Check-out date.
		Response
		 Provides a breakdown of the various cancellation policies that exist for that room type in the hotel including when the penalty is in effect and what the penalty is.
/dc/hotels/book	POST	Request
		 Language results should be in;
		 Signature
		 Currency for pricing information;
		• Hotel ID;
		 ID of a selected room type;
		 Check-in date;
		 Check-out date;
		 Orice:
		 Contact – First Name (contact information required for each room);
		 Contact – Middle Name (optional);
		 Contact – Last Name;
		 Contact – Home phone (optional);
		 Contact – Mobile phone (optional);
		 Board base ID (for 0 price board base);
		 Board base price;
		 Supplemental Fee ID;
		 Supplement Fee Cost;
		 Supplemental Fee Type;
		 Oupplemental information may appear multiple times);
		• Note;
		 Number of Adults;
		 Number of Adults, Number of Children (optional);
		• Age of children (mandatory if the number of
		children is not equal to 0);Payment Type;
		• Payment Type;

/pnr /products/external /products/external	GET POST DELETE	 Credit Card holder middle name (optional); Credit Card holder last name; Credit Card holder home phone; Credit Card holder mobile phone; Credit Card holder address; Credit Card holder state (optional); Credit Card holder country; Credit Card holder zip code (optional); Credit Card holder email; PNR; Response Provides the status of the booking and details for the booking just made. Service will be extended to return hotel segment information. Currency Price IncludedInTotal == true Label == HOTEL
		 Credit Card holder last name; Credit Card holder home phone;
		 Credit Card holder address; Credit Card holder city; Credit Card holder state (optional); Credit Card holder country; Credit Card holder zip code (optional); Credit Card holder email; PNR; Response
· · · · · · · · · · · · · · · · · · ·		for the booking just made.
/pnr	GET	
/products/external	POST	 Price IncludedInTotal == true
/products/external	DELETE	Label == HOTEL

2.4 Flight 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* v3.5 adds and enhances the functionality in this area in the following ways.

2.4.1 Customer Entitlement Table Tier Level Baggage Allowance

Digital Connect v3.5 will allow the airline to display any additional baggage a traveler may be entitled to according to the passenger's tier level information in the Customer Entitlement Table during booking. This prevents the traveler from purchasing additional baggage when not required and the airline having to issue a refund during check in.

This feature applies to the following paths:

- The Revenue Flow (B2C);
- The Redemption Flow (RBE);
- Manage Your Booking Modify Trip Options Flow (MYB: MTO);

• Manage Your Booking – Change Itinerary Flow (MYB: CI).

2.4.1.1 Prerequisites

Customer Entitlement Table must be updated with tier level inclusions for baggage in the airline partition.

2.4.1.2 Highlights

Airline can provide their most valuable customers with reliable information about extra baggage allowance they are entitled to (based on their Frequent Flyer tier).

No changes in existing flows.

2.4.1.3 API modifications

Service Name	Operation	Change
/products/air/bags /pnr/mto/products/air/bags /pnr/exchange/products/air/bags	GET	Modify to return baggage entitlement per tier level or traveler.
/purchase	POST	Modified to return included baggage.
/pnr	GET	Modified to return included baggage.

2.5 Payment and Fulfillment

This section covers the services that airlines use to present passengers with the forms of payment that are available for an itinerary, to collect payment information, to authorize the payment information, and to ticket the booking. These services are available to both initial booking and post-booking (such as exchanges) situations.

The service that returns a detailed price breakdown of all products and passenger details in the itinerary currently held in the session has the following additions and enhancement:

2.5.1 China UnionPay SecurePlus

Currently China UnionPay (CUP) is processed as a 3rd party redirect Payment Service Provider's (PSP) type Form of Payment (FOP). CUP SecurePlus will give airlines option to offer this FOP as POS Hosted and eliminate the redirect processing. Passenger after selecting CUP Secure Plus will be able to process the payment in a two-step payment process.

Digital Connect v3.5 will:

- 1. Prompt the passenger to send the mobile phone number on the first purchase call. The Payments send a message informing that a validation code is required for the next authorization request, which is to be received via SMS.
- 2. The code is then passed to Payments during the second purchase call which concludes the process.

Digital Connect v3.5 will collect additional fields and include them in the Authorization request. Moreover, it will have the capability to configure which fields are to be collected per airline and per form of payment.

This feature applies to the following paths:

- The Revenue Flow (B2C)
- The Manage Your Booking Modify Trip Options Flow (MYB: MTO)
- The Book Now Pay Later Flow (B2C: BNPL)
- The Manage Your Booking Book Now Pay Later Flow (MYB: BNPL)

2.5.1.1 Prerequisites

China UnionPay SecurePlus must be activated in Payments by a carrier and configured in SSW as 'POS Hosted'. The PSP (re-direct) handling is the default option.

2.5.1.2 Limitations

- 1. Mobile phone number is required for booking.
- 2. Purchasing insurance is not supported with China UnionPay.
- 3. The feature is not supported in:
- The Manage Your Booking Change Itinerary Flow (MYB: CI)
- The Manage Your Booking Cancel Refund Flow (MYB: CR)

2.5.1.3 Highlights

Digital Connect v3.5 will support the new China UnionPay SecurePlus solution not via a Payment Service Provider's (PSP) hosted site but via a direct API call, which will be defined as POS Hosted and handled like a credit card.

Changes in services are the same for any flow where China UnionPay SecurePlus is offered.

2.5.1.3.1 The Revenue 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.
- 2. Airline UI displays the returned flights to the passenger on the Flights page.
- 3. The passenger selects a flight.
- 4. 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
- 5. The airline prompts passenger for passenger details: first name/name/gender, date of birth, phone number, email address etc.
- 6. The airline uses /passengers POST to add passenger to the itinerary.

- 7. The airline calls /products/ancillaries GET to obtain list of ancillaries available for the currently selected itinerary.
- 8. After ancillary selection the airline calls /products/ancillaries POST to add selected ancillaries to the itinerary.
- 9. The shopping cart is updated.
- 10. When the passenger indicates that shopping is complete the airline obtains available payment options for the current itinerary by calling GET /paymentOptions. 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.
 - a. New feature:
 - i. on the first /purchase call a passenger is asked for the mobile phone number to receive validation code;
 - ii. on the second /purchase call the code is passed to Payments.
- 12. The confirmation page is displayed.
- 13. The airlines submit a /pnr GET request. The airline can format the information for display to the passenger.

Service Name	Operation	Change
/purchase	POST	 1st Authorization request – send the mobile phone number 2nd Authorization request – send verification code and (received in first Authorization response) additional details.

2.5.1.4 API modifications

2.6 Pricing

2.6.1 Change Fee Override EMD gap

Today in *Digital Connect* there are instances when a change/refund fee of an Electronic Miscellaneous Document (EMD) is ignored in the post booking revenue and redemption flows.

Digital Connect v3.5 introduces Change Fee Override functionality which will require a waiver code to be passed instead of an N/A value.

The functionality applies to the following paths:

- Manage Your Booking Change Itinerary Flow (MYB: CI);
- Manage Your Booking Modify Trip Options Flow (MYB: MTO);
- Manage Your Booking Cancel and Refund Flow (MYB: CR);

• Loyalty Phase III – cancel refund.

2.6.1.1 Prerequisites

- Default waiver code needs to be configured.
- The default waiver code must match a waiver code in the MISCO* Table.
- Change Fee override needs to be enabled via multihost table.

2.6.1.2 Error handling

Digital Connect validates code(s) entered by a passenger and returns errors if:

- Invalid waiver code is passed to select flight service in Manage Your Booking Change Itinerary Flow (MYB: CI);
- Invalid waiver code is passed to cancel service in Manage Your Booking Cancel Refund Flow (MYB: CR);

Туре	Error code	Message	Description
BusinessLogic	ERR.SSW.PRICING.UNABLE_TO_REPRICE	\$INVALID WAIVER CODE-SEE MISCO* - 1561	It's returned in case invalid waiver code is passed to select flight service in MYB: CI flow
BusinessLogic	ERR.SSW.CANCEL.NOT_ALLOWED	Problem occurred during cancel pricing. Cancel is not allowed.	It's returned in case invalid waiver code is passed to select flight service in MYB: CR flow
BusinessLogic	ERR.SSW.CANCEL.NOT_ALLOWED	CHANGE FEE FIELD CANNOT BE BLANK	It's returned in case change fee override is enabled in host but not in DC

• Change fee override is enabled in host but not in *Digital Connect*.

2.6.1.3 Highlights

There are no changes to any of the Digital Connect Services.

Host Refund Record will show the penalty waived with the waiver reason code:

CANCEL PENALTY:WAIVED-01

2.6.1.3.1 Multi host table in Host

• Change Fee Override ON

ADV PURCHASE FOR CAT 31 -NO	AER TAX VARIANCE -NO	+
TOUR IDENTIFIER IN S40 -YES	ALLOW VCHR TO CASH REFUND-YES	
NON FLT *DISPLAY* ON S18 -YES	EXCHANGE WITH MIXED CUR -NO	
CALC EXCH USING BASE CURR-NO	EXCHANGE SHOPPING -YES	
RFND TO DIFFERENT TB A/C -NO	SSWEB V9 USER -YES	
LARGE AMTS ON ALL SCREENS-NO	NON REF EXCHANGE -NO	
CAT 33 NRF EXCHANGE -NO	MULTIPLE FORMS OF REFUND -YES	
VCHR TO ANY FORM OF RFND -YES	ANY OFOP TO ANY RFND -NO	
TTL REF DUE ON MULTI EQV -NO	REFUND TO ORIGINAL CUR -NO	
NON-REFUNDABLE ORIGINAL -NO	NON-REFUNDABLE NO SHOW -NO	
DETCO DIO DECEDA HODO ANA_NO	WAIVING FEE REQUIRES CODE-YES	
W/S USE OLD CHG FEE FMT -NO	ALLOW NONREF EMD OVERRIDE-NO	
MAX REFUND CASH/CREDIT CARD -		
MAX REFUND CASH/CREDIT CARD -	INTL 99999.99	
MAX REFUND BY VOUCHER		
MAX REFUND TO EMD-S	00000 00	
MAX REFUND TO TRAVEL BANK	99999.99	
MAX REFUND BY CHECK		
EVEN EXCHANGE TOLERANCE		
TAX TOLERANCE		
EMD RFIC/GR/RFISC/DES D/99/99:	I/RESIDUAL VALUE	+
REFUND ACCOUNTING STATIONS		Ŧ

• Change Fee Override OFF

REND TO DIFFERENT TE A/C -NO	SSWEB V9 USER -NO
LARGE AMTS ON ALL SCREENS-NO	NON REF EXCHANGE -NO
	MULTIPLE FORMS OF REFUND -NO
VCHR TO ANY FORM OF RFND -NO	ANY OFOP TO ANY REND -NO
TTL REF DUE ON MULTI EQV -NO	REFUND TO ORIGINAL CUR -NO
NON-REFUNDABLE ORIGINAL -NO	NON-REFUNDABLE NO SHOW -NO
PETCO DLC PROMPY HORO AAA-NO	WAIVING FEE REQUIRES CODE-NO
W/S USE OLD CHG FEE FMT -NO	ATTOM NONKEE FMD OARKIDE-NO
MAX REFUND CASH/CREDIT CARD -	US/PR/VI 99999.99
	INTL 99999.99
MAX REFUND BY VOUCHER	99999.99
MAX REFUND TO EMD-S	
MAX REFUND TO TRAVEL BANK	99999.99
MAX REFUND BY CHECK	
EVEN EXCHANGE TOLERANCE	
TAX TOLERANCE	
EMD RFIC/GR/RFISC/DES	
REFUND ACCOUNTING STATIONS	
ELECTRONIC MISC D	OCUMENT OPTIONS
ELEC VOUCHER ACTIVE -YES	ANCILLARY BAGS ACTIVE -YES
ANCILLARY SEAT ACTIVE -YES	ANCILLARY SERVICES ACTIVE-YES
HOLDHING DELL HOLLYD IDD	

• It is possible to turn on Change Fee Override and bypass web.

Change Fee Override bypassed for WEB SERVICES:

ADV PURCHASE FOR CAT 31 -NO TOUR IDENTIFIER IN \$40 -YES NON FLT *DISPLAY* ON \$18 -YES CALC EXCH USING BASE CURR-YES RFND TO DIFFERENT TB A/C -NO LARGE AMTS ON ALL SCREENS-YES CAT 33 NRF EXCHANGE -NO VCHR TO ANY FORM OF RFND -NO VCHR TO ANY FORM OF RFND -NO TTL REF DUE ON MULTI EQV -NO NON-REFUNDABLE ORIGINAL -NO PTTS DIC DESTRY USES ANA-MO V/S USE OLD CHG FEE FMT -YES MAX REFUND CASH/CREDIT CARD - MAX REFUND CASH/CREDIT CARD - MAX REFUND TO EMD-S MAX REFUND TO TRAVEL BANK MAX REFUND BY CHECK EVEN EXCHANGE TOLERANCE TAX TOLERANCE	ALLOW VCHR TO CASH REFUND-YES EXCHANGE WITH MIXED CUR -YES EXCHANGE SHOPPING -NO SSWEB V9 USER -NO NON REF EXCHANGE -YES MULTIPLE FORMS OF REFUND -YES ANY OFOP TO ANY RFND -NO REFUND TO ORIGINAL CUR -NO WAIVING FEE REQUIRES CODE-YES ALLOW NONREF EMD OVERRIDE-NO US/PR/VI 11000.00 INTL 11000.00 750.00	+
EMD RFIC/GR/RFISC/DES D/99/991 REFUND ACCOUNTING STATIONS	/RESIDUAL VALUE	+

2.6.1.4 API modifications

No changes in Digital Connect API.

Error handling

3.1 Validation error changes

In *Digital Connect* v3.4, despite the possibility of invoking multiple validators simultaneously, there was only a single error message returned per a validated field (i.e. the one from the last validator invoked). Moreover, because of the Java Specification Request (JSR) and Java Development Kit (JDK) implementation details, there was no stable order of invoking validators, so the error message in JSON response was returned randomly.

Digital Connect v3.5 introduces a solution to this issue by returning a list of all validator messages per field. Also, the two field required error messages (i.e. "validation.field.required" and "validation.error.required_but_not_found") are replaced by a single one – "validation.field.required".

3.1.1 Changes in error response

3.1.1.1 Multiple error messages per field

There are no contract changes since the contract always allowed a list of messages per field, but in the case of error messages the DC implementation returned a single-element list only (i.e. an error message from the last called validator).

In Digital Connect v3.5. error messages from all the validators applied to a given field are returned.

Example of error message details:

Contract version	Origin	Destination	Description
Digital Connect v3.4	"validation.field.invalid"	"validation.field.required"	One validation error per field.
Digital Connect v3.5	"validation.text.tooShort", "validation.field.invalid"	"validation.text.tooLong", "validation.field.invalid"	Multiple error messages per field.

3.1.1.2 "Field required" message unification

Until *Digital Connect* v3.4 there were two different error messages for fields required. Example:

In *Digital Connect* v3.5 both messages ("validation.field.required_but_not_found" and "validation.field.required") are unified to "validation.field.required".

Example of invalid client request:

Contract version	Error code	Message	Description
Digital Connect v3.4	ERR.SSW.CLIENT. INVALID_REQUEST	<pre>"message": "Validation error.", "details": { "currency": ["validation.field.required"], "languageld": ["validation.error.required_but_not_found"</pre>	Two different error messages for fields required: • validation.field.required _but_not_found • validation.field.required
Digital Connect v3.5	ERR.SSW.CLIENT. INVALID_REQUEST	"message": "Validation error.", "details": { "currency": ["validation.field.required"], "languageld": ["validation.field.required"	Both messages unified to validation.field.required

Defect Fixes

4.1 Summary of Defect Fixes

Below defects will be fixed in *Digital Connect v3.5*:

4.2 Defect 1

iCRM/Siebel SR#:

1-4082014801

Title:

Ancillary Cart currency should be CZK as per AZ

Description:

It was reported that shopping list from OAC of Czech market is showing prices in EUR and not in CZK (equivalent column Shopping List) - Production Interact v7.3.1- SE 9.5X.

Resolution:

A code fix has been provided - QueryAncillariesRQ rollbacker has been created. It can be enabled with the se.ancillaries.removeCountryElementAndDefaultCurrencyProperty configuration property. It drops the country from RQ and sets the configuration property sat.currency.default to null only for this particular session.

4.3 Defect 2

iCRM/Siebel SR#:

1-3970184531

Title:

Inbound flights not returned for roundtrip itineraries with flights not operating on outbound date

Description:

For flights that do not operate daily, partial results (one-way itineraries) are expected when flights operate only on one of the dates in roundtrip inquiry. This works correctly when flights operate on outbound date only, but no one-way itineraries are returned when flights operate on inbound date only.

Resolution:

A code fix has been provided – update of inbound flights matcher for case of flights not operating on outbound.

4.4 Defect 3

iCRM/Siebel SR#:

1-1XUZS10

Title:

Tickets refused by Adyen were ticketed

Description:

Transactions rejected by Adyen are being ticketed with direct authorization.

Resolution:

The issue is caused by sending an extra space in the passengers service - fixed by trimming whitespaces.

4.5 Defect 4

iCRM/Siebel SR#:

1-4304014941

Title:

Unable to book online multiple city

Description:

When shopping for 4-leg multicity itinerary without diversity enabled, processing takes up huge amount of memory and times out.

Resolution:

A fix has been provided – optimization to handle large responses from IntelliSell. Code changes influence most QueryProducts flows.

4.6 Defect 5

iCRM/Siebel SR#:

1-4388718721

Title:

Loyalty: INTERNAL ERROR with Pricing ADT/CNN

Description:

All pricing is failing when booking ADT/CNN PNR. No issues if ADT is travelling alone.

Resolution:

An internal error in reprice. Interact sends the Passenger as Other with Extension as CNN. Service Engine expects to get CHD as a passenger code – a fix to this scenario has been provided.

4.7 Defect 6

iCRM/Siebel SR#:

1-4445757881

Title:

CVT E2E4 Unexpected response in QueryAncillary service

Description:

When the QueryAncillary service is called in the Saber's CERT environment, with a Pseudo City Code (PCC) that has a currency equal to that of the PCC from which the reservation was generated, the prices of the ancillaries no longer include the equivalent amount. It is a new behavior, since previously this data was always provided.

In Sabre's RES environment, the QueryAncillary service continues to provide the equivalent amount even when the CCP currencies of the reserve and quotation are the same.

Resolution:

A code fix which allows return for old contract version (such as 9.7.0) equivAmount data in a way expected by Interact and Ia.com has been provided.

4.8 Defect 7

iCRM/Siebel SR#:

1-4445900441

Title:

Form of Payment Cash

Description:

Ticket paid by WeChat Pay but E-ticket and VCR show Form of Payment: Cash.

Resolution:

A code fix has been provided – the correct Form of Payment for specific AFOP.

Contacting Customer Care

5.1 About Sabre Airline Solutions Customer Care

Sabre Airline Solutions[®] maintains the *Sabre*[®] *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.

5.1.1 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.

5.1.1.1 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

- 1. Go to community.sabre.com.
- 2. Click New Account.

The New User Registration page appears.

- 3. Enter required information.
- 4. 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.

5.1.1.2 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.

5.1.2 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	 Dial 1-800-000-133 (AT&T) Wait for the recording asking for the number you are dialing. Dial 888-832-4738.
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	 Dial 1-201-0288 (AT&T Toll Free Number). Wait for the recording asking for the number you are dialing. Dial 866-947-8059.
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 impact on your company's operations?
- 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?

5.2 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.	
	 Key personnel are unable to perform operational tasks due to system outage. 	
	 Current business practices cannot be performed due to system failure and continued work stoppage has severe financial consequences. 	
	• 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.	

5.2.1 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.	

5.2.2 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.