



OpenTravel™ Alliance

# OpenTravel Implementation Guide Executive Summary

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# Introduction

The OpenTravel Alliance (OpenTravel) is a member-funded, nonprofit organization formed in May 1999 by major airlines, hoteliers, car rental companies, and companies that provide distribution and technology systems to the travel industry. OpenTravel's primary activity is to develop and maintain a library of Extensible Markup Language (XML) schemas for use by the travel industry. These schemas constitute the OpenTravel XML specification, which is based on the World Wide Web Consortium (W3C) XML Schema standard.

The purpose of this implementation guide is to provide, in a single document, information that an implementer of the OpenTravel specification can use to more easily build software systems that are interoperable with other travel systems. The guide should also be useful for analysts who need to understand how to use the OpenTravel specification. In addition, it will help promote the adoption of the specification by members who have never implemented XML schemas or who are just becoming involved with OpenTravel.

## Guide Chapters

The guide has three chapters:

Chapter 1 presents some background information about OpenTravel and its activities and processes. It then provides some basic introductory material on XML and XML schemas.

Chapter 2 describes the architecture of the OpenTravel specification. Specifically, this section describes the XML schema architecture (schema modularity and the request and response model) upon which the OpenTravel specification is based, and it describes supporting mechanisms such as OpenTravel code lists.

Chapter 3 explains how to use the OpenTravel specification to build travel systems. Specifically, this section describes:

- Getting started with the OpenTravel Specification,
- Messaging options available to implementers of the OpenTravel specification,
- Guidance on how to describe and expose web services,
- Guidance on how to utilize lightweight session management,
- Guidance on reliable messaging, including WS-RM and TypeX, and,
- XML binding tools—the programs that automatically create pieces of software from XML schemas.

This document will be amended and expanded on an ongoing basis to address other topics relevant to the implementation and use of OpenTravel schemas.

## Using This Guide

**Portions of this document are accessed via embedded links, which enable downloadable "sub-document" PDF files. Clicking on a link will always download the most current version of a sub-document. This format allows OpenTravel to keep this document current and prevent the document from becoming too large to be useful.**

## Acknowledgements

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## Table of Contents

<a href="#">Introduction</a> .....	4
<a href="#">Guide Chapters</a> .....	4
<a href="#">Using This Guide</a> .....	4
<a href="#">Acknowledgements</a> .....	5
<a href="#">Chapter 1 – The OpenTravel Alliance</a> .....	8
<a href="#">1.1 Mission and Objectives</a> .....	8
<a href="#">1.2 Organizational Structure</a> .....	8
<a href="#">1.3 Key Activities</a> .....	10
<a href="#">1.4 Specification Release Process</a> .....	10
<a href="#">1.5 Extensible Markup Language (XML)</a> .....	12
<a href="#">1.6 XML Schemas</a> .....	12
<a href="#">Chapter 2 – General Functional Implementation</a> .....	14
<a href="#">2.1 OpenTravel Schema Design Best Practices</a> .....	14
<a href="#">2.2 OpenTravel Schema Architecture</a> .....	14
<a href="#">2.2.1 Message Level XML Schemas</a> .....	14
<a href="#">2.2.2 Function Specific XML Schemas</a> .....	14
<a href="#">2.2.3 Industry Common Types XML Schemas</a> .....	14
<a href="#">2.2.4 Common Types XML Schemas</a> .....	14
<a href="#">2.2.5 Simple Types XML Schemas</a> .....	14
<a href="#">2.3 Supporting Architecture</a> .....	14
<a href="#">2.3.1 Namespaces</a> .....	14
<a href="#">2.3.3 Enumerations and Code Lists</a> .....	14
<a href="#">2.3.3.1 Enumerations and Code Lists</a> .....	14
<a href="#">2.3.3.2 OpenTravel Code Lists</a> .....	14
<a href="#">2.3.3.3 External Code Lists</a> .....	14
<a href="#">2.3.4 Success/Warnings/Errors</a> .....	14
<a href="#">2.4 Message Exchange Patterns</a> .....	14
<a href="#">2.4.1 Request / Response (RQ/RS)</a> .....	14
<a href="#">2.4.2 Notif</a> .....	14
<a href="#">2.5.1 OTA ReadRQ</a> .....	14
<a href="#">2.5.2 OTA UpdateRQ/RS</a> .....	14
<a href="#">2.5.3 OTA DeleteRQ/RS</a> .....	14
<a href="#">2.5.4 OTA CancelRQ/RS</a> .....	14
<a href="#">2.5.5 OTA FileAttachmentNotifRQ/RS</a> .....	14
<a href="#">2.5.6 OTA NotifReportRQ/RS</a> .....	14
<a href="#">2.5.7 OTA PingRQ/RS</a> .....	14
<a href="#">2.5.8 OTA ScreenTextRQ/RS</a> .....	14
<a href="#">Chapter 3 – General Technical Implementation</a> .....	15
<a href="#">3.1 Getting Started with OpenTravel</a> .....	15
<a href="#">3.2 Non-Functional Requirements</a> .....	15
<a href="#">3.3 Additional Non-Functional Requirements</a> .....	15
<a href="#">3.4 Web Service Reliable Messaging</a> .....	15
<a href="#">3.5 Session Management</a> .....	15
<a href="#">3.6 XML Data Binding</a> .....	15

## Change Log

<b>Version Number</b>	<b>Date</b>	<b>Contributor</b>	<b>Changes</b>
1	August 2007		Initial Release
1.1	June 2009	Gee Chia, IBM	Added Section 3.2.8 <i>Web Service Reliable Messaging</i> . Specification Manager added Section 3.5.4 <i>OpenTravel Model Viewer</i> .
1.5	April 2010	Bonnie Lowell, OpenTravel	Removed references to flattened files that are no longer distributed with the OpenTravel specification and updated <i>Resources</i> section.
1.5	April 2010	Gee Chia, IBM Dipankur Pal, SkyTech	Contributed section 3.5 <i>Lightweight Session Management</i> .
1.5	April 2010	Gee Chia, IBM Doug Davis, IBM	Contributed section 3.4.1 <i>Reliable Messaging Guidelines: WS-RM</i> .
1.5	April 2010	Mansour Mazinani, SITA	Contributed section 3.4.2 <i>Reliable Messaging Guidelines: TypeX</i> .

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## 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.

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