



# Release Notes: Release Ready

SabreSonic CSS Digital Connect

Shop & Book, Manage Your Booking, Modify Trip Options

Version 3.6

## **Software version 3.6**

### **Document Edition 1.0 (October 2018)**

Template Version 4.9

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# Introduction

## 1.1 Document Overview

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This document contains release notes information for *SabreSonic® CSS Digital Connect v3.6*. Read this document so that you are aware of changes to the solution.

## 1.2 Release Identification

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

# Release Features

## 2.1 Summary of Features

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*Digital Connect v3.6* includes the following new and enhanced features by using *Digital Connect v3.6* services:

- Loyalty
- Flight Shopping

## 2.2 Loyalty

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### 2.2.1 Pricing Breakdown of Loyalty Fares and Taxes by Fare

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The conversion of taxes in the redemption space is problematic due to the various taxes that can be applied at any level within the fare structure. Redemption for fixed fares works at the fare component level and when some taxes cross the itinerary it is difficult to determine the conversion and refund strategies for these taxes. Redemption fares and taxes on those fares may or may not be converted to points per the carrier's business direction.

*Digital Connect v3.6* clearly defines each tax in the pricing response and provides points breakdown of taxes and surcharges that apply to each fare component in an itinerary.

The taxes will be returned in the response at the following levels:

- The complete itinerary;
- Inbound or outbound;
- The fare component;
- Segment;
- Part of the base fare.

New feature allows the taxes to be returned at the fare component level regardless of how the airline filed the taxes and surcharges.

Dynamic fares (in fully dynamic and mixed awards scenarios) will also be adjusted to make sure that the summation of the fare component pricing matches itinerary part pricing.

This functionality applies to The Redemption Flow (RBE).

#### 2.2.1.1 Prerequisites

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- Tax compensation logic and surcharge compensation must be activated in IntelliSell.
- Configuration to use fare breakdown enabled.
- Configuration to use this functionality or to keep the existing logic.

### 2.2.1.2 Limitations

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This functionality only applies to fixed awards.

### 2.2.1.3 API modifications

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Service Name	Operation	Change
/products	GET	Response will include points breakdown at fare component level.

## 2.3 Flight Shopping

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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* v3.6 adds and enhances the functionality in this area in the following ways.

### 2.3.1 Price Jump in Context Shopping

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This feature is an enhancement to Context Shopping. It is a part of the product, not a premium add-on.

Price Jump provides price adjustments during the shopping flow to prevent price discrepancies. For example, in a round trip itinerary, once user has selected the outbound flight, any price difference for the selected outbound flight will be adjusted to the inbound flight offers during the Context shopping response. Price Jump with Interline Branded Fares (IBF) Calendar shopping using the 7-day ribbon offers prices for both requested and alternate dates returning the lowest fare for each flight/brand. Based upon configuration, prices can be presented as either split per leg or as total itinerary price referred to as bundled.

In both view presentations, the fares offered on the ribbon are valid and are represented for purchase in the provided flight selections. Multicity is offered in Price Jump also, without the 7-day ribbon.

Fares can be displayed per passenger type or passenger total, depending on the carrier's choice. Additionally, the carrier can choose to display fares as Base only or Base + Tax. Discounts can be offered for pre- as well as post-shopping using Flight Promotions.

This feature applies to the following paths:

- The Revenue Flow (B2C);
- Book Now Pay Later Flow (B2C: BNPL).

#### 2.3.1.1 Limitations

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- Discount through Flight Promotions for bundle price is out of scope;
- OB fees for bundle price will be supported in the next release.

### 2.3.1.2 Prerequisites

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A carrier needs to be a customer of Context Shopping and a user of Interline Branded Fares (IBF) Calendar Shopping.

The following configurations for Price Jumps are:

- sat.search.b2c.uniqueOffers.enabled (default: false)
- sat.search.rbe.uniqueOffers.enabled (default: false)
- sat.search.b2c.bundlePrice.enabled (default: false)

### 2.3.1.3 Highlights

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- Multicity and Round Trip unbundle offers are currently supported.

#### 2.3.1.3.1 Whole itinerary price – Bundle Price

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Bundle Price is not enabled by default, but it can be used in Context Shopping or regular Interline Branded Fares (IBF) calls.

When the Bundle Price configuration is enabled:

1. If Bundled Price is enabled the total itinerary price is returned in addition to the 'Base' and 'Tax' for the Itinerary part or leg price.
2. *Digital Connect* search response returns a new element called bundledPrice in addition to the existing itinerary part price information for an offer. The bundled price element contains 'Base', 'Tax' and 'Total'.

"BundlePrice" is returned for "unbundleOffers", "unbundleAlternateDateOffers" and "brandedResults" in *Digital Connect* search response. Bundle Price also takes into account the "sat.flights.pricePaxesCalculation.type = ALL\_PAX/PER\_PAX" configuration.

#### 2.3.1.3.2 The Revenue Flow (B2C)

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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. The 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
  - a. New feature: not only current context shopping flight details are sent to shopping but pricing information for selected flights as well. Based upon the passenger flight selection, any pricing differences will be displayed in the subsequent flights offered to complete the itinerary.
5. The airline prompts passenger for passenger details: first name/surname/gender, date of birth, phone number, email address etc.
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 calls /products/ancillaries GET to obtain list of ancillaries available for the currently selected itinerary.
9. After a user selects an ancillary the airline calls /products/ancillaries POST to add selected ancillaries to the itinerary.
10. 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.
11. The shopping cart is updated.
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. 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.
14. The airline returns a /purchase service POST operation response and the confirmation page is displayed.
15. The airlines submit a /pnr GET request. The airline can format the information for display to the passenger.

#### 2.3.1.4 API modifications

Service Name	Operation	Change
/products/air/	POST	In addition to current context shopping flight details sent to shopping, pricing information for selected flight will be sent as well.

## 2.3.2 Flexible Calendar Search

Today in *Digital Connect* the experience of shopping for dates with round-trip prices is limited or in some cases the best combinable fare option is not returned.

*Digital Connect* v3.6 offers an enhancement in calendar to shop for flexible dates by showing the 30-Day Calendar. It returns the lowest branded, combinable fare for each date. These fares will be available for selection on the flight selection process. This enhancement also shows a round-trip fare with an indicator about the return option that was used for pricing.

The calendar provides either seven (7), fifteen (15), or thirty-one (31) days for outbound travel based on a flexibility indicator set by the airline. Each outbound date can be coordinated with an inbound date within plus or minus the tolerance range. This allows the lowest round-trip fare to be returned, and provides the traveler with additional return options.

The below table reflects the flexibility rules for 1<sup>st</sup> and 2<sup>nd</sup> request for both outbound (OB) and inbound (IB) dates.

Flight dates	First request	Second request
Outbound date	<ul style="list-style-type: none"> <li>If the shopping date is not within the flexibility range of the outbound date (i.e. shopping date is greater than or equal to 3, 7, or 15 days from the OB date): <ul style="list-style-type: none"> <li>The outbound date is searched within the flexibility range of days before and after the passed OB date.</li> </ul> </li> <li>If the flexibility range of the request overlaps the current shopping date (i.e. shopping date is less than the flexibility [3, 7, or 15] number of days away from the OB date passed: <ul style="list-style-type: none"> <li>the outbound date is searched from the current (shopping) date through 2 times the flexibility range.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>The outbound date is used exactly as passed by the client.</li> </ul>
Inbound date	<ul style="list-style-type: none"> <li>If the inbound date is beyond the flexibility range of the outbound date, and the OB date was beyond the flexibility range of the IB date: <ul style="list-style-type: none"> <li>the inbound date is not changed.</li> </ul> </li> <li>If the inbound date overlaps the range of the outbound date: <ul style="list-style-type: none"> <li>the inbound date is the last day of the search range of the outbound date.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>If the inbound date is over fifteen (15) days greater than the outbound date: <ul style="list-style-type: none"> <li>the outbound date is used as passed.</li> </ul> </li> <li>If the inbound date is up to fifteen (15) days greater than the outbound date: <ul style="list-style-type: none"> <li>the outbound date is the inbound date increased by fifteen (15) days.</li> </ul> </li> </ul>

This functionality applies to the Revenue Flow (B2C).

### 2.3.2.1 Prerequisites

- sat.search.flexibleCalendar.enabled – must be set to true; false uses existing.
  - This configuration is to prevent an airline from using this search if they are not eligible for it.
- sat.search.flexibleCalendar.search.plusMinus – the value that the airline uses in their searches. The default value is 3.
  - This configuration is to prevent the airline from using a larger flexibility range if it is sold as a premium service.

- gds.sabre.routeMustBeConfigured – must be set to false;
- sat.search.calendar.brandedShoppingEnabled – must be set to true;
- sat.search.fareBrandFiltering.enabled – must be set to true;
- sat.search.calendarFareBrandFiltering.enabled – must be set to true.
- sat.search.flexibleCalendar.oneWay.enabled – must be set to true if the feature is supposed to apply to one way trip.

### 2.3.2.2 Highlights

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One of the current calendar flight search solutions in *Digital Connect* is 30 Day Calendar. This functionality combines several outbound offers with one inbound offer only. If, for any reason, the inbound offer is not available, the functionality returns no available flights for the whole month. Such result is problematic as it is not true.

The other solution is search using NxN or NxM Calendar Matrix display which is designed to get the full combination of both outbound and inbound offers. Presently, delivering the 30x30 option is highly inefficient and impractical, therefore, the currently available modes are 5x5 and 7x7.

The Flexible Calendar solution balances the advantages of the previous two. If a customer selects an inbound offer that is unavailable, Flexible Calendar returns other options. The functionality combines several outbound dates with lowest fare inbound dates from within the tolerance range. The displayed prices are bundled, which counteracts any price jump effects, and so, the customer's confusion. As a result, the customer chooses outbound date based on total trip prices.

	<b>Calendar30</b>	<b>Calendar Matrix</b>	<b>Flexible Calendar</b>
Number of requests	2	1	1
Processed offers	$30 \times 1 + 1 \times 30 = 60$	$7 \times 7 = 49$	$30 \times 7 + 1 \times 30 = 240$
Prices	Unbundled	Unbundled	Bundled
Issues	No availability issue	Performance 30x30	n/a

#### 2.3.2.2.1 The return date disclosure

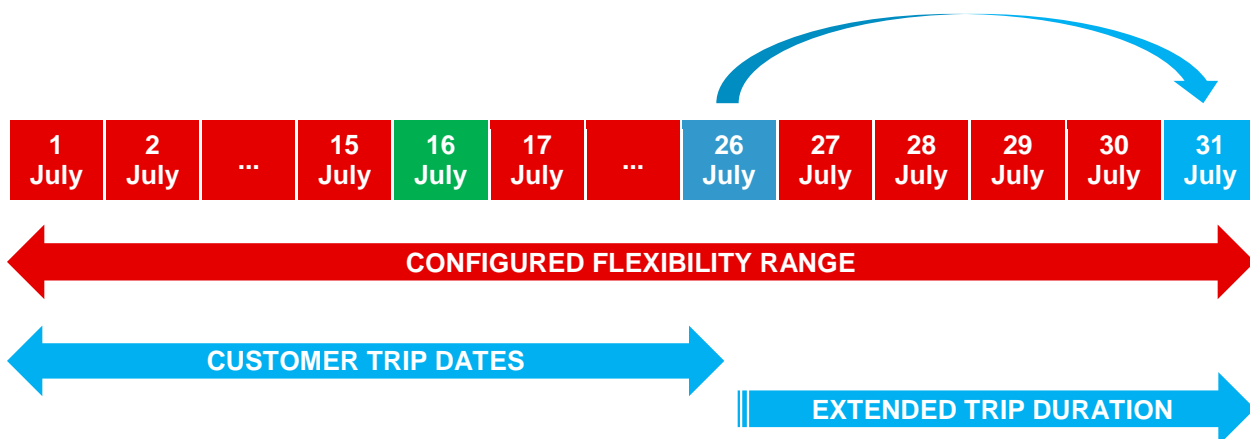
---

The Flexible Calendar displays the full allowed flexibility range, which is configurable.

The customer selects the outbound date (e.g. July 16) and the inbound date (e.g. July 26), and if:

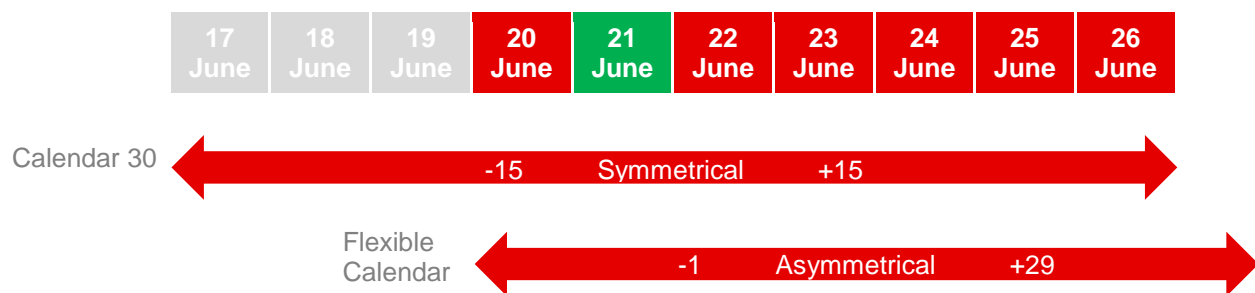
- the flexibility range configuration value is +/- fifteen (15) days;
- the inbound date is below the outbound date range;

The outbound date is the last day of the search range of the outbound date (July 31).



#### 2.3.2.2.2 Short trips

Currently in *Digital Connect*, Calendar 30 performs search symmetrically, therefore, in case of short trips (e.g. OB date June 20, IB date June 21) the search returns past dates as well. The Flexible Calendar does not allow a customer to search for a flight backwards and extends the search range asymmetrically.



#### 2.3.2.3 API modifications

Service Name	Operation	Change
/products/air/search	POST	<p>1<sup>st</sup> call:</p> <ul style="list-style-type: none"> <li>New searchType = FLEXIBLECALENDAR;</li> <li>Client will provide both inbound and outbound dates;</li> <li>Client will send flexibility range in plusMinusDays element.</li> </ul> <p>2<sup>nd</sup> call</p> <ul style="list-style-type: none"> <li>New searchType = FLEXIBLECALENDAR;</li> <li>Client will provide both inbound and outbound dates;</li> </ul>

		<ul style="list-style-type: none"><li>Client will send the selectedOfferRef element set up “-1” to differentiate between first and second request.</li></ul>
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## Defect Fixes

### 3.1 Summary of Defect Fixes

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Below defects have been fixed in *Digital Connect* v3.6:

### 3.2 Defect 1

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<b>iCRM/Siebel SR#:</b> 1-3186667961 & 1-1HQB8J6
<b>Title:</b> The operating carrier is not being displayed for codeshare when calling Flight Schedules.
<b>Description:</b> On flight schedules page, the operating carrier is not being displayed.
<b>Resolution:</b> Both operating carrier and marketing carrier will be displayed on the flight schedules page when the operating carrier differs from the marketing carrier.

### 3.3 Defect 2

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<b>iCRM/Siebel SR#:</b> n/a
<b>Title:</b> Dynamic 3DS Poller support for BNPL.
<b>Description:</b> DC 3.6 introduces the support of Poller capability in the Book Now Pay Later flow.
<b>Resolution:</b> The Poller will check if there is a ticket already issued at the time of purchase of the 3DS redirect.

### 3.4 Defect 3

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<b>iCRM/Siebel SR#:</b> n/a
<b>Title:</b> Ticket Time limit application for AFOP to fulfill Book Now Pay Later Booking.
<b>Description:</b> When a consumer comes back to fulfill the On Hold Booking, and wishes to use an Alternative Form of Payment (AFOP), then based on a new configuration determines if, based on the Ticket Time Limit (TTL) of the BNPL offer, the AFOP should be offered as a viable form of payment.
<b>Resolution:</b> <ul style="list-style-type: none"><li>• Introduced a configuration that determines if Book Now Pay Later (BNPL) Ticket Time Limit (TTL) is less than an Alternative Form of Payment (AFOP) TTL, then do not return AFOP as a payment option;</li><li>• Configuration: payment.adapter.afop.returnAFOPWithoutTTLValidation – set to false as the default value:<ul style="list-style-type: none"><li>◦ If the above configuration is true, AFOP is returned in BNPL flow without any TTL comparison with a warning message (how much time there is left for the BNPL TTL to expire and an advice that some AFOPs may take longer to in the payment options response);</li><li>◦ If the above configuration is false, the TTL comparison is performed and an AFOP option is returned only if BNPL TTL is higher.</li></ul></li></ul>

### 3.5 Defect 4

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<b>iCRM/Siebel SR#:</b> n/a
<b>Title:</b> Original PCC for PNR Retrieval.
<b>Description:</b> The PNR retrieval service has been enhanced to either return the Original booking Pseudo City Code (PCC) or the storefronts Pseudo City Code (PCC).
<b>Resolution:</b> A new configuration has been added to return Pseudo City Code (PCC) from the storefront rather than the booking Pseudo City Code (PCC). Config Key – gds.sabre.retrieveBooking.retrieveOriginalPseudoCityEnabled.

### 3.6 Defect 5

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<b>iCRM/Siebel SR#:</b> n/a
<b>Title:</b> Handling for Duplicate PNR Duplicate PNR that are triggered by back navigation during purchase.
<b>Description:</b> In the scenario when a user selects the back button on their browser there was the possibility of a duplicate booking being created.
<b>Resolution:</b> A new configuration gds.ticketingConfiguration.cancelDuplicatePnr.enabled has been created. If this configuration is true, then a duplicate PNR check will be executed to check whether a non-ticketed PNR already exists in the session (if it does, it will be canceled). If the above configuration is false, <i>Digital Connect</i> will not perform any check for duplicate PNR. The default value is set to true.