Jumbo API Integration

New Version : API V22

Extended login for distribution channel and nationalities
Search availability per GPS coordinates and radius

Revision	Date
1	08/11/2017
2	22/12/2017
3	12/01/2018
4	22/03/2018

GDS

Jumbo API Integration

- Introduction:

  This document presents the implementation scenario JumboTours recomends for PULL integration.

  Jumbo xml availability engine allows to retrieve hotel* products requesting by hotelid, by city or by areas. Specifying stay days and occupation. (*Jumbo can provide transfers)

  This new version includes the management of the nationality of the agency and pax plus the distribution channel of the agency. Due to the specificity of this version, it is mandatory to have Jumbotours agreement on the V22 settings in Jumbo System: please contact your sale representative.

  This version adds the search by GPS coordinates concept.

- Prerequisite: hotel inventory and if needed city and/or area inventory.

  - Hotels inventory: Create + Mapping and update
  - Structure mapping: geograficand/or areas, roomtypes

- Conector implementation:

  - Availability Request
  - Valuate Request
  - Confirm Request
  - Cancel Request
  - Booking retrieval

**Contact:
Support@xtravelsystem.com**

Jumbo API Integration

- Hotels inventory:
  - Weekely generation of content files XLS or XML
    - Retrieve the content file every Saturday and process.
    - Process: analyze the *diff* file in order to update only modified hotels and to create and mapp only new hotels (with content)
    - Mapping based on BID: as establishment_id (ws)

  - Update process: based on diff file
    - *diff* file indicates hotel ID changed : (C/U/D)
    - Content can be retieve from new file (or via ws)

  - Frequency: every Saturday
    - Jumbo offers a control on the mapping 3 or 4 times per year (on demand)

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- Geographic structure mapping:
  - If needed we can provide:
    - City to map with your geografic structure (*Cityid*)
    - Business areas, aka turistic destinations Ex: Mallorca (*AreaCode*)
  - Process:
    - Retieve and process Hotels_City_File in which we deliver our geografic structure along with our business areas structures: *CityId* and *areaCode*.
    - Mapp accordingly to your existing geografic structure our business areas

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- Room Types:
  - If needed we can provide list of all current Roomtypes (on demand or control: best sold roomtypes)
  - Frequency : To determine

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- Conector implementation:
  - Availability request: 5 Objects :
    - Stay (When)
    - Occupancy (Who)
    - Search criteria : (Where)
      - 4 business scenarios:
        - » By Hotel(s) id(s)   By City(ies) code(s)
        - » By area(s) code(s)   By distrct(s) code(s)
    - Channel criteria
      - B2B or B2C
    - Nationality criteria
      - Agency nationality
      - Pax nationality
  - WS operation: availabelHotelsByMultiQueryV22
  - Recommended Time Out configuration**: 2 – 15 sec**
    - Average response time : 150 ms to 500 ms

  - Objective: Retrieve available product.

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- Stay definition : **When ?**
  - Example:
    - `<checkin>`**2015-04-01T00:00:00**`</checkin>`
    - `<checkout>`**2015-04-10T23:59:00**`</checkout>`

- Occupancy definition: **Who ?**
  - Example:
    - `<occupancies>`
    - `<adults>`**2**`</adults>`
    - `<children>`**2**`</children>`
    - `<childrenAges>`**6**`</childrenAges>`
    - `<childrenAges>`**9**`</childrenAges>`
    - `<numberOfRooms>`**1**`</numberOfRooms>`
    - `</occupancies>`

Jumbo API Integration

- Search criteria : **Where?** 4 business scenarios

  Availability Search by hotel(s) (1/4) :

  Our operation allows to request availability by hotels: attribute *establishmentId* must contain the hotel id of the selected hotel. Various property ids may be defined: Example:

  - <!--Zero or more repetitions:-->
  - <establishmentId>123</establishmentId>
  - <establishmentId>456</establishmentId>
  - <establishmentId>789</establishmentId>
  - <establishmentId>951</establishmentId>
  - <!--Zero or more repetitions:-->

  This RQ will request availability for the mentioned hotels id: 123, 456,789,951.

  Remark: The number of *establishmentId* is not limited but the more hotels are indicated the longer will last the response: We recommend to test proof the RQ process and if necesarry to use our cities or areas attributes

Jumbo API Integration

- Search criteria : **Where?** 4 business scenarios

   Availability Search by city(ies) (2/4) :

   Our operation allows to request availability by city: attribute *cityCode* must contain the id of the city from our geografical structure. Various cities may be defined: Example:

   - `<!--Zero or more repetitions:-->`
   - `<cityCode>19</cityCode>`
   - `<cityCode>20</cityCode>`

   This RQ will request availability for the mentioned city codes: 19, 20.

   Remarks: The number of *cityCode* is not limited but the more ids are indicated the longer will last the response. This operation may be faster to retive results given the fact that the process does not include hotels off.

Jumbo API Integration

- Search criteria : **Where?** 4 business scenarios

Availability Search by area(s) (3/4) :

Our operation allows to request availability by city: attribute *cityId* must contain the id of the city from our geografical structure. Various cities may be defined: Example:

- <!--Zero or more repetitions:-->
- <areaCode>8</areaCode>
- <areaCode>6</areaCode>

This RQ will request availability for the mentioned areas codes : 8 and 6..

Remarks: The number of *areaCode* is not limited but the more codes are indicated the longer will last the response.

This operation may be faster to retrieve results given the fact that the process does not include hotels off.

Jumbo API Integration

- Search criteria : **Where?** 4 business scenarios

  Availability Search by district(s) (3/4) :

  Our operation allows to request availability by city: attribute *districtCode*contain the id of the city from our geografical structure. Various cities may be defined: Example:

  - <!--Zero or more repetitions:-->
  - <districtCode>1349</districtCode>
  - <districtCode>223</districtCode>

  This RQ will request availability for the mentioned districts codes 1349 and 223. .

  Remarks: The number of *districtCode*is not limited but the more codes are indicated the longer will last the response.

  This operation may be faster to retrieve results given the fact that the process does not include hotels off.

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- Search criteria: Comments:
  - **At least 1 search criteria is mandatory.**
  - **MultiQuery: search criterias may be mixed:**
    - <establishmentId>123</establishmentId>
    - <establishmentId>456</establishmentId>
    - <establishmentId>789</establishmentId>
    - <cityCode>19</cityCode>
    - <cityCode>20</cityCode>
    - <areaCode>19</areaCode>
    - <areaCode>20</areaCode>
    - <districtCode>34</districtCode>

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- Extended Login: Distribution Channel
- Our operation allows to request availability for specific distribution point of sale : B2B or B2C

Example:

```
<extendedLogin>
    <channel>B2B</channel>
    <loginCountry>ES</loginCountry>
    <mainNationality>ES</mainNationality>
</extendedLogin>
```

This RQ will request availability for B2B distribution rates.

Remarks:

- Current possible values : **B2B** or **B2C**.
- This feature is optional: If ignored, this node will not be processed by our system. O nationality filter will be applied.
- **Mandatory** to get comercial approval (Jumbo must set a specific XML configuration)
- If codes are wrong, node is ignored and rates return are according to the agencyCode specified.

Jumbo API Integration

- Extended Login: Agency and Pax Nationality

- Our operation allows to request availability for specific agency and pax nationality:

Example:

```
<extendedLogin>
    <channel>B2C</channel>
    <loginCountry>ES</loginCountry>
    <mainNationality>GB</mainNationality>
</extendedLogin>
```

loginCountry indicates the nationality of the agency that requests avilability . The code corresponds iso ISO 3166-1 alpha 2 country code.
MainNationality indicates the nationality of the lead pax. . The code corresponds iso ISO 3166-1 alpha 2 country code.

This RQ will request availability for a **spanish** agency for **British** citizens customers (with B2C rates)

Remarks:

- This feature is optional: If ignored, this node will not be processed by our system: no nationality filter will apply.
- If pax nationality is unknown, please use agency nationality as pax nationality (mandatory)
- ISO 3166 : https://www.iso.org/iso-3166-country-codes.html
- Mandatory to get comercial approval (Jumbo must set a specific XML configuration)
- If codes are wrong, node is ignored and rates return are according to the agencyCode specified.

Jumbo API Integration

- ## GPS Coordinates + radius

- Our operation allows to search availability by GPS coordinates indicating a GPS location and a radius :

    Example:

    ```
    <coordinates>
        <latitude>40.4165000</latitude>
        <longitude>-3.7025600</longitude>
        <radius>400</radius>
    </coordinates>
    ```

    This RQ will deliver all the hotels within a circle of 400 meters around the center of Madrid city.

    Remarks:
    - This feature is optional: If ignored, this node will not be processed by our system.
    - Values between 180.xx and -180.xx

- ## Pax Nationalities (restriction)

- Our systems may filter hotels with nationality restrictions.

  Example:

  ```
  <paxNationalities>
      <nationality>FR</nationality>
      <nationality>FR</nationality>
      <nationality>ES</nationality>
      <nationality>ES</nationality>
  </paxNationalities>
  ```

  Our system will avoid hotels with nationality exception for french and spanish.

  Remarks:
  - This feature is optional: If ignored, this node will not be processed by our system.
  - Values between Alfa-2 ISO country code. (ISO norm 3166-1/2)

Jumbo API Integration

- Availability Response:

- Paginated per hotel

- Node *availableHotels* contains
  - Establishement data (if needed)
  - all room combinations possible

```xml
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/" xmlns:xsd='
  <env:Body>
    <ns0:availableHotelsByMultiQueryV21Response>
      <result>
        <fromRow>0</fromRow>
        <numRows>99999</numRows>
        <totalRows>41</totalRows>
        <availableHotels>
          <establishment>
          <moreCombinations>false</moreCombinations>
          <roomCombinations>
        </availableHotels>
        <availableHotels>
          <establishment>
          <moreCombinations>false</moreCombinations>
          <roomCombinations>
          <roomCombinations>
        </availableHotels>
        <availableHotels>
          <establishment>
          <moreCombinations>false</moreCombinations>
          <roomCombinations>
          <roomCombinations>
            <prices>
            <prices>
            <rooms>
              <adults>2</adults>
              <children>0</children>
              <priceOfFirstNight xsi:nil="1"/>
              <quantity>1</quantity>
              <typeCode>V6X</typeCode>
              <typeName>APT 2 DORMITORIOS CON BALCON 2AD</typeName>
              <typeCategoryCode>APT</typeCategoryCode>
              <typeCategoryName>APARTAMENTO</typeCategoryName>
            </rooms>
          </roomCombinations>
        </availableHotels>
        <availableHotels>
        <availableHotels>
        <availableHotels>
        <availableHotels>
        <availableHotels>
        <availableHotels>
        <availableHotels>
        <availableHotels>
        <availableHotels>
        <availableHotels>
```
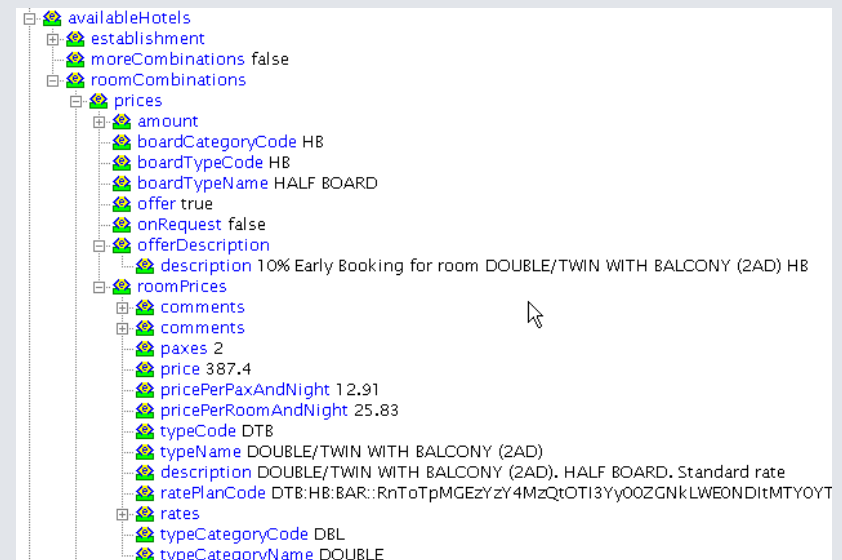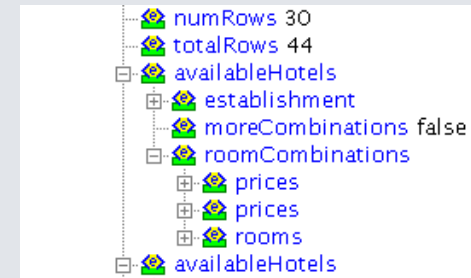
Jumbo API Integration

- establishment node contains minimum necesary information to display
  - Id, picture, lat long, etc ….. Short description in the requested language.

- roomCombinations node contain the available product for the request in the selected hotel.
  - Rooms and prices

```xml
<availableHotels>
    <establishment>
        <address>
            <address>Calle Calvia, 3</address>
            <cityCode>23</cityCode>
            <cityName>PALMA NOVA</cityName>
            <countryCode>ES</countryCode>
            <countryName>ESPAÑA</countryName>
            <districtCode xsi:nil="1"/>
            <districtName xsi:nil="1"/>
            <email xsi:nil="1"/>
            <fax>+34971680599</fax>
            <name xsi:nil="1"/>
            <stateCode>247</stateCode>
            <stateName>MALLORCA</stateName>
            <telephone>+34971680599</telephone>
            <zipCode>07181</zipCode>
        </address>
        <categoryCode>10</categoryCode>
        <categoryName>2 LLAVES</categoryName>
        <comments xsi:type="ns0:CommentsRSV2">
            <from>2018-05-20T22:00:00.000Z</from>
            <text>TASA ECOLOGICA: Todos los clientes con estancia en este establecimiento a partir del 01.07.16 (incluidos aque
Dicho pago deberá ser efectuado directamente en el establecimiento y  en función de la categoría oficial del mismo.</text>
            <to>2018-05-29T22:00:00.000Z</to>
            <type>ERRATA</type>
            <conditions xsi:nil="1"/>
            <errataType>TASA ECOLOGICA</errataType>
        </comments>
        <id>52585</id>
        <imageUrl>http://images.xtravelsystem.com/slide/files/public//52/5/8/5/Images/BUILDING3.jpg</imageUrl>
        <latitude>39.526554</latitude>
        <longitude>2.5406854</longitude>
        <name>APTS. MARTINEZ</name>
        <shortDescription>Como parte del complejo hotelero HOTEL GABARDA &amp; COMPLEX, a tan sólo 20 metros, los Apartamentos
El edificio, decorado con una fachada rústica, consta de 3 plantas (sin ascensor) y distribuido en 13 amplios apartamentos. Es el lugar
        <weight>100</weight>
    </establishment>
    <moreCombinations>false</moreCombinations>
    <roomCombinations>
```

Jumbo API Integration

- node roomCombination shows all possible products of a room:

- prices displays elements of the price:
  - Various elements show respective sub-elements :
  - Currency, cancellation terms, commission (if any), paxes, …
  - Offers if any are displayed
  - Supplements if any are displayed

- Node roomPrices includes additional info:
  - Cancellation Terms
  - Sales Commisssion
  - PVP Binding Price
  - Errata
  - pricePerPaxAndNight
  - Room code and Description
  - Rateplan codification and Description

Our API delivers all available rateplans

Jumbo API Integration

- Conector implementation:
  - Valuate request: 5 Objects :
    - Stay
    - Establishment ID
    - Occupancy
    - Rate plan Code
    - Extended login
      - Channel
      - Nationalities

```xml
<typ:valuateExtendsV21>
    <ValuationRQV21_1>
        <agencyCode>111</agencyCode>
        <brandCode>1</brandCode>
        <pointOfSaleId>1</pointOfSaleId>
        <checkin>2018-05-21T12:00:00.000Z</checkin>
        <checkout>2018-05-30T12:00:00.000Z</checkout>
        <establishmentId>723</establishmentId>
        <language>es</language>
        <occupancies>
            <adults>2</adults>
            <children>0</children>
            <numberOfRooms>1</numberOfRooms>
            <ratePlanCode>RTY:SC:STD::xUrgyeNDM1YmExMTgtYmM3My0(
        </occupancies>
        <onlyOnline>true</onlyOnline>
        <extendedLogin>
            <channel>B2B</channel>
            <loginCountry>SP</loginCountry>
            <mainNationality>SP</mainNationality>
        </extendedLogin>
    </ValuationRQV21_1>
</typ:valuateExtendsV21>
```

  - WS operation: valuateExtendsV22

  - Recommended Time Out configuration**: 3 - 10 sec**
    - Average response time : 200 ms to 300 ms

  - Objective: confirm **availability**, **price** and **cancellation terms**

Jumbo API Integration

- Valuate Response: similar to Availability RS

- 1/3 :

Jumbo API Integration

- Valuate Response: similar to Availability RS

- 2/3 : node occupation :

- Cancel terms

- Roomtype

- Special instructions
  - Erratas*


```xml
<occupations xsi:type="ns0:ValuatedOccupationV20">
    <adults>2</adults>
    <amount>
        <currencyCode>EUR</currencyCode>
        <value>230.99</value>
    </amount>
    <boardTypeCode>SC</boardTypeCode>
    <boardTypeName>SOLO ALOJAMIENTO</boardTypeName>
    <cancellationComments>
        <from xsi:nil="1"/>
        <text>2 - 11.11%</text>
        <to xsi:nil="1"/>
        <type>Cancellation term</type>
    </cancellationComments>
    <cancellationComments>
        <from xsi:nil="1"/>
        <text>pmi@jumbonline.com</text>
        <to xsi:nil="1"/>
        <type>Cancellation email</type>
    </cancellationComments>
    <children>0</children>
    <fromDate>2018-05-21T10:00:00.000Z</fromDate>
    <numberOfDays>9</numberOfDays>
    <numberOfRooms>1</numberOfRooms>
    <roomTypeCode>RTY</roomTypeCode>
    <roomTypeName>ESTUDIO CON BALCON 1/3PAX</roomTypeName>
    <toDate>2018-05-30T10:00:00.000Z</toDate>
    <comments xsi:type="ns0:CommentsRSV2">
        <from>2018-05-20T22:00:00.000Z</from>
        <text>POLÍTICA DE RESERVACIONES:.....</text>
        <to>2018-05-28T22:00:00.000Z</to>
        <type>ERRATA</type>
        <conditions xsi:nil="1"/>
        <errataType>POLÍTICA DE RESERVACIONES</errataType>
    </comments>
</comments>
<onRequest>false</onRequest>
```

*Mandatory information to show final customer

Jumbo API Integration

- Valuate Response: similar to Availability RS

- 3/3 Room and Rateplan description

  - Rateplan code

- OfferDescription (textual info related to a specific discount applid in the price)

```
                </comments>
                <onRequest>false</onRequest>
                <paxList xsi:nil="1"/>
                <description>ESTUDIO CON BALCON 1/3PAX. SOLO ALOJAMIENTO. Tarifa estandar</description>
                <ratePlanCode>RTY:SC:STD::xUrgyeNDM1YmExMTgtYmM3My00YmY4LWE4YjYtNTllZDFiMjdiYmI5</ratePlanCode>
                <rates>
                        <rate>STD</rate>
                </rates>
            </occupations>
            <offerDescription>
                <description>Reserva Anticipada para hab. ESTUDIO CON BALCON 1/3PAX SC</description>
            </offerDescription>
        </result>
    </ns0:valuateExtendsV21Response>
  </env:Body>
</env:Envelope>
```

Jumbo API Integration

- Conector implementation:
  - Confirm request: 6 Objects :
    - Establishment ID
    - Occupancy
    - Room / Board :
    - Pax list / Titular
    - Rate Plan Code
    - Extended Login
      - Channel
      - Nationality

```
<soapenv:Body>
    <typ:confirmExtendsV21>
        <ConfirmRQV21_1>
            <agencyCode>111</agencyCode>
            <brandCode>1</brandCode>
            <pointOfSaleId>1</pointOfSaleId>
            <checkin>2018-05-21T12:00:00.000Z</checkin>
            <checkout>2018-05-30T12:00:00.000Z</checkout>
            <establishmentId>723</establishmentId>
            <language>es</language>
            <occupancies>
                <adults>2</adults>
                <children>0</children>
                <numberOfRooms>1</numberOfRooms>
                <ratePlanCode>RTY:SC:STD::xUrqyeNDM1YmExMTqtYmM3My00YmY4LWE4YjYtNTllZDFiMjdiYmI5</ratePlanCode>
            </occupancies>
            <onlyOnline>true</onlyOnline>
            <extendedLogin>
                <channel>B2B</channel>
                <loginCountry>SP</loginCountry>
                <mainNationality>SP</mainNationality>
            </extendedLogin>
            <agencyReference>test</agencyReference>
            <closeBasket>true</closeBasket>
            <titular>LeadPax</titular>
        </ConfirmRQV21_1>
    </typ:confirmExtendsV21>
</soapenv:Body>
</soapenv:Envelope>
```

  - WS operation: confirmExtendsV22

  - Recommended Time Out configuration: **60 sec**
    - Average response time : 400 ms to 500 ms

  - Objective: confirm booking, retreive BasketId, Price, Cancel Terms, Documentation,

Jumbo API Integration

- Confirm Response:
- Basket id

- Comments

- Status OK

Jumbo API Integration

- Confirm Response:
- Total Price

- Cancellation Terms

- RoomType Code
  and name

- Room description

- Rate plan and code

- Stay dates

```xml
            <status>CLOSED</status>
            <total>
                <currencyCode>EUR</currencyCode>
                <value>230.99</value>
            </total>
            <userId xsi:nil="1"/>
            <voucherUrl xsi:nil="1"/>
            <checkin>2018-05-21T10:00:00.000Z</checkin>
            <checkout>2018-05-30T10:00:00.000Z</checkout>
            <establishmentId>723</establishmentId>
            <occupations xsi:type="ns0:ValuatedOccupationV20">
                <adults>2</adults>
                <amount>
                    <currencyCode>EUR</currencyCode>
                    <value>230.99</value>
                </amount>
                <boardTypeCode>SC</boardTypeCode>
                <boardTypeName>SOLO ALOJAMIENTO</boardTypeName>
                <cancellationComments>
                    <from xsi:nil="1"/>
                    <text>2 - 11.11%</text>
                    <to xsi:nil="1"/>
                    <type>Cancellation term</type>
                </cancellationComments>
                <cancellationComments>
                    <from xsi:nil="1"/>
                    <text>pmi@jumbonline.com</text>
                    <to xsi:nil="1"/>
                    <type>Cancellation email</type>
                </cancellationComments>
                <children>0</children>
                <fromDate>2018-05-21T10:00:00.000Z</fromDate>
                <numberOfDays>9</numberOfDays>
                <numberOfRooms>1</numberOfRooms>
                <roomTypeCode>RTY</roomTypeCode>
                <roomTypeName>ESTUDIO CON BALCON 1/3PAX</roomTypeName>
                <toDate>2018-05-30T10:00:00.000Z</toDate>
                <onRequest>false</onRequest>
                <paxList xsi:nil="1"/>
                <description>ESTUDIO CON BALCON 1/3PAX. SOLO ALOJAMIENTO. Tarifa estandar</description>
                <ratePlanCode>RTY:SC:STD::xUrqyeNDM1YmExMTqtYmM3My00YmY4LWE4YjYtNTllZDFiMjdiYmI5</ratePlanCode>
                <rates>
                    <rate>STD</rate>
                </rates>
            </occupations>
        </result>
    </ns0:confirmExtendsV21Response>
  </env:Body>
</env:Envelope>
```

Jumbo API Integration

- Confirm Response:

- Paxlist details

- Rateplan and description and code

- Rateplan name

Jumbo API Integration

- Conector implementation:
  - Cancel Process :
    - Valuate Cancellation : returns cancellation costs if apply.
    - Cancel Requests : 3 results :
      - OK FOC
      - OK + Costs
      - Impossible due to CT

  - WS operation: valuateCancellationV2 + cancelV2 (BasketHandler)

  - Recommended Time Out configuration**: 60 sec**
    - Average response time : 400 ms to 500 ms

  - Objective: retrieve cancellation costs + cancel booking.
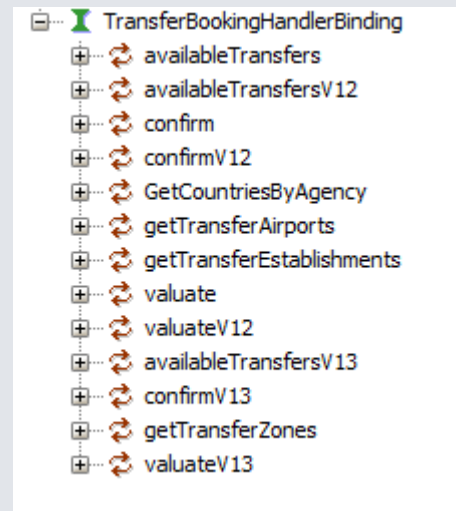
Jumbo API Integration

- Conector implementation:
  - Modification Process : (partial)
    1. Valuate Cancellation : returns cancellation costs if apply. (Baskethandler)
    2. Availability Request (hotelHandler)
    3. Valuate request (hotelHandler)
    4. Confirm + BasketID (hotelHandler) (adds a service to the basket)
    5. Cancelservice Requests (cancels service of a basket)

  - WS operation: valuateCancellationV2 + confirmV22 + cancelServiceV2 (BasketHandler)

  - Recommended Time Out configuration: **60 sec**
    - Average response time : 400 ms to 500 ms

  - Objective: Modify existing booking (limited: partial cancel re-book) .

Jumbo API Integration

- Conector implementation:
  - Bookings retrieval:
    - getBaskets
    - getBasketExtendedV20
  - WS operation: (Baskethandler)
    - getBasketsV16: retrieve the list of all existing baskets (paginated)
    - getBasketExtendedV20 : retrieve content of 1 existing basket.

  - Recommended Time Out configuration: **60 sec**
    - Average response time : 400 ms to 500 ms

  - Objective: retreive full content of a Basket.

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- Conector implementation: Transfers :

- 2 process:
  - Search availability by Hotel (Establishment id + Airport ID)
  - Search availability by zone (zoneId + airport id)
  - WS operation: TransferHandler:

Jumbo API Integration

- Mandatory concepts :

  Cancel policy of the product
  Errata and No show conditions
  Discounts and supplements if any

  Please inform JumboTours in case you are able and willing to sell :
  - Non-refundable products
  - PVP Binding products
  - Share room or share facilities
  - Channel point of sale : B2B, B2C
  - Etc ….

- The voucher must show :
  - Hotel Name + Location
  - Stay Days / Check-in and check-out days
  - Occupancy (AD + CH-age)
  - RoomType(s)
  - Errata translated
  - Discounts and supplements information
  - Cancellation Terms

  - Our system can send a voucher to the travel agency (B2B).

Jumbo API Integration

- System :
  - Keep alive Off = OK
  - Keep alive On : OK with TTL = 30 min*
  - Gzip : enabled RQ/RS
  - Reference time = Madrid time
  - http/https endpoints available

  - *to confirm settings with IT may vary over the time: please contact support@xtravelsystem.