



User Guide for Trip Proposal Services

SOAP API version 1.1.0

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Chapter 1. Getting Started

1.1. Introduction

Trip Proposal is new product to create an offline Trip based on shopping data. This “offer” can be automatically refreshed with current pricing and availability during it’s whole lifetime and converted into a real Booking using Sabre API. It greatly reduces Travel Agent manual labor to compile offers for their customers and book travel content that customer chooses to purchase.

1.2. About this guide

This guide describes usage of XML SOAP API of Trip Proposal Services application. API consists of following services:

- **TP_CreateRQ** - Create TripProposal document.
- **TP_ReadRQ** - Read Trip Proposal document.
- **TP_UpdateRQ** - Update Trip Proposal document.
- **TP_DeleteRQ** - Delete Trip Proposal document.
- **TP_BookRQ** - Convert Trip Proposal document options into real booking (PNR).
- **TP_RefreshRQ** - Refresh availability and prices for selected TripProposal document options.
- **Trip_SearchRQ** - External (to Trip Proposal Services) service, providing possibility to search among TripProposal documents.



Trip Proposal Services application provides also REST API, but its usage is covered in other document.

1.3. Customer Identification

This service can be used by:

- **Sabre Dev Studio** subscribers.
- **Sabre Travel Network** customers – travel agencies working on **Sabre® Red Workspace™** and other Sabre user interfaces.

Chapter 2. Services usage

2.1. General Services usage.

2.1.1. Accessing TripProposal SOAP Services

Trip Proposal Services SOAP API is accessible for users through Sabre® USG.

For Production use: <https://webservices.havail.sabre.com>

For test purposes (Certification): <https://sws-cert.cert.havail.sabre.com>

2.1.2. SOAP Request Structure

Each of TP Services Request, according to SOAP protocol specification must be wrapped into SOAP Envelope.

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Header>
    <eb:MessageHeader xmlns:eb="http://www.ebxml.org/namespaces/messageHeader"> ①
      <eb:From>
        <eb:PartyId>123123</eb:PartyId>
      </eb:From>
      <eb:To>
        <eb:PartyId>321321</eb:PartyId>
      </eb:To>
      <eb:CPAId>EY</eb:CPAId>
      <eb:ConversationId>112233</eb:ConversationId>
      <eb:Action>TP_DeleteRQ</eb:Action>
    </eb:MessageHeader>
    <Security xmlns="http://schemas.xmlsoap.org/ws/2002/12/secext"> ②
      <BinarySecurityToken>Shared/IDL:IceSess\SessMgr:1\0.IDL/Common/!ICESMS\ACPCRTC!ICES
      MSLB\CRT.LB!-3153057163134853489!410130!0!2</BinarySecurityToken>
    </Security>
  </soap:Header>
  <soap:Body> ③
    <!-- YOUR PAYLOAD GOES HERE -->
  </soap:Body>
</soap:Envelope>
```

SOAP Envelope must contain:

- ① in **Header**, **MessageHeader** tag in EB format.
- ② in **Header**, 'Security' tag, holding authentication token information.
- ③ in **Body**, Placeholder for XML content of users request.



Detailed description of EB SOAP format you can find: <http://www.ebxml.org/specs/ebMS2.pdf>

2.1.3. SOAP Response Structure

SOAP Response structure is similar to Request Structure.

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Header>
    <eb:MessageHeader xmlns:eb="http://www.ebxml.org/namespaces/messageHeader"
eb:version="1.0" soap:mustUnderstand="1"> ①
      <eb:From>
        <eb:PartyId eb:type="URI">321321</eb:PartyId>
      </eb:From>
      <eb:To>
        <eb:PartyId eb:type="URI">123123</eb:PartyId>
      </eb:To>
      <eb:CPAId>EY</eb:CPAId>
      <eb:ConversationId>112233</eb:ConversationId>
      <eb:Action>TP_DeleteRS</eb:Action>
      <eb:MessageData>
        <eb:MessageId>rumhg60pm</eb:MessageId>
        <eb:Timestamp>2018-04-27T09:32:00</eb:Timestamp>
      </eb:MessageData>
    </eb:MessageHeader>
    <wsse:Security xmlns:wsse="http://schemas.xmlsoap.org/ws/2002/12/secext"> ②
      <wsse:BinarySecurityToken valueType="String" EncodingType="wsse:Base64Binary"
>Shared/IDL:IceSess\SessMgr:1\0.IDL/Common/!ICESMS\ACPCRTC!ICESMSLB\CRT.LB!-
3153057163134853489!410130!0!2</wsse:BinarySecurityToken>
    </wsse:Security>
  </soap:Header>
  <soap:Body> ③
    <!--SAMPLE RESPONSE BODY PAYLOAD -->
    <tp:TP_DeleteRS xmlns:tp="http://services.sabre.com/tripproposal/v1_1" xmlns:stlp
="http://services.sabre.com/STL_Payload/v02_02">
      <stlp:ApplicationResults status="Complete">
        <stlp:Success timeStamp="2018-04-27T04:32:00.324-05:00"/>
      </stlp:ApplicationResults>
    </tp:TP_DeleteRS>
  </soap:Body>
</soap:Envelope>
```

SOAP Response Envelope contains:

- ① in **Header**, **MessageHeader** tag in EB format.
- ② in **Header**, 'Security' tag, holding authentication token information.
- ③ in **Body**, XML Response body.



Trip Proposal Services Requests are basing on Sabre-wide STL Payload standard, which unifies services response and enforces them to include **ApplicationResults** node.

2.1.4. MessageHeader information

MessageHeader is crucial part of each request, as apart from conversation parties identification and conversation ID, **USG** uses it to determine Service user is about to reach with his request.

```
<eb:MessageHeader xmlns:eb="http://www.ebxml.org/namespaces/messageHeader">
  <eb:From> ①
    <eb:PartyId>123123</eb:PartyId>
  </eb:From>
  <eb:To> ②
    <eb:PartyId>321321</eb:PartyId>
  </eb:To>
  <eb:CPAId>EY</eb:CPAId> ③
  <eb:ConversationId>112233</eb:ConversationId> ④
  <eb:Action>TP_DeleteRQ</eb:Action> ⑤
</eb:MessageHeader>
```

- ① Source system identification string (non verified)
- ② Target system identification string (non verified)
- ③ in Sabre used for additional caller identification ex. Airline Code (non verified)
- ④ **ConversationId** - user defined ID, can come from previous systems calls, used for response matching and tracing message execution process in case of any issues.
- ⑤ Service Action, used by **USG** to determine service to call (must be replaced by **USG** Action of Service to call).

2.1.5. Security and authentication

In order to call Trip Proposal Services published on **USG**, user must use valid Sabre session Token.

Trip Proposal Services supports authentication using both, older (host based) **ATH** token and new off-host **ATK** token, however **ATK** token must be convertible into **ATH**. **ATH** token can be obtained using service **SessionCreateRQ** and its required to destroy it after each usage session. It's valid for few minutes. **ATK** token can be obtained using service **TokenCreateRQ** and its not required not destroy it after each usage session. It remains valid and usable for few days.

To obtain security token user must possess valid **EPR** credentials.



To call Trip Proposal Services users **EPR** must be granted security attribute **TripProposalUser**, he will get authentication error from **USG** otherwise. Please contact Helpdesk for information how to get it.

Security tag example holding **ATH** token:


```
<security:Security xmlns:security="http://schemas.xmlsoap.org/ws/2002/12/secext">
```

```
<security:BinarySecurityToken>Shared/IDL:IceSess\SessMgr:1\0.IDL/Common/ICESMS\ACP  
CRTC!ICESMSLB\CRT.LB!-3153057163134853489!410130!0!2</security:BinarySecurityToken>  
</security:Security>
```

Security tag example holding **ATK** token:

```
<security:Security xmlns:security="http://schemas.xmlsoap.org/ws/2002/12/secext">
```

```
<security:BinarySecurityToken>T1RLAQIJCXpRCZzbNQQor8/s1TgoihyjNhBXhjULk9oiHBIbm0DtsFkV  
AACwPH9JKTNyE+eIx0IEwjb4We69LH3vRzN2aYom9cQjsXfyRbnBtLOeM7k5zBzXPafznWBmpCmDLCTJVVYUtu7  
Q8HFMZu0o9wy8I2Iv4oHUz1/oBrYrN+DN4dHFI3jpe7CfhOWWFFdUoP64kqVMmpEH/9vcjvZ0+KF04BWUKNXsW  
CMvIRU5g48FpSFIfkeuomUsNIhz/FuxgAiBuDVdgcNKnV7JJNpXNqHiN83WkT0paTvI* </security:BinaryS  
ecurityToken>  
</security:Security>
```

2.2. Document ownership constraints

Internal **TripProposal** document ownership model bases on **PCC** model, so each document is owned by **PCC** of its creator, not by creator person itself. This means that every **EPR** having access to given **PCC** has access to document owned by this **PCC**.

When document is created, document creator and owner fields are populated from callers session **currentCity** field.

Document owned by some **PCC** can be also accessed by any travel agency **PCC** having branch access to owners **PCC**, however Branch Access level is not verified.

2.3. Create Trip Proposal Service

USG Action: TP_CreateRQ

2.3.1. Introduction

Create Trip Proposal Service (TP_CreateRQ) is used to create new TripProposal document.



From creator session token *currentCity* field is used to assign ownership of the created document.

2.3.2. Request structure

```
<TP_CreateRQ xmlns="http://services.sabre.com/tripproposal/v1_1" xmlns:or="
http://services.sabre.com/res/or/v1_13"
    version="1.1.0" ①
    >
    <ReturnOptions retrieveDocument="false"/> ②
    <TripProposal> ③
    <Label>Generated TripProposal label</Label>
    <Comments>
    <Comment type="public">
    <Text>Comment text</Text>
    <Author>Comment author</Author>
    </Comment>
    </Comments>
    <Quote>
    <Label>Quote label</Label>
    <Comments>
    <Comment type="public">
    <Text>Quote comment text</Text>
    <Author>Quote comment author</Author>
    </Comment>
    </Comments>
    <Option status="PROPOSED">
    <Label>Option label</Label>
    <Comments>
    <Comment type="public">
    <Text>Option comment text</Text>
    <Author>Option comment author</Author>
    </Comment>
    </Comments>
    <Product>
    <or:ProductDetails productType="Product type" vendorCode="Vendor code"
        startPoint="Start code" startDateTime="2018-05-04T11:31:15"
        endPoint="End point" endDateTime="2018-05-04T11:31:15">
    <or:ProductName type="NOT_RELEVANT"/>
    <or:Air>
    <or:DepartureAirport>DFW</or:DepartureAirport>
```

```

    <or:ArrivalAirport>LHR</or:ArrivalAirport>
    <or:MarketingAirlineCode>LH</or:MarketingAirlineCode>
    <or:Eticket>>true</or:Eticket>
    <or:DepartureDateTime>2018-05-04T11:31:15</or:DepartureDateTime>
    <or:ArrivalDateTime>2018-05-04T11:31:15</or:ArrivalDateTime>
    <or:FlightNumber>1234</or:FlightNumber>
    <or:ActionCode>NN</or:ActionCode>
    <or:NumberInParty>1</or:NumberInParty>
  </or:Air>
</or:ProductDetails>
</Product>
</Option>
</Quote>
</TripProposal>
</TP_CreateRQ>

```

- ① API version
- ② ReturnOptions with *retrieveDocument* flag. when its enabled, apart from created document ID, complete document is returned in response. Default value is *false*
- ③ TripProposal Document. For detailed document structure see chapter [TripProposal document reference](#)

2.3.3. Response structure

Success Response:

```

<tp:TP_CreateRS xmlns:tp="http://services.sabre.com/tripproposal/v1_1" xmlns:stlp=
"http://services.sabre.com/STL_Payload/v02_02" proposalID="4BJ9KMAA2G" ①
  version="1.1.0">
  <stlp:ApplicationResults status="Complete"> ②
    <stlp:Success timeStamp="2018-04-27T04:31:25.754-05:00"/> ③
  </stlp:ApplicationResults>
</tp:TP_CreateRS>

```

- ① Created Document ID reference.
- ② STLP ApplicationResults node with success status "Complete".
- ③ STLP Success node - indicating success with execution timestamp

Error Response:

```

<tp:TP_CreateRS xmlns:tp="http://services.sabre.com/tripproposal/v1_1" xmlns:stlp=
"http://services.sabre.com/STL_Payload/v02_02" version="1.1.0">
  <stlp:ApplicationResults status="Incomplete"> ①
    <stlp:Error type="BusinessLogic" timeStamp="2018-04-27T04:59:27.517-05:00">②
      <stlp:SystemSpecificResults>
        <stlp:Message code="ERR.TPC.2">Document save error: Entered value,
starting with
[MnbQijnPGPicBwTiZnsFNyAnxczPSDog0InEZRszDWwKhysYMUUnDVpkKnDPYqaoQLgkOFDTGhTXpFUmsThq
lbNunwTgvLXQHnW...]
          exceeds maximum size limit 32767 bytes</stlp:Message>③
        </stlp:SystemSpecificResults>
      </stlp:Error>
    </stlp:ApplicationResults>
  </tp:TP_CreateRS>

```

- ① STLP ApplicationResults node with error status "Incomplete".
- ② STLP Error node with type of error and execution timestamp
- ③ STLP error messages describing error with error code.

2.4. Read Trip Proposal Service

USG Action: TP_ReadRQ

2.4.1. Introduction

Read Trip Proposal Service (TP_CreateRQ) is used to retrieve TripProposal document. User can specify document version to retrieve or obtain current one.



Document can be accessed only if requesting users *currentCity* (**PCC**) is document owner, or has branch access with owners **PCC**

2.4.2. Request structure

```
<TP_ReadRQ xmlns="http://services.sabre.com/tripproposal/v1_1" proposalID="4BJ9KMAA2G"
①
proposalVersion="2" ②
version="1.1.0" ③
/>
```

① TripProposal Document ID

② Requested document version. Current document version is returned if this attribute is missing

③ API version

2.4.3. Response structure

Success Response:

```
<tp:TP_ReadRS xmlns:tp="http://services.sabre.com/tripproposal/v1_1" xmlns:stlp=
"http://services.sabre.com/STL_Payload/v02_02" version="1.1.0" ①
>
  <stlp:ApplicationResults status="Complete"> ②
    <stlp:Success timeStamp="2018-04-27T04:31:34.322-05:00"/>
  </stlp:ApplicationResults>
  <tp:TripProposal proposalID="4BJ9KMAA2G" proposalVersion="2"> ③ ④
    <tp:Label>Generated TripProposal label</tp:Label>
    <tp:Comments>
      <tp:Comment type="public" pcc="B4T0" agentSign="A6E" primeHost="1S"> ⑤
        <tp:Text>Comment text</tp:Text>
        <tp:Author>Comment author</tp:Author>
        <tp:CreatedOn>2018-04-27T11:31:15</tp:CreatedOn>
        <tp:ModifiedOn>2018-04-27T11:31:15</tp:ModifiedOn>
      </tp:Comment>
    </tp:Comments>
    <tp:Quote quoteID="TP-1">
      <tp:Label>Quote label</tp:Label>
      <tp:Comments>
```

```

<tp:Comment type="public" pcc="B4T0" agentSign="A6E" primeHost="1S">
  <tp:Text>Quote comment text</tp:Text>
  <tp:Author>Quote comment author</tp:Author>
  <tp:CreatedOn>2018-04-27T11:31:15</tp:CreatedOn>
  <tp:ModifiedOn>2018-04-27T11:31:15</tp:ModifiedOn>
</tp:Comment>
</tp:Comments>
<tp:Option expirationDate="2018-05-04T11:31:15" optionID="TP-2" status="
PROPOSED">
  <tp:Label>Option label</tp:Label>
  <tp:Comments>
    <tp:Comment type="public" pcc="B4T0" agentSign="A6E" primeHost="1S">
      <tp:Text>Option comment text</tp:Text>
      <tp:Author>Option comment author</tp:Author>
      <tp:CreatedOn>2018-04-27T11:31:15</tp:CreatedOn>
      <tp:ModifiedOn>2018-04-27T11:31:15</tp:ModifiedOn>
    </tp:Comment>
  </tp:Comments>
  <tp:Product id="TP-3">
    <ProductDetails xmlns="http://services.sabre.com/res/or/v1_13" endDateTime=
"2018-05-04T11:31:15" endPoint="End point" productType="Product type" startDateTime=
"2018-05-04T11:31:15" startPoint="Start code" vendorCode="Vendor code">
      <ProductName type="AIR"/>
      <Air>
        <DepartureAirport>DFW</DepartureAirport>
        <ArrivalAirport>LHR</ArrivalAirport>
        <MarketingAirlineCode>LH</MarketingAirlineCode>
        <Eticket>true</Eticket>
        <DepartureDateTime>2018-05-04T11:31:15</DepartureDateTime>
        <ArrivalDateTime>2018-05-04T11:31:15</ArrivalDateTime>
        <FlightNumber>1234</FlightNumber>
        <ActionCode>NN</ActionCode>
        <NumberInParty>1</NumberInParty>
      </Air>
    </ProductDetails>
  </tp:Product>
</tp:Option>
</tp:Quote>
<tp:Metadata>
  <tp:SnapshotID>d4d6c4f6-af6d-4667-9368-99022abe7587</tp:SnapshotID>
  <tp:Ownership>
    <tp:Owner> ⑥
      <tp:UserID>2212</tp:UserID>
      <tp:CurrentCity>B4T0</tp:CurrentCity>
      <tp:PCC>B4T0</tp:PCC>
      <tp:AaaArea>A</tp:AaaArea>
      <tp:AgentHomeCity>B4T0</tp:AgentHomeCity>
      <tp:AgentPrimeHost>1S</tp:AgentPrimeHost>
      <tp:AgentSign>A6E</tp:AgentSign>
      <tp:CurrentPartition>AA</tp:CurrentPartition>
      <tp:Lniata>4944641</tp:Lniata>
    </tp:Owner>
  </tp:Ownership>
</tp:Metadata>

```

```

    <tp:DutyCode>*</tp:DutyCode>
    <tp:Domain>AA</tp:Domain>
    <tp>Date>2018-04-27T04:31:25</tp>Date>
  </tp:Owner>
  <tp:CreatedBy>
    <tp:UserID>2212</tp:UserID>
    <tp:CurrentCity>B4T0</tp:CurrentCity>
    <tp:PCC>B4T0</tp:PCC>
    <tp:AaaArea>A</tp:AaaArea>
    <tp:AgentHomeCity>B4T0</tp:AgentHomeCity>
    <tp:AgentPrimeHost>1S</tp:AgentPrimeHost>
    <tp:AgentSign>A6E</tp:AgentSign>
    <tp:CurrentPartition>AA</tp:CurrentPartition>
    <tp:Lniata>4944641</tp:Lniata>
    <tp:DutyCode>*</tp:DutyCode>
    <tp:Domain>AA</tp:Domain>
    <tp>Date>2018-04-27T04:31:25</tp>Date>
  </tp:CreatedBy>
  <tp:UpdatedBy>
    <tp:UserID>2212</tp:UserID>
    <tp:CurrentCity>B4T0</tp:CurrentCity>
    <tp:PCC>B4T0</tp:PCC>
    <tp:AaaArea>A</tp:AaaArea>
    <tp:AgentHomeCity>B4T0</tp:AgentHomeCity>
    <tp:AgentPrimeHost>1S</tp:AgentPrimeHost>
    <tp:AgentSign>A6E</tp:AgentSign>
    <tp:CurrentPartition>AA</tp:CurrentPartition>
    <tp:Lniata>4944641</tp:Lniata>
    <tp:DutyCode>*</tp:DutyCode>
    <tp:Domain>AA</tp:Domain>
    <tp>Date>2018-04-27T04:31:25</tp>Date>
  </tp:UpdatedBy>
</tp:Ownership>
</tp:Metadata>
</tp:TripProposal>
</tp:TP_ReadRS>

```

- ① API Version
- ② STLP ApplicationResults node with success status "Complete".
- ③ **TripProposal** Document with Reference ID. For detailed document structure see chapter [TripProposal document reference](#)
- ④ **TripProposal** Document version as requested.
- ⑤ Comment nodes with populated timestamps and ownership information.
- ⑥ Document ownership information populated from users session. This data is readonly.

Error Response:

```
<tp:TP_ReadRS xmlns:tp="http://services.sabre.com/tripproposal/v1_1" xmlns:stlp="http://services.sabre.com/STL_Payload/v02_02" version="1.1.0" >
  <stlp:ApplicationResults status="Incomplete"> ①
    <stlp:Error type="BusinessLogic" timeStamp="2018-04-27T05:02:42.359-05:00"> ②
      <stlp:SystemSpecificResults>
        <stlp:Message code="ERR.TPC.12">Security permission denied</stlp:Message> ③
      </stlp:SystemSpecificResults>
    </stlp:Error>
  </stlp:ApplicationResults>
</tp:TP_ReadRS>
```

- ① STLP ApplicationResults node with error status "Incomplete".
- ② STLP Error node with type of error and execution timestamp
- ③ STLP error messages describing error with error code.

2.5. Update Trip Proposal Service

USG Action: TP_UpdateRQ

2.5.1. Introduction

Update Trip Proposal Service (TP_UpdateRQ) is used to store new **TripProposal** document version. Service does not handle partial updates and sent document snapshot is stored as current, while previous version is moved to historical snapshots repository.



In update process all security/ownership rules apply, so user must be granted to read document to be able to update it.



In update process, **TripProposal** document must be referenced precisely with version id, to prevent simultaneous changes or document overrides by older version. When **proposalVersion** in request is lower than stored document version, user gets update error - outdated version.

2.5.2. Request structure

```
<tp:TP_UpdateRQ xmlns:tp="http://services.sabre.com/tripproposal/v1_1" xmlns:or="
"http://services.sabre.com/res/or/v1_13" version="1.1.0" ①
>
  <tp:ReturnOptions retrieveDocument="true"/> ②
  <tp:TripProposal proposalID="CAR3XBUH1E" proposalVersion="1"> ③
    <tp:Label>Generated TripProposal label</tp:Label>
    <tp:Comments>
      <tp:Comment type="public">
        <tp:Text>Comment text</tp:Text>
        <tp:Author>Comment author</tp:Author>
        <tp:CreatedOn>2018-05-14T15:43:38</tp:CreatedOn>
        <tp:ModifiedOn>2018-05-14T15:43:38</tp:ModifiedOn>
      </tp:Comment>
      <tp:Comment type="public"> ④
        <tp:Text>New comment text</tp:Text>
        <tp:Author>Author</tp:Author>
      </tp:Comment>
    </tp:Comments>
    <tp:Quote>
      <tp:Label>Quote label</tp:Label>
      <tp:Comments>
        <tp:Comment type="public">
          <tp:Text>Quote comment text</tp:Text>
          <tp:Author>Quote comment author</tp:Author>
          <tp:CreatedOn>2018-05-14T15:43:38</tp:CreatedOn>
          <tp:ModifiedOn>2018-05-14T15:43:38</tp:ModifiedOn>
        </tp:Comment>
      </tp:Comments>
    </tp:Quote>
  </tp:TripProposal>
</tp:TP_UpdateRQ>
```

```

<tp:Option status="PROPOSED">
  <tp:Label>Option label</tp:Label>
  <tp:Comments>
    <tp:Comment type="public">
      <tp:Text>Option comment text</tp:Text>
      <tp:Author>Option comment author</tp:Author>
      <tp:CreatedOn>2018-05-14T15:43:38</tp:CreatedOn>
      <tp:ModifiedOn>2018-05-14T15:43:38</tp:ModifiedOn>
    </tp:Comment>
  </tp:Comments>
  <tp:Product>
    <or:ProductDetails productType="AIR" vendorCode="AA" startPoint="MUC"
startDateTime="2018-05-21T15:43:38" endPoint="LAX" endDateTime="2018-05-21T15:43:38">
      <or:ProductName type="AIR"/>
      <or:Air>
        <or:DepartureAirport>MUC</or:DepartureAirport>
        <or:ArrivalAirport>LAX</or:ArrivalAirport>
        <or:MarketingAirlineCode>AA</or:MarketingAirlineCode>
        <or:Eticket>true</or:Eticket>
        <or:DepartureDateTime>2018-05-21T15:43:38</or:DepartureDateTime>
        <or:ArrivalDateTime>2018-05-21T15:43:38</or:ArrivalDateTime>
        <or:FlightNumber>1234</or:FlightNumber>
        <or:ActionCode>NN</or:ActionCode>
        <or:NumberInParty>1</or:NumberInParty>
      </or:Air>
    </or:ProductDetails>
  </tp:Product>
</tp:Option>
</tp:Quote>
</tp:TripProposal>
</tp:TP_UpdateRQ>

```

- ① API version
- ② *ReturnOptions* with *retrieveDocument* flag. when its enabled, apart from created document ID, complete document is returned in response. Default value is *false*
- ③ TripProposal Document. Precise reference with *proposalID* and *proposalVersion* is required. For detailed document structure see chapter [TripProposal document reference](#).
- ④ New comment added without ownership attributes populated.

2.5.3. Response structure

Success Response:

```

<tp:TP_UpdateRS xmlns:tp="http://services.sabre.com/tripproposal/v1_1" xmlns:stlp=
"http://services.sabre.com/STL_Payload/v02_02" version="1.1.0" ①
>
  <stlp:ApplicationResults status="Complete"> ②
    <stlp:Success timeStamp="2018-05-14T08:44:05.887-05:00"/> ③
  </stlp:ApplicationResults>

```

```

<tp:TripProposal proposalID="CAR3XBUH1E" proposalVersion="2"> ④
  <tp:Label>Generated TripProposal label</tp:Label>
  <tp:Comments>
    <tp:Comment type="public">
      <tp:Text>Comment text</tp:Text>
      <tp:Author>Comment author</tp:Author>
      <tp:CreatedOn>2018-05-14T15:43:38</tp:CreatedOn>
      <tp:ModifiedOn>2018-05-14T15:43:38</tp:ModifiedOn>
    </tp:Comment>
    <tp:Comment agentSign="A6E" pcc="B4T0" primeHost="1S" type="public"> ⑤
      <tp:Text>New comment text</tp:Text>
      <tp:Author>New comment author</tp:Author>
      <tp:CreatedOn>2018-05-14T08:44:05</tp:CreatedOn>
      <tp:ModifiedOn>2018-05-14T08:44:05</tp:ModifiedOn>
    </tp:Comment>
  </tp:Comments>
  <tp:Quote quoteID="TP-1">
    <tp:Label>Quote label</tp:Label>
    <tp:Comments>
      <tp:Comment type="public">
        <tp:Text>Quote comment text</tp:Text>
        <tp:Author>Quote comment author</tp:Author>
        <tp:CreatedOn>2018-05-14T15:43:38</tp:CreatedOn>
        <tp:ModifiedOn>2018-05-14T15:43:38</tp:ModifiedOn>
      </tp:Comment>
    </tp:Comments>
  <tp:Option expirationDate="2018-05-21T15:43:38" optionID="TP-2" status="
PROPOSED">
    <tp:Label>Option label</tp:Label>
    <tp:Comments>
      <tp:Comment type="public">
        <tp:Text>Option comment text</tp:Text>
        <tp:Author>Option comment author</tp:Author>
        <tp:CreatedOn>2018-05-14T15:43:38</tp:CreatedOn>
        <tp:ModifiedOn>2018-05-14T15:43:38</tp:ModifiedOn>
      </tp:Comment>
    </tp:Comments>
    <tp:Product id="TP-3">
      <ProductDetails xmlns="http://services.sabre.com/res/or/v1_13" endDateTime=
"2018-05-21T15:43:38" endPoint="LAX" productType="AIR" startDateTime="2018-05-
21T15:43:38" startPoint="MUC" vendorCode="AA">
        <ProductName type="AIR"/>
        <Air>
          <DepartureAirport>MUC</DepartureAirport>
          <ArrivalAirport>LAX</ArrivalAirport>
          <MarketingAirlineCode>AA</MarketingAirlineCode>
          <Eticket>true</Eticket>
          <DepartureDateTime>2018-05-21T15:43:38</DepartureDateTime>
          <ArrivalDateTime>2018-05-21T15:43:38</ArrivalDateTime>
          <FlightNumber>1234</FlightNumber>
          <ActionCode>NN</ActionCode>
        </Air>
      </Product>
    </tp:Product>
  </tp:Option>
</tp:TripProposal>

```



```

    </tp:Ownership>
  </tp:Metadata>
</tp:TripProposal>
</tp:TP_UpdateRS>

```

- ① API version.
- ② STLP *ApplicationResults* node with success status "Complete".
- ③ STLP *Success* node - indicating success with execution timestamp
- ④ *TripProposal* Document with *proposalID*, and *proposalVersion* identification attributes. *proposalVersion* shows increased version after successful update.
- ⑤ Newly added *Comment* node with ownership information and creation dates populated by service.
- ⑥ *Metadata* node, refreshed from repository version, with current *UpdatedBy* node.

Error Response:

```

<tp:TP_UpdateRS xmlns:tp="http://services.sabre.com/tripproposal/v1_1" xmlns:stlp=
"http://services.sabre.com/STL_Payload/v02_02" version="1.1.0">
  <stlp:ApplicationResults status="Incomplete"> ①
    <stlp:Error type="BusinessLogic" timeStamp="2018-05-15T05:48:17.040-05:00"> ②
      <stlp:SystemSpecificResults>
        <stlp:Message code="ERR.TPC.9">Document outdated error</stlp:Message> ③
      </stlp:SystemSpecificResults>
    </stlp:Error>
  </stlp:ApplicationResults>
</tp:TP_UpdateRS>

```

- ① STLP *ApplicationResults* node with error status "Incomplete".
- ② STLP *Error* node with type of error and execution timestamp
- ③ STLP error messages describing error with error code. In this case 'Document outdated error' - cause by attempt to override document with older version.

2.6. Delete Trip Proposal Service

USG Action: TP_DeleteRQ

2.6.1. Introduction

Delete Trip Proposal Service (TP_DeleteRQ) is used to delete TripProposal documents from persistent storage and making them immediately unavailable for searches and reads.



In delete process all security/ownership rules apply, so user must be granted to read document to be able to delete it.



It's not possible to read history version of deleted document.

2.6.2. Request structure

```
<tp:TP_DeleteRQ xmlns:tp="http://services.sabre.com/tripproposal/v1_1"
  proposalID="4BJ9KMAA2G" ①
  version="1.1.0" ②
/>
```

① Existing TripProposal ID

② API Version

2.6.3. Response structure

Success Response:

```
<tp:TP_DeleteRS xmlns:tp="http://services.sabre.com/tripproposal/v1_1" xmlns:stlp=
"http://services.sabre.com/STL_Payload/v02_02" version="1.1.0">
  <stlp:ApplicationResults status="Complete"> ①
    <stlp:Success timeStamp="2018-04-27T04:32:00.324-05:00"/> ②
  </stlp:ApplicationResults>
</tp:TP_DeleteRS>
```

① STLP *ApplicationResults* node with success status "Complete".

② STLP *Success* node - indicating success with execution timestamp

Error Response:

```
<tp:TP_DeleteRS xmlns:tp="http://services.sabre.com/tripproposal/v1_1" xmlns:stlp="http://services.sabre.com/STL_Payload/v02_02" version="1.1.0">
  <stlp:ApplicationResults status="Incomplete"> ①
    <stlp:Error type="BusinessLogic" timeStamp="2018-04-27T04:58:10.452-05:00"> ②
      <stlp:SystemSpecificResults> ③
        <stlp:Message code="ERR.TPC.12">Security permission
denied</stlp:Message>
      </stlp:SystemSpecificResults>
    </ns11:Error>
  </stlp:ApplicationResults>
</tp:TP_DeleteRS>
```

- ① STLP *ApplicationResults* node with error status "Incomplete".
- ② STLP *Error* node with type of error and execution timestamp
- ③ STLP error messages describing error with error code.

Detailed list of errors can be found in [Error catalogue](#) section

2.7. Book Trip Proposal Service

USG Action: **TP_BookRQ**

2.7.1. Introduction

Book Trip Proposal Service (TP_BookRQ) is used to convert chosen **TripProposal** document options into real reservation **PNR** by orchestration of native Sabre ® APIs. Service can be used in *stateful* and *stateless* mode - however, using **ATK** token for authentication only *stateless* mode is available.

Book Trip Proposal Service is able to orchestrate process of:

- Convert Products into suitable segments (Air, Car, Insurance etc..);
- Pass guarantee information, used while booking Car process;
- Pass to **PNR** items usually needed to close it - ex. Ticketing Time Limit, DK Number, Received From;
- Move to reservation Passengers defined in **TripProposal** document;
- Move to reservation Passengers data stored in Sabre Customer Insight ® (Passenger must contain Profile ID information);
- Store PriceQuote record for booked air segments using default options or provided pricing qualifiers;
- Place created **PNR** to queue;

Use of each of above feature is determined by appropriate *BookingOptions* switch and provide of additional data (if required).

During booking process, reference to source **TripProposal** document placed in **PNR**, however **PNR** locator can be stored in document, only when it is present at the end of booking process (*stateless* mode or *stateful* mode with close PNR request scenario).

In *stateful* mode, when TP document elements are just added to agents AAA without ending transaction, **PNR** locator is added to TP document as soon as it is available, after transaction end.

During end transaction postprocessing, reservation data change event is triggered and handled by 'Trip Proposal Services', and if modified **PNR** data contain TP document reference, some data, like locator or purge date are synchronized form **PNR** to referenced TP document.



In update process all security/ownership rules apply, so user must be granted to read document to be able to book/update it.

2.7.2. Request structure

```
<tp:TP_BookRQ xmlns:tp="http://services.sabre.com/tripproposal/v1_1" version="1.1.0">
  ①
  <tp:BookingOptions movePassengerDetails="true" moveReceivedFrom="true"> ②
    <tp:RequestType commitTransaction="true">Stateless</tp:RequestType>
  </tp:BookingOptions>
  <tp:TripProposalReference> ③
    <tp:TripProposalID>AED3X2XZ3V</tp:TripProposalID>
  </tp:TripProposalReference>
</tp:TP_BookRQ>
```

- ① API version
- ② Booking options
- ③ Reference to *TripProposal* document options to book

Booking Options

```
<tp:BookingOptions placeToQueue="false" movePassengerDetails="true"
movePricingDetails="false" moveReceivedFrom="true" moveDKNumber="true"
moveTicketingTimeLimit="false"> ①
  <tp:RequestType commitTransaction="true">Stateful</tp:RequestType> ②
  <tp:PnrLocator>BDAESQ</tp:PnrLocator> ③
  <tp:BookingGuarantee> ④
    <tp:PaymentCard reconcileAsCash="false">
      <or:PaymentType>CC</or:PaymentType>
      <or:CardCode>AX</or:CardCode>
      <or:CardNumber tokenized="true" masked="false">378282246310005</or:CardNumber>
      <or:ExpiryMonth>--11</or:ExpiryMonth>
      <or:ExpiryYear>2019</or:ExpiryYear>
      <or:DefaultExtendPayment>>false</or:DefaultExtendPayment>
      <or:SuppressFromInvoice>>false</or:SuppressFromInvoice>
      <or:GenerateApprovalAtTicketing>>false</or:GenerateApprovalAtTicketing>
      <or:CardHolderName>YNGECQDS</or:CardHolderName>
    </tp:PaymentCard>
  </tp:BookingGuarantee>
  <tp:DkNumber>355844</tp:DkNumber> ⑤
</tp:BookingOptions>
```

- ① *BookingOptions* Element having booking process features switches attributes. Turning on some options without supplying additional data ex. *placeToQueue* without queue details provided will cause request to fail.
- ② *RequestType* Element
- ③ *PnrLocator* Element
- ④ *BookingGuarantee* Element
- ⑤ *DKNumber* Element

Table 1. Table BookingOptions attributes.

Attribute	Description	Additional data required
placeToQueue	Queue place created PNR	YES
movePassengerDetails	Move passenger details from TP document to 'PNR'	NO
movePricingDetails	Store PQ record in PNR for booked air segments	NO
moveReceivedFrom	Populate ReceivedFrom to PNR .	NO
moveDKNumber	Set DKNumber for PNR .	YES
moveTicketingTimeLimit	Set TicketingTimeLimit for PNR .	YES

Example above shows usage of some of the *BookingOptions* required data. For more detailed list see below.

RequestType

```
<tp:RequestType commitTransaction="true" initialIgnore="false">
Stateful</tp:RequestType>
```

RequestType element is holding booking process mode. Element accepted values are *Stateful* and *Stateless*. In stateful mode user can decide whether to close edited **PNR** or leave session for further modifications, using *commitTransaction* attribute.

User can also decide whether **AAA** should be cleaned before booking process start and existing content ignored.

Stateless mode assumes both attributes value is *TRUE*

PnrLocator

```
<tp:PnrLocator>BDAESQ</tp:PnrLocator>
```

Providing existing Sabre ® **PNR** locator in *PnrLocator* element will cause Service to book options into this **PNR** instead of creating new one.

QueueItems

```
<tp:QueueItems>
  <tp:QueueItem>
    <tp:QueueNumber>101</tp:QueueNumber>
    <tp:CityCode>B4T0</tp:CityCode>
    <tp:PitCode>2</tp:PitCode>
  </tp:QueueItem>
</tp:QueueItems>
```

Turning on *placeToQueue* booking option, requires providing a least one queue details. *QueueItems* Element is holding this information.

BookingGuarantee

```
<tp:BookingGuarantee>
  <tp:PaymentCard reconcileAsCash="false">
    <or:PaymentType>CC</or:PaymentType>
    <or:CardCode>AX</or:CardCode>
    <or:CardNumber tokenized="true" masked="false">378282246310005</or:CardNumber>
    <or:ExpiryMonth>--11</or:ExpiryMonth>
    <or:ExpiryYear>2019</or:ExpiryYear>
    <or:DefaultExtendPayment>>false</or:DefaultExtendPayment>
    <or:SuppressFromInvoice>>false</or:SuppressFromInvoice>
    <or:GenerateApprovalAtTicketing>>false</or:GenerateApprovalAtTicketing>
    <or:CardHolderName>JOHN DOE</or:CardHolderName>
  </tp:PaymentCard>
</tp:BookingGuarantee>
```

Some of car rental vendors require providing credit card details as booking guarantee. *BookingGuarantee* Element is used to pass provided information to CAR booking service.



Only tokenized credit card numbers are allowed.

TicketingTimeLimit

```
<tp:TicketingTimeLimit>
  <tp:Code>7TAW</tp:Code>
</tp:TicketingTimeLimit>
```

When *moveTicketingTimeLimit* booking options is enabled, *TicketingTimeLimit* Element holds information required to close created **PNR**

ReceivedFrom

```
<tp:ReceivedFrom>AGENT SMITH</tp:ReceivedFrom>
```

When booking option *moveReceivedFrom* is used, system will generate suitable required

information according to authenticated user. *ReceivedFrom* Element can be used to override generated data.

ProfileFilters

```
<tp:ProfileFilters>
  <tp:ProfileFilter profileID="1234567" profileFilterID="1223" filterDomainID="B4T0"/>
  <tp:ProfileFilter profileID="9101123" profileFilterID="324" filterDomainID="A70S"/>
</tp:ProfileFilters>
```

When booking option *movePassengerDetails* is used, all passenger data stored in *TripProposal* document are transfer to *AAA*. If traveller data contains Sabre Profile information, then passenger data, populated to *AAA* comes from Sabre Profiles system, instead of details stored in *TP* document.

Each Sabre Profile can contain list of filters - specifications what profile data should be moved into session. When no filter is specified for *profileID*, default filter is assumed, however user can decide to use filter different, then default. In such case user supplies mapping for desired filter (referenced by *profileFilterID* and *filterDomainID*) to be used with suitable *profileID*

DkNumber

```
<tp:DkNumber>355844</tp:DkNumber>
```

When booking option *moveDKNumber* is used, *DkNumber* Element, containing proper DK number is required.

Trip Proposal Reference

```
<TripProposalReference>
  <TripProposalID>43XSFLEHG9</TripProposalID> ①
  <QuoteID>1</QuoteID> ②
  <OptionID>2</OptionID> ③
</TripProposalReference>
```

- ① ID of TP Document
- ② ID of *Quote* element to be booked
- ③ ID of *Option* element to be booked

TripProposalReference node contains description of list of document options to be booked.

TripProposalID element is mandatory. It holds ID of TP document to book. When no *QuoteID* or *OptionID* elements, all options contained within document will be used.

QuoteID element is optional but also multiple occurrences are possible. It's to hold ID's of document quotes to book. All options belonging to referenced quotes will be used.

OptionID element is optional but also multiple occurrences are possible. It's to hold ID's of document options to book.



When both *QuoteID* and *OptionID* elements are defined, *OptionID* elements are ignored.

2.7.3. Response structure

Success Response:

```
<tp:TP_BookRS xmlns:tp="http://services.sabre.com/tripproposal/v1_1" xmlns:stlp="http://services.sabre.com/STL_Payload/v02_02" version="1.1.0"> ①
  <stlp:ApplicationResults status="Complete"> ②
    <stlp:Success timeStamp="2018-04-27T05:26:19.009-05:00"/> ③
  </stlp:ApplicationResults>
  <tp:BookingResult>
    <tp:PnrLocator>BOKLTZ</tp:PnrLocator> ④
    <tp:BookingStatus optionID="TP-3" optionStatus="BOOKED"> ⑤
      <tp:ProductStatus productID="TP-4" productStatus="BOOKED"/>
    </tp:BookingStatus>
  </tp:BookingResult>
</tp:TP_BookRS>
```

- ① API version.
- ② STLP *ApplicationResults* node with success status "Complete".
- ③ STLP *Success* node - indicating success with execution timestamp
- ④ Booked PNR locator.
- ⑤ Requested to book *Option* status. Contains also booking statuses of each Product contained in referenced *Option*.

Partial Success with Warnings:

```
<tp:TP_BookRS xmlns:tp="http://services.sabre.com/tripproposal/v1_1" xmlns:stlp="http://services.sabre.com/STL_Payload/v02_02" version="1.1.0">
  <stlp:ApplicationResults status="Complete"> ①
    <stlp:Success timeStamp="2018-04-27T05:28:38.071-05:00"/>
    <stlp:Warning type="BusinessLogic" timeStamp="2018-04-27T05:28:38.028-05:00"> ②
      <stlp:SystemSpecificResults>
        <stlp:Message code="ERR.TPB.10">Booking error: Code [900104] Message [Error occurred while creating Product with id TP-2 - [INTERNAL_ERROR] Car service returned error: CHECK CREDIT CARD INFORMATION - INVALID LENGTH]</stlp:Message> ③
      </stlp:SystemSpecificResults>
    </stlp:Warning>
  </stlp:ApplicationResults>
  <tp:BookingResult>
    <tp:BookingStatus optionID="1" optionStatus="BOOKED"> ④
      <tp:ProductStatus productID="TP-1" productStatus="BOOKED"/>
    </tp:BookingStatus>
    <tp:BookingStatus optionID="2" optionStatus="NOT_PROCESSED"> ⑤
      <tp:ProductStatus productID="TP-2" productStatus="NOT_PROCESSED"/>
    </tp:BookingStatus>
  </tp:BookingResult>
</tp:TP_BookRS>
```

- ① STLP *ApplicationResults* node with error status "Complete".
- ② STLP *Warning* node with type of error and execution timestamp
- ③ STLP error messages describing error with error code. This error message populates also error code from downstream service - in this case **PNRServices**
- ④ Information about successful book of *Option 1*
- ⑤ Information, which *Product* in *Option* caused error and overall *Option* booking status.

Error Response:

```

<tp:TP_BookRS xmlns:tp="http://services.sabre.com/tripproposal/v1_1" xmlns:stlp=
"http://services.sabre.com/STL_Payload/v02_02" version="1.1.0">
  <stlp:ApplicationResults status="Incomplete"> ①
    <stlp:Error type="BusinessLogic" timeStamp="2018-04-27T05:21:34.224-05:00"> ②
      <stlp:SystemSpecificResults>
        <stlp:Message code="ERR.TPB.10">Booking error: Code [500700] Message [ET
PROCESSING ERROR ITINERARY REQUIRED TO COMPLETE TRANSACTION]</stlp:Message> ③
      </stlp:SystemSpecificResults>
    </stlp:Error>
  </stlp:ApplicationResults>
</tp:TP_BookRS>

```

- ① STLP *ApplicationResults* node with error status "Incomplete".
- ② STLP *Error* node with type of error and execution timestamp
- ③ STLP error messages describing error with error code. This error message populates also error code from downstream service - in this case **PNRServices**

2.8. Refresh Trip Proposal Service

USG Action: `TP_RefreshRQ`

2.8.1. Introduction

Refresh Trip Proposal Service (`TP_RefreshRQ`) is used to refresh pricing and availability status of offers stored in `TripProposal` document options. Price/Availability verification is performed by orchestration of Sabre APIs.

`Trip Proposal Services` currently supports only refresh of following types of products:

- Active Air products (verifies using `RevalidateItinRQ` provided by `Intellisell`),
- Active Hotel products (verified using `HotelPropertyDescriptionLLSRQ`),
- Active CAR products. (verified using `OTA_VehAvailRateLLSRQ`)



User must be granted access to orchestrated API for successful verification.

Price refresh process is influenced not only by `TripProposal` document content like number and type of passengers, type of itinerary items (ex. return flight), but can be also fine tuned with pricing qualifiers. Each of product type have its own set of pricing qualifiers possible to apply, which are compatible with other Sabre services. Detailed elaborated list of qualifiers can be found in `PricingQualifiers` chapter.



Each *Option* is priced as a whole, but must contain only one type of product, so *Option* holding return flight will contain two *Products* (with each air segment), but Hotel offered together must be stored in separate *Option* within the same *Quote*.



In refresh process all security/ownership rules apply, so user must be granted to read document to be able to refresh it.

2.8.2. Request structure

```
<tp:TP_RefreshRQ xmlns:tp="http://services.sabre.com/tripproposal/v1_1" version="1.1.0"> ①
  <tp:RefreshOptions returnFullDocument="true" companyName="OTAQA" /> ②
  <tp:TripProposalReference> ③
    <tp:TripProposalID>XYSF1ZZ8MX</tp:TripProposalID>
  </tp:TripProposalReference>
</tp:TP_RefreshRQ>
```

① API version

② *RefreshOptions* with *returnFullDocument* flag. when its enabled, apart from refreshed options status, complete document is returned in response. Default value is *true*. *companyName* attribute value is passed to `Intellisell` service to switch to custom pricing rules. User, who does not know his *customerName* should obtain one from `Intellisell` team.

③ *TripProposalReference* is similar as used in Book Trip Proposal Service. See [Trip Proposal Reference](#) for details.

2.8.3. Response structure

Success Response:

```
<tp:TP_RefreshRS xmlns:tp="http://services.sabre.com/tripproposal/v1_1" xmlns:stlp="http://services.sabre.com/STL_Payload/v02_02" version="1.1.0"> ①
  <stlp:ApplicationResults status="Complete"> ②
    <stlp:Success timeStamp="2018-05-16T08:57:54.906-05:00"/> ③
  </stlp:ApplicationResults>
  <tp:TripProposal proposalID="XYSF1ZZ8MX" proposalVersion="2"> ④
    <tp:Passenger passengerID="TP-1">
      <Type xmlns="http://services.sabre.com/res/or/v1_13" code="ADT">ADT</Type>
      <PersonName xmlns="http://services.sabre.com/res/or/v1_13">
        <Prefix>MS</Prefix>
        <Given>FIRSTNAME</Given>
        <Surname>LASTNAME</Surname>
        <Type>ADT</Type>
      </PersonName>
      <Telephone xmlns="http://services.sabre.com/res/or/v1_13">
        <PhoneNumber>12345678</PhoneNumber>
      </Telephone>
      <Email xmlns="http://services.sabre.com/res/or/v1_13">email@sample.com</Email>
    </tp:Passenger>
    <tp:Quote quoteID="TP-2">
      <tp:Label>Quote label</tp:Label>
      <tp:Comments/>
      <tp:Option expirationDate="2018-06-15T00:00:00" optionID="TP-3" status="ACTIVE">
        ⑤
        <tp:Label>Option label</tp:Label>
        <tp:Comments/>
        <tp:Product id="TP-4"> ⑥
          <ProductDetails xmlns="http://services.sabre.com/res/or/v1_13"
productCategory="AIR">
            <ProductName type="AIR"/>
            <Air>
              <DepartureAirport>AUH</DepartureAirport>
              <ArrivalAirport>MUC</ArrivalAirport>
              <OperatingAirlineCode>EY</OperatingAirlineCode>
              <MarketingAirlineCode>EY</MarketingAirlineCode>
              <Eticket>>false</Eticket>
              <DepartureDateTime>2018-05-18T09:05:00</DepartureDateTime>
              <ArrivalDateTime>2018-05-18T13:20:00</ArrivalDateTime>
              <FlightNumber>3</FlightNumber>
              <ClassOfService>Y</ClassOfService>
              <ActionCode>NN</ActionCode>
              <NumberInParty>1</NumberInParty>
              <inboundConnection>>false</inboundConnection>
            </Air>
          </ProductDetails>
        </tp:Product>
      </tp:Option>
    </tp:Quote>
  </tp:TripProposal>
</tp:TP_RefreshRS>
```

```

    <outboundConnection>false</outboundConnection>
    <BSGIndicator>false</BSGIndicator>
    <PassiveSegmentIndicator>false</PassiveSegmentIndicator>
    <ScheduleChangeIndicator>false</ScheduleChangeIndicator>
  </Air>
</ProductDetails>
</tp:Product>
<tp:Price> ⑦
  <PriceSummary xmlns="http://services.sabre.com/res/or/v1_13" id="1"
refreshTimestamp="2018-05-16T08:57:48"> ⑧
    <BasePrice currencyCode="AED">4390</BasePrice>
    <EquivPrice currencyCode="USD">1195.00</EquivPrice>
    <TotalTaxes>
      <Tax>
        <TaxAmount currencyCode="USD">197.40</TaxAmount>
        <TaxCode>TOTALTAX</TaxCode>
      </Tax>
      <TotalTaxAmount currencyCode="USD">197.40</TotalTaxAmount>
    </TotalTaxes>
    <TotalPrice currencyCode="USD">1392.40</TotalPrice>
    <PriceBreakDown>
      <PassengerType code="ADT"/>
      <NumberOfPassengers>1</NumberOfPassengers>
      <BasePrice currencyCode="AED">4390</BasePrice>
      <EquivPrice currencyCode="USD">1195.00</EquivPrice>
      <Taxes>
        <Tax>
          <TaxAmount currencyCode="USD">164.70</TaxAmount>
          <TaxCode>YQF</TaxCode>
        </Tax>
        <Tax>
          <TaxAmount currencyCode="USD">20.40</TaxAmount>
          <TaxCode>AE4</TaxCode>
        </Tax>
        <Tax>
          <TaxAmount currencyCode="USD">9.50</TaxAmount>
          <TaxCode>F62</TaxCode>
        </Tax>
        <Tax>
          <TaxAmount currencyCode="USD">1.40</TaxAmount>
          <TaxCode>TP</TaxCode>
        </Tax>
        <Tax>
          <TaxAmount currencyCode="USD">1.40</TaxAmount>
          <TaxCode>ZR2</TaxCode>
        </Tax>
        <TotalTaxAmount currencyCode="USD">197.40</TotalTaxAmount>
      </Taxes>
      <Price currencyCode="USD">1392.40</Price>
    </PriceBreakDown>
  </PriceSummary>

```

```

    <PriceProvider xmlns="http://services.sabre.com/res/or/v1_13">
      <ProviderName>RevalidateItinRQ</ProviderName>
    </PriceProvider>
  </tp:Price>
</tp:Option>
<tp:Option expirationDate="2018-06-15T00:00:00" optionID="TP-5" status="ACTIVE">
  <tp:Label>Option label</tp:Label>
  <tp:Comments/>
  <tp:Product id="TP-6">
    <ProductDetails xmlns="http://services.sabre.com/res/or/v1_13"
productCategory="AIR">
      <ProductName type="AIR"/>
      <Air>
        <DepartureAirport>AUH</DepartureAirport>
        <ArrivalAirport>MUC</ArrivalAirport>
        <OperatingAirlineCode>EY</OperatingAirlineCode>
        <MarketingAirlineCode>EY</MarketingAirlineCode>
        <Eticket>>false</Eticket>
        <DepartureDateTime>2018-05-18T09:05:00</DepartureDateTime>
        <ArrivalDateTime>2018-05-18T13:20:00</ArrivalDateTime>
        <FlightNumber>3</FlightNumber>
        <ClassOfService>Y</ClassOfService>
        <ActionCode>NN</ActionCode>
        <NumberInParty>1</NumberInParty>
        <inboundConnection>>false</inboundConnection>
        <outboundConnection>>false</outboundConnection>
        <BSGIndicator>>false</BSGIndicator>
        <PassiveSegmentIndicator>>false</PassiveSegmentIndicator>
        <ScheduleChangeIndicator>>false</ScheduleChangeIndicator>
      </Air>
    </ProductDetails>
  </tp:Product>
  <tp:Price>
    <PriceSummary xmlns="http://services.sabre.com/res/or/v1_13" id="1"
refreshTimestamp="2018-05-16T08:57:48">
      <BasePrice currencyCode="AED">4390</BasePrice>
      <EquivPrice currencyCode="USD">1195.00</EquivPrice>
      <TotalTaxes>
        <Tax>
          <TaxAmount currencyCode="USD">197.40</TaxAmount>
          <TaxCode>TOTALTAX</TaxCode>
        </Tax>
        <TotalTaxAmount currencyCode="USD">197.40</TotalTaxAmount>
      </TotalTaxes>
      <TotalPrice currencyCode="USD">1392.40</TotalPrice>
      <PriceBreakDown>
        <PassengerType code="ADT"/>
        <NumberOfPassengers>1</NumberOfPassengers>
        <BasePrice currencyCode="AED">4390</BasePrice>
        <EquivPrice currencyCode="USD">1195.00</EquivPrice>
        <Taxes>

```

```

    <Tax>
      <TaxAmount currencyCode="USD">164.70</TaxAmount>
      <TaxCode>YQF</TaxCode>
    </Tax>
    <Tax>
      <TaxAmount currencyCode="USD">20.40</TaxAmount>
      <TaxCode>AE4</TaxCode>
    </Tax>
    <Tax>
      <TaxAmount currencyCode="USD">9.50</TaxAmount>
      <TaxCode>F62</TaxCode>
    </Tax>
    <Tax>
      <TaxAmount currencyCode="USD">1.40</TaxAmount>
      <TaxCode>TP</TaxCode>
    </Tax>
    <Tax>
      <TaxAmount currencyCode="USD">1.40</TaxAmount>
      <TaxCode>ZR2</TaxCode>
    </Tax>
    <TotalTaxAmount currencyCode="USD">197.40</TotalTaxAmount>
  </Taxes>
  <Price currencyCode="USD">1392.40</Price>
</PriceBreakDown>
</PriceSummary>
<PriceProvider xmlns="http://services.sabre.com/res/or/v1_13">
  <ProviderName>RevalidateItinRQ</ProviderName>
</PriceProvider>
</tp:Price>
</tp:Option>
<tp:Option expirationDate="2018-06-15T00:00:00" optionID="TP-7" status="ACTIVE">
  <tp:Label>Option label</tp:Label>
  <tp:Comments/>
  <tp:Product id="TP-8">
    <ProductDetails xmlns="http://services.sabre.com/res/or/v1_13"
productCategory="AIR">
      <ProductName type="AIR"/>
      <Air>
        <DepartureAirport>AUH</DepartureAirport>
        <ArrivalAirport>MUC</ArrivalAirport>
        <OperatingAirlineCode>EY</OperatingAirlineCode>
        <MarketingAirlineCode>EY</MarketingAirlineCode>
        <Eticket>>false</Eticket>
        <DepartureDateTime>2018-05-18T09:05:00</DepartureDateTime>
        <ArrivalDateTime>2018-05-18T13:20:00</ArrivalDateTime>
        <FlightNumber>3</FlightNumber>
        <ClassOfService>Y</ClassOfService>
        <ActionCode>NN</ActionCode>
        <NumberInParty>1</NumberInParty>
        <inboundConnection>>false</inboundConnection>
        <outboundConnection>>false</outboundConnection>
      </Air>
    </ProductDetails>
  </tp:Product>
</tp:Option>

```

```

    <BSGIndicator>>false</BSGIndicator>
    <PassiveSegmentIndicator>>false</PassiveSegmentIndicator>
    <ScheduleChangeIndicator>>false</ScheduleChangeIndicator>
  </Air>
</ProductDetails>
</tp:Product>
<tp:Price>
  <PriceSummary xmlns="http://services.sabre.com/res/or/v1_13" id="1"
refreshTimestamp="2018-05-16T08:57:48">
    <BasePrice currencyCode="AED">4390</BasePrice>
    <EquivPrice currencyCode="USD">1195.00</EquivPrice>
    <TotalTaxes>
      <Tax>
        <TaxAmount currencyCode="USD">197.40</TaxAmount>
        <TaxCode>TOTALTAX</TaxCode>
      </Tax>
      <TotalTaxAmount currencyCode="USD">197.40</TotalTaxAmount>
    </TotalTaxes>
    <TotalPrice currencyCode="USD">1392.40</TotalPrice>
    <PriceBreakDown>
      <PassengerType code="ADT"/>
      <NumberOfPassengers>1</NumberOfPassengers>
      <BasePrice currencyCode="AED">4390</BasePrice>
      <EquivPrice currencyCode="USD">1195.00</EquivPrice>
      <Taxes>
        <Tax>
          <TaxAmount currencyCode="USD">164.70</TaxAmount>
          <TaxCode>YQF</TaxCode>
        </Tax>
        <Tax>
          <TaxAmount currencyCode="USD">20.40</TaxAmount>
          <TaxCode>AE4</TaxCode>
        </Tax>
        <Tax>
          <TaxAmount currencyCode="USD">9.50</TaxAmount>
          <TaxCode>F62</TaxCode>
        </Tax>
        <Tax>
          <TaxAmount currencyCode="USD">1.40</TaxAmount>
          <TaxCode>TP</TaxCode>
        </Tax>
        <Tax>
          <TaxAmount currencyCode="USD">1.40</TaxAmount>
          <TaxCode>ZR2</TaxCode>
        </Tax>
        <TotalTaxAmount currencyCode="USD">197.40</TotalTaxAmount>
      </Taxes>
      <Price currencyCode="USD">1392.40</Price>
    </PriceBreakDown>
  </PriceSummary>
</PriceProvider xmlns="http://services.sabre.com/res/or/v1_13">

```

```
<ProviderName>RevalidateItinRQ</ProviderName>
  </PriceProvider>
</tp:Price>
</tp:Option>
</tp:Quote>
<tp:Metadata>
  <tp:SnapshotID>102e52fb-fe9a-4948-ba25-a61023b9cdd5</tp:SnapshotID>
  <tp:Ownership>
    <tp:Owner>
      <tp:UserID>2212</tp:UserID>
      <tp:CurrentCity>B4T0</tp:CurrentCity>
      <tp:PCC>B4T0</tp:PCC>
      <tp:AaaArea>A</tp:AaaArea>
      <tp:AgentHomeCity>B4T0</tp:AgentHomeCity>
      <tp:AgentPrimeHost>1S</tp:AgentPrimeHost>
      <tp:AgentSign>A6E</tp:AgentSign>
      <tp:CurrentPartition>AA</tp:CurrentPartition>
      <tp:Lniata>1242592</tp:Lniata>
      <tp:DutyCode>*</tp:DutyCode>
      <tp:Domain>AA</tp:Domain>
      <tp>Date>2018-05-16T08:57:30</tp>Date>
    </tp:Owner>
    <tp:CreatedBy>
      <tp:UserID>2212</tp:UserID>
      <tp:CurrentCity>B4T0</tp:CurrentCity>
      <tp:PCC>B4T0</tp:PCC>
      <tp:AaaArea>A</tp:AaaArea>
      <tp:AgentHomeCity>B4T0</tp:AgentHomeCity>
      <tp:AgentPrimeHost>1S</tp:AgentPrimeHost>
      <tp:AgentSign>A6E</tp:AgentSign>
      <tp:CurrentPartition>AA</tp:CurrentPartition>
      <tp:Lniata>1242592</tp:Lniata>
      <tp:DutyCode>*</tp:DutyCode>
      <tp:Domain>AA</tp:Domain>
      <tp>Date>2018-05-16T08:57:30</tp>Date>
    </tp:CreatedBy>
    <tp:UpdatedBy>
      <tp:UserID>2212</tp:UserID>
      <tp:CurrentCity>B4T0</tp:CurrentCity>
      <tp:PCC>B4T0</tp:PCC>
      <tp:AaaArea>A</tp:AaaArea>
      <tp:AgentHomeCity>B4T0</tp:AgentHomeCity>
      <tp:AgentPrimeHost>1S</tp:AgentPrimeHost>
      <tp:AgentSign>A6E</tp:AgentSign>
      <tp:CurrentPartition>AA</tp:CurrentPartition>
      <tp:Lniata>1242592</tp:Lniata>
      <tp:DutyCode>*</tp:DutyCode>
      <tp:Domain>AA</tp:Domain>
      <tp>Date>2018-05-16T08:57:48</tp>Date>
    </tp:UpdatedBy>
  </tp:Ownership>
</tp:Metadata>
```

```
</tp:Metadata>  
</tp:TripProposal>  
</tp:TP_RefreshRS>
```

- ① API version.
- ② STLP ApplicationResults node with success status "Complete".
- ③ STLP Success node - indicating success with execution timestamp
- ④ *TripProposal* Document with *proposalID*, and *proposalVersion* identification attributes.
- ⑤ *Option* marked with attribute *status* **ACTIVE** confirming its still available.
- ⑥ Priced *Product* definition.
- ⑦ *Price* Element holding list of all pricing results for given option.
- ⑧ *PriceSummary* Element holding current pricing results including totals, taxes in passenger type breakdown.

Detailed description of *Price* element can be found in [TripProposal document reference](#)

2.9. Trip Search Service (finding proposals usage)

USG Action: **Trip_SearchRQ**

2.9.1. Introduction

Searching within **TripProposal** documents is facilitated using existing Sabre service, created to find **PNRs**. Trip Proposal Services just provide connector to **TripSearch** service. Most of searching criteria is shared with **PNR** search, but there is few specific to **TripProposal** searches.



Only Version **4.4.0** of **Trip_SearchRQ** Service contains support to search in **TripProposal** documents.



In search process all security/ownership rules apply, so user must be granted access to read document to be able to find it.

2.9.2. Request structure

```
<Trip_SearchRQ xmlns="http://webservices.sabre.com/triprecord" Version="4.4.0"> ①
  <ReadRequests>
    <ReservationReadRequest> ②
      <PosCriteria AnyBranch="false"/> ③
      <ProposalCriteria> ④
        <Proposal>
          <Name MatchMode="START">Gen</Name> ⑤
        </Proposal>
      </ProposalCriteria>
      <ReturnOptions ViewName="TripProposalSearch"/> ⑥
    </ReservationReadRequest>
  </ReadRequests>
</Trip_SearchRQ>
```

- ① Service request with *Version* attribute **4.4.0**.
- ② *ReservationReadRequest* Element, holding all search criteria.
- ③ *PosCriteria* with options to search only in logged *currentCity* **PCC**
- ④ *ProposalCriteria* container element for TP specific search criteria.
- ⑤ *Name* Element to search in TP document labels, all with value starting with 'Gen'
- ⑥ *ReturnOptions* with *ViewName* attribute value **TripProposalSearch**. Providing right view name is crucial for search withing `TripProposal` documents.

Tip Proposal Specific criteria

Search in */TripProposal/Label* field for string starting with ...


```
<ProposalCriteria>
  <Proposal>
    <Name MatchMode="START">Gen</Name>
  </Proposal>
</ProposalCriteria>
```

Search in */TripProposal/Metadata/Ownership/Owner/UsedId* for precise **userID**

```
<ProposalCriteria>
  <Proposal>
    <Owner>
      <UserID>2212</UserID>
    </Owner>
  </Proposal>
</ProposalCriteria>
```

Search in */TripProposal/@proposalID* for exact **proposalID**

```
<ProposalCriteria>
  <Proposal>
    <Id MatchMode="EXACT">MUH5ZGAWPI</Id>
  </Proposal>
</ProposalCriteria>
```

Search in */TripProposal/Metadata/Ownership/CreatedBy/Date* to find documents created within given time range.

```
<ProposalCriteria>
  <Proposal>
    <Owner>
      <CreateDate After="2018-05-16T09:51:26.934Z" Before="2018-05-18T09:51:26.934Z"/>
    </Owner>
  </Proposal>
</ProposalCriteria>
```

Search in */TripProposal/Metadata/Ownership/Owner/CurrentCity* to find documents belonging to given **PCC**.

```
<ProposalCriteria>
  <Proposal>
    <Owner>
      <CurrentCity>B4T0</CurrentCity>
    </Owner>
  </Proposal>
</ProposalCriteria>
```

For complete Criteria reference, please go to [Trip_SearchRQ](#) service documentation.

2.9.3. Response structure

Success Response:

```
<Trip_SearchRS xmlns="http://webservices.sabre.com/triprecord" Timestamp="2018-04-27T05:30:40" Target="Production" Version="4.4.0"> ①
  <Success>Success</Success> ②
  <ReservationsList NumberResults="0" NumberPages="0" Token="0">
    <Reservations>
      <Reservation> ③
        <tp:TP_ReadRS xmlns:tp="http://services.sabre.com/tripproposal/v1_1" version="1.1.0"> ④
          <tp:TripProposal proposalID="AYPOH8D0WJ" proposalVersion="1">
            <tp:Label>Generated TripProposal label</tp:Label> ⑤
            <!--
              Complete TripProposal document content
            -->
          </tp:TripProposal>
        </tp:TP_ReadRS>
      </Reservation>
      <Reservation>
        <tp:TP_ReadRS xmlns:tp="http://services.sabre.com/tripproposal/v1_1" version="1.1.0">
          <tp:TripProposal proposalID="8RQLUH1VS7" proposalVersion="1">
            <tp:Label>Generated TripProposal label</tp:Label>
            <!--
              Complete TripProposal document content
            -->
          </tp:TripProposal>
        </tp:TP_ReadRS>
      </Reservation>
    </Reservations>
  </ReservationsList>
</Trip_SearchRS>
```

- ① Service response with *Version* attribute **4.4.0**.
- ② *Success* node - indicating operation success.
- ③ Generic *Reservation* node wrapping each result.
- ④ Matched complete TripProposal document in schema version **1.1**
- ⑤ *Label* starting with string 'Gen' matching search criteria

Error Response:

```
<Trip_SearchRS xmlns="http://webservices.sabre.com/triprecord" Version="4.4.0"> ①
  <Errors> ②
    <Error ErrorMessage="TripSearch service responded with errors: Code: ERR.TRIP-
PROP.1003, Message: Invalid search criteria definition! Validation message:
[[NameCriterion/firstName minLength=[2], NameCriterion/lastName minLength=[2],
EmailCriterion/address minLength=[3], PhoneCriterion/number minLength=[3],
ProposalCriterion/name minLength=[3]]] "/>
  </Errors>
</Trip_SearchRS>
```

- ① Service response with *Version* attribute **4.4.0**.
- ② *Errors* node holding list of *Error* elements, describing problem.



Trip_SearchRS is not STL compliant.

Chapter 3. TripProposal document reference

3.1. Document structure overview

Data unit for *Trip Proposal Services* is *TripProposal* document. It's structure is designed to keep all data required to present trip offer to the customer, re-price given offer and create reservation out of chosen options.

Each *TripProposal* document can hold multiple variants for the same trip in *Quote* elements.

Each *Quote* element consists of set of *Options*, grouping given product type ex. Air segments, having its own price.



In given reference used namespace prefixes are assumed as **tp** = http://services.sabre.com/tripproposal/v1_1 and **or** = http://services.sabre.com/res/or/v1_13

```
<tp:TripProposal proposalID="4BJ9KMAA2G" proposalVersion="3"> ①
  <tp:Label>Mr Kovalsky trip to Dallas</tp:Label> ②
  <tp:TripType>Business</tp:TripType>
  <tp:ExternalBusinessID>Sabre Inc.</tp:ExternalBusinessID>
  <tp:ReasonForTravel>Business</tp:ReasonForTravel>
  <tp:Purpose>Business</tp:Purpose>
  <tp:Channel>Phone contacts</tp:Channel>
  <tp:Comments> ③
    <tp:Comment agentSign="A6E" pcc="B4T0" primeHost="1S" type="public">
      <tp:Text>Created new offer</tp:Text>
      <tp:Author>Johny</tp:Author>
      <tp:CreatedOn>2018-05-14T08:44:05</tp:CreatedOn>
      <tp:ModifiedOn>2018-05-14T08:44:05</tp:ModifiedOn>
    </tp:Comment>
  </tp:Comments>
  <tp:Passenger> ④
    <or:Type code="ADT">ADT</or:Type>
    <or:PersonName>
      <or:Prefix>MS</or:Prefix>
      <or:Given>NAME</or:Given>
      <or:Surname>THISISLONGLASTNAME</or:Surname>
      <or:Type>ADT</or:Type>
    </or:PersonName>
    <or:Telephone>
      <or:PhoneNumber>12345678</or:PhoneNumber>
    </or:Telephone>
    <or:Email>email@sample.com</or:Email>
  </tp:Passenger>
  <tp:Quote quoteID="TP-1"> ⑤
    <tp:Label>Quote label</tp:Label>
    <tp:Comments>
```

```

<tp:Comment agentSign="A6E" pcc="B4T0" primeHost="1S" type="public">
  <tp:Text>Basic offer</tp:Text>
  <tp:Author>Johny</tp:Author>
  <tp:CreatedOn>2018-04-27T11:31:15</tp:CreatedOn>
  <tp:ModifiedOn>2018-04-27T11:31:15</tp:ModifiedOn>
</tp:Comment>
</tp:Comments>
<tp:Option expirationDate="2018-05-04T11:31:15" optionID="TP-2" status="BOOKED">
  <tp:Label>Flight connection</tp:Label>
  <tp:Comments>
    <tp:Comment agentSign="A6E" pcc="B4T0" primeHost="1S" type="public">
      <tp:Text>Option comment text</tp:Text>
      <tp:Author>Option comment author</tp:Author>
      <tp:CreatedOn>2018-04-27T11:31:15</tp:CreatedOn>
      <tp:ModifiedOn>2018-04-27T11:31:15</tp:ModifiedOn>
    </tp:Comment>
  </tp:Comments>
  <tp:Product id="TP-3">
    <ProductDetails xmlns="http://services.sabre.com/res/or/v1_13" endDateTime=
"2018-05-04T11:31:15" endPoint="DFW" productType="AIR" startDateTime="2018-05-
04T11:31:15" startPoint="LAX" vendorCode="AA">
      <ProductName type="AIR"/>
      <Air>
        <DepartureAirport>LAX</DepartureAirport>
        <ArrivalAirport>DFW</ArrivalAirport>
        <MarketingAirlineCode>AA</MarketingAirlineCode>
        <DepartureDateTime>2018-05-04T11:31:15</DepartureDateTime>
        <ArrivalDateTime>2018-05-04T11:31:15</ArrivalDateTime>
        <FlightNumber>1234</FlightNumber>
        <ActionCode>NN</ActionCode>
        <NumberInParty>1</NumberInParty>
      </Air>
    </ProductDetails>
  </tp:Product>
</tp:Option>
</tp:Quote>
<tp:BookedPnrReference pnrCreateDate="2018-04-01">ABCDEF</tp:BookedPnrReference> ⑥
<tp:AdditionalFees> ⑦
  <tp:AgencyFee>
    <tp:Code>XDF</tp:Code>
    <tp:Description>VIP handling fee</tp:Description>
    <tp:Amount currencyCode="USD">5.00</tp:Amount>
    <tp:Tax currencyCode="USD">0.13</tp:Tax>
  </tp:AgencyFee>
</tp:AdditionalFees>
<tp:Metadata> ⑧
  <tp:SnapshotID>d4d6c4f6-af6d-4667-9368-99022abe7587</tp:SnapshotID>
  <tp:Ownership>
    <tp:Owner>
      <tp:UserID>2212</tp:UserID>
      <tp:CurrentCity>B4T0</tp:CurrentCity>
    </tp:Owner>
  </tp:Ownership>
</tp:Metadata>

```

```

<tp:PCC>B4T0</tp:PCC>
<tp:AaaArea>A</tp:AaaArea>
<tp:AgentHomeCity>B4T0</tp:AgentHomeCity>
<tp:AgentPrimeHost>1S</tp:AgentPrimeHost>
<tp:AgentSign>A6E</tp:AgentSign>
<tp:CurrentPartition>AA</tp:CurrentPartition>
<tp:Lniata>4944641</tp:Lniata>
<tp:DutyCode>*</tp:DutyCode>
<tp:Domain>AA</tp:Domain>
<tp>Date>2018-04-27T04:31:25</tp>Date>
</tp:Owner>
<tp:CreatedBy>
  <tp:UserID>2212</tp:UserID>
  <tp:CurrentCity>B4T0</tp:CurrentCity>
  <tp:PCC>B4T0</tp:PCC>
  <tp:AaaArea>A</tp:AaaArea>
  <tp:AgentHomeCity>B4T0</tp:AgentHomeCity>
  <tp:AgentPrimeHost>1S</tp:AgentPrimeHost>
  <tp:AgentSign>A6E</tp:AgentSign>
  <tp:CurrentPartition>AA</tp:CurrentPartition>
  <tp:Lniata>4944641</tp:Lniata>
  <tp:DutyCode>*</tp:DutyCode>
  <tp:Domain>AA</tp:Domain>
  <tp>Date>2018-04-27T04:31:25</tp>Date>
</tp:CreatedBy>
<tp:UpdatedBy>
  <tp:UserID>2212</tp:UserID>
  <tp:CurrentCity>B4T0</tp:CurrentCity>
  <tp:PCC>B4T0</tp:PCC>
  <tp:AaaArea>A</tp:AaaArea>
  <tp:AgentHomeCity>B4T0</tp:AgentHomeCity>
  <tp:AgentPrimeHost>1S</tp:AgentPrimeHost>
  <tp:AgentSign>A6E</tp:AgentSign>
  <tp:CurrentPartition>AA</tp:CurrentPartition>
  <tp:Lniata>4944641</tp:Lniata>
  <tp:DutyCode>*</tp:DutyCode>
  <tp:Domain>AA</tp:Domain>
  <tp>Date>2018-04-27T04:31:25</tp>Date>
</tp:UpdatedBy>
</tp:Ownership>
</tp:Metadata>
</tp:TripProposal>

```

- ① *TripProposal* element with *proposalID* string and *proposalVersion* number
- ② User defined fields, *Label*, *TripType*, *ExternalBusinessID*, *ReasonForTravel*, *Purpose*, *Channel*, keeping TN Agent information, helping to describe document.
- ③ Top level comments.
- ④ *Passenger* element with traveller details.
- ⑤ Trip offer as *Quote*

- ⑥ Reference to **PNR** booked from **TripProposal**.
- ⑦ List of possible additional charges.
- ⑧ Document *Metadata*.

3.2. Passengers definition

TripProposal document can store personal data of target travellers, who can be used in reservation create. Providing passenger data gives possibility to fine tune re-price process, as data like passenger type is regarded as pricing qualifier. It's not possible to book proposal in *Stateless* mode without passenger data provided.

Passenger can be defined by providing all required details, or using ID from **Sabre Profiles**, and use referenced information during booking process.

3.2.1. Passengers direct definition

```
<tp:Passenger primary="true" passengerID="TVL1"> ①
  <or:Type code="ADT" codeContext="ATPC"/> ②
  <or:PersonName> ③
    <or:Prefix>MR</or:Prefix>
    <or:Given>JOHN</or:Given>
    <or:Surname>DOE</or:Surname>
  </or:PersonName>
  <or:Telephone> ④
    <or:PhoneNumber>12345678</or:PhoneNumber>
  </or:Telephone>
  <or:Email>email@sample.com</or:Email> ⑤
</tp:Passenger>
```

- ① *Passenger* element with *passengerID* attribute, which is traveller reference in all document. When *passengerID* is not provided, value will be populated by API. If used decides use its own ID, it must be document wide unique.
- ② Passenger type definition. **ATPC** and **IATA** passenger type codes are accepted. when *codeContext* is not provided **ATPC** value is assumed. Type code should be provided in attribute instead of node value.
- ③ Passenger *Given*, *Surname*, *Prefix* personals.
- ④ Telephone numbers
- ⑤ Email addresses

3.2.2. Using **Sabre Profiles** reference

```
<tp:Passenger passengerID="TVL1"> ①
  <or:Profile>
    <or:ID>1234</or:ID> ②
    <or:ShortType>TVL</or:ShortType> ③
    <or:OwningAgency>B4T0</or:OwningAgency> ④
  </or:Profile>
</tp:Passenger>
```

- ① *Passenger* element with *passengerID* attribute, which is traveller reference in all document. When *passengerID* is not provided, value will be populated by API. If used decides use its own ID, it must be document wide unique.
- ② Profile ID in **Sabre Profiles**.
- ③ Profile type code. Only TRAVELLER (code **TVL**) are considered, when moving profile to **PNR**.
- ④ **PCC** of agency owning this profile (Part of profile identification).



During refresh process all passengers, defined as profile reference are assumed to be **ADT** type. If passenger type, stored in profile is different, it will be passed to session and used when storing **PQ** record.

3.3. Quotes

Quote is reflecting one trip variant, aggregating services offered with the prices. One document can have multiple quotes.


```

<tp:Quote quoteID="TP-1"> ①
  <tp:Label>Quote label</tp:Label> ②
  <tp:Comments> ③
    <tp:Comment agentSign="A6E" pcc="B4T0" primeHost="1S" type="public">
      <tp:Text>Basic offer</tp:Text>
      <tp:Author>Johny</tp:Author>
      <tp:CreatedOn>2018-04-27T11:31:15</tp:CreatedOn>
      <tp:ModifiedOn>2018-04-27T11:31:15</tp:ModifiedOn>
    </tp:Comment>
  </tp:Comments>
  <tp:Option expirationDate="2018-05-04T11:31:15" optionID="TP-2" status="PROPOSED">
    ④
    <tp:Label>Flight connection</tp:Label>
    <tp:Comments>
      <tp:Comment agentSign="A6E" pcc="B4T0" primeHost="1S" type="public">
        <tp:Text>Option comment text</tp:Text>
        <tp:Author>Option comment author</tp:Author>
        <tp:CreatedOn>2018-04-27T11:31:15</tp:CreatedOn>
        <tp:ModifiedOn>2018-04-27T11:31:15</tp:ModifiedOn>
      </tp:Comment>
    </tp:Comments>
    <tp:Product id="TP-3">
      <or:ProductDetails endDateTime="2018-05-04T11:31:15" endPoint="DFW" productType
="AIR" startDateTime="2018-05-04T11:31:15" startPoint="LAX" vendorCode="AA">
        <or:ProductName type="AIR"/>
        <or:Air>
          <or:DepartureAirport>LAX</or:DepartureAirport>
          <or:ArrivalAirport>DFW</or:ArrivalAirport>
          <or:MarketingAirlineCode>AA</or:MarketingAirlineCode>
          <or:DepartureDateTime>2018-05-04T11:31:15</or:DepartureDateTime>
          <or:ArrivalDateTime>2018-05-04T11:31:15</or:ArrivalDateTime>
          <or:FlightNumber>1234</or:FlightNumber>
          <or:ActionCode>NN</or:ActionCode>
          <or:NumberInParty>1</or:NumberInParty>
        </or:Air>
      </or:ProductDetails>
    </tp:Product>
  </tp:Option>
  <tp:AdditionalFees> ⑤
    <tp:AgencyFee>
      <tp:Code>XDF</tp:Code>
      <tp:Description>VIP handling fee</tp:Description>
      <tp:Amount currencyCode="USD">5.00</tp:Amount>
      <tp:Tax currencyCode="USD">0.13</tp:Tax>
    </tp:AgencyFee>
  </tp:AdditionalFees>
</tp:Quote>

```

- ① Quote element with *quoteID* attribute, being quote identifier. When *quoteID* in not provided, value will be populated by API. If used decides use its own ID, it must be document wide unique.

- ② *Label* element, covered in [Label](#).
- ③ *Comments* element, covered in [Comments](#).
- ④ *Option* element, covered in [Options](#). *Quote* can consists of many *Options*, per each offered product type.
- ⑤ *AdditionalFees* element, covered in [AgencyFees](#).

3.3.1. Options

Option is smallest *TripProposal* document element having its own price. Contains information about offered products, and usually contains single product. Exception are flight segments (Air products) ex. of multileg or return flight, being priced together. Each *Option* is referenced by document widely unique *optionID*.

Option status can be reflected in *status* attribute.

Option hve information about expiration date. This value is calculated basing on enclosed product start date.

```

<tp:Option expirationDate="2018-05-04T11:31:15" optionID="TP-2" status="PROPOSED"> ①
  <tp:Label>Flight connection</tp:Label> ②
  <tp:Comments> ③
    <tp:Comment agentSign="A6E" pcc="B4T0" primeHost="1S" type="public">
      <tp:Text>Option comment text</tp:Text>
      <tp:Author>Option comment author</tp:Author>
      <tp:CreatedOn>2018-04-27T11:31:15</tp:CreatedOn>
      <tp:ModifiedOn>2018-04-27T11:31:15</tp:ModifiedOn>
    </tp:Comment>
  </tp:Comments>
  <tp:Product id="TP-3"> ④
    <or:ProductDetails endDateTime="2018-05-04T11:31:15" endPoint="DFW" productType=
"AIR" startDateTime="2018-05-04T11:31:15" startPoint="LAX" vendorCode="AA">
      <or:ProductName type="AIR"/>
      <or:Air>
        <or:DepartureAirport>LAX</or:DepartureAirport>
        <or:ArrivalAirport>DFW</or:ArrivalAirport>
        <or:MarketingAirlineCode>AA</or:MarketingAirlineCode>
        <or:DepartureDateTime>2018-05-04T11:31:15</or:DepartureDateTime>
        <or:ArrivalDateTime>2018-05-04T11:31:15</or:ArrivalDateTime>
        <or:FlightNumber>1234</or:FlightNumber>
        <or:ActionCode>NN</or:ActionCode>
        <or:NumberInParty>1</or:NumberInParty>
      </or:Air>
    </or:ProductDetails>
  </tp:Product>
  <tp:Price> ⑤
    <or:PriceSummary id="1" refreshTimestamp="2018-05-16T08:57:48">
      <or:BasePrice currencyCode="AED">4390</or:BasePrice>
      <or:EquivPrice currencyCode="USD">1195.00</or:EquivPrice>
      <or:TotalTaxes>

```

```

<or:Tax>
  <or:TaxAmount currencyCode="USD">197.40</or:TaxAmount>
  <or:TaxCode>TOTALTAX</or:TaxCode>
</or:Tax>
<or:TotalTaxAmount currencyCode="USD">197.40</or:TotalTaxAmount>
</or:TotalTaxes>
<or:TotalPrice currencyCode="USD">1392.40</or:TotalPrice>
<or:PriceBreakDown>
  <or:PassengerType code="ADT"/>
  <or:NumberOfPassengers>1</or:NumberOfPassengers>
  <or:BasePrice currencyCode="AED">4390</or:BasePrice>
  <or:EquivPrice currencyCode="USD">1195.00</or:EquivPrice>
  <or:Taxes>
    <or:Tax>
      <or:TaxAmount currencyCode="USD">164.70</or:TaxAmount>
      <or:TaxCode>YQF</or:TaxCode>
    </or:Tax>
    <or:TotalTaxAmount currencyCode="USD">197.40</or:TotalTaxAmount>
  </or:Taxes>
  <or:Price currencyCode="USD">1392.40</or:Price>
</or:PriceBreakDown>
</or:PriceSummary>
</tp:Price>
</tp:Option>

```

- ① *Option* element with *optionID* attribute, being option identifier (used in book and refresh process). When *optionID* is not provided, value will be populated by API. If used decides use its own ID, it must be document wide unique.
- ② *Label* element, covered in [Label](#).
- ③ *Comments* element, covered in [Comments](#).
- ④ *Product* element, described in details in [Product](#) section.
- ⑤ *Price* element, collecting *PriceSummary* instances. *Price* is described in details in [Price](#) section.

Product

Product Element keeps offered type of service data, with set of service rules and limitations connected to its price.

TBD

Price

Price Element is used to keep results of each product re-price, but also pricing service directives (pricing qualifiers), giving possibility to tune pricing offer in a way its provided by other Sabre services.

TBD

3.4. Common elements

Elements like *Label*, *Comments* and *AgencyFees* share the same structure but can be used on different document levels, like document, *Quote* or *Option*.

3.4.1. Label

Label is optional, user defined description string. Document level *Label* can be used as search criterion.

```
<tp:Label>User defined Label Text</tp:Label>
```

3.4.2. Comments

Comments element, defined on document, *Quote* and *Option* level, is optional and wraps list of *Comment* items. Each *Comment* keeps notes or remarks, with automatic population of create, modification dates and real user authorship.

```
<tp:Comments>
  <tp:Comment agentSign="A6E" pcc="B4T0" primeHost="1S" type="public"> ①
    <tp:Text>Created new offer</tp:Text> ②
    <tp:Author>Johny</tp:Author> ③
    <tp:CreatedOn>2018-05-14T08:44:05</tp:CreatedOn> ④
    <tp:ModifiedOn>2018-05-14T08:44:05</tp:ModifiedOn> ⑤
  </tp:Comment>
  <tp:Comment type="public">
    <tp:Text>Customer likes it very much</tp:Text>
    <tp:Author>Johny</tp:Author>
  </tp:Comment>
</tp:Comments>
```

- ① *Comment* element, with automatically populated author identification (agentSign, pcc, primeHost) and *type* attribute, without meaning for API itself, but possibly usable for **GUI**, to implement ex. hidden comments.
- ② Comment text.
- ③ Optional, user defined author identification.
- ④ Comment create date. When empty populated by API with current date value. When value is present (previously added comment case) automatic user identification attributes are not recalculated nor populated.
- ⑤ Modification Date. When empty populated by API with current date value, which is suggested approach.

3.4.3. AgencyFees

If agency needs to charge customer with additional, reservation related fees ex. handling fee, this

information can be reflected in **TripProposal** document. Fees can be defined per document (reservation) level or per offered quote. This information is only stored for informational purposes/data exchange and no recalculations will be performed by API.

```
<tp:AdditionalFees>
  <tp:AgencyFee> ①
    <tp:Code>XDF</tp:Code> ②
    <tp:Description>VIP handling fee</tp:Description> ③
    <tp:Amount currencyCode="USD">5.00</tp:Amount> ④
    <tp:Tax currencyCode="USD">0.13</tp:Tax> ⑤
  </tp:AgencyFee>
  <tp:AgencyFee>
    <tp:Code>ACF</tp:Code>
    <tp:Description>Climate fee</tp:Description>
    <tp:Amount currencyCode="USD">1.00</tp:Amount>
    <tp:Tax currencyCode="USD">0.05</tp:Tax>
  </tp:AgencyFee>
</tp:AdditionalFees>
```

- ① Fee definition, Up to 99 occurrences possible
- ② Optional string with fee code.
- ③ Optional string with fee description.
- ④ Mandatory fee decimal number reflecting fee amount. Amount can have currency code.
- ⑤ Optional fee tax amount as decimal number. Tax amount can have currency code.

3.5. Products Reference

TBD

3.5.1. Air Segments

Sample of Option holding two segments (return flight)

```
<tp:Option optionID="123" status="PROPOSED">
  <tp:Label>Return trip sample</tp:Label>
  <tp:Product>
    <or:ProductDetails productCategory="AIR">
      <or:ProductName type="AIR"/>
      <or:Air>
        <or:DepartureAirport>AUH</or:DepartureAirport>
        <or:ArrivalAirport>MUC</or:ArrivalAirport>
        <or:MarketingAirlineCode>EY</or:MarketingAirlineCode>
        <or:Eticket>>false</or:Eticket>
        <or:DepartureDateTime>2018-05-20T09:05:00</or:DepartureDateTime>
        <or:ArrivalDateTime>2018-05-20T13:20:00</or:ArrivalDateTime>
        <or:FlightNumber>3</or:FlightNumber>
        <or:ClassOfService>Y</or:ClassOfService>
        <or:ActionCode>NN</or:ActionCode>
        <or:NumberInParty>1</or:NumberInParty>
        <or:inboundConnection>>false</or:inboundConnection>
        <or:outboundConnection>>false</or:outboundConnection>
        <or:BSGIndicator>>false</or:BSGIndicator>
        <or:PassiveSegmentIndicator>>false</or:PassiveSegmentIndicator>
        <or:ScheduleChangeIndicator>>false</or:ScheduleChangeIndicator>
      </or:Air>
    </or:ProductDetails>
  </tp:Product>
  <tp:Product>
    <or:ProductDetails productCategory="AIR">
      <or:ProductName type="AIR"/>
      <or:Air>
        <or:DepartureAirport>MUC</or:DepartureAirport>
        <or:ArrivalAirport>AUH</or:ArrivalAirport>
        <or:MarketingAirlineCode>EY</or:MarketingAirlineCode>
        <or:Eticket>>false</or:Eticket>
        <or:DepartureDateTime>2018-06-02T12:10:00</or:DepartureDateTime>
        <or:ArrivalDateTime>2018-06-02T20:05:00</or:ArrivalDateTime>
        <or:FlightNumber>6</or:FlightNumber>
        <or:ClassOfService>F</or:ClassOfService>
        <or:ActionCode>NN</or:ActionCode>
        <or:NumberInParty>1</or:NumberInParty>
        <or:inboundConnection>>false</or:inboundConnection>
        <or:outboundConnection>>false</or:outboundConnection>
        <or:BSGIndicator>>false</or:BSGIndicator>
        <or:PassiveSegmentIndicator>>false</or:PassiveSegmentIndicator>
        <or:ScheduleChangeIndicator>>false</or:ScheduleChangeIndicator>
      </or:Air>
    </or:ProductDetails>
  </tp:Product>
</tp:Option>
```

3.5.2. Hotels



Hotel products can be stored and re-priced using Trip Proposal Services, but booking is not yet supported.

```

<tp:Product>
  <or:ProductDetails productType="HHT" vendorCode="VC" statusCode="GK"
startPoint="LAX" startDateTime="2018-05-19T09:07:05" endPoint="LAX" endDateTime="2018-
05-21T09:07:05">
    <or:ProductName type="HHT"/>
    <or:Hotel>
      <or:Reservation>
        <or:LineNumber>1</or:LineNumber>
        <or:LineType>HHT</or:LineType>
        <or:LineStatus>GK</or:LineStatus>
        <or:SpecialPrefs>
          <or:LateDepartureRequired>true</or:LateDepartureRequired>
        </or:SpecialPrefs>
        <or:RoomType>
          <or:RoomTypeCode>B1Q</or:RoomTypeCode>
          <or:NumberOfUnits>0</or:NumberOfUnits>
          <or:RateOccupancyPerRoom>0</or:RateOccupancyPerRoom>
          <or:NumOfBeds>1</or:NumOfBeds>
        </or:RoomType>
        <or:Services>
          <or:MealType mealTypeCode="MealTypeCode" mealTypeDescription=
"MealTypeDescription"/>
        </or:Services>
        <or:TimeSpanStart>2018-05-19T09:07:05</or:TimeSpanStart>
        <or:TimeSpanEnd>2018-05-21T09:07:05</or:TimeSpanEnd>
        <or:ChainCode>VC</or:ChainCode>
        <or:HotelCityCode>LAX</or:HotelCityCode>
        <or:HotelName>Hotel Name</or:HotelName>
      </or:Reservation>
      <or:HotelPolicy>
        <or:LateDeparturePolicy>LateDeparturePolicy</or:LateDeparturePolicy>
      </or:HotelPolicy>
      <or:PricingElements>
        <or:Deposit amount="71" currencyCode="EUR">
          <or:DueDate>2018-05-19</or:DueDate>
        </or:Deposit>
        <or:Discount amount="100" currencyCode="EUR" type="DiscountType">
          <or:DiscountDescription>RRHIAPOFVBOIGYASPTTV</or:DiscountDescription>
        </or:Discount>
        <or:Payment>
          <or:SubTotal amount="79" currency="EUR"/>
          <or>Total amount="59" currency="EUR">
            <or:DueDate>2018-05-19</or:DueDate>
          </or>Total>
        </or:Payment>
      </or:PricingElements>
    </or:Hotel>
  </or:ProductDetails>
</tp:Product>

```


3.5.3. Car Rentals

```
<tp:Product>
  <or:ProductDetails productType="CAR" vendorCode="ZR" statusCode="NN" startPoint="
LAX" startDateTime="2018-05-19T08:53:38" endDateTime="2018-05-26T08:53:38">
    <or:ProductName type="CAR"/>
    <or:Vehicle>
      <or:VehicleRentalCore pickUpDateTime="07-18T09:00" returnDateTime="07-25T09:00">
        <or:DropOffLocationDetails locationCode="DFW"/>
        <or:LocationDetails locationCode="DFW"/>
      </or:VehicleRentalCore>
      <or:VehicleVendorAvail>
        <or:VehicleResCore>
          <or:CollectionDeliveryInfo>
            <or:CollectionInfo>
              <or:ContactNumber>
                <or:PhoneNumber>123456789</or:PhoneNumber>
              </or:ContactNumber>
            </or:CollectionInfo>
          </or:CollectionDeliveryInfo>
          <or:PricedEquipment equipmentType="ECAR" quantity="1"/>
          <or:RentalRate stmRatePlan="W">
            <or:InvoiceRemarks/>
            <or:VehicleTypes>
              <or:VehType>ECAR</or:VehType>
            </or:VehicleTypes>
          </or:RentalRate>
          <or:Charge typeOfGuarantee="G">
            <or:ChargeDetails>
              <or:ApproximateTotalCharge amount="36.83" mileageAllowance="UNL"
numDays="2" numHours="0" rateType="E" totalMandatoryCharges="105.02"/>
            </or:ChargeDetails>
          </or:Charge>
        </or:VehicleResCore>
        <or:Vendor code="ZR"/>
      </or:VehicleVendorAvail>
    </or:Vehicle>
  </or:ProductDetails>
</tp:Product>
```

Chapter 4. Error catalogue

Glossary

Following is a glossary of terms (listed in alphabetical order by term):

2SG

2nd Generation Services Gateway - unified point to reach all REST Sabre® APIs

AAA

Agent assembly area. Interactive create PNR session (Called also *Session*)

Customer Insight

Marketing name for Sabre Profiles

EPR

Employee Profile Record - internal Sabre® user account

ET

End transaction - closing process of PNR create or edit

PCC

Pseudo City Code

Sabre Profiles

System holding extended passenger data, like personals, email addresses, documents but also loyalties, etc... as *Profile*.

SRW

Sabre® Red Workspace

STL

Sabre Template Library - set of Sabre® standards for re-usable XML messages

STLP

STL compliant XML payload

TN

Sabre® Travel Network

USG

Universal Services Gateway - unified point to reach all SOAP Sabre® APIs