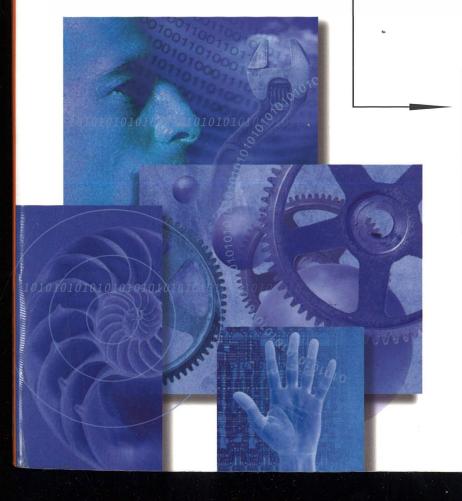




Programming for BIZTalk Servers



**Build business-to**business e-commerce solutions using XML, SOAP, and the BizTalk **Framework** 

**Brian E. Travis** 

Zynga Ex. 1018, p. 1 Zynga v. IGT IPR2022-00368



# XMLand SOAP Programming for BizTalk Servers

# Use XML, BizTalk, and SOAP to speak the language of business on the Internet!

Get the work-ready information and tools you need to meet the challenges of doing business in Internet time. Well-known XML instructor and solutions developer Brian Travis shares his fromthe-field experience on how to create business-to-business (B2B) e-commerce applications using eXtensible Markup Language (XML). He begins by building the business case for XML in the B2B context, discussing standards, industry schemas, and the BizTalk Framework. He then tackles the how-to's of application integration, stepping you line by line through code and business examples—including the construction of a working BizTalk server application.

- Express complex data relationships with simple XML syntax—for easy cross-platform data exchange
- Learn how to use XML schemas and the BizTalk Framework to adapt existing data and applications for e-commerce—and lower your transaction costs
- Use the Simple Object Access Protocol (SOAP) to pass information to partners across platforms and through firewalls
- See the play-by-play of what happens when you use Extensible Stylesheet Language (XSL)—and the Architag XRay XML Editor on CD-ROM—to transform XML documents from one schema to another
- Use the BizTalk Mapper tool in Microsoft® BizTalk Server 2000 to create your own transformation-processing style sheets
- Understand the business and technical requirements for BizTalk server software—and walk through the development of a complete B2B solution
- Get turned on to XML and BizTalk-related resources on line including libraries of validated schemas, free XML tools, best practices, case studies, and discussion groups





89075403253





### **Included on CD-ROM:**

### **E-Book Plus Code Samples**

- Microsoft BizTalk Server 2000 Technical Preview containing tools, sample programs, and white papers
- Microsoft SOAP Toolkit for Visual Studio 6.0
- Architag XRay XML Editor
- OmniMark C/VM and Integrated Development Environment
- OmniMark At Work, Volume 1: Getting Started, Electronic Version.
- All code from examples and exercises
- Fully searchable electronic version of the book

For **system requirements**, see the section. About the Companion CD."

### **About the Author:**

Brian E. Travis—a highly regarded author, instructor, and consultant on XML and related standards—specializes in real-world XML implementations. As chief technical officer and founder of Architag International Corporation, he creates intelligent content-management systems for clients around the world.

## Also available:



Your sourcebook for developing server-side applications in Microsoft Windows 2000

Inside Server-Based Applications ISBN: 1-57231-817-1

To see the full line of developer resources from Microsoft Press, go to: mspress.microsoft.com/developer

**U.S.A.** \$49.99 U.K. £32.99

£32.99 [V.A.T-included]

Canada \$72.99 [Recommended]

Programming/E-Commerce

**Microsof<sup>2</sup>/h**ga Ex. 1018, p. 2 Zynga v. IGT IPR2022-00368



Microsoft®

# Programming for BIZTalk Servers

Business Library
University of Wisconsin - Madison
2200 Granger Hall
975 University Avenue
Madison, Wil 53706-1323

**Brian E. Travis** 

Zynga Ex. 1018, p. 3 Zynga v. IGT IPR2022-00368



PUBLISHED BY Microsoft Press A Division of Microsoft Corporation One Microsoft Way Redmond, Washington 98052-6399

Copyright © 2000 by Brian E. Travis

All rights reserved. No part of the contents of this book may be reproduced or transmitted in any form or by any means without the written permission of the publisher.

Library of Congress Cataloging-in-Publication Data

Travis, Brian E., 1958-

XML and SOAP Programming for BizTalk Servers / Brian E. Travis.

p. cm.

ISBN 0-7356-1126-2

1. XML (Document markup language) I. Title.

QA76.76.H94 T75 2000

005.7'2--dc21

00-041582

Printed and bound in the United States of America.

3456789 MLML 543210

Distributed in Canada by Penguin Books Canada Limited.

A CIP catalogue record for this book is available from the British Library.

Microsoft Press books are available through booksellers and distributors worldwide. For further information about international editions, contact your local Microsoft Corporation office or contact Microsoft Press International directly at fax (425) 936-7329. Visit our Web site at <a href="mailto:mspress.microsoft.com">mspress.microsoft.com</a>. Send comments to <a href="mailto:mspress.microsoft.com">mspress.microsoft.com</a>.

Simple Object Access Protocol (SOAP) 1.1 copyright © 2000 DevelopMentor, International Business Machines Corporation, Lotus Development Corporation, Microsoft, UserLand Software.

BizTalk Framework 2.0 Draft: Document and Message Specification © 1999–2000, Microsoft Corporation. All rights reserved.

Appendix A is adapted from an article written by OmniMark. Copyright © OmniMark Technologies Corporation 1988–2000.

Active Directory, ActiveX, BizTalk, CarPoint, IntelliSense, JScript, Microsoft, Microsoft Press, MSN, Visual Basic, Visual C++, Visual Studio, and Windows are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries. Other product and company names mentioned herein may be the trademarks of their respective owners.

Unless otherwise noted, the example companies, organizations, products, people, and events depicted herein are fictitious. No association with any real company, organization, product, person, or event is intended or should be inferred.

Acquisitions Editor: David Clark Project Editor: Victoria Thulman Technical Editor: Brian Johnson Manuscript Editor: Rebecca McKay



# **Table of Contents**

Acknowledgments	XI
Introduction	xiii
About the Companion CD	xvii
Part I XML for E-Commerce	
Chapter 1 The XML Business Perspective	3
BUSINESS-TO-BUSINESS E-COMMERCE	5
SEPARATION OF DATA FROM PROCESS	5
XML AND THREE-TIER WEB ARCHITECTURES	6
Data Tier .	7
Client Tier	8
Middle Tier	8
XML for Content Providers	18
Standards	22
Building the Page	25
XML FOR CONTENT MANAGEMENT	26
XML FOR CONTENT AGGREGATION	27
THE BACKGROUND OF  ELECTRONIC DOCUMENT INTERCHANGE	30
XML FOR ELECTRONIC DOCUMENT INTERCHANGE	31
XML and E-Commerce	32
Lingua Franca	32
XML and Processing Languages	34
Chapter 2 XML Background	35
HTML: THE GOOD STUFF	35
HTML: THE BAD STUFF	36
SGML: THE GOOD STUFF	38
SGML: THE BAD STUFF	39
WE NEED XML	40
YMI Mythe	Δ1

Zynga Ex. 1018, p. 5 Zynga v. IGT IPR2022-00368



# DOCKET

# Explore Litigation Insights



Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

# **Real-Time Litigation Alerts**



Keep your litigation team up-to-date with **real-time** alerts and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

# **Advanced Docket Research**



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

# **Analytics At Your Fingertips**



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

# API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

# **LAW FIRMS**

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

# **FINANCIAL INSTITUTIONS**

Litigation and bankruptcy checks for companies and debtors.

# **E-DISCOVERY AND LEGAL VENDORS**

Sync your system to PACER to automate legal marketing.

