Freedom To Fly
The Way You Want

Time	To	Flight		Gate	Remarks
2310	Frankfurt	LH	524	C24	Boarding
2320	London-Heath	BA	16	C18	Boarding
2325	Tokyo-Narita	NH	902	D35	Boarding
2325	London-Heath	QF	9	C13	Boarding
2340	Paris-CDG	DL	8377	C22	On Time
2345	Tokyo-Narita	AA	5832	D44	Boarding
0025	Osaka/Kansai	JL	722	D40	On Time
0055	London-Heath	QF	31	C26	On Time
0130	Beijing	CA	970	D30	On Time
0145	Moscow-Domode	UA	516	C23	On Time

Release Notes: Release Ready

SabreSonic CSS Digital Connect

Shop & Book, Manage Your Booking, Modify Trip Options

Version 3.0.1

Sabre

Software version 3.0.1

Document Edition 1.0 (September 2016)

Template Version 4.5

Table of Contents

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Introduction

1

abreSonic® CSS Digital Connect exposes key capabilities of Sabre's eCommerce platform like shopping, booking, ancillaries, payments, seat selection and ticketing whilst abstracting its underlying booking engine business, architecture and infrastructure, to enable an optimized data set via JSON for airlines to consume and create their own user experiences.

This document contains "Release Ready" Release Notes information for *SabreSonic® CSS Digital Connect v3.0.1*.
It contains high-level information to enable advanced identification of new features and preparation for readiness and deployment.

1.1 Document Overview

This document identifies the functionality provided by the release ready release of *SabreSonic® CSS Digital Connect v3.0.1* and the specific services that gives airlines to that functionality. For details, see the Digital Connect API documentation.
Read this document so that you are aware of changes to the solution.

1.2 Release Identification

Release Version	Type (Version, Update, or Update with Patch)	Date	Approved By	Description of Change
3.0.1	Maintenance release	September 2016		

Release Features

2

2.1 Summary of Features

SabreSonic® CSS Digital Connect v3.0.1 includes the following new and enhanced features by using *SabreSonic® CSS Digital Connect v3.0.1* services:

2.2 Error handling

SabreSonic® CSS Digital Connect v3.0.1 implements an enhancement that aims to solve some minor issues related to proper error handling.

The aim of this enhancement is to provide the Airline with more precise explanation of the behavior, which caused an error e.g. wrong order of service calls - Products are called before the Flight Selection.

2.2.1 API Modifications

There will be no new messages added to the contract – already existing error messages will be added to the specific services.

1. Service /passengers POST

   - Problem: Service /passengers executed before the Flight Selection (/products/air POST).

     o *Old Error Message – removed:*

```
{
  "status": "Complete",
  "type": "BusinessLogic",
  "errorCode": "ERR.SSW.APP.BUSINESS_ERROR",
  "timeStamp": "2016-08-09T19:06:12",
  "message": "'Reservation' object has to be set first."
}
```

     o *New Error Message – added:*

```
{
  "status": "Incomplete",
  "type": "BusinessLogic",
  "errorCode": "ERR.SSW.APP.MISSING_RESERVATION",
  "timeStamp": "2016-08-09T19:18:22",
  "message": "Itinerary has not been selected."
}
```

2. Service /products GET

- Problem: Service /products executed before the Flight Selection (/products/air POST).

  o *New Error Message – added:*

```
{
  "status": "Incomplete",
  "type": "BusinessLogic",
  "errorCode": "ERR.SSW.APP.MISSING_RESERVATION",
  "timeStamp": "2016-08-09T19:18:22",
  "message": "Itinerary has not been selected."
}
```

3. Service /products/air/search

- Scenario 1 – "*itineraryParts* " object has not been sent:

  o *AirSearch Request:*

```
{
   "cabinClass" : "Business",
   "currency" : null,
   "awardBooking" : false,
   "searchType" : "BRANDED",
   "promoCodes" : null,
   "passengers" : {
   "ADT" : 1
   },
   "pointOfSale" : null,
   "trendIndicator" : null
}
```

  o *AirSearch Response:*

```
{
  "status": "NotProcessed",
  "type": "Validation",
  "errorCode": "ERR.SSW.CLIENT.INVALID_REQUEST",
  "timeStamp": "2016-09-15T20:07:06",
  "message": "Validation error",
  "details": {
    "itineraryParts": [
      "validation.error.required_but_not_found"
    ]
```

```
    }
}
```

- Scenario2 – "*itineraryParts*" has been sent as an empty object:

    o *AirSearch Request:*

```
{
    "cabinClass" : "Economy",
    "currency" : null,
    "awardBooking" : false,
    "searchType" : "BRANDED",
    "itineraryParts" : [ ],
    "promoCodes" : null,
    "passengers" : {
     "ADT" :"1"
     }
    "pointOfSale" : null,
    "trendIndicator" : null
}
```

    o *AirSearch Response:*

```
{
  "status": "NotProcessed",
  "type": "Validation",
  "errorCode": "ERR.SSW.CLIENT.INVALID_REQUEST",
  "timeStamp": "2016-09-15T20:07:06",
  "message": "Validation error",
  "details": {
    "itineraryParts": [
      "validation.error.required_but_not_found"
    ]
  }
}
```

4. Service /products/ancillaries GET

- Problem: Service /products/ancillaries executed before the Flight Selection (/products/air POST):

    o *Old Error message – removed:*

```
{
  "status": "Complete",
  "type": "BusinessLogic",
```

```
  "errorCode": "ERR.SSW.APP.BUSINESS_ERROR",
  "timeStamp": "2016-08-09T19:06:12",
  "message": "'Reservation' object has to be set first."
}
```

  o *New Error Message – added:*

```
{
  "status": "Incomplete",
  "type": "BusinessLogic",
  "errorCode": "ERR.SSW.APP.MISSING_RESERVATION",
  "timeStamp": "2016-08-09T19:18:22",
  "message": "Itinerary has not been selected."
}
```

- Problem: Service /products/ancillaries called before passengers were added to the reservation (/passengers POST):

  o *New Error Message – added:*

```
{
  "status": "Incomplete",
  "type": "Application",
  "errorCode": "ERR.SSW.CLIENT.PASSENGERS.MISSING ",
  "timeStamp": "2016-08-09T19:00:17",
  "message": "Passengers has not been selected. "
}
```

5. Service /products/air/farerules

- Problem: Service /products/air/farerules service executed before the Flight Selection (/products/air POST):

  o *Old Error Message – removed:*

```
{
  "status": "Complete",
  "type": "BusinessLogic",
  "errorCode": "ERR.SSW.APP.BUSINESS_ERROR",
  "timeStamp": "2016-08-09T18:58:05",
  "message": "'Reservation' object has to be set first."
}
```

o *New Error Message – added:*

```
{
  "status": "Incomplete",
  "type": "BusinessLogic",
  "errorCode": "ERR.SSW.APP.MISSING_RESERVATION",
  "timeStamp": "2016-08-09T19:18:22",
  "message": "Itinerary has not been selected."
}
```

2.3 Forms of Payment

Setup of forms of payment that will be available to passengers in *SabreSonic® CSS Digital Connect v3.0.1*.

2.3.1 New Forms of Payment

Newly supported forms of payment include:

- Combination of the Credit Card and PagaTodo;
- Combination of the 3DS Credit Card and PagaTodo;
- Combination of the Credit Card and UATP Credit Card;
- Combination of the 3DS Credit Card and UATP Credit Card.

They will be implemented across below flows

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

2.3.1.1 API Modifications

There will be no changes in the API.

2.4 PNR Retrieval

The service that retrieves PNR information for an existing booking has the following enhancement – there will be a new way of handling situations with PNR(s) where logged-in user is not a passenger (e.g. claimed PNRs). In such situations it is required to allow user to retrieve such PNR based on the result of /profile/mytrips service.

2.4.1 Highlights

In order to allow logged-in user retrieve all PNR(s) in the profile (also where logged-in user is neither organizer, nor traveler) Digital Connect makes following sequence of DC service calls:

1. The airline prompts the passenger for login credentials; the passenger supplies them.
2. The airline logs the passenger in with the /login POST service.
3. The airline executes /profile/mytrips service and retrieves list of PNRs associated with the booking.
   Cache creation – it will store a list of all PNR(s) belonging to the booking.
4. PNR retrieval – Digital Connect will allow to execute the /pnr service with only the PNR locator number as a parameter in the request (even if the airline has set also the last name as the required parameter):

   - If PNR is in the cached list - /pnr service will retrieve this PNR (PNR will be retrieved also if the last name has not matched or if the last name has not been sent in the request);
   - If PNR is not in the cached list from /profile/mytrips - there will be an error stating that this PNR cannot be retrieved, asking for other required data for the PNR:

     "Problem occurred while retrieving a pnr. Pnr not existing or verification information like first name, last name or email not valid."

5. If service /profile/mytrips was not invoked previously – there will be an error (missing PNR data, like last name etc).

2.4.2 Prerequisites:

1. User has to be logged-in (POST /login)
2. Service /profile/mytrips has to be invoked (in order to get list of all PNR(s) which are linked to the profile)

2.4.3 API Modifications

There will be no changes in the API.

2.5 Seat Map

The service that obtains information about seats that are available for any flights that the passenger has selected and populates a seatmap for the passenger has the following enhancement:

2.5.1 Seat characteristics returned by the SeatMap services

The Seat Map has been enhanced due to the returned from *GetSeatMap* seats facilities codes. Those codes will be returned for each seat in the Seat Map response structure as the s*eatCharacteristics* Array:

```
"seatCharacteristics": [
                        "A",
                        "CH"
                      ],
```

2.5.1.1 Prerequisites

Enhanced Seat Map must be used by the airline.

2.5.1.2 API Modifications

Service Name	Operation	Change
/products/seats /products/seats/preview /pnr/bnpl/products/seats /pnr/mto/seats /pnr/mto/products/seats /pnr/exchange/products/seats /pnr/upgrade/products/seats	GET	Response will include the following codes in the seatCharacteristics Array: • EXTRA_LEG_SPACE->L • LEG_REST->2 • BULKHEAD->K • BULKHEAD_WITH_MOVIE_SCREEN->KA • EXIT_DOOR->E BASSINET->B • MOVIE_SCREEN->MV • INDIVIDUAL_MOVIE_SCREEN_WITH_CHOICE->3 • INDIVIDUAL_MOVIE_SCREEN_WITHOUT_CHOICE->3A • AIR_PHONE->AR • INDIVIDUAL_AIRPHONE->AS • EMERGENCY_EXIT->EX • LUGGAGE_STORAGE->LG • STORAGE_SPACE->SO • TABLE->TA • HANDICAPPED_FACILITY->H • ELECTRONICS_CONNECTION->EC • EXTRA_COMFORT->EK EXTRA_OXYGEN_MASK->??(EO - placeholder) • UNKNOWN->??(UN-placeholder)

Defect Fixes

3

3.1 Summary of Defect Fixes

SabreSonic® CSS Digital Connect v3.0.1 includes the following fixed defects:

1. Defect 1: Fix for CollectMiscFee "TotalCost" in case 4G fails during exchange
2. Defect 2: Fix that solves issue when the user is not able to pay BNPL fee paid with Multiple Form of Payment (MFOP) combination (with 3DS Credit Card).

3.2 Defect 1

Title: Fix for CollectMiscFee "TotalCost" in case 4G fails during exchange

Description:

Fix to correct colectMiscFee calculations during an exchange process.

Resolution:

That fix ensures that the total price during an exchange will not include cost of seats that failed during an adding operation. It secures that only seats that were added to the reservation during an exchange process will be ticketed and paid.

3.3 Defect 2

Title: Fix that solves issue when the user is not able to pay BNPL fee paid with Multiple Form of Payment (MFOP) combination (with 3DS Credit Card).

Description:

That fix removes the collectMiscFee part from the authorization part before the redirect.

Resolution:

CollectMiscFee will be calculated only after the redirect:

- 1st /products/bnpl/purchase call
  - 1st FOP authorization
  - 2nd FOP authorization
- redirect / back from redirect
- 2nd /products/bnpl/purchase call:
  - redirected FOP final authorization
  - **CollectMisccFee**

There will be no error as the BNPL fee was not yet ticketed at that stage.

Contacting Customer Care 4

4.1   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.

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

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.

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**.
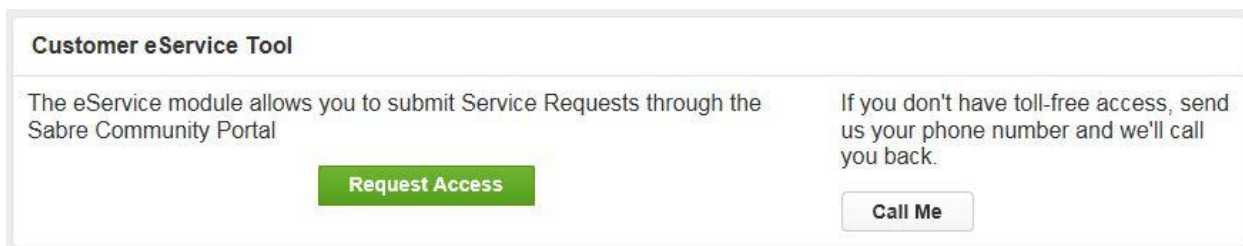
4.1.2 Telephone

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	ITFS Number
Antigua	888-832-4738
Argentina	0800-666-1664
Australia	1-800-081-993
Austria	800291705
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

Country	ITFS Number
China Telecom	4001.202.315
China Network Co.	4001.202.315
Cyprus	800-96110
Colombia	01 800 954 1326
Czech Republic	800-700-117
Denmark	80885884
Egypt - Cairo	8000000491
Egypt - Other	8000000491
El Salvador	800-0000-0011
Estonia	800.0111.665
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	1809 246 033
Italy	800-787-417
Jamaica	18664026835
Japan	0053-116-0811
Korea	0030 813 1943
Malaysia	1800 813 609
Malta	800-90112 PIN 356
Mexico	1-800-123-8537
Netherland Antilles	US ATT Direct Access, then 888-832-4738
The Netherlands	0800-023 2237
New Zealand	0800-450-960

Contacting Customer Care

Confidential and Proprietary Sabre Airline Solutions

Country	ITFS Number
Norway	800-18-798
Pakistan	00 800 12 001 PIN 5046
Paraguay	009 800 598 1 0004
Peru	0800-52-226
Philippines	1-800-111-00338
Philippines	1-800-111-00339
Russia	810-800-240-31012
Saudi Arabia	1800-11 PIN 5671
Serbia	0-800-190-138
Singapore	800-101-1651
Spain	900-995-926
Sweden	0200-285-836
Switzerland	0800 894 534
Tahiti	888-832-4738
Thailand	1800 156 203 7722
Trinidad and Tobago	888-870-9002
UK	8000288446
Uruguay	2-518-6642
USA	1-888-421-8889
Venezuela	0800-100-3851
Vietnam	1-201-0288, wait for ATT recording, then 866-947-9059

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?

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. • 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.

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.