

User's Guide

About OpenTravel

The OpenTravel Alliance is passionate about solving the problems inherent with connecting multiple systems within the complex travel distribution arena.

OpenTravel's mission is to engineer specifications that make data transmission flow smoothly throughout travel, tourism and hospitality. OpenTravel creates, expands and drives adoption of open universal data specifications, including but not limited to the use of XML, for the electronic exchange of business information among all sectors of the travel industry.

OpenTravel is comprised of companies representing airlines, car rental firms, hotels, cruise lines, railways, leisure suppliers, service providers, tour operators, travel agencies, solutions providers, technology companies and distributors. Tens of thousands of OpenTravel message structures are in use, carrying tens of millions of messages between trading partners every day.



OpenTravel Alliance

1740 Massachusetts Avenue

Boxborough, MA 01719 USA

+1 978 236 7606

Email: info@opentravel.org

Web: www.opentravel.org

© 2010, OpenTravel Alliance. All rights reserved. OpenTravel and FastRez are trademarks of the OpenTravel Alliance.

The OpenTravel Alliance (OpenTravel) offers this publication for use at the discretion of the individual or company. Each individual or company that uses this material does so at its own risk and with the acknowledgement that the individual or company is solely and fully responsible for its use of this material.

Contents

Introduction	4
Section 1 - Code Table	6
Section 2 - Binding Schema	7
Section 3 - WSDL Overview	8
Section 4 - XML Schema Documentation	9
Section 5 - Availability Messages	. 10
5.1 Availability Data Fields	. 10
5.2 Availability Use Cases and Instance Documents	. 13
5.2.1 Use Case 1 - Check availability for a single hotel property	. 13
5.2.2 Use Case 2 - Check availability for multiple properties	. 14
Section 6 - Reservation Booking Messages	. 15
6.1 Reservation Data Fields	. 15
6.2 Reservation Use Cases and Instance Documents	. 22
6.2.1 Use Case 1 – Book a reservation with multiple rates	. 22
6.2.2 Use Case 2 – Unsuccessful booking, no rooms available	. 22
Section 7 - Reservation Retrieval Messages	. 23
7.1 Retrieval Data Fields	. 23
7.2 Retrieve Reservation Use Cases and Instance Documents	. 24
7.2.1 Use Case 1 - Retrieve a reservation	. 24
7.2.2 Use Case 2 - Unsuccessful retrieval, no reservation found	. 24
Section 8 - Reservation Cancellation Messages	. 25
8.1 Cancellation Data Fields	. 25
8.2 Cancel Reservation Use Case and Instance Documents	. 27
8.2.1 Use Case 1 - Cancel a reservation, penalty applies	. 27
8.2.2 Use Case 2 – Cancel a reservation, no penalty applies	. 27
Section 9 - Validation Service	. 28
Overview	. 28
What the Service Expects	. 28
Instructions for Using the Service	. 29

Introduction

FastRez is a tightly defined specification for the hotel industry, covering a set of common business functions for electronic distribution. FastRez provides an alternative for emerging or smaller companies who need a quick and easy solution for distributing their travel and traveler information, but may also be useful for larger companies who would like to reduce the cost of connecting with multiple smaller partners. Implementing FastRez in the manner in which it was designed allows a company to seamlessly interoperate with anyone else who also implements the specification.

FastRez includes messages to handle the availability, reservation booking, reservation retrieval, and reservation cancellation functions for hotel properties. Each schema is a smaller, more defined version of the 2010B OpenTravel message. The significant reduction in the size of the schemas makes the messages easier and quicker to implement. The schemas are also more restrictive making them much more useful for validation. The FastRez message sets include:

Request	Response	
FastRezOTA_HotelAvailRQ	FastRezOTA_HotelAvailRS	
FastRezOTA_HotelResRQ	FastRezOTA_HotelResRS*	
FastRezOTA_ReadRQ	FastRezOTA_HotelResRS*	
FastRezOTA_CancelRQ	FastRezOTA_CancelRS	

^{*}Please note that the FastRezOTA_HotelResRS message is the response message for both the FastRezOTA_HotelResRQ and the FastRezOTA_ReadRQ messages.

The naming convention for the FastRez messages is simply the name of the OpenTravel message from which the FastRez message was derived, preceded by "FastRez". The 2010B OpenTravel messages from which the FastRez messages originated include:

FastRez Message	2010B OpenTravel Message	
FastRezOTA_HotelAvailRQ	OTA_HotelAvailRQ	
FastRezOTA_HotelAvailRS	OTA_HotelAvailRS	
FastRezOTA_HotelResRQ	OTA_HotelResRQ	
FastRezOTA_HotelResRS	OTA_HotelResRS	
FastRezOTA_ReadRQ	OTA_ReadRQ	
FastRezOTA_CancelRQ	OTA_CancelRQ	
FastRezOTA_CancelRS	OTA_CancelRS	

The annotation within each of the messages follows the <u>RFC 2119</u> best practices in order to make the intent of each field clear. By making the messages as restrictive as possible and clearly annotating the intent of each field, maximum interoperability can be assured.

FastRez is compatible with and will validate against the 2010B version of OpenTravel's standard schema.

This user's guide has three components. Sections 1 through 4 describe the mechanisms available to support the implementation of FastRez, including a code table, binding schema, WSDL and XML Schema documentation.

©2010-2011 OpenTravel Alliance. All rights reserved.

Sections 5 through 8 describe the structure of the FastRez specification, and include sequence diagrams, data tables, use cases and instance documents.

Sections 9 describes the validation service available to FastRez implementers.

Section 1 - Code Table

FastRez makes use of the OpenTravel Code Table to define possible values for the elements and attributes of type "OTA_CodeType" and "ListOfOTA_CodeType." FastRez makes recommendations on which code lists to reference within its annotations. For example, the annotation for the "Type" attribute of a RequesterID states that this "...MUST refer to OpenTravel Code List Unique ID Type (UIT)."

The Code Table is maintained by OpenTravel and updated with each new release of the OpenTravel specification. The 2010B Code Table has been included with this FastRez release in the "OpenTravel_CodeTable" folder and is available in two formats: Excel and XML. The structure of the XML-based code table is defined by the included OpenTravel_CodeTable schema file.

Section 2 - Binding Schema

Over time the role of the schema has been expanded beyond the original concept of validation of XML instances to include rendering low level building blocks of code that can be used to bind the internal representation of the data on a system and the external representation of the data in an XML document. Given the only moderate maturity of many of the binding tools and the occasionally incompatible requirements between code generation and message specification, it is not practical to use the normal validating schemas directly. An alternative (binding) version of the schema has been included under the name FastRezBinding.xsd. This binding schema represents a compromise between the authoritative validation schemas and the needs of the binding tools.

In order to bind successfully, this schema has to encompass all the messages and represent a superset of their definitions where specifications at the element level are incompatible between messages. Also, changes are made to the schema structures to eliminate certain idioms that are known to cause binding problems on some platforms (e.g. xsd:choice is converted to xs:sequence); it may also require additional edits for your particular environment, therefore as a consequence it is important that the user does not treat these schema as authoritative for any of the messages but only as an aid to implementation.

Section 3 - WSDL Overview

The FastRez product includes a single WSDL (web services definition language) file, which is required to bind a solution. The WSDL defines the interface of the services provided, and specifies the location of the service and the operations the service exposes. The operations contained in this WSDL include:

- CheckAvailability;
- BookReservation;
- RetrieveReservation; and
- CancelReservation.

The FastRez WSDL will need to be modified upon implementation to identify the physical endpoint for the service, which will vary by trading partner. The FastRez WSDL is:

FastRezServices.wsdl.

Section 4 - XML Schema Documentation

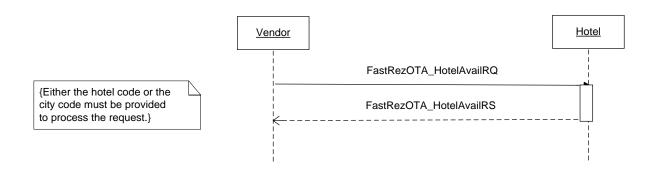
<u>The OpenTravel FastRez Schema Dictionary</u> provides accurate and up to date structured references of OpenTravel FastRez schema. Data dictionary documentation is provided for all aspects of each schema file, including Elements, Simple Types, Complex Types, Groups, Attributes, Attribute Groups, Constraints and Facets. Additional documentation includes overview tables that illustrate child structures below elements, complex types and attribute groups and documentation of Global Attributes, Groups, key, keyref and unique constraints.

<u>The 2010B FastRez Schema Dictionary</u> artifact provides accurate and up to date structured references of OpenTravel 2010B schema for the following files:

- FastRezOTA_HotelAvailRQ
- FastRezOTA HotelAvailRS
- FastRezOTA HotelResRQ
- FastRezOTA HotelResRS
- FastResOTA_CancelRQ
- FastRezOTA CancelRS
- FastRezOTA_ReadRQ
- FastRezOTA_SimpleTypes
- FastRezBinding

Section 5 - Availability Messages

The availability request message allows for a hotel availability check to be performed for a single property or for multiple properties within a single city. The city search may be narrowed by supplying a particular hotel chain or brand. The availability response returns the details of one or more properties, which have rooms available that meet the criteria specified in the request.



5.1 Availability Data Fields

The availability request message is comprised of the following data fields (<u>see OpenTravel FastRez Schema Dictionary</u>):

Availability Request	Required	Repeatable
OTA_HotelAvailRQ	Yes	No
EchoToken	No	No
TimeStamp	Yes	No
Version	Yes	No
PrimaryLanguageID	Yes	No
MaxResponses	No	No
POS	Yes	No
Source	Yes	No
ISOCountry	Yes	No
ISOCurrency	Yes	No
RequestorID	Yes	No
Туре	Yes	No
ID	Yes	No
ID_Context	Yes	No
AvailRequestSegments	Yes	No
AvailRequestSegment	Yes	No
HotelSearchCriteria	Yes	No
Criterion	Yes	No
Availability Request	Required	Repeatable
HotelRef	Yes	No
ChainCode	No	No
BrandCode	No	No

HotelCode	No	No
HotelCityCode	No	No
StayDateRange	Yes	No
Start	Yes	No
End	Yes	No
RoomStayCandidates	Yes	No
RoomStayCandidate	Yes	No
BedTypeCode	No	Yes (List)
NonSmoking	No	No
GuestCounts	Yes	No
GuestCount	Yes	Yes
AgeQualifyingCode	Yes	No
Age	No	No
Count	Yes	No

The availability response message is comprised of the following data fields ($\underline{\text{see OpenTravel}}$ FastRez Schema Dictionary):

Availability Response	Required	Repeatable
OTA_HotelAvailRS	Yes	No
EchoToken	No	No
TimeStamp	Yes	No
Version	Yes	No
PrimaryLanguageID	Yes	No
POS	Yes	No
Source	Yes	No
ISOCountry	Yes	No
ISOCurrency	Yes	No
RequestorID	Yes	No
Type	Yes	No
ID	Yes	No
ID_Context	Yes	No
Success	Yes, in successful message	No
Warnings	No	No
Warning	Yes	Yes
Туре	Yes	No
ShortText	No	No
Code	No	No
Status	No	No
Tag	No	No
RPH	No	No
RoomStays	Yes	No
Availability Response	Required	Repeatable
RoomStay	Yes	Yes
WarningRPH	No	No
RoomTypes	Yes	No
RoomType	Yes	Yes
RoomTypeCode	Yes	No
BedTypeCode	No	Yes(List)

Non-Smoking	No	No
RoomDescription	Yes	No
Name	No	No
Text	Yes	Yes
Language	No	No
RatePlans	Yes	No
RatePlan	Yes	Yes
RatePlanCode	Yes	No
MealsIncluded	No	No
Breakfast	No	No
Lunch	No	No
Dinner	No	No
MealPlanCodes	No	Yes (List)
RatePlanDescription	Yes	No
Name	No	No
Text	Yes	No
Language	No	No
RoomRates	Yes	No
RoomRate	Yes	Yes
EffectiveDate	Yes	No
ExpireDate	Yes	No
ExpireDateExclusiveIndicator	Yes	No
RoomTypeCode	Yes	No
RatePlanCode	Yes	No
PromotionCode	No	No
Rates	Yes	No
Rate	Yes	No
CancelPolicies	No	No
CancelPenalty	Yes	Yes
Deadline	Yes	No
AbsoluteDeadline	Yes	No
AmountPercent	Yes	No
Amount	Yes	No
CurrencyCode	Yes	No
PenaltyDescription	Yes	No
Name	No	No
Text	Yes	No
Language	No	No
Total	Yes	No
Availability Response	Required	Repeatable
AmountBeforeTax	No	No
AmountAfterTax	No	No
CurrencyCode	Yes	No
Guarantee	Yes	No
GuaranteeType	Yes	No
GuaranteesAccepted	No	No
GuaranteeAccepted	Yes	Yes
PaymentCard	Yes	No
CardType	Yes	No
CardCode	Yes	No
BasicPropertyInfo	Yes	No

ChainCode	No	No
BrandCode	No	No
HotelCode	Yes	No
HotelName	No	No
ChainName	No	No
BrandName	No	No
Criteria	Yes	No
Criterion	Yes	No
HotelRef	Yes	No
ChainCode	No	No
BrandCode	No	No
HotelCode	No	No
HotelCityCode	No	No
StayDateRange	Yes	No
Start	Yes	No
End	Yes	No
RoomStayCandidates	Yes	No
RoomStayCandidate	Yes	No
BedTypeCode	No	Yes (List)
NonSmoking	No	No
GuestCounts	Yes	No
GuestCount	Yes	Yes
AgeQualifyingCode	Yes	No
Age	No	No
Count	Yes	No
Errors	Yes, in unsuccessful	No
	message	
Error	Yes	Yes
Туре	Yes	No
ShortText	No	No
Code	No	No
Status	No	No
Tag	No	No
NodeList	No	No

5.2 Availability Use Cases and Instance Documents

5.2.1 Use Case 1 - Check availability for a single hotel property.

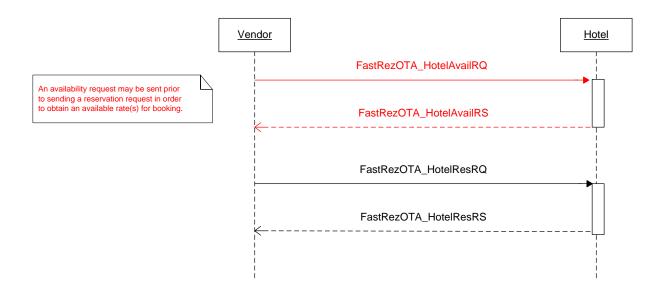
Request: FastRezOTA_HotelAvailRQ	Response: FastRezOTA_HotelAvailRS
Fred Smith would like to check availability at the Denver Mountainside Hotel for arrival on 13 August 2009 for two nights. He is checking for a non-smoking room for two adults through his favorite website.	Fred receives a response showing that the Denver Mountainside Hotel has nonsmoking rooms available for 13 August 209 for one night at a rate of US\$269.00 and US\$289.00 and 14 August 2009 for one night at a rate of US\$189.00 and US\$209.00 based on double occupancy.

5.2.2 Use Case 2 - Check availability for multiple properties.

Request: FastRezOTA HotelAvailRQ2	Response: FastRezOTA HotelAvailRS2
Fred Smith would like to check availability in the Los Angeles area for the Wylie Hotel chain. He would like to arrive on 15 May 2009 and depart on 16 May 2009. He is checking for non-smoking rooms with one king bed for one adult through his favorite website.	Fred receives a response that each of the following hotels has non-smoking king rooms available. The LA Wylie Downtown property has rooms available for the rate of US\$359.00, the LA Wylie West property has rooms available at the rate of US\$339.00 and the LA Wylie Airport property has rooms available for the rate of US\$309.00 based on single occupancy.

Section 6 - Reservation Booking Messages

The reservation request message allows for a single room to be reserved at a single property, which may have one or more rates associated with it. This message may be preceded by an availability request in order to acquire data required to book the reservation. The response message returns the details of the completed reservation along with the confirmation number. If a reservation is not successfully booked, then an error is returned indicating the reason that the reservation could not be completed.



6.1 Reservation Data Fields

The reservation request message is comprised of the following data fields (<u>see OpenTravel FastRez Schema Dictionary</u>):

Reservation Request	Required	Repeatable
OTA_HotelResRQ	Yes	No
EchoToken	No	No
TimeStamp	Yes	No
Version	Yes	No
PrimaryLanguageID	Yes	No
POS	Yes	No
Source	Yes	No
ISOCountry	Yes	No
ISOCurrency	Yes	No
RequestorID	Yes	No
Reservation Request	Required	Repeatable
ID	Yes	No
Type	Yes	No
ID_Context	Yes	No

otelReservations	Yes	No
HotelReservation	Yes	No
RoomStays	Yes	No
RoomStay	Yes	Yes
RoomTypes	No	No
RoomType	Yes	Yes
BedTypeCode	No	Yes (List)
NonSmoking	No	No
RoomRates	Yes	No
Room Rate	Yes	Yes
EffectiveDate	Yes	No
ExpireDate	Yes	No
ExpireDateExclusiveInd	Yes	No
RoomTypeCode	Yes	No
RatePlanCode	Yes	No
PromotionCode	No	No
Rates	No	No
Rate	Yes	No
Total	Yes	No
AmountBeforeTax	No	No
AmountAfterTax	No	No
CurrencyCode	Yes	No
GuestCounts	Yes	No
GuestCount	Yes	Yes
AgeQualifyingCode	Yes	No
Age	No	No
Count	Yes	No
BasicPropertyInfo	Yes	No
ChainCode	No	No
BrandCode	No	No
Hotel Code	Yes	No
ResGuests	Yes	No
ResGuest	Yes	Yes
Profiles	Yes	No
ProfileInfo	Yes	No
Profile	Yes	No
Customer	Yes	No
PersonName	Yes	No
NamePrefix	No	No
GivenName	Yes	No
MiddleName	No	No
SurName	Yes	No
Reservation Request	Required	Repeatable
NameSuffix	No	No
Telephone	No	Yes
PhoneTechType	Yes	No
PhoneUseType	No	No
CountryAccessCode	No	No
AreaCityCode	Yes	No
PhoneNumber	Yes	No
FIIOHENUHDEI	165	No

T	
	Yes
	No
	Yes
	No
Yes	Yes
	No
	No
	No
No	No
No	No
No	No
Yes	No
No	No
No	No
Yes	No
No	No
Yes	No
No	No
Yes	No
No	No
Yes	No
Yes	No
No	No
Yes	No
No	No
Yes	No
No	No
Yes	No
Required	Repeatable
Yes	No
	Yes

The reservation response message is comprised of the following data fields ($\underline{\text{see OpenTravel}}$ $\underline{\text{FastRez Schema Dictionary}}$):

Reservation Response	Required	Repeatable
OTA_HotelResRS	Yes	No
EchoToken	No	No

TimeStamp	Yes	No
Version	Yes	No
PrimaryLanguageID	Yes	Yes
POS	Yes	No
Source	Yes	No
ISOCountry	Yes	No
ISOCurrency	Yes	No
RequestorID	Yes	No
Type	Yes	No
ID	Yes	No
ID_Context	Yes	No
Success	Yes, in successful	No
	message	
Warnings	No	No
Warning	Yes	Yes
Type	Yes	No
ShortText	No	No
Code	No	No
Status	No	No
Tag	No	No
RPH	No	No
HotelReservations	Yes	No
HotelReservation	Yes	No
RoomStays	Yes	No
RoomStay	Yes	Yes
RoomTypes	Yes	No
RoomType	Yes	Yes
RoomTypeCode	Yes	No
BedTypeCode	No	Yes (List)
NonSmoking	No	No
RoomDescription	Yes	No
Name	No	No
Text	Yes	No
Reservation Response	Required	Repeatable
Language	No	No
RatePlans	Yes	No
RatePlan	Yes	Yes
RatePlanCode	Yes	No
MealsIncluded	No	No
Breakfast	No	No
Lunch	No	No
Dinner	No	No
MealPlanCodes	No	Yes (List)
RatePlanDescription	Yes	No
Name	No	No
Text	Yes	No
	No	No
Language BoomBatos		
RoomRates	Yes	No Yos
Room Rate	Yes	Yes
EffectiveDate Evering Date	Yes	No
ExpireDate	Yes	No

ExpireDateExclusiveInd	Yes	No
RoomTypeCode	Yes	No
RatePlanCode	Yes	No
PromotionCode	No	No
Rates	Yes	No
Rate	Yes	No
Total	Yes	No
AmountBeforeTax	No	No
AmountAfterTax	No	No
CurrencyCode	Yes	No
GuestCounts	Yes	No
GuestCount	Yes	Yes
AgeQualifyingCode	Yes	No
Age	No	No
Count	Yes	No
BasicPropertyInfo	Yes	No
ChainCode	No	No
BrandCode	No	No
Hotel Code	Yes	No
HotelName	No	No
ChainName	No	No
BrandName	No	No
ResGuests	Yes	No
ResGuest	Yes	Yes
		Na
Profiles	Yes	No
ProfileInfo	Yes	No
ProfileInfo Profile	Yes Yes	No No
ProfileInfo Profile Customer	Yes Yes Yes	No No No
ProfileInfo Profile Customer Reservation Response	Yes Yes Yes Required	No No No Repeatable
ProfileInfo Profile Customer Reservation Response PersonName	Yes Yes Yes Required Yes	No No No Repeatable No
ProfileInfo Profile Customer Reservation Response PersonName NamePrefix	Yes Yes Yes Required Yes No	No No No Repeatable No
ProfileInfo Profile Customer Reservation Response PersonName NamePrefix GivenName	Yes Yes Yes Required Yes No Yes	No No No Repeatable No No No
ProfileInfo Profile Customer Reservation Response PersonName NamePrefix GivenName MiddleName	Yes Yes Yes Required Yes No Yes No	No No No Repeatable No No No No No
ProfileInfo Profile Customer Reservation Response PersonName NamePrefix GivenName MiddleName SurName	Yes Yes Yes Required Yes No Yes No Yes No Yes	No No No Repeatable No No No No No No No
ProfileInfo Profile Customer Reservation Response PersonName NamePrefix GivenName MiddleName SurName NameSuffix	Yes Yes Yes Required Yes No Yes No Yes No Yes No	No No No Repeatable No
ProfileInfo Profile Customer Reservation Response PersonName NamePrefix GivenName MiddleName SurName NameSuffix Telephone	Yes Yes Yes Required Yes No Yes No Yes No Yes No No No	No No No Repeatable No No No No No No No No No Yes
ProfileInfo Profile Customer Reservation Response PersonName NamePrefix GivenName MiddleName SurName NameSuffix Telephone PhoneTechType	Yes Yes Yes Yes Required Yes No Yes No Yes No Yes No Yes No Yes	No No No Repeatable No
ProfileInfo Profile Customer Reservation Response PersonName NamePrefix GivenName MiddleName SurName NameSuffix Telephone PhoneTechType PhoneUseType	Yes Yes Yes Yes Required Yes No Yes No Yes No Yes No Yes No No No No Yes No	No No No Repeatable No
ProfileInfo Profile Customer Reservation Response PersonName NamePrefix GivenName MiddleName SurName NameSuffix Telephone PhoneTechType PhoneUseType CountryAccessCode	Yes Yes Yes Yes Required Yes No Yes No Yes No Yes No No No No Yes No No No No No No No	No No No Repeatable No
ProfileInfo Profile Customer Reservation Response PersonName NamePrefix GivenName MiddleName SurName NameSuffix Telephone PhoneTechType PhoneUseType CountryAccessCode AreaCityCode	Yes Yes Yes Yes Required Yes No Yes No Yes No Yes No No No Yes No No Yes No Yes	No No No Repeatable No
ProfileInfo Profile Customer Reservation Response PersonName NamePrefix GivenName MiddleName SurName NameSuffix Telephone PhoneTechType PhoneUseType CountryAccessCode AreaCityCode PhoneNumber	Yes Yes Yes Yes Required Yes No Yes No Yes No Yes No No Yes No No Yes	No No No Repeatable No
ProfileInfo Profile Customer Reservation Response PersonName NamePrefix GivenName MiddleName SurName NameSuffix Telephone PhoneTechType PhoneUseType CountryAccessCode AreaCityCode PhoneNumber Extension	Yes Yes Yes Yes Required Yes No Yes No Yes No Yes No No Yes No Yes No Yes No No Yes No No Yes No	No No No Repeatable No
ProfileInfo Profile Customer Reservation Response PersonName NamePrefix GivenName MiddleName SurName NameSuffix Telephone PhoneTechType PhoneUseType CountryAccessCode AreaCityCode PhoneNumber Extension Email	Yes Yes Yes Required Yes No Yes No Yes No Yes No No Yes No No Yes No No Yes No	No No No Repeatable No
ProfileInfo Profile Customer Reservation Response PersonName NamePrefix GivenName MiddleName SurName NameSuffix Telephone PhoneTechType PhoneUseType CountryAccessCode AreaCityCode PhoneNumber Extension Email EmailType	Yes Yes Yes Required Yes No Yes No Yes No Yes No No Yes Yes Yes Yes Yes No No No Yes	No No No Repeatable No
ProfileInfo Profile Customer Reservation Response PersonName NamePrefix GivenName MiddleName SurName NameSuffix Telephone PhoneTechType PhoneUseType CountryAccessCode AreaCityCode PhoneNumber Extension Email EmailType Address	Yes Yes Yes Required Yes No Yes No Yes No Yes No No No Yes Yes No No No Yes Yes No No No	No No No Repeatable No
ProfileInfo Profile Customer Reservation Response PersonName NamePrefix GivenName MiddleName SurName NameSuffix Telephone PhoneTechType PhoneUseType CountryAccessCode AreaCityCode PhoneNumber Extension Email EmailType Address Type	Yes Yes Yes Required Yes No Yes No Yes No Yes No No Yes Yes No No Yes Yes No No No Yes	No No No Repeatable No
Profile Info Profile Customer Reservation Response PersonName NamePrefix GivenName MiddleName SurName NameSuffix Telephone PhoneTechType PhoneUseType CountryAccessCode AreaCityCode PhoneNumber Extension Email EmailType Address Type AddressLine	Yes Yes Yes Required Yes No Yes No Yes No No Yes Yes Yes No No Yes Yes Yes Yes No No Yes	No No No Repeatable No
Profile Info Profile Customer Reservation Response PersonName NamePrefix GivenName MiddleName SurName NameSuffix Telephone PhoneTechType PhoneUseType CountryAccessCode AreaCityCode PhoneNumber Extension Email EmailType Address Type AddressLine CityName	Yes	No No No Repeatable No
Profile Info Profile Customer Reservation Response PersonName NamePrefix GivenName MiddleName SurName NameSuffix Telephone PhoneTechType PhoneUseType CountryAccessCode AreaCityCode PhoneNumber Extension Email EmailType Address Type AddressLine	Yes Yes Yes Required Yes No Yes No Yes No No Yes Yes Yes No No Yes Yes Yes Yes No No Yes	No No No Repeatable No

StateCode	No	No
CountryName	No	No
CountryCode	Yes	No
CompanyName	No	No
CustLoyalty	No	No
ProgramID	Yes	No
MembershipID	Yes	No
ResGlobalInfo	Yes	No
TimeSpan	Yes	No
Start	Yes	No
End	Yes	No
Comments	No	No
Comment	Yes	No
Name	No	No
Text	Yes	No
Language	No	No
Guarantee	Yes	No
GuaranteeType	Yes	No
Guarantees Accepted	No	No
GuaranteeSAccepted	Yes	No
PaymentCard PaymentCard	Yes	No
CardType	Yes	No
CardCode	Yes	No
Reservation Response		Repeatable
	Required No	No
ExpireDate MaskedCardNumber		
CardHolderName	Yes	No No
CancelPenalties	Yes	No
	No	No
CancelPenalty	Yes	Yes
Deadline AbsoluteDeadline	Yes	No No
	Yes	No
AmountPercent	Yes	No No
Amount	Yes	No No
CurrencyCode	Yes	No No
PenaltyDescription	Yes	No No
Name	No	No
Text	Yes	No No
Language	No	No No
HotelReservationIDs	Yes	No
HotelReservationID	Yes	Yes
ResID_Type	Yes	No No
ResID_Value	Yes	No No
ResID_Source	Yes	No
ResID_SourceContext	.,	
	Yes	No No
Errors	Yes, in unsuccessful message	No
<u></u>	Yes, in unsuccessful message Yes	No Yes
Errors	Yes, in unsuccessful message Yes Yes	No
Error Type ShortText	Yes, in unsuccessful message Yes Yes No	No Yes
Errors Type	Yes, in unsuccessful message Yes Yes	No Yes No

Tag	No	No
NodeList	No	No

6.2 Reservation Use Cases and Instance Documents

6.2.1 Use Case 1 – Book a reservation with multiple rates.

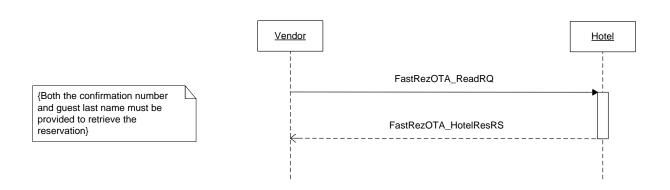
Request: FastRezOTA HotelResRQ	Response: FastRezOTA HotelResRS
Fred Smith decides to book a non-smoking king room at the Denver Mountainside Hotel arriving on 13 August 2009 for two nights. He would like to book the first night at the CORB rate of US\$289.00 and the second night at the BREB rate of US\$209.00. His reservation is for two adult guests. Fred also includes his name, address, phone number, email address, customer loyalty number and credit card information to complete his reservation. Fred submits the reservation through his favorite website.	Fred receives a response that his reservation was successfully booked. He receives his confirmation number (81234567) for the reservation as well as the details of the booking.

6.2.2 Use Case 2 - Unsuccessful booking, no rooms available.

Request: FastRezOTA HotelResRQ2	Response: FastRezOTA HotelResRS2
Fred Smith decides to book a non-smoking king room at the Denver Mountainside Hotel arriving on 13 August 2009 for two nights. He would like to book the first night at the CORB rate of US\$289.00 and the second night at the BREB rate of US\$209.00. His reservation is for two adult guests. Fred also includes his name, address, phone number, email address, customer loyalty number and credit card information to complete his reservation. Fred submits the reservation through his favorite website.	Fred receives a response that the hotel is sold out and there are currently no rooms available.

Section 7 - Reservation Retrieval Messages

The read request message allows a reservation to be retrieved by confirmation number and guest last name. Both of these pieces of data are required to retrieve the reservation in order to assure that the correct reservation is being returned. The reservation response message is returned in response to the read request message and contains the same data fields as previously defined in the reservation booking section of this document.



7.1 Retrieval Data Fields

The read request message is comprised of the following data fields (<u>see OpenTravel FastRez Schema Dictionary</u>):

Retrieve Reservation	Required	Repeatable
OTA_ReadRQ	Yes	No
EchoToken	No	No
TimeStamp	Yes	No
Version	Yes	No
PrimaryLanguageID	Yes	Yes
POS	Yes	No
Source	Yes	No
ISOCountry	Yes	No
ISOCurrency	Yes	No
RequestorID	Yes	No
Type	Yes	No
ID	Yes	No
ID_Context	Yes	No
ReadRequests	Yes	No
ReadRequest	Yes	No
UniqueID	Yes	No
Туре	Yes	No
ID	Yes	No
ID_Context	Yes	No
Retrieve Reservation	Required	Repeatable
Verification	Yes	No
PersonName	Yes	No

SurName	Yes	No

7.2 Retrieve Reservation Use Cases and Instance Documents

7.2.1 Use Case 1 - Retrieve a reservation.

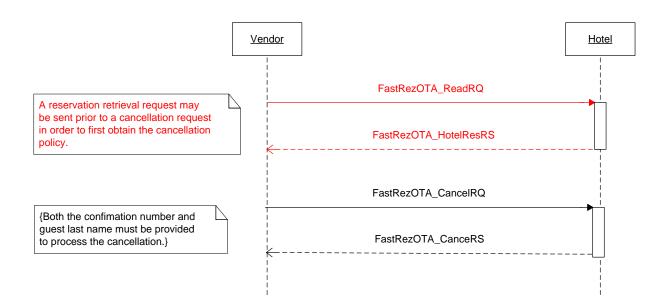
Request: FastRezOTA ReadRQ	Response: FastRezOTA HotelResRS3
Fred Smith would like to review his reservation so he enters a request to retrieve his reservation submitting his confirmation number (81234567) and his last name (Smith) through his favorite website.	Fred receives a response that displays the details of his reservation.

7.2.2 Use Case 2 - Unsuccessful retrieval, no reservation found.

Request: FastRezOTA ReadRQ2	Response: FastRezOTA HotelResRS4
Fred Smith would like to review his reservation so he enters a request to retrieve his reservation submitting his confirmation number (81234567) and his last name however he misspells his last name and enters "Smitg". He submits his request through his favorite website.	Fred receives an error response that indicates that there are no reservations that match his request.

Section 8 - Reservation Cancellation Messages

The cancellation request message allows for a reservation to be cancelled by confirmation number and guest last name. Both of these pieces of data are required to cancel the reservation in order to verify that the correct reservation is being cancelled. This message may be preceded by the read message in order to review the cancellation policy prior to cancelling the reservation. The cancel response message returns the cancellation number along with the details of the cancellation penalty, if one applies.



8.1 Cancellation Data Fields

The cancel request message is comprised of the following data fields (<u>see OpenTravel</u> <u>FastRez Schema Dictionary</u>):

Cancel Request	Required	Repeatable
OTA_CancelRQ	Yes	No
EchoToken	No	No
TimeStamp	Yes	No
Version	Yes	No
PrimaryLanguageID	Yes	No
CancelType	Yes	No
POS	Yes	No
Source	Yes	No
ISOCountry	Yes	No
ISOCurrency	Yes	No
Cancel Request	Required	Repeatable
RequestorID	Yes	No
Type	Yes	No

ID	Yes	No
ID_Context	Yes	No
UniqueID	Yes	No
Туре	Yes	No
ID	Yes	No
ID_Context	Yes	No
Verification	Yes	No
PersonName	Yes	No
SurName	Yes	No
Reasons	No	No
Reason	Yes	Yes

The cancel response message is comprised of the following data fields (<u>see OpenTravel FastRez Schema Dictionary</u>):

Cancel Response	Required	Repeatable
OTA_CancelRS	Yes	No
EchoToken	No	No
TimeStamp	Yes	No
Version	Yes	No
PrimaryLanguageID	Yes	No
Status	Yes	No
Success	Yes, in successful message	No
Warnings	No	No
Warning	Yes	Yes
Туре	Yes	No
ShortText	No	No
Code	No	No
Status	No	No
Tag	No	No
RPH	No	No
UniqueID	No	No
Type	Yes	No
ID	Yes	No
ID_Context	Yes	No
CancelInfoRS	No	No
Cancel Rules	No	Yes
CancelRule	Yes	No
CancelByDate	Yes	No
Amount	No	No
CurrencyCode	No	No
PaymentCard	Yes	No
Cancel Response	Required	Repeatable
CardType	Yes	No
CardCode	Yes	No
CardNumber	No	No
ExpireDate	No	No
MaskedCardNumber	No	No
CardHolderName	Yes	No

UniqueID	Yes	No
Type	Yes	No
ID	Yes	No
ID_Context	Yes	No
Errors	Yes, in unsuccessful	No
	message	
Error	Yes	Yes
Type	Yes	No
ShortText	No	No
Code	No	No
Status	No	No
Tag	No	No
NodeList	No	No

8.2 Cancel Reservation Use Case and Instance Documents

8.2.1 Use Case 1 - Cancel a reservation, penalty applies.

Request: FastRezOTA CancelRQ	Response: <u>FastRezOTA CancelRS</u>
Fred Smith's plans have changed and he needs to cancel his reservation. It is past the cancellation deadline. Mr. Smith submits his confirmation number (81234567) and last name (Smith) through his favorite website to process the cancellation.	Fred receives a response that echoes back his confirmation number (81234567) and returns his cancellation number (71234567) with a notification that his credit card will be billed for US\$223.06 because he cancelled his reservation after the cancellation deadline.

8.2.2 Use Case 2 - Cancel a reservation, no penalty applies.

Request: <u>FastRezOTA CancelRQ2</u>	Response: FastRezOTA CancelRS2
Sam Jones' trip has been cancelled and he needs to cancel his hotel reservation. It is prior to the cancellation deadline, so no cancellation penalty applies. Sam submits his confirmation number (87654321) and his last name (Jones) through his favorite website to request the cancellation.	Sam receives a response that echoes back his confirmation number (87654321) and returns his cancellation number (76543218) with a notification that no cancellation penalty applies.

Section 9 - Validation Service



Overview

As part of OpenTravel's FastRez schema set release, PilotFish Technology (www.pilotfishtechnology.com) has supplied an automated, e-mail based validation system that allows users to send in transactions as singular attachments and have those attachments validated against the FastRez schemas. This service expedites and simplifies development of OpenTravel-based transactions and transformations by providing an easily accessible means of determining if a particular message is valid.

To use the service, you need only an e-mail account and access to the internet in order to use it. This tutorial assumes you're using Microsoft Outlook as an e-mail client, but it is by no means required. Screenshots shown are for Microsoft Outlook 2003.

The service works effectively by accepting an XML attachment via e-mail and validating its contents. The XML attachment in question should be an OpenTravel document. Your e-mail needs no body or content – only an XML attachment.

What the Service Expects

The validation service will accept XML files attached in e-mail messages. If you send an invalid XML file or an XML format that is not recognized, you will receive a message back indicating this.

Currently, only validation for OpenTravel FastRez schemas is supported. Your XML file should therefore represent one of the following types:

- CancelRQ A cancellation request.
- CancelRS A cancellation response (to a request).
- HotelAvailRQ A hotel availability request.
- HotelAvailRS A hotel availability response (to a request).
- HotelResRQ A hotel reservation request.
- HotelResRS A hotel reservation response (to a request).
- ReadRQ A read request.

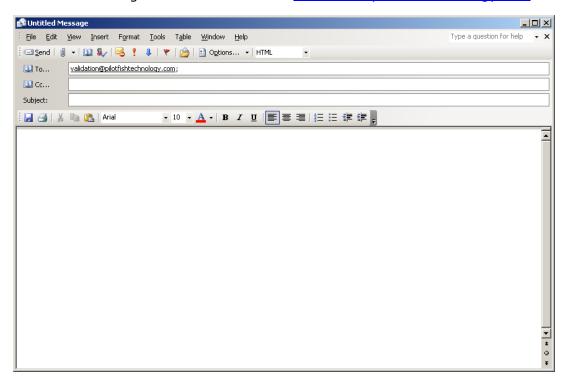
Your document should therefore be in the form of the above, using the correct OpenTravel namespace and root element type. The service is largely intended for developers needing to

©2010-2011 OpenTravel Alliance. All rights reserved.

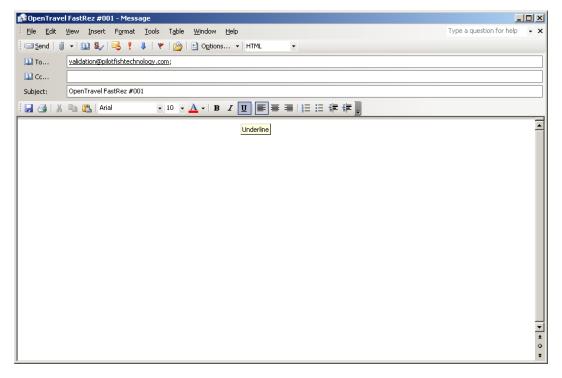
ascertain the validity of produced samples or production data – documents are therefore expected to be valid XML (meaning all tags are appropriately closed and positioned).

Instructions for Using the Service

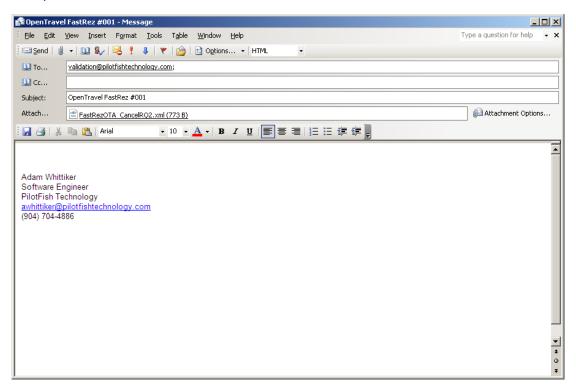
1. All validation messages must be directed to validation@pilotfishtechnology.com.



2. The subject line needs to begin with "OpenTravel FastRez". The service will return your message with the same subject, plus the "re:" prefix. For our example, we'll append an arbitrary ID:



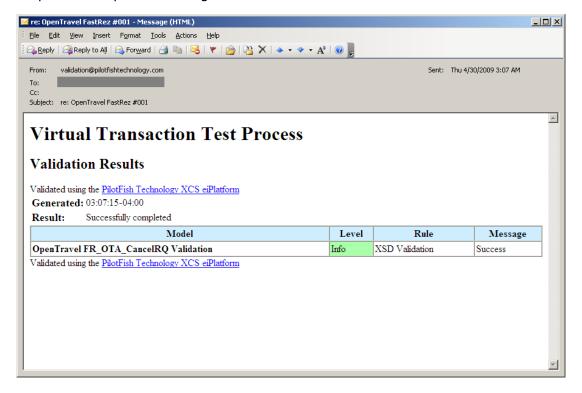
3. Attach a file to validate. This should be an XML document of a supported validation type (FastRez). Filenames for XML documents will usually have the .xml extension, like "example.xml"



4. Send the message. Allow for up to two minutes for your validation results to return.

Note that the validation service automatically detects the schema to validate against based on the document's root element and its associated namespace – you must have at least these correct or defer to one of PilotFish Technology's explicit message types. You may only attach one transaction per e-mail for validation. E-mail messages require no content / body, only a subject beginning with "Validation" and an attachment.

An example of a response message:



You may send in as many validation requests as you wish, provided you only attach one XML document per e-mail sent.