

**Oracle® E-Business Tax: Vertex Q-Series and Taxware
Sales/Use Tax System**

Implementation Guide

Release 12.2

Part No. E48753-01

September 2013

Oracle E-Business Tax: Vertex Q-Series and Taxware Sales/Use Tax System Implementation Guide, Release 12.2

Part No. E48753-01

Copyright © 2006, 2013, Oracle and/or its affiliates. All rights reserved.

Primary Author: Stacey Tucker-Blosch

Contributing Author: Desh Deepak, Amit Jain, Robert MacIsaac, Amarnath Molugu, Anand Naik

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are "commercial computer software" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

This software or hardware and documentation may provide access to or information on content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services.

Contents

Send Us Your Comments

Preface

1 License and Support for the Vertex Q-Series and Taxware Sales/Use Tax System

License.....	1-1
Support.....	1-1

2 Installing and Implementing the Vertex Q-Series or Taxware Sales/Use Tax System

Installing the Tax Service Provider Product.....	2-1
Setup for Prepackaged Tax Service Provider Integration.....	2-1
Setup for Non-Prepackaged Tax Service Provider Integration.....	2-6

3 Business Processes

Transaction Options in Oracle Receivables.....	3-1
Working with Service Provider Tax Jurisdiction Codes.....	3-1
Monthly Procedures.....	3-2
Exemption Handling.....	3-3
Reconciliation and Audit Procedures.....	3-4
Support Procedures.....	3-5

4 Technical Reference

Available Parameters.....	4-1
Customizable Tax Functions.....	4-1

Using Flexfields and Fields in Other Applications..... 4-22

A Sample Scenario: Tax Rate API

Loading a Custom Rate File..... A-1

Send Us Your Comments

Oracle E-Business Tax: Vertex Q-Series and Taxware Sales/Use Tax System Implementation Guide, Release 12.2

Part No. E48753-01

Oracle welcomes customers' comments and suggestions on the quality and usefulness of this document. Your feedback is important, and helps us to best meet your needs as a user of our products. For example:

- Are the implementation steps correct and complete?
- Did you understand the context of the procedures?
- Did you find any errors in the information?
- Does the structure of the information help you with your tasks?
- Do you need different information or graphics? If so, where, and in what format?
- Are the examples correct? Do you need more examples?

If you find any errors or have any other suggestions for improvement, then please tell us your name, the name of the company who has licensed our products, the title and part number of the documentation and the chapter, section, and page number (if available).

Note: Before sending us your comments, you might like to check that you have the latest version of the document and if any concerns are already addressed. To do this, access the new Oracle E-Business Suite Release Online Documentation CD available on My Oracle Support and www.oracle.com. It contains the most current Documentation Library plus all documents revised or released recently.

Send your comments to us using the electronic mail address: appsdoc_us@oracle.com

Please give your name, address, electronic mail address, and telephone number (optional).

If you need assistance with Oracle software, then please contact your support representative or Oracle Support Services.

If you require training or instruction in using Oracle software, then please contact your Oracle local office and inquire about our Oracle University offerings. A list of Oracle offices is available on our Web site at www.oracle.com.

Preface

Intended Audience

Welcome to Release 12.2 of the *Oracle E-Business Tax: Vertex Q-Series and Taxware Sales/Use Tax System Implementation Guide*.

This guide assumes you have a working knowledge of the following:

- The principles and customary practices of your business area.
- Computer desktop application usage and terminology.

If you have never used Oracle E-Business Suite, we suggest you attend one or more of the Oracle E-Business Suite training classes available through Oracle University.

See Related Information Sources on page viii for more Oracle E-Business Suite product information.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc>.

Access to Oracle Support

Oracle customers have access to electronic support through My Oracle Support. For information, visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info> or visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs> if you are hearing impaired.

Structure

- 1 License and Support for the Vertex Q-Series and Taxware Sales/Use Tax System
- 2 Installing and Implementing the Vertex Q-Series or Taxware Sales/Use Tax System

- 3 Business Processes**
- 4 Technical Reference**
- A Sample Scenario: Tax Rate API**

Related Information Sources

This book is included in the Oracle E-Business Suite Documentation Library, which is supplied in the Release 12.2 Media Pack. If this guide refers you to other Oracle E-Business Suite documentation, use only the latest Release 12.2 versions of those guides.

Online Documentation

All Oracle E-Business Suite documentation is available online (HTML or PDF).

- **Online Help** - Online help patches (HTML) are available on My Oracle Support.
- **PDF Documentation** - See the Oracle E-Business Suite Documentation Library for current PDF documentation for your product with each release.
- **Release Notes** - For information about changes in this release, including new features, known issues, and other details, see the release notes for the relevant product, available on My Oracle Support.
- **Oracle Electronic Technical Reference Manual** - The Oracle Electronic Technical Reference Manual (eTRM) contains database diagrams and a detailed description of database tables, forms, reports, and programs for each Oracle E-Business Suite product. This information helps you convert data from your existing applications and integrate Oracle E-Business Suite data with non-Oracle applications, and write custom reports for Oracle E-Business Suite products. The Oracle eTRM is available on My Oracle Support.

Related Guides

You should have the following related books on hand. Depending on the requirements of your particular installation, you may also need additional manuals or guides.

Oracle Alert User's Guide

This guide explains how to define periodic and event alerts to monitor the status of your Oracle E-Business Suite data.

Oracle Application Framework Developer's Guide

This guide contains the coding standards followed by the Oracle E-Business Suite development staff to produce applications built with Oracle Application Framework. This guide is available in PDF format on My Oracle Support and as online documentation in JDeveloper 10g with Oracle Application Extension.

Oracle Application Framework Personalization Guide

This guide covers the design-time and run-time aspects of personalizing applications

built with Oracle Application Framework.

Oracle Fusion Middleware Adapter for Oracle Applications User's Guide (Oracle Application Server Adapter for Oracle Applications User's Guide)

This guide covers the use of Adapter for Oracle Applications in developing integrations between Oracle E-Business Suite and trading partners.

Please note that the user's guide can be found in the following documentation libraries:

- As part of the Oracle Fusion Middleware and SOA Suite in 11g, *Oracle Fusion Middleware Adapter for Oracle Applications User's Guide* is available in the Oracle Fusion Middleware 11g Documentation Library.
- As part of the Oracle Application Server in 10g, *Oracle Application Server Adapter for Oracle Applications User's Guide* is available in the Oracle Application Server 10g Documentation Library.

Oracle Diagnostics Framework User's Guide

This manual contains information on implementing and administering diagnostics tests for Oracle E-Business Suite using the Oracle Diagnostics Framework.

Oracle E-Business Suite Concepts

This book is intended for all those planning to deploy Oracle E-Business Suite Release 12.2, or contemplating significant changes to a configuration. After describing the Oracle E-Business Suite architecture and technology stack, it focuses on strategic topics, giving a broad outline of the actions needed to achieve a particular goal, plus the installation and configuration choices that may be available.

Oracle E-Business Suite CRM System Administrator's Guide

This manual describes how to implement the CRM Technology Foundation (JTT) and use its System Administrator Console.

Oracle E-Business Suite Desktop Integration Framework Developer's Guide

Oracle E-Business Suite Desktop Integration Framework is a development tool that lets you define custom integrators for use with Oracle Web Applications Desktop Integrator. This guide describes how to define and manage integrators and all associated supporting objects, as well as how to download and upload integrator definitions.

Oracle E-Business Suite Developer's Guide

This guide contains the coding standards followed by the Oracle E-Business Suite development staff. It describes the Oracle Application Object Library components needed to implement the Oracle E-Business Suite user interface described in the *Oracle E-Business Suite User Interface Standards for Forms-Based Products*. It provides information to help you build your custom Oracle Forms Developer forms so that they integrate with Oracle E-Business Suite. In addition, this guide has information for customizations in features such as concurrent programs, flexfields, messages, and logging.

Oracle E-Business Suite Flexfields Guide

This guide provides flexfields planning, setup, and reference information for the Oracle E-Business Suite implementation team, as well as for users responsible for the ongoing maintenance of Oracle E-Business Suite product data. This guide also provides information on creating custom reports on flexfields data.

Oracle E-Business Suite Installation Guide: Using Rapid Install

This book is intended for use by anyone who is responsible for installing or upgrading Oracle E-Business Suite. It provides instructions for running Rapid Install either to carry out a fresh installation of Oracle E-Business Suite Release 12.2, or as part of an upgrade to Release 12.2.

Oracle E-Business Suite Maintenance Guide

This guide contains information about the strategies, tasks, and troubleshooting activities that can be used to help ensure an Oracle E-Business Suite system keeps running smoothly, together with a comprehensive description of the relevant tools and utilities. It also describes how to patch a system, with recommendations for optimizing typical patching operations and reducing downtime.

Oracle E-Business Suite Security Guide

This guide contains information on a comprehensive range of security-related topics, including access control, user management, function security, data security, and auditing. It also describes how Oracle E-Business Suite can be integrated into a single sign-on environment.

Oracle E-Business Suite Setup Guide

This guide contains information on system configuration tasks that are carried out either after installation or whenever there is a significant change to the system. The activities described include defining concurrent programs and managers, enabling Oracle Applications Manager features, and setting up printers and online help.

Oracle E-Business Suite User's Guide

This guide explains how to navigate, enter data, query, and run reports using the user interface (UI) of Oracle E-Business Suite. This guide also includes information on setting user profiles, as well as running and reviewing concurrent requests.

Oracle E-Business Suite User Interface Standards for Forms-Based Products

This guide contains the user interface (UI) standards followed by the Oracle E-Business Suite development staff. It describes the UI for the Oracle E-Business Suite products and how to apply this UI to the design of an application built by using Oracle Forms.

Oracle E-Business Suite Integrated SOA Gateway User's Guide

This guide describes the high level service enablement process, explaining how users can browse and view the integration interface definitions and services residing in Oracle Integration Repository.

Oracle E-Business Suite Integrated SOA Gateway Implementation Guide

This guide explains how integration repository administrators can manage and administer the Web service activities for integration interfaces including native packaged integration interfaces, composite services (BPEL type), and custom integration interfaces. It also describes how to invoke Web services from Oracle E-Business Suite by employing the Oracle Workflow Business Event System, and how to manage Web service security, configure logs, and monitor SOAP messages.

Oracle E-Business Suite Integrated SOA Gateway Developer's Guide

This guide describes how system integration developers can perform end-to-end service integration activities. These include orchestrating discrete Web services into meaningful end-to-end business processes using business process execution language (BPEL), and deploying BPEL processes at run time.

This guide also explains how to invoke Web services using the Service Invocation Framework. This includes defining Web service invocation metadata, invoking Web services, and testing the Web service invocation.

Oracle e-Commerce Gateway User's Guide

This guide describes the functionality of Oracle e-Commerce Gateway and the necessary setup steps in order for Oracle E-Business Suite to conduct business with trading partners through Electronic Data Interchange (EDI). It also describes how to run extract programs for outbound transactions, import programs for inbound transactions, and the relevant reports.

Oracle e-Commerce Gateway Implementation Guide

This guide describes implementation details, highlighting additional setup steps needed for trading partners, code conversion, and Oracle E-Business Suite. It also provides architecture guidelines for transaction interface files, troubleshooting information, and a description of how to customize EDI transactions.

Oracle iSetup Developer's Guide

This manual describes how to build, test, and deploy Oracle iSetup Framework interfaces.

Oracle iSetup User's Guide

This guide describes how to use Oracle iSetup to migrate data between different instances of the Oracle E-Business Suite and generate reports. It also includes configuration information, instance mapping, and seeded templates used for data migration.

Oracle Report Manager User's Guide

Oracle Report Manager is an online report distribution system that provides a secure and centralized location to produce and manage point-in-time reports. Oracle Report Manager users can be either report producers or report consumers. Use this guide for information on setting up and using Oracle Report Manager.

Oracle Web Applications Desktop Integrator Implementation and Administration Guide

Oracle Web Applications Desktop Integrator brings Oracle E-Business Suite functionality to a spreadsheet, where familiar data entry and modeling techniques can be used to complete Oracle E-Business Suite tasks. You can create formatted spreadsheets on your desktop that allow you to download, view, edit, and create Oracle E-Business Suite data, which you can then upload. This guide describes how to implement Oracle Web Applications Desktop Integrator and how to define mappings, layouts, style sheets, and other setup options.

Oracle Workflow Administrator's Guide

This guide explains how to complete the setup steps necessary for any product that includes workflow-enabled processes. It also describes how to manage workflow processes and business events using Oracle Applications Manager, how to monitor the progress of runtime workflow processes, and how to administer notifications sent to workflow users.

Oracle Workflow Developer's Guide

This guide explains how to define new workflow business processes and customize existing Oracle E-Business Suite-embedded workflow processes. It also describes how to define and customize business events and event subscriptions.

Oracle Workflow User's Guide

This guide describes how users can view and respond to workflow notifications and monitor the progress of their workflow processes.

Oracle Workflow API Reference

This guide describes the APIs provided for developers and administrators to access Oracle Workflow.

Oracle Workflow Client Installation Guide

This guide describes how to install the Oracle Workflow Builder and Oracle XML Gateway Message Designer client components for Oracle E-Business Suite.

Oracle XML Gateway User's Guide

This guide describes Oracle XML Gateway functionality and each component of the Oracle XML Gateway architecture, including Message Designer, Oracle XML Gateway Setup, Execution Engine, Message Queues, and Oracle Transport Agent. It also explains how to use Collaboration History that records all business transactions and messages exchanged with trading partners.

The integrations with Oracle Workflow Business Event System, and the Business-to-Business transactions are also addressed in this guide.

Oracle XML Publisher Report Designer's Guide

Oracle XML Publisher is a template-based reporting solution that merges XML data with templates in RTF or PDF format to produce a variety of outputs to meet a variety of business needs. Using Microsoft Word or Adobe Acrobat as the design tool, you can create pixel-perfect reports from the Oracle E-Business Suite. Use this guide to design your report layouts.

This guide is available through the Oracle E-Business Suite online help.

Oracle XML Publisher Administration and Developer's Guide

Oracle XML Publisher is a template-based reporting solution that merges XML data with templates in RTF or PDF format to produce a variety of outputs to meet a variety of business needs. Outputs include: PDF, HTML, Excel, RTF, and eText (for EDI and EFT transactions). Oracle XML Publisher can be used to generate reports based on existing Oracle E-Business Suite report data, or you can use Oracle XML Publisher's data extraction engine to build your own queries. Oracle XML Publisher also provides a robust set of APIs to manage delivery of your reports via e-mail, fax, secure FTP, printer, WebDav, and more. This guide describes how to set up and administer Oracle XML Publisher as well as how to use the Application Programming Interface to build custom solutions.

This guide is available through the Oracle E-Business Suite online help.

Oracle E-Business Suite Upgrade Guide: Release 12.0 and 12.1 to 12.2:

This guide provides information for DBAs and Applications Specialists who are responsible for upgrading Release 12.0 and 12.1 Oracle E-Business Suite system (techstack and products) to Release 12.2. In addition to information about applying the upgrade driver, it outlines pre-upgrade steps and post-upgrade steps, and provides descriptions of product-specific functional changes and suggestions for verifying the upgrade and reducing downtime.

Oracle Advanced Global Intercompany System User's Guide:

This guide describes the self service application pages available for Intercompany users. It includes information on setting up intercompany, entering intercompany transactions, importing transactions from external sources and generating reports.

Oracle Advanced Collections User Guide:

This guide describes how to use the features of Oracle Advanced Collections to manage your collections activities. It describes how collections agents and managers can use Oracle Advanced Collections to identify delinquent customers, review payment history and aging data, process payments, use strategies and dunning plans to automate the collections process, manage work assignments, and handle later-stage delinquencies.

Oracle Advanced Collections Implementation Guide:

This guide describes how to configure Oracle Advanced Collections and its integrated products. It contains the steps required to set up and verify your implementation of Oracle Advanced Collections.

Oracle Assets User Guide:

This guide provides you with information on how to implement and use Oracle Assets. Use this guide to understand the implementation steps required for application use, including defining depreciation books, depreciation method, and asset categories. It also contains information on setting up assets in the system, maintaining assets, retiring and reinstating assets, depreciation, group depreciation, accounting and tax accounting,

budgeting, online inquiries, impairment processing, and Oracle Assets reporting. The guide explains using Oracle Assets with Multiple Reporting Currencies (MRC). This guide also includes a comprehensive list of profile options that you can set to customize application behavior.

Oracle Bill Presentment Architecture User's Guide:

This guide provides you information on using Oracle Bill Presentment Architecture. Consult this guide to create and customize billing templates, assign a template to a rule and submit print requests. This guide also provides detailed information on page references, seeded content items and template assignment attributes.

Oracle Cash Management User Guide:

This guide describes how to use Oracle Cash Management to clear your receipts, as well as reconcile bank statements with your outstanding balances and transactions. This manual also explains how to effectively manage and control your cash cycle. It provides comprehensive bank reconciliation and flexible cash forecasting.

Oracle Credit Management User Guide:

This guide provides you with information on how to use Oracle Credit Management. This guide includes implementation steps, such as how to set up credit policies, as well as details on how to use the credit review process to derive credit recommendations that comply with your credit policies. This guide also includes detailed information about the public application programming interfaces (APIs) that you can use to extend Oracle Credit Management functionality.

Oracle Customer Data Librarian User Guide:

This guide describes how to use Oracle Customer Data Librarian to establish and maintain the quality of the Trading Community Architecture Registry, focusing on consolidation, cleanliness, and completeness. Oracle Customer Data Librarian has all of the features in Oracle Customers Online, and is also part of the Oracle Customer Data Management product family.

Oracle Customer Data Librarian Implementation Guide:

This guide describes how to implement Oracle Customer Data Librarian. As part of implementing Oracle Customer Data Librarian, you must also complete all the implementation steps for Oracle Customers Online.

Oracle Customers Online User Guide:

This guide describes how to use Oracle Customers Online to view, create, and maintain your customer information. Oracle Customers Online is based on Oracle Trading Community Architecture data model and functionality, and is also part of the Oracle Customer Data Management product family.

Oracle Customers Online Implementation Guide:

This guide describes how to implement Oracle Customers Online.

Oracle E-Business Suite Multiple Organizations Implementation Guide:

This guide describes the multiple organizations concepts in Oracle E-Business Suite. It describes in detail on setting up and working effectively with multiple organizations in Oracle E-Business Suite.

Oracle E-Business Tax User Guide:

This guide describes the entire process of setting up and maintaining tax configuration data, as well as applying tax data to the transaction line. It describes the entire regime-to-rate setup flow of tax regimes, taxes, statuses, rates, recovery rates, tax jurisdictions, and tax rules. It also describes setting up and maintaining tax reporting codes, fiscal classifications, tax profiles, tax registrations, configuration options, and third party service provider subscriptions. You also use this manual to maintain migrated tax data for use with E-Business Tax.

Oracle E-Business Tax Implementation Guide:

This guide provides a conceptual overview of the E-Business Tax tax engine, and describes the prerequisite implementation steps to complete in other applications in order to set up and use E-Business Tax. The guide also includes extensive examples of setting up country-specific tax requirements.

Oracle E-Business Tax Reporting Guide:

This guide explains how to run all tax reports that make use of the E-Business Tax data extract. This includes the Tax Reporting Ledger and other core tax reports, country-specific VAT reports, and Latin Tax Engine reports.

Oracle E-Business Tax: Vertex Q-Series and Taxware Sales/Use Tax System Implementation Guide

This guide explains how to setup and use the services of third party tax service providers for US Sales and Use tax. The tax service providers are Vertex Q-Series and Taxware Sales/Use Tax System. When implemented, the Oracle E-Business Tax service subscription calls one of these tax service providers to return a tax rate or amount whenever US Sales and Use tax is calculated by the Oracle E-Business Tax tax engine. This guide provides setup steps, information about day-to-day business processes, and a technical reference section.

Oracle Embedded Data Warehouse User Guide:

This guide describes how to use Embedded Data Warehouse reports and workbooks to analyze performance.

Oracle Embedded Data Warehouse Implementation Guide:

This guide describes how to implement Embedded Data Warehouse, including how to set up the intelligence areas.

Oracle Embedded Data Warehouse Install Guide:

This guide describes how to install Embedded Data Warehouse, including how to create database links and create the end user layer (EUL).

Oracle Financial Accounting Hub Implementation Guide:

This guide provides detailed implementation information that leverages the features of Oracle Subledger Accounting to generate accounting.

Oracle Financial Services Reference Guide:

This guide provides reference material for Oracle Financial Services applications in Release 12, such as Oracle Transfer Pricing, and includes technical details about application use as well as general concepts, equations, and calculations.

Oracle Financial Services Implementation Guide:

This guide describes how to set up Oracle Financial Services applications in Release 12.

Oracle Financial Services Reporting Administration Guide:

This guide describes the reporting architecture of Oracle Financial Services applications in Release 12, and provides information on how to view these reports.

Oracle Financials and Oracle Procurement Functional Upgrade Guide: Release 11i to Release 12:

This guides provides detailed information about the functional impacts of upgrading Oracle Financials and Oracle Procurement products from Release 11i to Release 12. This guide supplements the *Oracle E-Business Suite Upgrade Guide: Release 12.0 and 12.1 to 12.2*.

Oracle Financials Concepts Guide:

This guide describes the fundamental concepts of Oracle Financials. The guide is intended to introduce readers to the concepts used in the applications, and help them compare their real world business, organization, and processes to those used in the applications.

Oracle Financials Country-Specific Installation Supplement:

This guide provides general country information, such as responsibilities and report security groups, as well as any post-install steps required by some countries.

Oracle Financials for the Americas User Guide:

This guide describes functionality developed to meet specific business practices in countries belonging to the Americas region. Consult this user guide along with your financial product user guides to effectively use Oracle Financials in your country.

Oracle Financials for Asia/Pacific User Guide:

This guide describes functionality developed to meet specific business practices in countries belonging to the Asia/Pacific region. Consult this user guide along with your financial product user guides to effectively use Oracle Financials in your country.

Oracle Financials for Europe User Guide:

This guide describes functionality developed to meet specific business practices in countries belonging to the European region. Consult this user guide along with your financial product user guides to effectively use Oracle Financials in your country.

Oracle Financials for India User's Guide:

This guide provides information on how to use Oracle Financials for India. Use this guide to learn how to create and maintain setup related to India taxes, defaulting and calculation of taxes on transactions. This guide also includes information about accounting and reporting of taxes related to India.

Oracle Financials for India Implementation Guide:

This guide provides information on how to implement Oracle Financials for India. Use this guide to understand the implementation steps required for application use, including how to set up taxes, tax defaulting hierarchies, set up different tax regimes, organization and transactions.

Oracle Financials Glossary:

The glossary includes definitions of common terms that are shared by all Oracle Financials products. In some cases, there may be different definitions of the same term for different Financials products. If you are unsure of the meaning of a term you see in an Oracle Financials guide, please refer to the glossary for clarification. You can find the glossary in the online help or in the *Oracle Financials Implementation Guide*.

Oracle Financials Implementation Guide:

This guide provides information on how to implement the Oracle Financials E-Business Suite. It guides you through setting up your organizations, including legal entities, and their accounting, using the Accounting Setup Manager. It covers intercompany accounting and sequencing of accounting entries, and it provides examples.

Oracle Financials RXi Reports Administration Tool User Guide:

This guide describes how to use the RXi reports administration tool to design the content and layout of RXi reports. RXi reports let you order, edit, and present report information to better meet your company's reporting needs.

Oracle General Ledger Implementation Guide:

This guide provides information on how to implement Oracle General Ledger. Use this guide to understand the implementation steps required for application use, including how to set up Accounting Flexfields, Accounts, and Calendars.

Oracle General Ledger Reference Guide

This guide provides detailed information about setting up General Ledger Profile Options and Applications Desktop Integrator (ADI) Profile Options.

Oracle General Ledger User's Guide:

This guide provides information on how to use Oracle General Ledger. Use this guide to learn how to create and maintain ledgers, ledger currencies, budgets, and journal entries. This guide also includes information about running financial reports.

Oracle Incentive Compensation Implementation Guide:

This guide provides Compensation Administrators with guidance during implementation of Oracle Incentive Compensation. The procedures are presented in the recommended order that they should be performed for successful implementation.

Appendixes are included that describe system profiles, lookups, and other useful information.

Oracle Incentive Compensation User Guide:

This guide helps Compensation Managers, Compensation Analysts, and Plan administrators to manage Oracle Incentive Compensation on a day-to-day basis. Learn how to create and manage rules hierarchies, create compensation plans, collect transactions, calculate and pay commission, and use Sales Credit Allocation.

Oracle Internet Expenses Implementation and Administration Guide:

This book explains in detail how to configure Oracle Internet Expenses and describes its integration with other applications in the E-Business Suite, such as Oracle Payables and Oracle Projects. Use this guide to understand the implementation steps required for application use, including how to set up policy and rate schedules, credit card policies, audit automation, and the expenses spreadsheet. This guide also includes detailed information about the client extensions that you can use to extend Oracle Internet Expenses functionality.

Oracle iAssets User Guide

This guide provides information on how to implement and use Oracle iAssets. Use this guide to understand the implementation steps required for application use, including setting up Oracle iAssets rules and related product setup steps. It explains how to define approval rules to facilitate the approval process. It also includes information on using the Oracle iAssets user interface to search for assets, create self-service transfer requests and view notifications.

Oracle iProcurement Implementation and Administration Guide:

This manual describes how to set up and administer Oracle iProcurement. Oracle iProcurement enables employees to requisition items through a self-service, Web interface.

Oracle iReceivables Implementation Guide:

This guide provides information on how to implement Oracle iReceivables. Use this guide to understand the implementation steps required for application use, including how to set up and configure iReceivables, and how to set up the Credit Memo Request workflow. There is also a chapter that provides an overview of major features available in iReceivables.

Oracle iSupplier Portal User Guide:

This guide contains information on how to use Oracle iSupplier Portal to enable secure transactions between buyers and suppliers using the Internet. Using Oracle iSupplier Portal, suppliers can monitor and respond to events in the procure-to-pay cycle.

Oracle iSupplier Portal Implementation Guide:

This guide contains information on how to implement Oracle iSupplier Portal and enable secure transactions between buyers and suppliers using the Internet.

Oracle Loans User Guide:

This guide describes how to set up and use Oracle Loans. It includes information on how to create, approve, fund, amortize, bill, and service extended repayment plan and direct loans.

Oracle Partner Management Implementation and Administration Guide:

This guide helps Vendor administrators to set up and maintain relationships and programs in the Partner Management application. The main areas include setting up the partner and channel manager dashboards, partner setup, partner programs and enrollment, opportunity and referral management, deal registration, special pricing management, and partner fund management.

Oracle Partner Management Vendor User Guide:

This guide assists vendor users in using Partner Management on a daily basis. This includes interaction with the partner and channel manager dashboards, working with partners and partner programs, managing opportunities and referrals, registering deals, and working with special pricing and partner funds.

Oracle Payables User's Guide:

This guide describes how to use Oracle Payables to create invoices and make payments. In addition, it describes how to enter and manage suppliers, import invoices using the Payables open interface, manage purchase order and receipt matching, apply holds to invoices, and validate invoices. It contains information on managing expense reporting, procurement cards, and credit cards. This guide also explains the accounting for Payables transactions.

Oracle Payables Implementation Guide:

This guide provides you with information on how to implement Oracle Payables. Use this guide to understand the implementation steps required for how to set up suppliers, payments, accounting, and tax.

Oracle Payables Reference Guide:

This guide provides you with detailed information about the Oracle Payables open interfaces, such as the Invoice open interface, which lets you import invoices. It also includes reference information on purchase order matching and purging purchasing information.

Oracle Payments Implementation Guide:

This guide describes how Oracle Payments, as the central payment engine for the Oracle E-Business Suite, processes transactions, such as invoice payments from Oracle Payables, bank account transfers from Oracle Cash Management, and settlements against credit cards and bank accounts from Oracle Receivables. This guide also describes how Oracle Payments is integrated with financial institutions and payment systems for receipt and payment processing, known as funds capture and funds disbursement, respectively. Additionally, the guide explains to the implementer how to plan the implementation of Oracle Payments, how to configure it, set it up, test transactions, and how use it with external payment systems.

Oracle Payments User's Guide:

This guide describes how Oracle Payments, as the central payment engine for the Oracle E-Business Suite, processes transactions, such as invoice payments from Oracle Payables, bank account transfers from Oracle Cash Management, and settlements against credit cards and bank accounts from Oracle Receivables. This guide also describes to the Payment Administrator how to monitor the funds capture and funds disbursement processes, as well as how to remedy any errors that may arise.

Oracle Procurement Buyer's Guide to Punchout and Transparent Punchout:

This guide contains necessary information for customers implementing remote catalog content on a supplier's Web site or on Oracle Exchange.

Oracle Procurement Contracts Online Help:

This guide is provided as online help only from the Oracle Procurement Contracts application and includes information about creating and managing your contract terms library.

Oracle Procurement Contracts Implementation and Administration Guide:

This guide describes how to set up and administer Oracle Procurement Contracts. Oracle Procurement Contracts enables employees to author and maintain complex contracts through a self-service, Web interface.

Oracle Public Sector Financials User Guide:

This guide describes how to set up and administer Oracle Public Sector Advanced Features. It describes Encumbrance Reconciliation Reports, GASB 34/35 Asset Accounting, and Funds Available Enhancements.

Oracle Purchasing User's Guide:

This guide describes how to create and approve purchasing documents, including requisitions, different types of purchase orders, quotations, RFQs, and receipts. This guide also describes how to manage your supply base through agreements, sourcing rules, and approved supplier lists. In addition, this guide explains how you can automatically create purchasing documents based on business rules through integration with Oracle Workflow technology, which automates many of the key procurement processes.

Oracle Receivables User Guide:

This guide provides you with information on how to use Oracle Receivables. Use this guide to learn how to create and maintain transactions and bills receivable, enter and apply receipts, enter customer information, and manage revenue. This guide also includes information about accounting in Receivables. Use the Standard Navigation Paths appendix to find out how to access each Receivables window.

Oracle Receivables Implementation Guide:

This guide provides you with information on how to implement Oracle Receivables. Use this guide to understand the implementation steps required for application use, including how to set up customers, transactions, receipts, accounting, tax, and

collections. This guide also includes a comprehensive list of profile options that you can set to customize application behavior.

Oracle Receivables Reference Guide:

This guide provides you with detailed information about all public application programming interfaces (APIs) that you can use to extend Oracle Receivables functionality. This guide also describes the Oracle Receivables open interfaces, such as AutoLockbox which lets you create and apply receipts and AutoInvoice which you can use to import and validate transactions from other systems. Archiving and purging Receivables data is also discussed in this guide.

Oracle Sourcing Implementation and Administration Guide:

This guide contains information on how to implement Oracle Sourcing to enable participants from multiple organizations to exchange information, conduct bid and auction processes, and create and implement buying agreements. This allows professional buyers, business experts, and suppliers to participate in a more agile and accurate sourcing process.

Oracle Subledger Accounting Implementation Guide:

This guide provides setup information for Oracle Subledger Accounting features, including the Accounting Methods Builder. You can use the Accounting Methods Builder to create and modify the setup for subledger journal lines and application accounting definitions for Oracle subledger applications. This guide also discusses the reports available in Oracle Subledger Accounting and describes how to inquire on subledger journal entries.

Oracle Supplier Scheduling User's Guide:

This guide describes how you can use Oracle Supplier Scheduling to calculate and maintain planning and shipping schedules and communicate them to your suppliers.

Oracle iProcurement Implementation and Administration Guide:

This manual describes how to set up and administer Oracle iProcurement. Oracle iProcurement enables employees to requisition items through a self-service, Web interface.

Oracle Procurement Contracts Implementation and Administration Guide:

This manual describes how to set up and administer Oracle Procurement Contracts. Oracle Procurement Contracts enables employees to author and maintain complex contracts through a self-service, Web interface.

Oracle Trading Community Architecture User Guide:

This guide describes the Oracle Trading Community Architecture (TCA) and how to use features from the Trading Community Manager responsibility to create, update, enrich, and cleanse the data in the TCA Registry. It also describes how to use Resource Manager to define and manage resources.

Oracle Trading Community Architecture Administration Guide:

This guide describes how to administer and implement Oracle Trading Community Architecture (TCA). You set up, control, and manage functionality that affects data in the TCA Registry. It also describes how to set up and use Resource Manager to manage resources.

Oracle Trading Community Architecture Reference Guide:

This guide contains seeded relationship types, seeded Data Quality Management data, D&B data elements, Bulk Import interface table fields and validations, and a comprehensive glossary. This guide supplements the documentation for Oracle Trading Community Architecture and all products in the Oracle Customer Data Management family.

Oracle Trading Community Architecture Technical Implementation Guide:

This guide explains how to use the public Oracle Trading Community Architecture application programming interfaces (APIs) and develop callouts based on Oracle Workflow Business Events System (BES). For each API, this guide provides a description of the API, the PL/SQL procedure, and the Java method, as well as a table of the parameter descriptions and validations. For each BES callout, this guide provides the name of the logical entity, its description, and the ID parameter name. Also included are setup instructions and sample code.

Oracle U.S. Federal Financials User's Guide:

This guide describes the common concepts for an integrated financial management solution for federal agencies to comply with the requirements of the U.S. Federal government. It describes the product architecture and provides information on Budget Execution, Prompt Payment, Treasury payments, Third party payments, Interagency transactions, Receivables management, Federal reports, CCR Integration, and Year End Closing.

Oracle U.S. Federal Financials Implementation Guide:

This guide describes the common concepts for an integrated financial management solution for federal agencies. It includes a consolidated setup checklist by page and provides detailed information on how to set up, maintain, and troubleshoot the Federal Financial application for the following functional areas: Sub Ledger Accounting, Budget Execution, Prompt Payment, Treasury payments, Third party payments, Interagency transactions, Receivables management, Federal reports, CCR Integration, and Year End Closing.

Oracle Projects Documentation Set

Oracle Projects Implementation Guide:

Use this guide to implement Oracle Projects. This guide also includes appendixes covering function security, menus and responsibilities, and profile options.

Oracle Project Costing User Guide:

Use this guide to learn detailed information about Oracle Project Costing. Oracle Project Costing provides the tools for processing project expenditures, including calculating

their cost to each project and determining the General Ledger accounts to which the costs are posted.

Oracle Project Billing User Guide:

This guide shows you how to use Oracle Project Billing to define revenue and invoicing rules for your projects, generate revenue, create invoices, and integrate with other Oracle Applications to process revenue and invoices, process client invoicing, and measure the profitability of your contract projects.

Oracle Project Management User Guide:

This guide shows you how to use Oracle Project Management to manage projects through their lifecycles - from planning, through execution, to completion.

Oracle Project Portfolio Analysis User Guide:

This guide contains the information you need to understand and use Oracle Project Portfolio Analysis. It includes information about project portfolios, planning cycles, and metrics for ranking and selecting projects for a project portfolio.

Oracle Project Resource Management User Guide:

This guide provides you with information on how to use Oracle Project Resource Management. It includes information about staffing, scheduling, and reporting on project resources.

Oracle Grants Accounting Documentation

Oracle Grants Accounting User Guide:

This guide provides you with information about how to implement and use Oracle Grants Accounting. Use this guide to understand the implementation steps required for application use, including defining award types, award templates, allowed cost schedules, and burden set up. This guide also explains how to use Oracle Grants Accounting to track grants and funded projects from inception to final reporting.

Oracle Property Manager Documentation

Oracle Property Manager User Guide:

Use this guide to learn how to use Oracle Property Manager to create and administer properties, space assignments, and lease agreements.

Oracle Property Manager Implementation Guide:

Use this guide to learn how to implement Oracle Property Manager and perform basic setup steps such as setting system options and creating lookup codes, contacts, milestones, grouping rules, term templates, and a location hierarchy. This guide also describes the setup steps that you must complete in other Oracle applications before you can use Oracle Property Manager.

Integration Repository

The Oracle Integration Repository is a compilation of information about the service

endpoints exposed by the Oracle E-Business Suite of applications. It provides a complete catalog of Oracle E-Business Suite's business service interfaces. The tool lets users easily discover and deploy the appropriate business service interface for integration with any system, application, or business partner.

The Oracle Integration Repository is shipped as part of the E-Business Suite. As your instance is patched, the repository is automatically updated with content appropriate for the precise revisions of interfaces in your environment.

You can navigate to the Oracle Integration Repository through Oracle E-Business Suite Integrated SOA Gateway.

Do Not Use Database Tools to Modify Oracle E-Business Suite Data

Oracle **STRONGLY RECOMMENDS** that you never use SQL*Plus, Oracle Data Browser, database triggers, or any other tool to modify Oracle E-Business Suite data unless otherwise instructed.

Oracle provides powerful tools you can use to create, store, change, retrieve, and maintain information in an Oracle database. But if you use Oracle tools such as SQL*Plus to modify Oracle E-Business Suite data, you risk destroying the integrity of your data and you lose the ability to audit changes to your data.

Because Oracle E-Business Suite tables are interrelated, any change you make using an Oracle E-Business Suite form can update many tables at once. But when you modify Oracle E-Business Suite data using anything other than Oracle E-Business Suite, you may change a row in one table without making corresponding changes in related tables. If your tables get out of synchronization with each other, you risk retrieving erroneous information and you risk unpredictable results throughout Oracle E-Business Suite.

When you use Oracle E-Business Suite to modify your data, Oracle E-Business Suite automatically checks that your changes are valid. Oracle E-Business Suite also keeps track of who changes information. If you enter information into database tables using database tools, you may store invalid information. You also lose the ability to track who has changed your information because SQL*Plus and other database tools do not keep a record of changes.

License and Support for the Vertex Q-Series and Taxware Sales/Use Tax System

License

Vertex Q-Series

If you wish to implement the Vertex Q-Series with Oracle E-Business Suite, you must obtain a license from Vertex, Inc.

Visit the Vertex website at <http://www.vertexinc.com> for further information. All support for the Vertex Q-Series is provided by Vertex Inc.

Taxware Sales/Use Tax System

If you wish to implement Taxware Sales/Use Tax System with Oracle E-Business Suite, you must obtain a license from Taxware, LP - A First Data Company.

Visit the Taxware website at <http://www.taxware.com> for further information. All support for the Taxware Sales/Use Tax System is provided by Taxware.

Support

The integrations with Vertex Q-Series and Taxware Sales/Use Tax System are supported by Oracle for US state and local sales taxes only within the order-to-cash business flows. For a complete list of the order-to-cash application products supported by Oracle E-Business Tax, see: E-Business Tax and Transaction Taxes, *Oracle E-Business Tax User Guide*.

Installing and Implementing the Vertex Q-Series or Taxware Sales/Use Tax System

Installing the Tax Service Provider Product

The latest Oracle certified versions of tax service providers products are available prepackaged with Oracle E-Business Suite Release 12. The product database objects of each tax service provider reside on the Oracle installation CD as a single zip file. A one-step automated process facilitates the installation without any user intervention, which replaces the multi-step process previously required but still supported as an alternative.

Prerequisites

- Execute a license agreement with a tax service provider.
- Provide Oracle SQL*Plus access to the APPS schema.

Setup for Prepackaged Tax Service Provider Integration

Tax service provider database server-side software, residing on the Oracle CD, is manually installed after the Oracle E-Business suite Release 12 is successfully installed. To find the version of the latest prepackaged tax service provider software, review the documentation included with your software. The prepackaged installation process will automatically upgrade the existing database server-side tax service provider software, if any. The main components of prepackaged tax service provider software are:

- An installation driver script.
- A zipped tax service provider software file consisting of database server-side objects.

Where appropriate, Oracle may certify a more recent version of tax service provider

software than the version included with the Oracle CD. Users can download the prepackaged tax service provider software from My Oracle Support. Contact your Oracle support representative for more information.

Note: This section does not describe the process of the installation and upgrade steps required by tax service providers. Contact tax service provider support for the details.

Complete the following steps in the order shown to implement the prepackaged version of a tax service provider product:

1. Run the installation driver script.
2. Set profile options.
3. Set up lookup codes for tax exemption reason.
4. Set up provider-specific tax regime and taxes.
5. Set up service subscriptions.
6. Install client-side tax service provider software.
7. Load tax jurisdictions and rates.
8. Set up tax accounts.
9. Turn on address validation.
10. Set up jurisdiction codes and other optional fields (optional).
11. Verify the tax service provider implementation.

Step 1 Run the Installation Driver Script

The installation driver script (UNIX Shell script for UNIX-based systems) unzips the tax service provider software zip file, installs the database server-side software, and integrates tax service provider software with E-Business Tax. After a successful installation of Release 12, run the driver script at the command prompt as follows:

```
cd $ZX_TOP/bin  
ztxptnr.sh <parameter1> <parameter2> <parameter3> <parameter4>  
<parameter5> <parameter6>
```

This table contains parameters passed to the driver script:

Parameter	Parameter Name	Required
parameter1	Provider Name	Yes
parameter2	System User (Database)	Yes
parameter3	Provider Schema Name	Yes
parameter4	Tablespace Name for Provider Schema	Yes
parameter5	Temporary Tablespace Name for Provider Schema	Yes
parameter6	SQL*Loader Executable (sqlldr) for loading sample Taxware Data	Yes

The parameters in this table are required and must be passed in the order listed. An example driver script run command based on this table for Vertex is (note that Taxware has an additional parameter):

```
$ZX_TOP/bin/ztxptnr.sh vertex system vertex USER_DATA TEMP
```

Other relevant information for the driver script includes:

- Location of the driver script: \$ZX_TOP/bin.
- Location of the execution log file: \$APPLTMP.
- Name of the execution log file: ztxptnr.log.

Step 2 Set Profile Options

Set the relevant profile options for your tax service provider. See: Setting Profile Option Values, *Oracle E-Business Tax Implementation Guide*.

Step 3 Set Up Lookup Code Tax Exemption Reason

When storing tax exemptions in E-Business Tax, use the Lookups window to set up the Tax Exemption Reason lookup code. The lookup type for this lookup code is ZX_EXEMPTION_REASON. These reason codes are used by tax service providers to determine the exemption reason. The reason codes are restricted in the number of characters that are used by a provider. See: Setting Up Lookup Codes, *Oracle E-Business Tax Implementation Guide*.

Important: Vertex exemption reasons are restricted to one alphanumeric character. Define Vertex exemption reasons so that the first character of the Exemption Reason Name is unique.

Important: Taxware exemption reasons are restricted to two alphanumeric characters. Define Taxware exemption reasons so that the first two characters of the Exemption Reason Name are unique.

Step 4 Set Up Provider-Specific Tax Regime and Taxes

To implement a tax service provider, you need to create a tax regime and taxes. You typically create three taxes: state, county, and city. See: United States Sales and Use Tax, *Oracle E-Business Tax Implementation Guide*.

Step 5 Set Up Service Subscriptions

After creating a tax regime, create service subscription for your operating unit or legal entity to the tax regime you just created for your tax service provider. If your installation uses multiple organizations for United States, you may use a tax service provider only for some specific operating units or legal entities. See: Setting Up Service Subscriptions, *Oracle E-Business Tax User Guide*.

Step 6 Install Client-Side Tax Service Provider Software

Install all necessary client-side tax service provider software. Refer to the user guides of your tax service provider.

Step 7 Load Tax Jurisdictions and Rates

Obtain and load the tax jurisdictions and rates from your tax service provider. Load this data into both the tax service provider system and E-Business Tax.

Step 8 Set Up Tax Accounts

Define tax accounts in E-Business Tax. If you define separate tax liability accounts for each ship-to state, it is easier for you to reconcile total tax amounts for each state in General Ledger with tax service provider reports. See: Setting Up Tax Accounts, *Oracle E-Business Tax User Guide*.

Step 9 Turn on Address Validation

Ensure that address validation is turned on before creating customer addresses. See: Real-Time Address Validation, *Oracle Trading Community Architecture User Guide*.

Step 10 Set Up Jurisdiction Codes and Other Optional Fields

You can optionally implement descriptive flexfields and use the standard fields available in Oracle Receivables windows to extend the basic functionality of this integration. Use the Warehouse Jurisdiction Code, Salesperson Jurisdiction Code, and Customer Addresses Jurisdiction Code to support tax calculations using Ship To, Ship From, Point of Order Origin, and Point of Order Acceptance addresses.

You can set up tax exemptions in E-Business Tax. See: *Setting Up Tax Exemptions, Oracle E-Business Tax User Guide* for more information. You can set an option in the User Defined Receivables Activity Information descriptive flexfield to indicate whether you want to post adjustment information to the tax service provider audit table.

Step 11 Verify the Tax Service Provider Implementation

Perform these steps to verify that your tax service provider is successfully integrated:

1. Create customer addresses.

Verify that the customer addresses are validated against the loaded geography data.

2. Create a sales order.

Verify that the estimated tax is calculated using the tax service.

3. Import a sales order with AutoInvoice.

Verify that tax is calculated using the tax service provider on invoices imported from Oracle Order Management or other feeder systems.

4. Create an invoice using the Receivables Transaction Workbench.

Verify that tax is calculated using the tax service provider on manual invoices created in Oracle Receivables.

5. Update or delete an invoice line.

When you update or delete an invoice line, tax amounts should reconcile to your tax service provider tax reports.

6. Credit an invoice.

When you create credit memos, tax amounts should reconcile to your tax service provider tax reports.

7. Copy an invoice.

Verify that tax is calculated using the tax service provider on the copied invoice.

8. Create an exempt order.

Verify that Oracle Receivables exemptions are used in calculating tax with the tax service provider.

9. Adjust an invoice.

Verify that tax adjustments reconcile with your service provider tax reports. Only approved adjustments of type *Tax* are reflected in your provider tax reports, which lets you control which write-offs have recoverable sales tax from the state, county, and city.

Setup for Non-Prepackaged Tax Service Provider Integration

Complete these steps in the order shown to implement a tax service provider product:

1. Install database server-side software.
2. Provide grants to the APPS schema.
3. Recreate synonyms.
4. Set profile options.
5. Set up lookup code tax exemption reason.
6. Set up provider-specific tax regime and taxes.
7. Set up service subscriptions.
8. Create index on Vertex audit file.
9. Install client-side tax service provider software.
10. Load tax jurisdictions and rates.
11. Set up tax accounts.
12. Turn on address validation.
13. Setup jurisdiction codes and other optional fields (optional).
14. Verify the tax service provider implementation.

Step 1 Install Database Server-Side Software

Install the latest Oracle-certified version of your tax service provider product. Provider-specific database objects should all be created in a separate schema.

Step 2 Provide Grants to the APPS Schema

Once a service provider software is installed, give the following grants to the APPS schema in order to execute the service provider APIs:

Vertex

```
CONNECT <Vertex schema>/<Vertex password>
GRANT ALL ON QSU TO <APPS Schema>
WITH GRANT OPTION;
GRANT ALL ON GEO TO <APPS Schema>
WITH GRANT OPTION;
GRANT ALL ON REGPRERETURNSTBL TO <APPS Schema>
WITH GRANT OPTION;
```

Taxware

```
CONNECT <Taxware schema>/<Taxware password>
GRANT ALL ON TAXPKG_GEN TO <APPS Schema>
WITH GRANT OPTION;
GRANT ALL ON TAXPKG_10 TO <APPS Schema>
WITH GRANT OPTION;
GRANT DELETE ON TAXAUDIT_HEADER to <APPS Schema>;
GRANT DELETE ON TAXAUDIT_DETAIL to <APPS Schema>;
GRANT DELETE ON TAXAUDIT_TAX to <APPS Schema>;
GRANT DELETE ON TAXAUDIT_JURIS to <APPS Schema>;
```

Step 3 Recreate Synonyms

Once the packages are installed, you must recreate the following synonyms to point to the correct service provider packages:

Vertex

```
CONNECT <APPS_Schema>/<APPS_Password>
DROP SYNONYM ZX_TAX_VERTEX_QSU;
DROP SYNONYM ZX_TAX_VERTEX_GEO;
DROP SYNONYM ZX_TAX_VERTEX_AUDIT;
CREATE SYNONYM ZX_TAX_VERTEX_QSU FOR <Vertex Schema>.QSU;
CREATE SYNONYM ZX_TAX_VERTEX_GEO FOR <Vertex Schema>.GEO;
CREATE SYNONYM ZX_TAX_VERTEX_AUDIT FOR <Vertex Schema>.REGPRERETURNSTBL;
```

Taxware

```

CONNECT <apps schema>/<apps password>
DROP SYNONYM ZX_TAX_TAXWARE_010;
DROP SYNONYM ZX_TAX_TAXWARE_GEN;
DROP SYNONYM ZX_TAX_TAXWARE_AUDIT_HEADER;
DROP SYNONYM ZX_TAX_TAXWARE_AUDIT_DETAIL;
DROP SYNONYM ZX_TAX_TAXWARE_AUDIT_JURIS;
DROP SYNONYM ZX_TAX_TAXWARE_AUDIT_TAX;
CREATE SYNONYM ZX_TAX_TAXWARE_010 FOR <Taxware Schema>.TAXPKG_10;
CREATE SYNONYM ZX_TAX_TAXWARE_GEN FOR <Taxware Schema>.TAXPKG_GEN;
CREATE SYNONYM ZX_TAX_TAXWARE_AUDIT_HEADER FOR <Taxware
Schema>.TAXAUDIT_HEADER;
CREATE SYNONYM ZX_TAX_TAXWARE_AUDIT_DETAIL FOR <Taxware
Schema>.TAXAUDIT_DETAIL;
CREATE SYNONYM ZX_TAX_TAXWARE_AUDIT_JURIS FOR <Taxware
Schema>.TAXAUDIT_JURIS;
CREATE SYNONYM ZX_TAX_TAXWARE_AUDIT_TAX FOR <Taxware
Schema>.TAXAUDIT_TAX;

```

Step 4 to Step 7

See: Step 2 to Step 5 in the Setup Checklist for PrePackaged Tax Service Provider Integration, page 2-1 for details of these setup steps.

Step 8 Create Index on Vertex Audit Table (Vertex only)

During the rollback phase of AutoInvoice, the program deletes invalid transactions from the Oracle Receivables interface tables. You need to create an index for the TRANSUSERAREA column in the REGPRERETURNSTBL Vertex table so that Vertex can identify the invoices to delete much more quickly.

To create this index:

1. Login to SQLPLUS in the Vertex Schema.
2. Enter the following SQL command:

```

CREATE INDEX <INDEX_NAME> ON
REGPRERETURNSTBL (TRANSUSERAREA);

```

where <INDEX_NAME> is unique within the Vertex schema.

Step 9 to Step 14

See: Step 6 to Step 11 in the Setup Checklist for PrePackaged Tax Service Provider Integration, page 2-1 for details of these setup steps.

Business Processes

Transaction Options in Oracle Receivables

If you have integrated with a tax service provider, these actions are not required for Receivables transactions:

- Entering tax classification codes on transaction lines.
- Entering transaction line attributes in the Additional Tax Determining Factors window.

Working with Service Provider Tax Jurisdiction Codes

Service providers may use their own tax jurisdiction code to identify a taxing jurisdiction. A service provider jurisdiction code is typically needed when the zip code of an address does not uniquely identify the exact taxing jurisdiction. For example, the same city and zip code may have two or more different taxing jurisdictions in different geographical areas within the same zip code. For such zip codes, you should enter the service provider tax jurisdiction codes when you enter your customer addresses.

See: Address Formatting, *Oracle Trading Community Architecture User Guide* for information about entering customer addresses.

Vertex

Vertex uses the term *geocode* for tax jurisdiction codes. The geocode is an internal code that is understood by the Vertex integration. The geocode is a nine-digit numeric code that is composed of a two-digit state code, followed by a three-digit county code, followed by a four-digit code to identify a tax jurisdiction within a city. For example: 12-345-6789.

The Vertex integration uses the Vertex GeoCoder API to retrieve the geocode for a ship-to customer address, if a geocode is not available on the customer address and cannot be retrieved from the E-Business Tax jurisdiction setup. If the GeoCoder API

cannot find a geocode, an error is raised.

Taxware

The Taxware jurisdiction code is a nine-digit alphanumeric code. It is composed of the two-character state code, the five-digit zip code, and a unique two-digit numeric code. For example, the code CA9411401 is composed of the state code CA for California, the zip code 94114, and the Taxware jurisdiction code 01.

The Taxware integration retrieves the jurisdiction code either from the customer address or the E-Business Tax jurisdiction setup. If a jurisdiction code is not found, then 00 is passed as the jurisdiction code to the tax calculation API.

Monthly Procedures

Each month tax service providers send an updated version of their data file. You need to upload the data file into both the tax service provider system and the E-Business Tax system. This will ensure that E-Business Tax has the latest information for address validation and tax jurisdiction code/geocode retrieval during tax calculation.

E-Business US Sales and Use Tax Import Program

Use the E-Business US Sales and Use Tax Import Program to upload US sales and use tax updates from your tax service provider. The E-Business US Sales and Use Tax Import Program imports tax content for US sales tax rates at various jurisdiction levels. For example, at the state, county, city, and zip code or zip code range levels. The program also supports the import of incremental tax content.

The system loads the data into the TCA Geography model and into all related E-Business Tax entities, including taxes, tax statuses, tax rates, tax jurisdictions, and accounts. The data the system loads into the TCA Geography model includes master geography data, such as state, county, city, zip or postal code, and their relationships and hierarchy. The system also creates the geography identifiers for alternate city names apart from the geography types and geography nodes.

To upload US sales and use tax data:

1. Copy the data file from your external service provider (Taxware, LP – A First Data Company or Vertex, Inc.) to the location \$APPL_TOP_NE/zx on the 12.2 instance.
 1. If the zx folder is not created under \$APPL_TOP_NE, then manually create the zx folder.
 2. E-Business Tax loads the data file into the interface table as part of the request set, so that you do not need to load the data file manually.

2. Navigate to the Schedule Request Set page.
3. In the Request Set Name field, select *E-Business US Sales and Use Tax Import Program*.
4. Select the E-Business Tax Content Upload File Load Program radio button.
5. Enter the directory where you have placed the data file and the file name (for example, if the file name of the data file is filename.dat, then enter \$APPL_TOP_NE/zx/filename.dat).
6. In the Tax Content Source field, select:
 - 1 - Vertex, Inc.
 - 2 - Taxware, LP – A First Data Company
7. In the Tax Content Source Tax Regime Code field, select the tax regime code to which the data should be imported.

Note: The E-Business US Sales and Use Tax Import Program does not load geography and tax zones specific to any tax regimes. This data can be shared by other tax regimes.
8. Enter the service request schedule parameters.
9. Submit the request.

Exemption Handling

You can define your customer exemptions using a tax service provider, E-Business Tax, or both. At transaction time, if an applicable E-Business Tax exemption is found, it is passed to the tax service provider API and applied to the tax calculation. The tax service provider tax repository includes the exempt tax line for complete audit and reconciliation.

If you decide to build your own logic to pass exemptions to the tax service provider, for example, by making use of E-Business Tax fiscal classifications, you can write your own code using PL/SQL. See: Customizable Tax Functions, page 4-1 for information customizing the exemption and exception values passed by E-Business Tax.

If the Tax Handling field is enabled on an Oracle Order Management or Oracle Receivables transaction line, you can override the tax service provider setup and identify a transaction as exempt, according to your tax exemption setup in E-Business Tax. See: Setting Up Tax Exemptions, *Oracle E-Business Tax User Guide* for more information.

Set the eBTax: Allow Override of Customer Exemptions profile option to control the

display of the Tax Handling field. See: Setting Profile Option Values, *Oracle E-Business Tax Implementation Guide*.

Reconciliation and Audit Procedures

Tax service providers return the calculated tax lines to E-Business Tax. The tax lines for Oracle Receivables transactions returned by tax service providers are stored in E-Business Tax similar to the way tax lines calculated by E-Business Tax itself are stored.

Due to the limitations of Vertex and Taxware APIs in accepting the transaction line update details, whenever a user updates a transaction line in Oracle Receivables, two lines are passed to Vertex or Taxware for tax calculation. For example, if the line amount is changed from \$100 to \$200, because of either quantity or price change, the tax service provider API is called for a transaction line with line amount as -\$100 and another line with line amount as \$200. The taxes for transaction line of line amount -\$100 back out the original tax amounts calculated for the original line amount of \$100.

Only approved adjustments of type *Tax* are synchronized with the tax service providers. This gives you greater control over which adjustments should reduce the sales tax liability. If you have adjustments of type *Tax* that you do not want to post to the tax service provider repository, see: Using Flexfields and Fields in Other Applications, page 4-22 for more information.

Before completing your tax returns using the tax service provider reports, you should reconcile the total tax amounts held in E-Business Tax, Oracle General Ledger, and a tax service provider repository. All Oracle Receivables transactions get stored in the tax service provider repository at the time of tax calculation. Thus, the tax details in E-Business Tax and in a tax service provider repository are always the same. The Oracle Receivables transactions are posted to General Ledger only when they are completed and posted to General Ledger from the Subledger Accounting application. Therefore, before reconciliation with General Ledger, all transactions must be completed and posted to the General Ledger.

You can reconcile the total tax amounts of Oracle Receivables transactions by state to Oracle General Ledger. The total tax amounts by state reported by the Tax Reconciliation Report should reconcile to each state tax liability account held in Oracle General Ledger.

Reconcile total tax amounts by state to the tax service provider repository by running the Vertex Sales Tax Register or Taxware Sales/Use Tax report.

The tax service providers and Oracle Receivables use different terms when referring to the tax calculation date and the accounting date for transactions. This table summarizes these terminology differences:

Value	Oracle Receivables	Vertex Q-Series	Taxware SUTS
Accounting Date	GL Date	Transaction Date	Fiscal Date
Tax Calculation Date	Transaction Date	Invoice Date	Invoice Date

Related Topics

Tax Reconciliation Report, *Oracle E-Business Tax Reporting Guide*

Support Procedures

Begin with E-Business Tax debug messages to review issues that arise with tax calculation by tax service providers. The debug log contains all the input and output parameters sent and received to and from a tax service provider. The tax service provider returned messages are printed in the debug log after this E-Business Tax introductory message:

An error has occurred in the tax service provider API. Please review the following messages and contact tax service provider support for further action.

This guide does not describe the process of the installation required by tax service providers, reports provided by tax service providers, or upgrades to newer releases. You should refer to the tax service provider's manuals and documents and contact tax service provider support for details.

Related Topics

System Alerts, Metrics, and Logs, *Oracle Applications System Administrator's Guide - Maintenance*

Technical Reference

Available Parameters

The tax service providers tax calculation APIs get the input from the view `ZX_O2C_CALC_TXN_INPUT_V`. For the list of available attributes refer to the view description in the *Oracle E-Business Suite Electronic Technical Reference Manual*.

Customizable Tax Functions

Tax service providers require some attributes that do not exist as standard columns in the E-Business Suite tables or can be mapped to an attribute out of two or more potential attribute in E-Business Suite. To achieve this, view `ZX_O2C_CALC_TXN_INPUT_V` has some extra columns. There are tax functions that populate the values of these extra columns in the tables `ZX_PRVDR_HDR_EXTNS_GT` and `ZX_PRVDR_LINE_EXTNS_GT` used for the view.

The packages `ARP_TAX_VIEW_TAXWARE` and `ARP_TAX_VIEW_VERTEX` contain the tax functions for Taxware and Vertex respectively. These tax functions contain default logic that can be re-written for an installation. The tax functions are called from the procedures in the packages `ZX_TAXWARE_USER_PKG` and `ZX_VERTEX_USER_PKG`, which insert records in `ZX_PRVDR_HDR_EXTNS_GT` and `ZX_PRVDR_LINE_EXTNS_GT` tables.

The table below contains the tax functions contained in `ARP_TAX_VIEW_TAXWARE` `ARP_TAX_VIEW_VERTEX` packages and the values assigned to Vertex and Taxware API parameters by the calling procedures in the packages `ZX_TAXWARE_USER_PKG` and `ZX_VERTEX_USER_PKG`.

Function/Procedure Name	Column Name in ZX_O2C_CALC_TXN_INPUT_V	Default Value	Mapped Attribute of Taxware API	Mapped Attribute of Vertex API
TRANSACTION_DATE	LINE_EXT_DATE_ATTRIBUTE1	TRX_LINE_GL_DATE of ZX_LINES_DET_FACTORS	TaxLink.FiscalDate	fTransDate
PRODUCT_CODE	LINE_EXT_VARCHAR_ATTRIBUTE2	SEGMENT1 of MTL_SYSTEM_ITEMS	TaxLink.ProdCode	fTDMProdCd
AUDIT_FLAG	LINE_EXT_VARCHAR_ATTRIBUTE8	ATTRIBUTE15 of AR_RECEIVABLES_TRX	TaxLink.ReptInd	Not mapped directly, but determines if the transaction should be recorded in the Vertex repository.
SHIP_TO_ADDRESS_CODE	LINE_EXT_VARCHAR_ATTRIBUTE9	<ol style="list-style-type: none"> Ship-to address jurisdiction code TAX_JURISDICTION_CODE from ZX_JURISDICTIONS_B 	<p>TaxLink.StateCode = substr(SHIP_TO_ADDRESS_CODE,2,2)</p> <p>TaxLink.PriZip = substr(SHIP_TO_ADDRESS_CODE,4,5)</p> <p>TaxLink.PriGeo = substr(SHIP_TO_ADDRESS_CODE,9,2)</p>	<p>.fJurisSTGeoCd = substr(SHIP_TO_ADDRESS_CODE,2,9)</p> <p>.fJurisSTInCi = substr(SHIP_TO_ADDRESS_CODE,1,1)</p>

Function/Procedure Name	Column Name in ZX_O2C_CALC_TXN_INPUT_V	Default Value	Mapped Attribute of Taxware API	Mapped Attribute of Vertex API
SHIP_FROM_ADDRESS_CODE	LINE_EXT_VAR CHAR_ATTRIB UTE10	Warehouse address jurisdiction code	JurLink.ShipFr.State = substr(SHIP_FROM_ADDRESS_CODE,2,2) JurLink.ShipFr.Zip = substr(SHIP_FROM_ADDRESS_CODE,4,5) JurLink.ShipFr.Geo = substr(SHIP_FROM_ADDRESS_CODE,9,2)	.fJurisSFGeoCd = substr(SHIP_FROM_ADDRESS_CODE,2,9) .fJurisSFInCi = substr(SHIP_FROM_ADDRESS_CODE,1,1)
POA_ADDRESS_CODE	LINE_EXT_VAR CHAR_ATTRIB UTE11	Taxware: Organization jurisdiction code Vertex: Salesperson jurisdiction code	JurLink.POA.State = substr(POA_ADDRESS_CODE,2,2) JurLink.POA.Zip = substr(POA_ADDRESS_CODE,4,5) JurLink.POA.Geo = substr(POA_ADDRESS_CODE,9,2)	.fJurisOAGeoCd = substr(POA_ADDRESS_CODE,2,9) .fJurisOAInCi = substr(POA_ADDRESS_CODE,1,1)
CUSTOMER_CODE	LINE_EXT_VAR CHAR_ATTRIB UTE12	Bill To Party Number (PARTY_NUMBER of HZ_PARTIES)	TaxLink.CustNo	.fTDMCustCd

Function/Procedure Name	Column Name in ZX_O2C_CALC_TXN_INPUT_V	Default Value	Mapped Attribute of Taxware API	Mapped Attribute of Vertex API
COMPANY_CODE	LINE_EXT_VAR CHAR_ATTRIB UTE14	01	TaxLink.CompanyID	.FTDMCompCd
DIVISION_CODE	LINE_EXT_VAR CHAR_ATTRIB UTE15	01	TaxLink.DivCode	.FTDMDivCd
SERVICE_INDICATOR	LINE_EXT_VAR CHAR_ATTRIB UTE1	Profile: ZX_TAXVDR_SERVICEIND	JurLink.ServInd	N/A
TAX_SELECTION_PARAMETER	LINE_EXT_NUMBER_ATTRIB UTE6	Profile: ZX_TAXVDR_TAXSELPARAM	TaxSelParm	N/A
CUSTOMER_NAME	LINE_EXT_VAR CHAR_ATTRIB UTE13	Bill To Party Name (PARTY_NAME of HZ_PARTIES)	TaxLink.CustName	N/A
VENDOR_CONTROL_EXEMPTIONS	LINE_EXT_VAR CHAR_ATTRIB UTE16	Job Number (ATTRIBUTE1 from RA_CUST_TRX_TYPES)	TaxLink.JobNo	N/A
USE_NEXPRO	LINE_EXT_VAR CHAR_ATTRIB UTE17	Profile: ZX_TAXVDR_USENEXPRO	TaxLinkUseNexproInd	N/A

Function/Procedure Name	Column Name in ZX_O2C_CALC_TXN_INPUT_V	Default Value	Mapped Attribute of Taxware API	Mapped Attribute of Vertex API
POO_ADDRESS_CODE	LINE_EXT_VAR CHAR_ATTRIB UTE20	Salesperson jurisdiction code	JurLink.POO.State = substr(POO_ADDRESS_CODE,2,2) JurLink.POO.Zip = substr(POO_ADDRESS_CODE,4,5) JurLink.POO.Geo = substr(POO_ADDRESS_CODE,9,2)	N/A
CALCULATION_FLAG	LINE_EXT_VAR CHAR_ATTRIB UTE21	00000 (Calculate tax at all jurisdiction levels)	TaxLink.NoStateTax TaxLink.StateExempt TaxLink.NoCnTax TaxLink.CnExempt TaxLink.NoLoTax TaxLink.LoExempt TaxLink.NoSecnTax TaxLink.SecCnExempt TaxLink.NoSecLoTax TaxLink.SecLoExempt	N/A

Function/Procedure Name	Column Name in ZX_O2C_CALC_TXN_INPUT_V	Default Value	Mapped Attribute of Taxware API	Mapped Attribute of Vertex API
TRX_LINE_TYPE	LINE_EXT_VAR CHAR_ATTRIB UTE1	SALE	N/A	.fTransType
CUSTOMER_CLASS	LINE_EXT_VAR CHAR_ATTRIB UTE13	Null	N/A	.fTDMCustClass Cd
GET_EXEMPTIONS (parameter state_exempt_percent)	LINE_EXT_NUMBER_ATTRIB UTE1	RATE_MODIFIER of ZX_EXEMPTIONS for STATE Tax	TaxLink.StExemptAmt = TaxLink.GrossAmt * (GET_EXEMPTIONS.state_exempt_percent)	.fPriStExmtAmt = fTransExtendedAmt * (GET_EXEMPTIONS.state_exempt_percent)
GET_EXEMPTIONS (parameter county_exempt_percent)	LINE_EXT_NUMBER_ATTRIB UTE2	RATE_MODIFIER of ZX_EXEMPTIONS for COUNTY Tax	TaxLink.CntyExemptAmt = TaxLink.GrossAmt * (GET_EXEMPTIONS.county_exempt_percent)	.fPriCoExmtAmt = fTransExtendedAmt * (GET_EXEMPTIONS.county_exempt_percent)
GET_EXEMPTIONS (parameter city_exempt_percent)	LINE_EXT_NUMBER_ATTRIB UTE3	RATE_MODIFIER of ZX_EXEMPTIONS for CITY Tax	TaxLink.CityExemptAmt = TaxLink.GrossAmt * (GET_EXEMPTIONS.city_exempt_percent)	.fPriCiExmtAmt = fTransExtendedAmt * (GET_EXEMPTIONS.city_exempt_percent)
GET_EXEMPTIONS (parameter state_exempt_reason)	LINE_EXT_VAR CHAR_ATTRIB UTE4	NULL	TaxLink.StReasonCode	.fPriStExmtRsnCd
GET_EXEMPTIONS (parameter county_exempt_reason)	LINE_EXT_VAR CHAR_ATTRIB UTE5	NULL	TaxLink.CntyReasonCode	.fPriCoExmtRsnCd

Function/Procedure Name	Column Name in ZX_O2C_CALC_TXN_INPUT_V	Default Value	Mapped Attribute of Taxware API	Mapped Attribute of Vertex API
GET_EXEMPTIONS (parameter city_exempt_reason)	LINE_EXT_VAR CHAR_ATTRIB UTE6	NULL	TaxLink.CityReasonCode	.fPriCiExmtRsnCd
GET_EXEMPTIONS (parameter use_step)	LINE_EXT_VAR CHAR_ATTRIB UTE3	Taxware: 'Y'	TaxLink.UseStep	N/A
GET_EXEMPTIONS (parameter step_proc_flag)	LINE_EXT_VAR CHAR_ATTRIB UTE7	Taxware: 1	TaxLink.StepProcFlg	N/A
GET_EXEMPTIONS (parameter crit_flag)	LINE_EXT_VAR CHAR_ATTRIB UTE19	'R'	TaxLink.CritFlg	N/A
GET_EXEMPTIONS (parameter sec_county_exempt_percent)	LINE_EXT_NUMBER_ATTRIB UTE4	RATE_MODIFIER of ZX_EXEMPTIONS for SECONDARY COUNTY Tax	TaxLink.SecCntExemptAmt = TaxLink.GrossAmt * (GET_EXEMPTIONS.sec_county_exempt_percent)	N/A
GET_EXEMPTIONS (parameter sec_city_exempt_percent)	LINE_EXT_NUMBER_ATTRIB UTE5	RATE_MODIFIER of ZX_EXEMPTIONS for SECONDARY CITY Tax	TaxLink.SecLoExemptAmt = TaxLink.GrossAmt * (GET_EXEMPTIONS.sec_city_exempt_percent)	N/A
GET_EXEMPTIONS (parameter state_certificate_number)	LINE_EXT_VAR CHAR_ATTRIB UTE22	EXEMPT_CERTIFICATE_NUMBER of ZX_EXEMPTIONS for STATE Tax	TaxLink.StTaxCertificateNo	N/A

Function/Procedure Name	Column Name in ZX_O2C_CALC_TXN_INPUT_V	Default Value	Mapped Attribute of Taxware API	Mapped Attribute of Vertex API
GET_EXEMPTIONS (parameter county_certificate_number)	LINE_EXT_VAR CHAR_ATTRIBUTED23	EXEMPTION_CERTIFICATE_NUMBER of ZX_EXEMPTIONS for COUNTY Tax	TaxLink.CnTaxCertificateNo	N/A
GET_EXEMPTIONS (parameter city_certificate_number)	LINE_EXT_VAR CHAR_ATTRIBUTED24	EXEMPTION_CERTIFICATE_NUMBER of ZX_EXEMPTIONS for CITY Tax	TaxLink.LoTaxCertificateNo	N/A
GET_EXEMPTIONS (parameter cert_no)	LINE_EXT_VAR CHAR_ATTRIBUTED3	EXEMPTION_CERTIFICATE_NUMBER of ZX_EXEMPTIONS for CITY, COUNTY or STATE Tax in the order it is found	N/A	.fPriCustExmtCertificateNum
GET_EXEMPTIONS (parameter district_exempt_reason)	LINE_EXT_VAR CHAR_ATTRIBUTED7	NULL	N/A	.fPriDiExmtReason
GET_EXEMPTIONS (parameter district_exempt_percent)	LINE_EXT_NUMBER_ATTRIBUTED4	RATE_MODIFIER of ZX_EXEMPTIONS for DISTRICT Tax	N/A	.fPriDiExmtAmount = fTransExtendedAmount * (GET_EXEMPTIONS.district_exempt_percent)

The tax functions are included in the E-Business Tax files \$ZX_TOP/patch/115/sql/ztxvwab.pls and ztxvwvb.pls.

The value of the eBTax Vertex: Case Sensitive profile option is assigned to the header_ext_varchar_attribute1. This profile option is used by Vertex to indicate whether information retrieval is performed using case-sensitive searches.

All tax functions have a parameter named `p_view_name`. This parameter identifies the transaction source context for rewriting the body of a tax function. Based on the transaction source, the table below identifies the table from where you can fetch transaction line attributes and join with other E-Business Suite tables.

Transaction Source	p_view_name value for Vertex	p_view_name value for Taxware	Table Name
AutoInvoice - Invoice/Debit Memo/On Account Credit Memo	TAX_LINES_INVOICE_IMPORT_V_V	TAX_LINES_INVOICE_IMPORT_V_A	RA_CUSTOMER_TRANSACTION_LINES_ALL
AutoInvoice - Applied Credit Memo	TAX_LINES_RMA_IMPORT_V_V_CREDITMEMO	TAX_LINES_RMA_IMPORT_V_A_CREDITMEMO	RA_CUSTOMER_TRANSACTION_LINES_ALL
Recurring Invoice	TAX_LINES_RECURRING_INVOICE_V_V	TAX_LINES_RECURRING_INVOICE_V_A	RA_CUSTOMER_TRANSACTION_LINES_ALL
Manual Entry & Update - Invoice/Debit Memo/On Account Credit Memo	TAX_LINES_CREATE_V_V_INVOICE	TAX_LINES_CREATE_V_A_INVOICE	RA_CUSTOMER_TRANSACTION_LINES_ALL
Manual Entry & Update - Applied Credit Memo	TAX_LINES_CM_V_V_CREDITMEMO	TAX_LINES_CM_V_A_CREDITMEMO	RA_CUSTOMER_TRANSACTION_LINES_ALL
Override Tax Lines	TAX_LINES_DELETE_V_V	TAX_LINES_DELETE_V_A	RA_CUSTOMER_TRANSACTION_LINES_ALL
Delete Invoice/Debit Memo/On Account Credit Memo/ Applied Credit Memo	TAX_LINES_CREATE_V_V	TAX_LINES_CREATE_V_A	RA_CUSTOMER_TRANSACTION_LINES_ALL
Tax Adjustment	TAX_ADJUSTMENTS_V_V	TAX_ADJUSTMENTS_V_A	RA_ADJUSTMENTS_ALL
Order Management	OE_TAX_LINES_SUMMARY_V_V	OE_TAX_LINES_SUMMARY_V_A	OE_ORDER_LINES_ALL

Transaction Source	p_view_name value for Vertex	p_view_name value for Taxware	Table Name
Order Capture	ASO_TAX_LINES_SUMMARY_V_V	ASO_TAX_LINES_SUMMARY_V_A	ASO_QUOTE_LINES_ALL

FUNCTION TRANSACTION_DATE(

```
p_view_name IN VARCHAR2,
p_header_id IN NUMBER,
p_line_id IN NUMBER) RETURN DATE;
```

Input	Description
p_view_name	Name of view calling this function
p_header_id	ID of transaction header
p_line_id	ID of transaction line

The function returns NULL by default and the calling procedure stores the GL Date value on the transaction line in the LINE_EXT_DATE_ATTRIBUTE1 column of the ZX_PRVDR_LINE_EXTNS_GT table. This value is used for reporting purposes.

FUNCTION PRODUCT_CODE(

```
p_view_name IN VARCHAR2,
p_header_id IN NUMBER,
p_line_id IN NUMBER,
p_item_id IN NUMBER,
p_memo_line_id IN NUMBER) RETURN VARCHAR2;
```

Input	Description
p_view_name	Name of view calling this function
p_header_id	ID of transaction header
p_line_id	ID of transaction line
p_item_id	ID of inventory item

Input	Description
p_memo_line_id	ID of memo line

The function returns NULL by default and the calling procedure stores the SEGMENT1 value from the MTL_SYSTEM_ITEMS table (System Items key flexfield) in the LINE_EXT_VARCHAR_ATTRIBUTE2 column of the ZX_PRVDR_LINE_EXTNS_GT table. If a memo line is passed instead of an inventory item, then a NULL value is stored. The part number is used to determine exemptions.

FUNCTION AUDIT_FLAG(

```
p_view_name IN VARCHAR2,
p_header_id IN NUMBER,
p_line_id IN NUMBER) RETURN VARCHAR2;
```

Input	Description
p_view_name	Name of view calling this function
p_header_id	ID of transaction header
p_line_id	ID of transaction line

The function returns NULL by default and the calling procedure stores the value Y in the LINE_EXT_VARCHAR_ATTRIBUTE8 column of the ZX_PRVDR_LINE_EXTNS_GT table.

The value is used as an indicator for the auditing of tax adjustments. If Y, the tax adjustment is posted to the tax service provider repository.

FUNCTION SHIP_TO_ADDRESS_CODE(

```
p_view_name          IN VARCHAR2,
p_header_id          IN NUMBER,
p_line_id            IN NUMBER
p_ship_to_address_id IN NUMBER,
p_ship_to_location_id IN NUMBER,
p_trx_date           IN NUMBER,
p_ship_to_state       IN VARCHAR2,
p_postal_code         IN VARCHAR2) RETURN VARCHAR2;
```

Input	Description
p_view_name	Name of view calling this function
p_header_id	ID of transaction header
p_line_id	ID of transaction line
p_ship_to_address_id	ID of Ship-to address
p_ship_to_location_id	ID of Ship-to location
p_trx_date	Transaction Date
p_ship_to_state	State of the ship-to
p_postal_code	Zip code for the ship-to

The function returns NULL by default and the calling procedure stores the value in the ZX_PRVDR_LINE_EXTNS_GT table as per the description below.

The first character represents the In/Out City Limits flag. If this value is 1, then the Ship-to address is within the city limits; if this value is 0, then it is outside the city limits. The rest of the string is the jurisdiction code for the Ship-to address.

The In/Out City Limits is derived from the SALES_TAX_INSIDE_CITY_LIMITS column of the HZ_LOCATIONS table. If the In/Out City Limits flag is not found in the SALES_TAX_INSIDE_CITY_LIMITS column of the HZ_LOCATIONS table, the default value is within the city limits (1). For Taxware, the value of the first character is always 1.

The jurisdiction code is obtained from the SALES_TAX_GEOCODE column of the HZ_LOCATIONS table. If SALES_TAX_GEOCODE is NULL, the ZX_JURISDICTION_CODE column of the ZX_JURISDICTIONS_B table is returned for the ship-to city and zip code.

FUNCTION SHIP_FROM_ADDRESS_CODE(

```

p_view_name    IN VARCHAR2,
p_header_id    IN NUMBER,
p_line_id      IN NUMBER,
p_warehouse_id IN NUMBER) RETURN VARCHAR2;
```

Input	Description
p_view_name	Name of view calling this function
p_header_id	ID of transaction header
p_line_id	ID of transaction line
p_warehouse_id	ID of warehouse of the ship-from

The function returns NULL by default and the calling procedure stores the value in the ZX_PRVDR_LINE_EXTNS_GT table as per the description below.

The first character represents the In/Out City Limits flag. If this value is 1, then the Ship-from address is within the city limits; if this value is 0, then it is outside the city limits. The rest of the string is the jurisdiction code for the Ship-from address. For Taxware, the value of the first character is always 1.

The In/Out City Limits is derived from LOC_INFORMATION14 of the Location Address descriptive flexfield. The jurisdiction code is derived from LOC_INFORMATION13 of the Location Address descriptive flexfield.

FUNCTION POA_ADDRESS_CODE(

```
p_view_name IN VARCHAR2,
p_header_id IN NUMBER,
p_line_id IN NUMBER,
p_salesrep_id IN NUMBER) RETURN VARCHAR2;
```

Input	Description
p_view_name	Name of view calling this function
p_header_id	ID of transaction header
p_line_id	ID of transaction line
p_salesrep_id	ID of the primary sales representative

The function uses all four parameters for Vertex. The function does not use the p_salesrep_id parameter for Taxware.

The function returns NULL by default and the calling procedure stores the value in the ZX_PRVDR_LINE_EXTNS_GT table as per the description below.

The first character represents the In/Out City Limits flag. If this value is 1, then the Point

of Order Acceptance is within the city limits; if this value is 0, then it is outside the city limits. For Taxware, the value of the first character is 1.

The rest of the string is the jurisdiction code for the Point of Order Acceptance.

For Vertex, the In/Out City Limits is derived from the SALES_TAX_INSIDE_CITY_LIMITS column of the RA_SALESREPS view. The jurisdiction is derived from the SALES_TAX_GEOCODE column of the RA_SALESREPS view.

For Taxware, the jurisdiction code is derived from SALES_TAX_GEOCODE of the ZX_PRODUCT_OPTIONS_ALL table.

FUNCTION CUSTOMER_CODE(

```
p_view_name IN VARCHAR2,
p_header_id IN NUMBER,
p_line_id IN NUMBER) RETURN VARCHAR2;
```

Input	Description
p_view_name	Name of view calling this function
p_header_id	ID of transaction header
p_line_id	ID of transaction line

The function returns NULL by default and the calling procedure stores the bill to party PARTY_NUMBER from the HZ_PARTIES table in the LINE_EXT_VARCHAR_ATTRIBUTE12 column of the ZX_PRVDR_LINE_EXTNS_GT table. This value is used to determine the taxability of the individual customer.

FUNCTION COMPANY_CODE(

```
p_view_name IN VARCHAR2,
p_header_id IN NUMBER,
p_line_id IN NUMBER) RETURN VARCHAR2;
```

Input	Description
p_view_name	Name of view calling this function
p_header_id	ID of transaction header
p_line_id	ID of transaction line

The function returns NULL by default and the calling procedure stores 01 for both

Taxware and Vertex in the LINE_EXT_VARCHAR_ATTRIBUTE14 column of the ZX_PRVDR_LINE_EXTNS_GT table. This value is used to control the tax reporting level and identifies exemptions defined in the tax service provider system.

FUNCTION DIVISION_CODE(

```
p_view_name      IN VARCHAR2,
p_header_id      IN NUMBER,
p_line_id        IN NUMBER) RETURN VARCHAR2;
```

Input	Description
p_view_name	Name of view calling this function
p_header_id	ID of transaction header
p_line_id	ID of transaction line

The function returns NULL by default and the calling procedure stores 01 for both Taxware and Vertex in the LINE_EXT_VARCHAR_ATTRIBUTE15 column of the ZX_PRVDR_LINE_EXTNS_GT table. This value is used to control the tax reporting level and identifies exemptions defined in the tax service provider system.

FUNCTION SERVICE_INDICATOR(

```
p_view_name      IN VARCHAR2,
p_header_id      IN NUMBER,
p_line_id        IN NUMBER) RETURN NUMBER;
```

Input	Description
p_view_name	Name of view calling this function
p_header_id	ID of transaction header
p_line_id	ID of transaction line

The function returns NULL by default and the calling procedure stores 1, 2, or 3 in the LINE_EXT_VARCHAR_ATTRIBUTE1 column of the ZX_PRVDR_LINE_EXTNS_GT table. 1 indicates *service*; 2 indicates *rental*; 3 indicates *non-service*. The value is taken from the eBTax Taxware: Service Indicator profile option.

FUNCTION TAX_SEL_PARM(

```
p_view_name      IN VARCHAR2,  
p_header_id     IN NUMBER,  
p_line_id       IN NUMBER) RETURN NUMBER
```

Input	Description
p_view_name	Name of view calling this function
p_header_id	ID of transaction header
p_line_id	ID of transaction line

The function returns NULL by default and the calling procedure stores the value 2 or 3 in the LINE_EXT_NUMBER_ATTRIBUTE6 column of the ZX_PRVDR_LINE_EXTNS_GT table. 2 means use only the ship-to address in the tax calculation; 3 means use all jurisdiction information in the tax calculation. The value is taken from the eBTax Taxware: Tax Selection profile option.

FUNCTION CUSTOMER_NAME(

```
p_view_name IN VARCHAR2,  
p_header_id IN NUMBER,  
p_line_id IN NUMBER) RETURN VARCHAR2;
```

Input	Description
p_view_name	Name of view calling this function
p_header_id	ID of transaction header
p_line_id	ID of transaction line

The function returns NULL by default and the calling procedure stores the bill to party PARTY_NAME from the HZ_PARTIES table in the LINE_EXT_VARCHAR_ATTRIBUTE13 column of the ZX_PRVDR_LINE_EXTNS_GT table. This value is used on the Sales/Use Tax Report to report by customer name.

FUNCTION VENDOR_CONTROL_EXEMPTIONS(

```
p_view_name      IN VARCHAR2,  
p_header_id     IN NUMBER,  
p_line_id       IN NUMBER,  
p_trx_type_id   IN NUMBER) RETURN VARCHAR2;
```

Input	Description
p_view_name	Name of view calling this function
p_header_id	ID of transaction header
p_line_id	ID of transaction line
p_trx_type_id	ID of the transaction type

The function returns NULL by default and the calling procedure stores ATTRIBUTE1 of the RA_CUST_TRX_TYPES_ALL table in the LINE_EXT_VARCHAR_ATTRIBUTE16 column of the ZX_PRVDR_LINE_EXTNS_GT table. The value corresponds to the job number which is used to determine exemptions.

FUNCTION USE_NEXPRO(

```
p_view_name    IN VARCHAR2,
p_header_id    IN NUMBER,
p_line_id      IN NUMBER) RETURN VARCHAR2
```

Input	Description
p_view_name	Name of view calling this function
p_header_id	ID of transaction header
p_line_id	ID of transaction line

The function returns NULL by default and the calling procedure assigns the value Y or N to the LINE_EXT_VARCHAR_ATTRIBUTE17 column of the ZX_PRVDR_LINE_EXTNS_GT table.

The value indicates whether Taxware uses the Nexpro functionality: Y = Use Nexpro; N = Do not use Nexpro. The value is taken from the eBTax Taxware: Use Nexpro profile option.

FUNCTION POO_ADDRESS_CODE(

```
p_view_name    IN VARCHAR2,
p_header_id    IN NUMBER,
p_line_id      IN NUMBER,
p_salesrep_id  IN NUMBER) RETURN VARCHAR2;
```

Input	Description
p_view_name	Name of view calling this function
p_header_id	ID of transaction header
p_line_id	ID of transaction line
p_salesrep_id	ID of the primary sales representative

The function returns NULL by default and the calling procedure stores the value in the ZX_PRVDR_LINE_EXTNS_GT table as per the description below. This function is only for Taxware.

The value of the first character is always 1. The rest of the string is the jurisdiction code for the Point of Order Origin. It is derived from the SALES_TAX_GEOCODE column of the RA_SALESREPS view.

FUNCTION CALCULATION_FLAG(

```
p_view_name    IN VARCHAR2,
p_header_id    IN NUMBER,
p_line_id      IN NUMBER) RETURN VARCHAR2;
```

Input	Description
p_view_name	Name of view calling this function
p_header_id	ID of transaction header
p_line_id	ID of transaction line

The function returns NULL by default and the calling procedure stores a 5-character string, to represent the five jurisdiction level calculation flags, in the LINE_EXT_VARCHAR_ATTRIBUTE21 column of the ZX_PRVDR_LINE_EXTNS_GT table. The first character is for the state tax; the second for the county tax; the third for the city tax; the fourth for the secondary county tax; and the fifth for the secondary city tax.

Each character identifies whether tax should be calculated at a particular jurisdiction level. 1 indicates that tax should not be calculated for this level; 0 indicates that tax should be calculated.

FUNCTION TRX_LINE_TYPE(

```
p_view_name    IN VARCHAR2,  
p_header_id   IN NUMBER,  
p_line_id     IN NUMBER) RETURN VARCHAR2;
```

Input	Description
p_view_name	Name of view calling this function
p_header_id	ID of transaction header
p_line_id	ID of transaction line

The function returns NULL by default and the calling procedure stores the value SALE in the LINE_EXT_VARCHAR_ATTRIBUTE1 column of the ZX_PRVDR_LINE_EXTNS_GT table. Valid values are PURCHASE, RENTAL, SALE, and SERVICE.

FUNCTION CUSTOMER_CLASS(

```
p_view_name    IN VARCHAR2,  
p_header_id   IN NUMBER,  
p_line_id     IN NUMBER,  
p_customer_id IN NUMBER) RETURN VARCHAR2;
```

Input	Description
p_view_name	Name of view calling this function
p_header_id	ID of transaction header
p_line_id	ID of transaction line
p_customer_id	ID of customer (ship-to, bill-to, or other)

The function returns NULL by default and the calling procedure also stores the value NULL in the LINE_EXT_VARCHAR_ATTRIBUTE13 column of the ZX_PRVDR_LINE_EXTNS_GT table. You can customize the function to return a customer class code to use to determine exemptions.

PROCEDURE GET_EXEMPTIONS(

```
p_exemption_id IN NUMBER,  
p_state_exempt_percent OUT NUMBER,  
p_state_exempt_reason OUT VARCHAR2,  
p_state_cert_no OUT VARCHAR2,  
p_county_exempt_percent OUT NUMBER,  
p_county_exempt_reason OUT VARCHAR2,  
p_county_cert_no OUT VARCHAR2,  
p_city_exempt_percent OUT NUMBER,  
p_city_exempt_reason OUT VARCHAR2,  
p_city_cert_no OUT VARCHAR2,  
p_sec_county_exempt_percent OUT NUMBER,  
p_sec_city_exempt_percent OUT NUMBER,  
p_use_step OUT VARCHAR2,  
p_step_proc_flag OUT VARCHAR2,  
p_crit_flag OUT VARCHAR2)
```

Input	Description
p_exemption_id	ID of exemption record
p_<juris>_exempt_percent	Exemption percent for jurisdiction
p_<juris>_exempt_reason	Exemption reason for jurisdiction
p_<juris>_cert_no	Exemption certificate number for jurisdiction
p_use_step	Use STEP90 flag
p_step_proc_flag	STEP processing flag
p_crit_flag	Criterion flag

The procedure returns NULL values by default for all output parameters and the calling procedure assigns the value as per the description below. This procedure is called for Taxware integration only.

E-Business Tax stores exemptions for each jurisdiction individually in the ZX_EXEMPTIONS table. Therefore, this procedure may get called five times if the exemptions are defined for each of the five jurisdiction levels. E-Business Tax assigns the values stored in the ZX_EXEMPTIONS table for each jurisdiction. Only the first two characters of the exemption reason stored in ZX_EXEMPTIONS are passed to Taxware.

If ZX_EXEMPTIONS does not have exemption records for all five jurisdictions, Taxware is passed Y for p_use_step, 1 for p_step_proc_flag, and R for p_crit_flag.

If this procedure is re-written at an installation, E-Business Tax passes the values of the flags p_use_step, p_step_proc_flag and p_crit_flag to Taxware from the last call

E-Business Tax makes to the GET_EXEMPTION procedure for a transaction line. Each call to GET_EXEMPTION should return a jurisdiction-specific exempt percentage, exempt reason, and exempt certificate number that is passed to Taxware.

PROCEDURE GET_EXEMPTIONS(

```
p_exemption_id IN NUMBER,
p_cert_no OUT VARCHAR2,
p_state_exempt_percent OUT NUMBER,
p_state_exempt_reason OUT VARCHAR2,
p_county_exempt_percent OUT NUMBER,
p_county_exempt_reason OUT VARCHAR2,
p_city_exempt_percent OUT NUMBER,
p_city_exempt_reason OUT VARCHAR2,
p_district_exempt_percent OUT NUMBER,
p_district_exempt_reason OUT VARCHAR2)
```

Input	Description
p_exemption_id	ID of exemption record
p_<juris>_exempt_percent	Exemption percent for jurisdiction
p_<juris>_exempt_reason	Exemption reason for jurisdiction
p_cert_no	Exemption certificate number

The procedure returns NULL values by default for all output parameters and the calling procedure assigns the value as per the description below. This procedure is called for Vertex integration only.

E-Business Tax stores exemptions for each jurisdiction individually in the ZX_EXEMPTIONS table. Therefore, this procedure may get called four times if the exemptions are defined for each of the four jurisdiction levels. E-Business Tax assigns the values stored in the ZX_EXEMPTIONS table for each jurisdiction. Only the first character of the exemption reason stored in ZX_EXEMPTIONS is passed to Vertex.

If this procedure is re-written at an installation, each call to GET_EXEMPTION should return a jurisdiction-specific exempt percentage and exempt reason that is passed to Vertex. The certificate number received from the last call to this function for a transaction line is passed to Vertex for that transaction line.

Related Topics

Tax Partner Services Plug-In, *Oracle E-Business Tax Reporting Guide*

Using Flexfields and Fields in Other Applications

Some descriptive flexfields and fields in other applications are used specifically for service provider integration. The following tables list all such fields. Note that all fields are optional.

Predefined Descriptive Flexfields for Storing Tax Information

The table below shows the predefined descriptive flexfields that you can use to enter ship-from information.

Table Name	Column	Window	Field Name	Description
HR_LOCATION S_V (Location Address descriptive flexfield)	LOC_ INFORMATION 1 3	Location Address	Sales Tax Override	Ship-From jurisdiction code.
HR_LOCATION S_V (Location Address descriptive flexfield)	LOC_ INFORMATION 1 4	Location Address	Inside City Limits	Indicates whether the address is considered inside or outside the city limits (Vertex only).

User-Defined Descriptive Flexfields Used to Store Tax Information

If you want to use any of the following descriptive flexfields to store tax information, you must register each flexfield as required.

Table Name	Field Name	Column	Description	Value Set Name
AR_ RECEIVABLES_ TRX	Receivables Activity Information	ATTRIBUTE15	Post Adjustment to Service Provider	AR_TAXVDR_Y ES_NO
RA_CUST_TRX_ TYPES_ALL	Transaction Type Information	ATTRIBUTE1	Job Number (Taxware Only)	AR_TAXVDR_C HAR10

Important: Use of user-defined descriptive flexfields is considered a customization. Functions supplied by Oracle may change in future releases to support these fields in core tables. Additionally, if these columns are in use by your customizations, you may need to either redefine the tax functions so that they look in other attribute columns, or your customizations may need to be changed.

Other Application Fields Used to Store Tax Information

The table below lists fields in other applications that you can use to enter point of order acceptance (POA), point of order origin (POO), and ship-to information.

Table Name	Column	Window	Field Name	Description
JTF_RS_SALESREPS	SALES_TAX_GEOCODE	Sales Force	Geo Override	Point of Order Origin jurisdiction code (Taxware)
				Point of Order Acceptance GeoCode (Vertex)
	SALES_TAX_IN_SIDE_CITY_LIMITS	Sales Force	Inside City Limits	Indicates whether the POA address is inside the city limits (Vertex Only)
HZ_LOCATION_S	SALES_TAX_GEOCODE	Customer Addresses	Geo Override	Ship-to GeoCode
	SALES_TAX_IN_SIDE_CITY_LIMITS	Customer Addresses	Inside City Limits	Indicates whether the ship-to address is inside the city limits (Vertex Only)
AR_SYSTEM_PARAMETERS_ALL	SALES_TAX_GEOCODE	System Options	Geo Override	Point of Order Acceptance jurisdiction code (Taxware Only)

Related Topics

Defining Descriptive Flexfields, *Oracle Applications Flexfields Guide*

Sample Scenario: Tax Rate API

Loading a Custom Rate File

The following describes some key information and restrictions regarding the loading of a custom rate file:

- There are no limitations in tax content data upload for other tax partners. Tax content data upload functions the same for Vertex and Taxware.
- This scenario pertains only to the US.
- Loading a custom rate file creates the tax to rate setup under an established regime, however you should manually create the taxes in order to properly set the accounting and exemption handling methods.
- You should not use this methodology to maintain an upgraded regime. However, you can use it to maintain a manually created regime.
- You cannot upload the tax content data for two different regimes. The regime that you use to upload the data first time should be used each time.

Record Types

Record Types

Record Type	Description
00	Country
01	State Geography Record

03	County Geography Record
06	City Geography Record
08	Postal Code Record
09	Tax Rate Record

Detailed examples of the records in a content file are given in the *Example of Content File Records*, page A-10 section that follows.

Content File Attributes Definitions

Content File Attributes Definitions

	Content Data Type	Data Type	Size	Description
1	Country Code	NUMBER	3	This mandatory attribute identifies a country. It should be leading zeros filled if not of 3 digits.
2	State Jurisdiction Code	NUMBER	2	This mandatory attribute identifies a state geography code and/ or state tax jurisdiction code. It should be leading zero filled if a state jurisdiction code is of one digit.

3	County Jurisdiction Code	NUMBER	3	This mandatory attribute in a county or city record identifies a county geography code and/ or county tax jurisdiction code. It should be leading zeros filled if a county jurisdiction code is of less than three digits.
4	City Jurisdiction Code	CHARACTER	23	This mandatory attribute in a city record identifies a city geography code and/ or city tax jurisdiction code. It should be trailing spaces filled.
5	Effective From	DATE	8	This mandatory attribute is the effective from date. The date should be provided in YYYYMMDD format.
6	Effective To	DATE	8	This is the effective to date. This attribute should be filled with SPACES if there is no effective to date for a jurisdiction. The date should be provided in YYYYMMDD format.

7	Creation Version	NUMBER	5	This mandatory attribute identifies the file version in which this record was first introduced.
8	Last Updated Version	NUMBER	5	This mandatory attribute identifies the file version in which this record was last updated.
9	Country/State Abbreviation	CHARACTER	2	This mandatory attribute gives the two characters alphabetic abbreviation for a country or state.
10	Geography Name	CHARACTER	30	This is a mandatory attribute. In a state record it should have the state name, in a county record it should have the county name and in a city record it should have the city name. This field is trailing spaces filled.
11	Tax Authority Level	CHARACTER	6	This mandatory attribute in a tax rate record identifies if the given tax rate is for STATE, COUNTY or CITY tax.

12	Jurisdiction Serial Number	NUMBER	1	This attribute can have only two values 0 or 1. These values represent outside and inside city limits respectively.
13	Multiple Parent Flag	CHARACTER	1	This optional attribute identifies geography with multiple parents such as a city in two counties. At present Multiple Parents are not supported and user should pass N only.
14	Zip Begin	CHARACTER	5	This mandatory attribute is available only in zip range record.
15	Zip End	CHARACTER	5	This is a mandatory attribute. If there is a discrete zip code and not a range, same value should be given in both Zip Begin and Zip End.

16	Tax Rate	NUMBER	8	This mandatory attribute should have eight digits with no decimal point. First three digits are considered before decimal and the last five are considered after decimal. This field is zero filled, for example, a rate of 2.5 should be given as 00250000.
17	Tax Rate Active Flag	CHARACTER	1	This mandatory attribute is used for inactivating a tax rate. It is used in the situations when a wrong rate got published that needs to be disabled.
18	Primary City Flag	CHARACTER	1	This attribute is mandatory for city geography records and used for identifying the primary city and alternate city names. This attribute should be passed only for City Geography records. Primary City Flag = Y for Primary City and = N for Alternate City Names.

Record Layouts

Geography Records

	Content File Column Name	Size	Positions	Update Allowed?
1	Record Type	2	1-2	N
2	Country Code	3	3-5	N
3	State Jurisdiction Code	2	6-7	N
4	County Jurisdiction Code	3	8-10	N
5	City Jurisdiction Code	23	11-33	N
6	Effective From	8	34-41	N
7	Effective To	8	41-49	Y (Change is only allowed from a blank date to an actual effective to date). At present, geography end-dating is not supported in the Tax Content Upload Program
8	Creation Version	5	50-54	N
9	Last Updated Version	5	55-59	Y (Can update to a higher version only)
10	Country/State Abbreviation	2	60-61	N

11	Geography Name	30	62-91	N
12	Multiple Parent Flag	1	92-92	N
13	Jurisdiction Serial Number	1	93-93	N
14	Primary City Flag	1	94-94	N

Zip Range Record

	Content File Column Name	Size	Positions	Update Allowed
1	Record Type	2	1-2	N
2	Country Code	3	3-5	N
3	State Jurisdiction Code	2	6-7	N
4	County Jurisdiction Code	3	8-10	N
5	City Jurisdiction Code	23	11-33	N
6	Effective From	8	34-41	N
7	Effective To	8	42-49	Y (Change is only allowed from a blank date to an actual effective to date)
8	Creation Version	5	50-54	N

9	Last Update Version	5	55-59	Y (Can update to a higher version only)
10	Zip Begin	5	60-64	N
11	Zip End	5	65-69	N
12	Geography Name	30	70-99	N

Tax Rate Record (Sales, Use, Rental, Lease)

	Content File Column Name	Size	Positions	Update Allowed?
1	Record Type	2	1-2	N
2	Country Code	3	3-5	N
3	State Jurisdiction Code	2	6-7	N
4	County Jurisdiction Code	3	8-10	N
5	City Jurisdiction Code	23	11-33	N
6	Effective From	8	34-41	N
7	Effective To	8	42-49	Y (Change is only allowed from a blank date to an actual effective to date)
8	Creation Version	5	50-54	N

9	Last Updated Version	5	55-59	Y (Can update to a higher version only)
10	Tax Rate	8	60-67	N
11	Tax Rate Active Flag	1	68-68	Y (Can only update the flag from A to N)
12	Tax Authority Level	6	69-74	N

Possible Values of Attributes

Attribute Name	Possible Values
Tax Authority Level	STATE, COUNTY, CITY
Tax Rate Active Flag	A (Active), N (In Active)
Multiple Parent Flag	Y (Yes), N (No)
Primary City Flag	Y (Yes), N (No)
Jurisdiction Serial Number	0, 1

Examples of Content File Records

Note: Dates are in format YYYYMMDD. Creation Version and Last Updated Versions are both 1 as the records are being first introduced in version 1 of the file and have not yet been updated in any subsequent versions.

Geography Record

Content File Column Name	Position	Country Record	State Record	County Record	Primary City Record	Alternate City Record
Record Type	1-2	00	01	03	06	06
Country Code	3-5	001	001	001	001	001
State Jurisdiction Code	6-7		05	05	03	03
County Jurisdiction Code	8-10			081	081	081
City Jurisdiction Code	11-33				2790	2790
Effective From	34-41	19900101	19900101	19900101	19900101	19900101
Effective To	42-49					
Creation Version	50-54	1	1	1	1	1
Last Updated Version	55-59	1	1	1	1	1
Country/State Abbreviation	60-61	US	CA	CA	CA	CA
Geography Name	62-91	United States	California	San Mateo	Redwood City	Redwood Shores

Multiple Parent Flag	92-92	N	N	N	N	N
Jurisdiction Serial Number	93-93	1	1	1	1	1
Primary City Flag	94-94				Y	N

The preceding table explains the country, state, county, primary city and alternate city name records in the content file.

For a Country Record, the record type is 00. Country Code = 001 for United States. State, County and City jurisdiction code columns will have no values. Effective from is 01-Jan-1990 and Effective to is Null. Country/State Abbreviation = US.

For a State Record, the record type is 01. Country Code = 001 and State Jurisdiction Code = 05 for California i.e. State California under Country US. County and City jurisdiction code columns will have no values. Effective from is 01-Jan-1990 and Effective to is Null. Country/State Abbreviation = CA.

For a County Record, the record type is 03. Country Code = 001, State Jurisdiction Code = 05 and County Jurisdiction Code = 081 for San Mateo, such as County San Mateo under State California under Country US. City jurisdiction code column will have no value. Effective from is 01-Jan-1990 and Effective to is Null. Country/State Abbreviation = CA.

For a Primary City Record, the record type is 06. Country Code = 001, State Jurisdiction Code = 05, County Jurisdiction Code = 081 and City Jurisdiction Code = 2790 for Redwood City, such as City Redwood City under County San Mateo under State California under Country US. Effective from is 01-Jan-1990 and Effective to is Null. Country/State Abbreviation = CA. The Primary City Flag is Y.

For an Alternate City Name Record, the values of columns record type, Country Code, State Jurisdiction Code, County Jurisdiction Code, City Jurisdiction Code, and Country/State Abbreviation are same as the Primary City record but the Primary City Flag is N. Also see that the Geography Name is different Redwood Shores (for example, the city Redwood City is also known as Redwood Shores).

Note: Geography end dating is not supported by the Tax Content Upload Program.

Content File Column Name	Position	Primary City Record	Alternate City Name Record	Content File Column Name	Position	Primary City Zip Range	Alternate City Zip Range
Record Type	1-2	06	06	Record Type	1-2	08	08
Country Code	3-5	001	001	Country Code	3-5	001	001
State Jurisdiction Code	6-7	03	03	State Jurisdiction Code	6-7	030	03
County Jurisdiction Code	8-10	081	081	County Jurisdiction Code	8-10	081	081
City Jurisdiction Code	11-33	2790	2790	City Jurisdiction Code	11-33	2790	2790
Effective From	34-41	19900101	19900101	Effective From	34-41	19900101	19900101
Effective To	42-49			Effective To	42-49		
Creation Version	50-54	1	1	Creation Version	50-54	1	1
Last Updated Version	55-59	1	1	Last Updated Version	55-59	1	1
Country/State Abbreviation	60-61	CA	CA	Zip Begin	60-64	94061	64065
Geography Name	62-91	Redwood City	Redwood Shores	Zip End	65-69	64065	94065

Multiple Parent Flag	92-92	N	N	Geography Name	77-99	Redwood City	Redwood Shores
Jurisdiction Serial Number	93-93	1	1				
Primary City Flag	94-94	Y	N				

The preceding table explains the postal code records for the primary city and alternate city record in the content file.

For a Postal Code Record, the record type is 08. The value of columns Country Code, State Jurisdiction Code, County Jurisdiction Code, City Jurisdiction Code and Geography Name are same as the corresponding City Geography Record. Effective from is 01-Jan-1990 and Effective to is Null. Zip Begin is the Start Postal Code and Zip End is the End Postal Code of the postal range of the city. If the city has only one postal code for it then both Zip Begin and Zip End will be same. For example, Postal Code Range for Redwood City is 94061 to 94065 and Postal Code for the Alternate City Redwood Shores is 94065.

Tax Rate Record

Content File Column Name	Position	State Tax Rate Record	County Tax Rate Record	City Tax Rate Record
Record Type	1-2	09	09	09
Country Code	3-5	001	001	001
State Jurisdiction Code	6-7	05	05	05
County Jurisdiction Code	8-10		017	017
City Jurisdiction Code	11-33			7600
Effective From	34-41	20040101	20040101	20040101

Effective To	42-49			
Creation Version	50-54	1	1	1
Last Update Version	55-59	1	1	1
Tax Rate	60-67	00625000	001000000	000500000
Tax Rate Active Flag	68-68	A	A	A
Tax Authority Level	69-74	STATE	COUNTY	CITY

The preceding table explains the tax rate records for the state, county and city record in the content file.

The record type for the Tax Rate record is 09.

For a State Tax Rate Record, the Tax Authority Level is STATE. The values of columns Country Code and State Jurisdiction Code are same as State Geography Code record. County and City jurisdiction code columns will have no values. Effective from is 01-Jan-2004 and Effective to is Null. Tax Rate = 00625000 or 6.25% and Active Flag is A or Yes.

For a County Tax Rate Record, the Tax Authority Level is COUNTY. The values of columns Country Code, State Jurisdiction Code and County Jurisdiction Code are same as County Geography Code record. City jurisdiction code column will have no value. Effective from is 01-Jan-2004 and Effective to is Null. Tax Rate = 001000000 or 1.0% and Active Flag is A or Yes.

For a City Tax Rate Record, the Tax Authority Level is CITY. The values of columns Country Code, State Jurisdiction Code, County Jurisdiction Code and City Jurisdiction Code are same as City Geography Code record. Effective from is 01-Jan-2004 and Effective to is Null. Tax Rate = 000500000 or 0.5% and Active Flag is A or Yes.

Tax Authority level can be used to override the tax rate of a particular geography.

Content File Column Name	Position	County Tax Rate Record	City Tax Rate Record
Record Type	1-2	09	09
Country Code	3-5	001	001

State Jurisdiction Code	6-7	48	48
County Jurisdiction Code	8-10	044	044
City Jurisdiction Code	11-33		1922
Effective From	34-41	20040701	20040701
Effective To	42-49		
Creation Version	50-54	1	1
Last Update Version	55-59	1	1
Tax Rate	60-67	00100000	000500000
Tax Rate Active Flag	68-68	A	A
Tax Authority Level	69-74	COUNTY	COUNTY

The preceding table explains the tax rate records with City Overriding the County Tax Rate record in the content file.

The County tax rate record shows that the County 044 of State 48 has Tax-authority COUNTY and an active tax rate of 1%.

In the City tax rate record, State, County and City Jurisdiction Codes are given but the tax authority level is specified as COUNTY. So the record identifies a city but the tax rate is of county tax. This means for the City 1922 of County 044 and State 48, the tax rate will be 0.5% for the county 044 in place of 1.0%.

Similarly, we can have a County tax rate record with Tax-Authority STATE to override state tax rate and City tax rate record with Tax-Authority STATE to override state tax rate.

Tax Rate Change and Error Correction

Example 1: State Tax Rate Change

Assume that the state tax rate of California (State Jurisdiction Code: 05) was changed to 7.25 effective from 1-Jul-2004. The existing record of California state tax rate is updated and a new tax rate record is added in the following table. Notice the values in bold.

Content File Column Name	Position	State Tax Rate Record	State Tax Rate Record
Record Type	1-2	09	09
Country Code	3-5	001	001
State Jurisdiction Code	6-7	05	05
County Jurisdiction Code	8-10		
City Jurisdiction Code	11-33		
Effective From	34-41	20040101	20040701
Effective To	42-49	20040630	
Creation Version	50-54	1	2
Last Updated Version	55-59	2	2
Tax Rate	60-67	00625000	00725000
Tax Rate Active Flag	68-68	A	A
Tax Authority Level	69-74	STATE	STATE

In the first record, the Last Updated Version has been updated with 2 indicating the record has changed in file version 2. The Effective to has been changed to 30-Jun-2004. The second record has both Creation Version and Last Updated Version as 2 since this record is created in file version 2 and has not been updated since then. This record has been created with Effective From 01-Jul-2004 and Tax Rate 7.25%.

Example 2: County Tax Rate Change with Data Error

To extend the preceding example, assume that the county tax rate has changed to 1.25% effective 1-Jul-1990. However, the content in the file shows 1.5% instead of 1.25%.

Content File Column Name	Position	County Tax Rate Record	County Tax Rate Record
---------------------------------	-----------------	-------------------------------	-------------------------------

Record Type	1-2	09	09
Country Code	3-5	001	001
State Jurisdiction Code	6-7	05	05
County Jurisdiction Code	8-10	053	053
City Jurisdiction Code	11-33		
Effective From	34-41	19900101	19900701
Effective To	42-49	19900630	
Creation Version	50-54	1	2
Last Updated Version	55-59	2	2
Tax Rate	60-67	1	1.5
Tax Rate Active Flag	68-68	A	A
Tax Authority Level	69-74	COUNTY	COUNTY

Example 3: Data Error Correction

The incorrect county tax rate of 1.5% is corrected to 1.25% by inactivating the wrong data record and by providing a new record. Oracle does not provide any mechanism for partners to indicate deletion of a record. If the wrong rate has already been used, it can't be updated. Therefore, partners must make existing record inactive and provide a new record with correct tax rate.

Content File Column Name	Position	State Tax Rate Record	State Tax Rate Record
Record Type	1-2	09	09
Country Code	3-5	001	001

State Jurisdiction Code	6-7	05	05
County Jurisdiction Code	8-10	053	053
City Jurisdiction Code	11-33		
Effective From	34-41	19900701	20040701
Effective To	42-49		
Creation Version	50-54	2	3
Last Updated Version	55-59	3	3
Tax Rate	60-67	1.5	1.25
Tax Rate Active Flag	68-68	N	A
Tax Authority Level	69-74	COUNTY	COUNTY

The Last Updated Version of the record introduced in version 2 has been updated with 3 indicating the record has changed in file version 3. The Active Flag has been changed to N. The second record has both Creation Version and Last Updated Version as 3 since this record is created in file version 3 and has not been updated since then. This record has been created with correct Tax rate 1.25%.

In the preceding examples, state and county have been taken as an example to show data change and error correction. All these changes and error corrections apply to the state, county and city tax. This change affects only the tax rate record.

