OpenTravel Implementation Guide

Executive Summary

VERSION 1.0

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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.

The guide has three sections. Section 1 presents some background information about OpenTravel and its activities and processes. It then provides some basic introductory material on XML and XML schemas.

Section 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.

Section 3 explains how to use the OpenTravel specification to build travel systems. Specifically, this section describes messaging options available to implementers of the OpenTravel specification, provides guidance on how to describe and expose web services and on how flattened schemas might be used, and discusses 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.

Acknowledgements

OpenTravel's success as an organization is the result of the commitment of its member companies, and their willingness to provide resources, to realize the vision of a standard specification that enables richer interoperability between travel trading partners and ultimately a better traveler experience.

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About the OpenTravel Implementation Guide

The full *OpenTravel Implementation Guide*, written by OpenTravel staff and members, is available free of charge to OpenTravel members only. For access to the document, please visit the OpenTravel Member Site at http://forum.opentravel.org/, or the OpenTravel wiki at http://wiki.opentravel.org/index.php/Main_Page. Both sites require OpenTravel approval for access.

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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