

# **Oracle Enterprise Taxation Management**

Optional Third-Party Products Installation Guide

Version 2.2.0

**E17778-01**

March 2009

Oracle Enterprise Taxation Management Optional Third Party Products

E17778-01

Copyright © 2000, 2009, Oracle and/or its affiliates. All rights reserved.

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 software or related documentation 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 RIGHTS

Programs, software, databases, and related documentation and technical data delivered to U.S. Government customers are "commercial computer software" or "commercial technical data" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, the use, duplication, disclosure, modification, and adaptation shall be subject to the restrictions and license terms set forth in the applicable Government contract, and, to the extent applicable by the terms of the Government contract, the additional rights set forth in FAR 52.227-19, Commercial Computer Software License (December 2007). Oracle USA, Inc., 500 Oracle Parkway, Redwood City, CA 94065.

This software 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 which may create a risk of personal injury. If you use this software in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure the safe use of this software. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software in dangerous applications.

Oracle is a registered trademark of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.

This software 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

<b>Preface</b> .....	<b>i-i</b>
Audience .....	i-i
Documentation Accessibility .....	i-i
Accessibility of Code Examples in Documentation .....	i-i
Accessibility of Links to External Web Sites in Documentation .....	i-ii
Related Documents .....	i-ii
Conventions .....	i-ii
<b>Chapter 1</b>	
<b>Overview</b> .....	<b>1-1</b>
Third-Party Products for Oracle Enterprise Taxation Management .....	1-2
What is this book? .....	1-2
<b>Chapter 2</b>	
<b>Installing and Configuring Oracle Utilities Web Self Service</b> .....	<b>2-1</b>
Oracle Utilities Web Self Service Installation Package .....	2-2
Overview .....	2-2
Preparing for the Web Self Service Installation .....	2-2
Installing Oracle Utilities Web Self Service.....	2-2
Web Server Configuration - WebLogic.....	2-4
Setting Up the Web Application - WebLogic.....	2-4
Web Server Configuration - Oracle Application Server.....	2-5
Setting Up the Web Application - Oracle Application Server .....	2-5
Web Server Configuration - WebSphere .....	2-6
Setting Up the Web Application - WebSphere.....	2-6
Oracle ETM Web Self Service Configuration.....	2-7
Configuring the Connection To Oracle Enterprise Taxation Management.....	2-7
Property File Configuration .....	2-7
Customizing Self Service Functionality .....	2-18
<b>Chapter 3</b>	
<b>Reports Configuration</b> .....	<b>3-1</b>
Reports Configuration for Business Objects Enterprise.....	3-2
Configuring The System To Enable Reports .....	3-2
Sample Reports Supplied with the Product .....	3-3
How to Use a Sample Report Provided with the System .....	3-3
Reports Configuration for Oracle BI Publisher .....	3-11
Installing Oracle BI Publisher Enterprise .....	3-11
Configuring The System To Enable Reports .....	3-11
Sample Reports Supplied with the Product .....	3-12
<b>Chapter 4</b>	
<b>Additional Products</b> .....	<b>4-1</b>
Business Objects XI R2 Professional Edition .....	4-2
Installing Business Objects XI Server.....	4-2

Configure Business Object Enterprise .....	4-2
On-line Document Display with DOC1 .....	4-4
Supported DOC1 Reports.....	4-4
Installing and Integrating DOC1 Templates with ETM.....	4-4
Description of On-line Bill Display .....	4-5
On-line Bill Display Components .....	4-5
On-Line Document Display Components .....	4-7
Point-Of-Sale (POS) Printer Installation .....	4-9
Installation.....	4-9
Special Considerations.....	4-9

## Appendix A

<b>License and Copyright Notices .....</b>	<b>A-1</b>
Third Party Products.....	A-1
Notice concerning usage of ANTLR.....	A-1
Notice concerning usage of Apache Software.....	A-1
Notice concerning usage of ASM.....	A-4
Notice concerning usage of CruiseControl.....	A-4
Notice concerning usage of dom4j .....	A-5
Notice concerning usage of Ehcache.....	A-6
Notices concerning usage of Hibernate and c3p0 .....	A-7
Notice concerning usage of International Components for Unicode (ICU4J) .....	A-12
Notice concerning usage of fcrypt .....	A-13
Notice concerning usage of Jaxen.....	A-14
Notice concerning usage of JOSSO.....	A-15
Notice concerning usage of libjpeg.....	A-15
Notice concerning usage of libproj4.....	A-16
Notice concerning usage of libtiff.....	A-16
Notice concerning usage of MX4J .....	A-16
Notice concerning usage of PicoContainer .....	A-17
Notice concerning usage of QDox .....	A-18
Notice concerning usage of XStream .....	A-18
Notice concerning usage of Perl.....	A-19
Notice concerning usage of Mime-Base64 Perl Module.....	A-21
Notice concerning usage of Mime-Lite Perl Module .....	A-21
Notice concerning usage of DBD::DB2 Perl Module .....	A-21
Notice concerning usage of DBI Perl Module.....	A-22

---

---

# Preface

This guide provides instructions for installing and configuring optional third-party products that can be used with Oracle Enterprise Taxation Management.

This preface contains these topics:

- **Audience**
- **Documentation Accessibility**
- **Related Documents**
- **Conventions**

## Audience

*Oracle Enterprise Taxation Management Optional Third-Party Products* is intended for anyone who needs to install and configure third-party products, such as Web Self-Service or Reporting, for Oracle Enterprise Taxation Management

## Documentation Accessibility

Our goal is to make Oracle products, services, and supporting documentation accessible, with good usability, to the disabled community. To that end, our documentation includes features that make information available to users of assistive technology. This documentation is available in HTML format, and contains markup to facilitate access by the disabled community. Accessibility standards will continue to evolve over time, and Oracle is actively engaged with other market-leading technology vendors to address technical obstacles so that our documentation can be accessible to all of our customers. For more information, visit the Oracle Accessibility Program Web site at

<http://www.oracle.com/accessibility/>

## Accessibility of Code Examples in Documentation

Screen readers may not always correctly read the code examples in this document. The conventions for writing code require that closing braces should appear on an otherwise empty line; however, some screen readers may not always read a line of text that consists solely of a bracket or brace.

---

## Accessibility of Links to External Web Sites in Documentation

This documentation may contain links to Web sites of other companies or organizations that Oracle does not own or control. Oracle neither evaluates nor makes any representations regarding the accessibility of these Web sites.

### TTY Access to Oracle Support Services

Oracle provides dedicated Text Telephone (TTY) access to Oracle Support Services within the United States of America 24 hours a day, seven days a week. For TTY support, call 800.446.2398.

## Related Documents

For more information, see these Oracle documents:

- *Oracle Enterprise Taxation Management Quick Install Guide*
- *Oracle Enterprise Taxation Management Installation Guide*
- *Oracle Enterprise Taxation Management Database Administrator's Guide*
- *Oracle Enterprise Taxation Management Operations and Configuration Guide*

## Conventions

The following text conventions are used in this document:

<b>Convention</b>	<b>Meaning</b>
<b>boldface</b>	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
<i>italic</i>	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

# Chapter 1

---

## Overview

This chapter provides an overview of the optional third-party products available for Oracle Enterprise Taxation Management, including:

- **Third-Party Products for Oracle Enterprise Taxation Management**
- **What is this book?**

## Third-Party Products for Oracle Enterprise Taxation Management

This document discusses the following third-party products that can be used with Oracle Enterprise Taxation Management

- Oracle Utilities Web Self Service
- Business Objects Reporting
- Oracle BI Publisher
- Business Objects XI R2 Professional Edition
- DOC1
- Point-of-Sale Printer software

### What is this book?

This book describes the installation and configuration of optional third-party products for Oracle Enterprise Taxation Management, including the following:

- **Chapter 1: Overview** (this chapter) provides an overview of the third-party products used with Oracle Enterprise Taxation Management.
- **Chapter 2: Installing and Configuring Oracle Utilities Web Self Service** discusses the Oracle Utilities Web Self Service software that can be used in conjunction with Oracle Enterprise Taxation Management.
- **Chapter 3: Reports Configuration** discusses the reporting features of the software that can be used by Oracle Enterprise Taxation Management. It covers Business Objects Enterprise and Oracle BI Publisher.
- **Chapter 4: Additional Products** discusses other software products, including Business Objects XI R2, DOC1, and Point-of-Sale Printer software.



# Chapter 2

---

## Installing and Configuring Oracle Utilities Web Self Service

This section discusses the installation and configuration of Oracle Utilities Web Self Service, including:

- **Oracle Utilities Web Self Service Installation Package**
- **Web Server Configuration - WebLogic**
- **Web Server Configuration - Oracle Application Server**
- **Web Server Configuration - WebSphere**
- **Oracle ETM Web Self Service Configuration**

# Oracle Utilities Web Self Service Installation Package

## Overview

Web Self Service can be installed on any server/Web Server combination listed in the Supported platform section.

Perl and Java must be installed on the target server as per the requirements for the above combination.

## Preparing for the Web Self Service Installation

The following steps describe how to download and unzip the installation file:

### For Unix Web Self Service Installation:

1. Copy the delivery file Release-SelfService-V2.2.0.tar from the Oracle Enterprise Taxation Management V2.2.0 Web Self Service folder on the installation media to a directory on your UNIX box where you would like to install the application.
2. Decompress the file by typing:

```
tar -xf Release-SelfService-2.2.0.tar
```

### For Windows Web Self Service Installation:

1. Copy the delivery file Release-SelfService-V2.2.0.zip from the Oracle Enterprise Taxation Management V2.2.0 Web Self Service folder on the installation media to a directory on your Windows box where you would like to install the application.
2. Unzip the file by using Winzip or Winrar utility

A directory Release-SelfService-V2.2.0 with following substructure is created under the directory where you placed the tar file:

File/Folder	Description
../etc	Contains templates for the generation of WSS
../perllib	Oracle Perl libraries
../product	Apache Ant 1 .70 (required to build WSS)

## Installing Oracle Utilities Web Self Service

Follow these steps to install Oracle Utilities Web Self Service:

### For Unix Web Self Service Installation:

1. Change directory to Release-SelfService-V2.2.0
2. Execute the install utility:

```
./install.sh -d <Self Service installation destination directory >
```

Note: The Self Service installation destination directory must exist prior to installing Web Self Service. This directory cannot be the same directory where you are conducting the installation.

### For Windows Web Self Service Installation

1. Change directory to Release-SelfService-V2.2.0

2. Execute the install utility:

```
./install.cmd -d <Self Service installation destination directory >
```

Note: The Self Service installation destination directory must exist prior to installing Web Self Service. This directory cannot be the same directory where you are conducting the installation.

## Web Self Service Installation Menu

An interactive screen appears. You must populate each item with your environment values. For example:

```
*****
Pick your installation options:
*****
1. Destination directory name for installation.      | /spl/WSS
2. Web Server Host.                                | /sf-lin
3. Web Server Port Number.                          | 8200
4. Mail SMTP Host.                                  | mail.server
5.      Web Application Server Type.                 | WLS
6.      When OAS: SPLWeb OC4J instance name is required. | OC4J1
7.      When WAS: SPLWeb server instance name is required. | server2
```

P. Process the installation.

Each item in the above list should be configured for a successful installation.

Choose option to configure or (P) to process the installation:

Option (6) is the Web Application Server where the Oracle Enterprise Taxation Management environment is running. You can choose one of the following:

```
CONFIGURATION OPTION :      Web Application Server Type.
      You may choose one of the following products as a Web
Application Server:
      WLS - WebLogic
      WAS - Websphere
      TCAT - Tomcat
      OAS - Oracle Application Server
      OC4J - OC4J Standalone
Enter Choice (WAS) :
```

Option (6) is required if you selected "OAS" in option (5).

Option (7) is required if you selected "WAS" in option (5).

When you have specified the installation options, press **P** to continue with the installation.

Each item in the list above must be configured for a successful install.

You may deploy the Web Self Service application on any Web server supported by the application. You must have Java and Perl installed prior to the installation of Web Self Service.

# Web Server Configuration - WebLogic

## Setting Up the Web Application - WebLogic

The following are specific instructions for WebLogic. For more details, please refer to the following link: <http://edocs.bea.com/wls/docs100/index.html>

For other web servers with JSP capability, you need to perform similar actions. If you are familiar with a structure of WebLogic config.xml file, you may configure the Self Service application by directly editing this file. If you prefer to use WebLogic console, follow the instructions:

1. Start the WebLogic Console: `http://server_url:server_port/console`
2. Within the console, go to the **Deployments** link. You should see a list of applications that probably does not include SelfService. (If it does, it must be the previous version of SelfService. Delete it by clicking the trash can to the right of **SelfService**.)
3. Click **Lock & Edit** button, than **Install**. You will then get the **Install Application Assistant** page. You can browse the directories using the console interface and select the SelfService.ear that you wish to deploy. Confirm all the defaults.
4. Click **Next**. to get the **Choose Targeting Style** page. Select **Install this deployment as an application**.
5. Click **Next** to get the **Optional Settings** page. Keep the default values.
6. Click **Next**. and click **Finish**: Review the changes and click **Save**, and then click **Activate Changes**.

Once the changes have been activated you need to start the SelfService module. Go back to the **Summary of Deployments** page. Select the **SelfService** module and start it by clicking **Start**, then selecting **Servicing all requests**.

### Target Self Service to the Web Server

If this is the first time you are installing Self Service on this version of Oracle Enterprise Taxation Management, you'll have to target the application to the particular Web server (there is only one defined, it's called 'myserver').

1. While still in the Weblogic console, click on the **Targets** tab.
2. Make sure the Current Target for SelfService is "myserver".

### Create WEB User in WebLogic

**Defining the User in WebLogic.** You may choose to define a user other than WEB, if desired. However, the user ID for accessing Oracle Enterprise Taxation Management must match the user ID for WebLogic. The Oracle Enterprise Taxation Management user is defined in the properties file. Refer to **Oracle Enterprise Taxation Management User Id** on page 2-7 for more information on how to override this setting. In addition, the authorization string to be added to the HTTP authorization connection request must be modified in the properties file. Refer to **Authorization String** on page 2-8 for more information on how to override this setting.

1. While still in WebLogic console, click **Security Realms** in the Domain Structure tree on the left. Click **myrealm**, than select the **Users and Groups** tab.
2. Click **New** and create user WEB and password selfservice (all lowercase, without a space).

**Defining the Password in WebLogic.** You may choose to define a user id and password other than WEB and selfservice, if desired. However, the authorization string to be added to the HTTP authorization connection request must be modified in the properties file. Refer to **Authorization String** on page 2-8 for more information on how to override this setting.

# Web Server Configuration - Oracle Application Server

## Setting Up the Web Application - Oracle Application Server

The following are specific instructions for Oracle Application Server (OAS).

For other web servers with JSP capability, you need to perform similar actions. In order to use OAS console, follow the instructions:

1. Start the Oracle Application Server Console: `http://server_url:server_port/em/console`
2. Within the console, Click on your OC4J Instance , for example, **SPLWG**
3. Select the **Applications** tab. You should see a list of applications that probably does not include SelfService. (If it does, it must be the previous version of SelfService - Undeploy it by placing a check mark next to the SelfService Application then click "Undeploy".)
4. Click **Deploy** to go to the **Deploy: Select Archive** page. Paste the full pathname of the SelfService.ear that you wish to deploy, in the field **Location on Server**.
5. Click **Next** to go to the **Deploy: Application Attributes** page. Enter the Application Name SelfService. The **Context Root** should default to /SelfService, if not populate the field with /SelfService.
6. Click **Next** to go to the **Deploy: Deployment Settings** page. There is not any configuration that is needed on this page.
7. Click **Deploy** to go to the **Confirmation** page. No configuration is needed on this page. When the Application is successfully deployed you will see a message like the following: "The Application "SelfService" has been successfully deployed."

## Create WEB User in Oracle Application Server

**Defining the User in OAS.** You may choose to define a user other than WEB, if desired. However, the user ID for accessing Oracle Enterprise Taxation Management must match the user ID for Oracle Application Server.

Refer to **Oracle Enterprise Taxation Management User Id** on page 2-7 for more information on how to override this setting. In addition, the authorization string to be added to the HTTP authorization connection request must be modified in the properties file. Refer to **Authorization String** on page 2-8 for more information on how to override this setting.

- While still in Oracle Application Server console, Navigate to the following location: **OC4J Instance (SPLWG), Administration , Security Providers , Instance Level Security , Realms , Users**. Click **Create**.
- Create the user **WEB** and password **selfservice** (all lowercase, without a space). Depending the security settings within OAS you may need to add a numeric character to the password, if so you will need to review the section **Authorization String** on page 2-8. Move the **cisusers** Role Name to the **Selected Roles** list and click **OK**.

**Defining the Password in Oracle Application Server.** You may choose to define a user id and password other than WEB and selfservice, if desired. However, the authorization string to be added to the HTTP authorization connection request must be modified in the properties file. Refer to **Authorization String** on page 2-8 for more information on how to override this setting.

## Web Server Configuration - WebSphere

The following are specific instructions for WebSphere

For other web servers with JSP capability, you need to perform similar actions. In order to use WebSphere console, follow these instructions:

### Setting Up the Web Application - WebSphere

1. Start the WebSphere Console: [https://server\\_url:server\\_port/ibm/console](https://server_url:server_port/ibm/console)
2. From the **Integrated Solutions Console**, select **Applications**, then **Enterprise Applications**
3. Select **Install**
4. Select the location of SelfService.ear file and then Click **Next**.
5. Leave the defaults as specified, and **Next**.
6. Under **Clusters and Servers** select your server, and then select your Module. Click **Apply**. Click **Next**.
7. On the **Map virtual hosts for Web modules** window, click **Next**.
8. Review the Summary, and Click **Finish**.
9. Under **Installing....**, select **Save** when you see **Application SelfService installed successfully**.

### Create WEB user in WebSphere

1. Select **Applications, Enterprise Applications**.
2. Select **SelfService**.
3. Navigate to **Enterprise Applications, SelfService, Security role to user/group mapping**. Select **cisusers** and Click **OK**.
4. Select **WEB**. Then select **OK**.

**Defining the Password in WebSphere.** You may choose to define a user id and password other than WEB and selfservice, if desired. However, the authorization string to be added to the HTTP authorization connection request must be modified in the properties file. Refer to Authorization String for more information on how to override this setting.

# Oracle ETM Web Self Service Configuration

This section describes configuration needed to enable a connection to Oracle Enterprise Taxation Management. It includes importing the appropriate services for use by XAI, configuration of the properties file and defining settings in Oracle Enterprise Taxation Management.

## Configuring the Connection To Oracle Enterprise Taxation Management

This section describes the steps needed to import the appropriate XAI services needed by the Oracle Utilities Web Self Service application.

### Oracle Utilities Web Self Service XAI Services

Starting with V2.2.0, Web Self Service XAI services are bundled with the application.

### Navigate to the Self Service Login Page

Verify that you are able to get to the Self Service login page ([http://server\\_name:port/SelfService/SSvcController/login](http://server_name:port/SelfService/SSvcController/login)<http://server:port/SelfService>).

## Property File Configuration

The SelfServiceConfig.properties file of the self-service web application contains several properties that may need to be changed for your particular installation.

At installation time, this file was created based on a template and certain parameterized values were overwritten to correspond to appropriate values for your installation.

There are other settings in the configuration file that you may want to modify according to your business needs.

To review the settings for this file, go to the WEB-INF directory of the SelfService installation directory. It is named SelfServiceConfig.properties. Comments have a pound sign (#) at the beginning of the line.

To modify the settings of the configuration file, you must configure the settings in a second 'override' properties file. Its purpose is to define settings that are unique to your implementation, and to enable future releases of the web application to modify the SelfServiceConfig.properties file without affecting your settings.

The file name of override file is CMSelfServiceConfig.properties and is located in the WEB-INF directory of the SelfService directory (in the same location as the SelfServiceConfig.properties file).

### General Settings

This section describes general settings needed by the system for web self-service.

#### URL of XAI Server

The URL of the XAI server. This setting has been parameterized for customization at installation time and is not found in the override properties file.

#### Override Properties File

Defines the name of the override properties file. This value is set to CMSelfServiceConfig.properties and may not be changed.

#### Oracle Enterprise Taxation Management User Id

The configuration file defines a user id of WEB. This is the user that the Oracle Utilities Web Self Service application uses to access application services in Oracle Enterprise Taxation Management. This user id must correspond with the user id you defined in WebLogic.

If you defined a user ID other than WEB in WebLogic, you must customize this setting. Find the setting in the CMSSelfServiceConfig.properties file, remove "# PARM" to enable the setting and indicate the desired value.

```
# User Id in CC&B that the Self Service application should assume
# PARM com.splwg.selfservice.CC&BUser=WEB
```

The Oracle Enterprise Taxation Management user defined in the file (either WEB or your chosen id) must be defined in Oracle Enterprise Taxation Management. In Oracle Enterprise Taxation Management, navigate to **Utilities Menu, Security, User +**.

- Create a new user named WEB (or desired value). Be sure that this new user is added to appropriate user groups so that it has access to all the application services used by the Oracle Utilities Web Self Service application.
- Make sure to set Account Security for this web user. Since Oracle Utilities Web Self Service uses the web user id to connect to Oracle Enterprise Taxation Management, you may use this to restrict which accounts can be accessed through Oracle Utilities Web Self Service.

### Authorization String

The authorization string defines a string to be added to the HTTP authorization connection request. It contains the user id and password encoded in Base 64. The configuration file provides a string with the user WEB and the password selfservice encoded in Base64. This user id and password must correspond to the settings defined in WebLogic.

If you defined a user ID other than WEB or a password other than selfservice in WebLogic, you must customize this setting. Find the setting in the CMSSelfServiceConfig.properties file, remove "# PARM" and provide the appropriate Base64 encoded value.

```
# Authorization cookie for the XAI server. This is user:password in
Base64.
# For user WEB, password selfservice the cookie is:
# com.splwg.selfservice.XAICookie=V0VConNlbGZzZXJ2aWN1
# PARM com.splwg.selfservice.XAICookie=V0VConNlbGZzZXJ2aWN1
```

### Web Person ID Type

When registering for web self-service, the customer defines a web login id. This ID is stored as an entry in the person IDs collection with an appropriate Person ID Type. The configuration file defines the Person ID type to use as WEB. You may choose to use this ID type or you may prefer to set up a different id type.

To use a person ID type other than WEB, you must customize this setting. Find the setting in the CMSSelfServiceConfig.properties file, remove "# PARM" to enable the setting and indicate the desired value.

```
# Person Identifier Type to be used in CC&B for storing the user id
# PARM com.splwg.selfservice.IdType=WEB
```

The person ID type defined in the properties file (either WEB or your chosen id type) must be defined in Oracle Enterprise Taxation Management. In Oracle Enterprise Taxation Management, navigate to **Admin Menu, Identifier Type**. Add the ID type defined in your configuration file and indicate an appropriate description.

**Format of the Web User ID.** If you would like to impose restrictions on the web user chosen by your customers, you must create an identifier format algorithm. For example, you may want to restrict the web user ID to a minimum number of characters or to require a mixture of alpha and numeric characters.



## Authentication Plug In Settings

By default, authentication is done by looking up the entered user ID and comparing the entered password with the password stored for this user on the Person table in the Oracle Enterprise Taxation Management database.

The configuration file defines special authentication as false and indicates a 'dummy' authentication class.

This authentication algorithm may be overridden by specifying an alternative java class that is used as a plug in. To override the value, find the setting in the CMSelfServiceConfig.properties file, remove "# PARM" to enable the setting.

```
# Whether a class different than the default is performing the
authentication (valid values true, false)
# PARM com.splwg.selfservice.Authentication=false

# Dynamic class name for Authentication
# PARM
com.splwg.selfservice.AuthenticationClassName=com.splwg.selfservice.Du
mmyAuthentication
```

Set the property 'Authentication' to true, and set the property 'AuthenticationClassName' to an alternative class name. This third-party class needs to implement the IAuthentication.class interface found under SelfService/Web-Inf/classes/com/splwg/selfservice.

## Displaying Bill Print Image PDFs

If the DOC1 bill print software is installed on your system, bills may be displayed in PDF format. If this is the case, the **VIEW** hyperlink is displayed beside the last bill on the account information page.

### Show Bill Image

The configuration file assumes that you are able to display a bill image using DOC1. The ShowBill setting is defaulted to true. If you are not able to display a bill image, you must customize this setting. Find the setting in the CMSelfServiceConfig.properties file, remove "# PARM" to enable the setting and indicate false.

```
# Whether 'View' should be displayed next to the last bill in the
Account Information screen (valid values true, false)
# PARM com.splwg.selfservice.ShowBill=true
```

### URL for On-line Bill

This setting indicates the server and port number for your Oracle Enterprise Taxation Management installation where the bill images may be found. This setting has been parameterized for customization at installation time and is not found in the override properties file.

### Timeout for Cached Bill PDFs

The configuration file defines the timeout for cached bill PDFs as 60 (minutes). If you want to override this setting, find the setting in the CMSelfServiceConfig.properties file, remove "# PARM" to enable the setting and indicate the desired value.

```
# Timeout (in minutes) for cached bill PDFs
# PARM com.splwg.selfservice.PDFCacheTimeout=60
```

### Directory for Cached Bill PDFs

If you choose to define a location for the PDF cache, different from the default temporary directory, find the setting in the CMSelfServiceConfig.properties file, remove "# PARM" to enable the setting and indicate the desired value.

```
# Directory to be used for cached bill PDFs
#
```

```
# Use this parameter if you want to specify the location for the PDF
cache.
# If it is omitted, the default temporary directory will be used.
# PARM com.splwg.selfservice.PDFCacheLocation=C:\\TEMP
```

## Customer Contact Settings

Customer Contacts may be created for certain events. (Refer to the table below).

The configuration file defines the class and type as NONE for each event. This means that by default, no customer contact is generated.

The CMSelfServiceConfig.properties file defines possible settings for the customer contact class and type that you may choose to use to generate customer contacts. The following table defines the events that may generate a customer contact, along with the suggested values for the class and type for each event.

Event	Event Description	Property Name=Sample Value
Login Success	Customer successfully logged into the web self service application.	CustomerContactClassLoginSuccess=WEB CustomerContactTypeLoginSuccess= LOGIN
Login Failed	Customer attempted to login to the web self service application, but was not successful.	CustomerContactClassLoginFailure=WEB CustomerContactTypeLoginFailure=FAILLOGIN
Register New User	The customer registered to use the web self service application.	CustomerContactClassRegistration=WEB CustomerContactTypeRegistration=REGISTER
Meter Read	The customer entered a meter read via the web self service application.	CustomerContactClassMeterRead=WEB CustomerContactTypeMeterRead=MTRREAD
Payment	The customer entered a credit card payment via the web self service application.	CustomerContactClassPaymentReceived=WEB CustomerContactTypePaymentReceived=PAYRCV
Disconnect Service	The customer requested to stop one or more services via the web self service application.	CustomerContactClassServiceDisconnect=SVC CustomerContactTypeServiceDisconnect=STOP
Update Personal Info	The customer updated personal information via the web self service application.	CustomerContactClassPersonalInfoUpdate=WEB CustomerContactTypePersonalInfoUpdate=PERSONALINFO

If you choose to have a customer contact generated for an event, find the setting for the Customer Contact Class and Customer Contact Type for each event in the CMSelfServiceConfig.properties file and remove '#PARM'. If you choose to define a customer contact class/type different than the ones provided, indicate the desired value.

```
# Customer Contact Class in CC&B to be used when creating customer
contacts for successful logins
# PARM com.splwg.selfservice.CustomerContactClassLoginSuccess=WEB
```

```
# Customer Contact Type for a successful login
# PARM com.splwg.selfservice.CustomerContactTypeLoginSuccess=LOGIN
```

For each event that you want a customer contact generated for, you must enter a customer contact class and type in Oracle Enterprise Taxation Management that corresponds to the value in the properties file.

- Navigate in Oracle Enterprise Taxation Management to **Admin Menu, Customer Contact Class**. Add one or more class values for your customer contacts.
- Navigate to **Admin Menu, Customer Contact Type**. Add a unique customer contact type for each event above, where you would like a customer contact generated. Indicate the desired customer contact class defined in the previous step.

**Error Creating Contact.** If a customer contact cannot be created (e.g. because of incorrect setup of the customer contact class in Oracle Enterprise Taxation Management) an error is written to the WebLogic console and a To Do Entry for the Oracle Utilities Web Self Service administrator is created.

## To Do Entry Settings

To Do Entries may be created for certain events listed in the table below.

Event	Property Name
Administration	AdminToDoType=CI_WSSAD
Meter read out of high low limits	MeterReadToDoType=CI_WSSMR
Stop Service	ServiceStopToDoType=CI_WSSST
Update Personal Info	PersonalInfoToDoType=CI_WSSPE

For the Administration event, the To Do type is defined as shown in the table. The Administration To Do type is used to alert the Oracle Utilities Web Self Service administrator about a malfunction in the web self-service application as a result of one of the following reasons:

- Error in sending an email to the customer, either during the registration process, from the password change page or from the password reminder page. A reason for failure in sending an email may be a broken connection to the SMTP email server or incorrect definitions in the Oracle Utilities Web Self Service file.
- Error in attempting to create a customer contact.

If you prefer to define a different To Do type for the administration event, find the setting in the CMSelfServiceConfig.properties file, remove "# PARM" to enable the setting and indicate the desired value.

```
# To Do Type for Administrator Information
# PARM com.splwg.selfservice.AdminToDoType=CI_WSSAD
```

The configuration file defines the remaining To Do types as NONE. This means that by default, no To Do entry is generated for those events. If you choose to have a To Do entry generated for an event, find the setting for the To Do type for each event in the CMSelfServiceConfig.properties file and remove '#PARM'. If you choose to define a To Do type different than the ones provided, indicate the desired value.

```
# To Do Type for Meter Reads failing High/Low
# PARM com.splwg.selfservice.MeterReadToDoType=CI_WSSMR
```

```
# To Do Type for Service Stop
```

```
# PARM com.splwg.selfservice.ServiceStopToDoType=CI_WSSST

# To Do Type for Update Personal Information
# PARM com.splwg.selfservice.PersonalInfoToDoType=CI_WSSPE
```

The following table identifies the required settings for the To Do entries. If you have decided to use a different To Do Type code, you must define the drill keys and sort keys as shown.

ToDo Type	Description	Message Cat / Message	Drill Down App Service	Sort Key(s)	Drill Key (Table/Field)
CI_WSSAD	Web Self Service Administration	15 / 314	CILCPERP (Person)	Error Message	CI_PER / PER_ID
CI_WSSMR	WSS Meter Read Failed Hi/Lo	15 / 312	CILMMRDP (Meter Read)	Actual Read,Low Limit,High Limit	CI_REG_READ / MR_ID
CI_WSSPE	WSS Personal Information Updated	15 / 313	CILCPERP (Person)	Customer Contact Id	CI_PER / PER_ID
CI_WSSST	WSS Stop Service	15 / 311	CILCSVAP (Service Agreement)	Service Agreement Id	CIS_SA / SA_ID

Note. The sort key and drill key for the administration To Do type are not really used. Values are required for the To Do type definition. The To Do entries are related to technical problems, so a transaction to drill down to is not available.

**Error Creating To Do.** If a To Do entry cannot be created successfully, an error message is written to the web server console.

## Payment Related Settings

This section describes the settings needed to successfully store a credit card payment in Oracle Enterprise Taxation Management via the web.

### Currency

The configuration file defines the currency to use for credit card payments as USD. If this is not the correct currency for your installation, you must customize this setting. Find the setting in the CMSelfServiceConfig.properties file, remove "# PARM" to enable the setting and indicate the desired value.

```
# Currency code to use for payments
# PARM com.splwg.selfservice.CurrencyCode=USD
```

You must also ensure that the currency code defined (either USD or your override value) has been defined in Oracle Enterprise Taxation Management using **Admin Menu, Currency Code**.

### Auto Pay Source Codes

Credit card payments submitted via the web are handled as an automatic payment and must be interfaced to the appropriate external system for card number verification.

In Oracle Enterprise Taxation Management, automatic payments must reference a tender type that indicates that the payment is used for auto pay and must reference an appropriate auto pay source code.

Note. The tender type and auto pay source codes described here would be used for any situation where a customer has provided a credit card for payment and the information must be sent to the appropriate credit card company. For example, perhaps a customer calls to provide credit card information for payment. As a result, you may already have appropriate values defined in Oracle Enterprise Taxation Management.

Navigate in Oracle Enterprise Taxation Management to **Admin Menu, Tender Type**. If you do not already have a tender type set up for credit card payments that require authorization, create one. The following table provides an example such an entry.

Tender Type	Description	Generate Auto Pay	External Type	Expiration Date Req'd
APCC	Auto Pay by Credit Card	Checked	Credit Card Withdrawal	Checked

One or more auto pay source codes are required. The auto pay source code allows you to reference a validation algorithm to validate the credit card number entered. The recommendation is to create a different auto pay source code for each type of credit card (for example, Visa, Master Card, etc) in order to reference the appropriate validation algorithm.

The configuration file defines a separate auto pay source code for the four major types of credit cards: Visa, Master Card, Discover and American Express. For your installation, you may choose to define different values for the auto pay source codes than the ones provided.

- If you choose to use the settings as defined in the configuration file, you must define the corresponding auto pay source codes in Oracle Enterprise Taxation Management.
- If you choose to override the values in the configuration file, you must find each setting in the CMSelfServiceConfig.properties file, remove "# PARM" to enable the setting and indicate the desired value.

```
# Auto Pay Source Code for Visa
# PARM com.splwg.selfservice.AutoPay.Visa=VISA

# Auto Pay Source Code for MasterCard
# PARM com.splwg.selfservice.AutoPay.MasterCard=MASTERCARD

# Auto Pay Source Code for Discover
# PARM com.splwg.selfservice.AutoPay.Discover=DISCOVER

# Auto Pay Source Code for AmericanExpress
# PARM com.splwg.selfservice.AutoPay.AmericanExpress=AMEX
```

Navigate in Oracle Enterprise Taxation Management to **Admin Menu, Auto Pay Source Code**. If you do not already have source codes created for the various credit card types, create them. The following table provides examples.

Auto Pay Source	Description	Tender Type	Route Type	Validation Algorithm
VISA	Visa card	APCC	ACH	VALID-VISA

Auto Pay Source	Description	Tender Type	Route Type	Validation Algorithm
MASTERCARD	Master Card	APCC	ACH	VALID-MC
DISCOVER	Discover card	APCC	ACH	VALID-DSC
AMEX	American Express	APCC	ACH	VALID-AMEX

Notice that the auto pay source codes all reference the same tender type created above. Also note that the source codes reference the same auto pay route type. Refer to payment documentation for more information about the auto pay route type.

### Credit Card Validation Class Plug In

By default, the credit card number entered by the customer is not fully validated. It basically checks that the number entered is a valid credit card number for the chosen credit card type. It does not try to contact a credit card company.

To implement a more thorough validation algorithm, indicate an alternative third party Java class. To override these settings, find the setting in the CMSelfServiceConfig.properties file, remove "# PARM" to enable the setting.

```
# Whether a class is validating the credit card (valid values true,
false)
# PARM com.splwg.selfservice.CreditCardValidation=true

# Dynamic class name for CreditCardValidation
# PARM
com.splwg.selfservice.CreditCardValidationClassName=com.splwg.selfserv
ice.DummyCreditCardValidation
```

Modify the property 'CreditCardValidationClassName' to specify the third-party class name. This third party class needs to implement the ICreditCardValidation.class interface found under SelfService/Web-Inf/classes/com/splwg/selfservice.

**Oracle Enterprise Taxation Management Validation.** The auto pay source code may reference a validation algorithm to handle credit card validation. This validation is only done when the payment information is sent to Oracle Enterprise Taxation Management. Use the credit card validation plug-in spot in the configuration properties to capture an error in the credit card as soon as the user enters a value.

### Location Settings

The location settings define format settings for display and entry of dates, numbers and phone numbers.

### Phone Types

The web self service account and person information pages attempt to display a home and business phone number. Actually, the phone numbers displayed correspond to two phone number types defined in Oracle Enterprise Taxation Management for your person phone numbers.

The configuration file defines the phone type for the Home phone number as HOME and defines the phone type for the business phone number as BUSN. If these settings do not correspond with the phone types that you have defined in Oracle Enterprise Taxation Management for the person record, you must customize the settings. Find the setting in the CMSelfServiceConfig.properties file, remove "# PARM" to enable the setting and indicate the desired value.

```
# ETM phone type used for home phone numbers
# PARM com.splwg.selfservice.PhoneTypeHome=HOME

# ETM phone type used for business phone numbers
# PARM com.splwg.selfservice.PhoneTypeBusiness=BUSN
```

You probably already have the appropriate phone types defined in Oracle Enterprise Taxation Management. If not, navigate to **Admin Menu, Phone Type**. Add the two phone types defined in your configuration file and indicate an appropriate description.

**Phone Format.** In Oracle Enterprise Taxation Management, each phone type references an algorithm to define valid formats for the phone type. One of the valid phone formats defined in the algorithm for the phone types used by the Oracle Utilities Web Self Service application must be used for the phone format setting.

### Phone Format

The configuration file defines the phone format used for display and entry of a phone number as (999) 999-9999. If this is not appropriate for your installation, you must customize this setting. Find the setting in the CMSelfServiceConfig.properties file, remove "# PARM" to enable the setting and indicate the desired value.

```
# Phone format used on Update Personal Information screen
# PARM com.splwg.selfservice.PhoneFormat=(999) 999-9999
```

**Valid Format.** This phone format must be a valid format used by the phone format algorithm referenced in Oracle Enterprise Taxation Management on your home and business phone types.

### Date Formats

The display format of dates and date/times are specified with the properties 'CorDaptixDateFormat' and 'CorDaptixDateTimeFormat'. These formats should correspond to the date and time formats defined in the Display Profile for the Oracle Enterprise Taxation Management User ID.

To override the formats set in the configuration properties file, find the setting in the CMSelfServiceConfig.properties file, remove "# PARM" to enable the setting and indicate the desired value.

```
# Date format used to display dates received from XAI
# PARM com.splwg.selfservice.CC&BDateFormat=MM-dd-yyyy
```

```
# Date-Time format used to display date/times received from XAI
com.splwg.selfservice.CC&BDateTimeFormat=MM-dd-yyyy HH:mm:ss
```

The format used by XAI is determined with the properties 'XAIDateFormat' and 'XAIDateTimeFormat'. These formats should correspond to the default date format and default date/time format defined for your Oracle Enterprise Taxation Management XAI Adapter.

Refer to the "Setting Up Your Registry" section in the XAI utilities guide for more information about defining XAI adapters.

Note. It is also possible for each individual Oracle Enterprise Taxation Management schema to define date and date/time formats. If that is the case, the schema formats should correspond to the formats defined here.

To override the formats set in the configuration properties file, find the setting in the CMSelfServiceConfig.properties file, remove "# PARM" to enable the setting and indicate the desired value.

```
# Date format used by XAI (set in XAI Formats control table) for dates
sent to XAI
# PARM com.splwg.selfservice.XAIDateFormat=yyyy-MM-dd
```

```
# Date-Time format used by XAI (set in XAI Formats control table) for
Date/Time sent to XAI
# PARM com.splwg.selfservice.XAIDateTimeFormat=yyyy-MM-dd HH:mm:ss
```

### Amount Formats

The display format for amounts is specified with the property 'CorDaptixNumberFormat'.

To override the format set in the configuration properties file, find the setting in the CMSelfServiceConfig.properties file, remove "# PARM" to enable the setting and indicate the desired value.

```
# Number format to be used to display amounts received from XAI (should  
be identical to the display profile)  
# PARM com.splwg.selfservice.ETMNumberFormat=###,##0.00
```

**Display Profile Setting.** The decimal symbol and group symbol defined here should match the settings defined for the display profile defined for the Oracle Enterprise Taxation Management User ID.

The XAI format is specified with the property 'XAINumberFormat'.

To override the format set in the configuration properties file, find the setting in the CMSelfServiceConfig.properties file, remove "# PARM" to enable the setting and indicate the desired value.

```
# Number format to be used for Amounts sent to XAI  
# PARM com.splwg.selfservice.XAINumberFormat=#####0.00
```

### E-Mail Settings

Several functions in the Oracle Utilities Web Self Service application (registration, password change and reminder) send an email with the user ID and password to the customer.

#### Send Email

The configuration file assumes that you want to send emails for the above listed events. If your installation does not want to send email confirmations, you must customize this setting. Find the setting in the CMSelfServiceConfig.properties file, remove "# PARM" to enable the setting and indicate a value of false.

```
# Whether an email will be sent (should be set to false when no SMTP  
server can be reached); valid values: true, false  
# PARM com.splwg.selfservice.SendEmail=true
```

#### Email File Location

Indicates the location of the text file containing the text mailed to the customer, when the customer chooses the transactions Password Change and Password Reminder ('Forgot Password'). This setting has been parameterized for customization at installation time and is not found in the override properties file.

A sample file called EmailFile.txt, located in the SelfService directory. The contents of the email may contain the following substitution variables that are replaced at execution time with the Userid or Password. This is done by embedding the following values in the email text file:

- @user@ - represents the userid
- @password@ - represents the password

#### Email Subject

This setting defines the subject of the email for password changes and reminders. The configuration file defines this value as Your User and Password. If your installation would prefer a different email subject, find the setting in the CMSelfServiceConfig.properties file, remove "# PARM" to enable the setting and indicate the desired value.



```
# Subject of Mail
# PARM com.splwg.selfservice.EmailSubject=Your User and Password
```

### Registration Email File Location

Indicates the location of the text file containing the text mailed to the customer, when the customer successfully registers as a new user. This setting has been parameterized for customization at installation time and is not found in the override properties file.

### Registration Email Subject

This setting defines the subject of the email for successful registrations. The configuration file defines the subject as Your registered User and Password. If your installation would prefer a different email subject, you must customize this setting, find the setting in the CMSelfServiceConfig.properties file, remove "# PARM" to enable the setting and indicate the desired value.

```
# Subject of Registration Mail
# PARM com.splwg.selfservice.RegistrationEmailSubject=Your registered
User and Password
```

### SMTP Host

This setting defines your SMTP host name. It has been parameterized for customization at installation time and is not found in the override properties file.

### From Address

This setting defines the sender address appearing on emails to your customers from the Oracle Utilities Web Self Service application. This setting must be defined in the override properties file.

```
# From Address:
com.splwg.selfservice.FromAddress=SelfServiceAdmin
<administrator@company.com>
```

**Error Sending Email.** If an email is not sent successfully, a message is written to the web server console and an "administration" To Do entry is created.

### Action Settings

This section is needed if your implementers decide to add new pages to the web self service functionality delivered. The parameters provided below are samples to show the expected syntax.

```
# Actions:
# The following section allows the dynamic definition of additional
actions. The property name must start with
# "com.splwg.selfservice.Action" and after that it contains the action
name. The property value is the class name.
# Following two examples:

# PARM
com.splwg.selfservice.Action.financialhistory=com.splwg.selfservice.Ac
countFinancialHistoryAction
# PARM
com.splwg.selfservice.Action.billinghistory=com.splwg.selfservice.Bill
ingHistoryAction
```

The property name must start with "com.splwg.selfservice.Action", followed by the action name. The property value is the class name.

Refer to the Creating an Action Class section in the Oracle Utilities Web Self Service guide for more information.

## Customizing Self Service Functionality

If you develop your own Self Service application customization, please follow this rule:

Every file you create should be prefixed by CM (for example, CMSelfServiceConfig.properties).

All files prefixed by CM will be preserved during future upgrades of Self Service application, that will save you time and effort during customization of the future upgrades.

Refer to the Customizing Web Self-Service section in the *Oracle Utilities Web Self Service* guide for information about customizing the web self service functionality.

# Chapter 3

---

## Reports Configuration

This section describes the steps required to configure Oracle Enterprise Taxation Management and a reporting engine to support the Oracle Enterprise Taxation Management reporting solution using Business Objects Enterprise or Oracle BI Publisher. This section includes:

- **Reports Configuration for Business Objects Enterprise**
- **Reports Configuration for Oracle BI Publisher**

## Reports Configuration for Business Objects Enterprise

The Framework supports the integration of Crystal Reports/Business Objects Enterprise integration with the Oracle Enterprise Taxation Management application.

No Oracle Enterprise Taxation Management centric sample reports are provided

Business Objects Enterprise™ provides the tools for:

- Making reports available over the web (establishing the required report server processes).
- Integrating reports with the Oracle Enterprise Taxation Management system.
- Scheduling reports to run on a regular basis.
- Managing instances of the reports that have been created by a previous run.
- Managing user access to the report instances.

This section assumes that you have already installed Business Objects Enterprise such that requests can be pointed to the Business Objects Enterprise running with Windows Tomcat server. For information about installing Business Objects Enterprise, refer to **Business Objects XI R2 Professional Edition** on page 4-2 and to the installation instructions provided with the Business Objects Enterprise application.

Note: We used Crystal Reports XI Developer Edition to develop sample reports that are distributed with the Oracle Enterprise Taxation Management system. We used Business Objects Enterprise XI R2 on Windows with Tomcat server for running reports on the web and for testing the integration with Oracle Enterprise Taxation Management. The sample reports and integration may not work with other Business Objects Enterprise versions and products.

In addition, the following database client software versions were used:

Oracle: the client must match the database server version, i.e. Oracle 9 client for an Oracle 9 database and Oracle 10 client for an Oracle 10 database.

DB2: DB2 Connect 8

SQL Server: MS-SQL Server 2005 SP1

## Configuring The System To Enable Reports

This section describes the steps needed to configure your system to enable reports.

### Configure the System to Invoke Business Objects Enterprise Real-time

In order to invoke Business Objects Enterprise from within Oracle Enterprise Taxation Management, the system must be configured so that Oracle Enterprise Taxation Management knows how to invoke reports.

### Specify Reporting Tool Options

The following information should be defined on Reporting Tool Options table:

- **Reporting Tool User ID** defines the user id to use when logging into Business Objects Enterprise.
- **Reporting Tool Password** defines the password to use when logging into Business Objects Enterprise.
- **Reporting Server** is the web server URL where the reporting tool is installed.

Note. Reporting Server option must include the real server name and not just IP address. Business Object Enterprise SDK uses the machine name for logon.

- **Reporting Folder** defines the name of the directory on the Business Objects web server where Java Service pages (JSP) are located. The Oracle Enterprise Taxation Management

reporting tool algorithm constructs the URL to open Business Objects Enterprise based on the information provided on Reporting Options. The reporting tool algorithm assumes that a JSP named "logon.jsp" is located there. The same folder name should be used as a report folder in Business Objects Enterprise where reports are published. See section for more information.

Refer to the Reports chapter of the Oracle Enterprise Taxation Management user guide for more information about the reporting options table.

### **Reporting Tool Algorithm**

The base product provides an installation algorithm plug-in spot called Reporting Tool. This plug-in spot should contain an algorithm that invokes the third party reporting tool real-time. Oracle Enterprise Taxation Management provides an algorithm type called RPTE-INV, which invokes Business Objects Enterprise.

This algorithm relies on information defined in the Reporting Options table: the reporting server and folder names, the user name and password for accessing the reporting tool. The algorithm constructs several strings, for example, the URL of the Java server page "logon.jsp", information about the report being requested and user info in the format expected by Business Objects Enterprise. The Cobol program returns these fields to the browser. The browser then submits these strings as hidden HTML form and opens a Business Objects Enterprise window.

To use the RPTE-INV algorithm type to invoke Business Objects Enterprise, perform the following steps:

- Create an algorithm for this algorithm type.
- On the installation options, add an entry to the algorithm collection with an algorithm entity of Reporting Tool and indicate the algorithm created in the previous step.

### **Interface with Business Objects Enterprise Batch Scheduler**

For many of your reports, you probably want the report to be produced on a regular basis according to a scheduler. The Oracle Enterprise Taxation Management reporting solution relies on the Business Objects Enterprise software to provide the batch scheduler functionality. Refer to Business Objects Enterprise documentation for details about configuring the batch scheduler.

Oracle Enterprise Taxation Management provides a report history page to display report instances that were produced via the batch scheduler and are stored in a repository. The report history page relies on the reporting tool algorithm to invoke Business Objects Enterprises and display the historic instances for the selected report.

Oracle Enterprise Taxation Management provides two batch jobs that can schedule reports in batch - Bill Print and FO Print. Refer to User documentation for more information.

## **Sample Reports Supplied with the Product**

The system provides several sample reports that may be used by your organization as they are to as a starting point for creating a new report. The following sections provide instructions on how to set up your implementation environment to use the sample reports.

Refer to the Reports chapter of the Oracle Enterprise Taxation Management user guide for a description of each sample report.

## **How to Use a Sample Report Provided with the System**

If you would like to use any of the sample reports, you need to perform some steps to be able to execute them in an implementation environment. This section walks you through the steps needed.

## Stored Procedures

Each report has one or more corresponding database stored procedures that store the business logic to fetch the data from the database that is then presented in the report.

### Oracle

The prerequisite for Oracle Enterprise Taxation Management reports to work against the target database is setting up of a RPTUSER database user. This user should have read access to all Oracle Enterprise Taxation Management database objects and execution privilege on the stored procedures that the reports access.

The steps involved in setting up the RPTUSER are:

1. Create the RPTUSER

To create the RPTUSER (if it doesn't exist), navigate to the Database\Oracle folder and edit the file CDX\_rptuser.sql to match your requirements. The parameters in this file that need review are: password of the user, default and temporary tablespace names for the user.

Now log into the target database as a DBA user using SQLPLUS and execute the script by entering following command at SQL prompt:

```
SQL> @CDX_rptuser.sql
```

("SQL>" denotes the SQL prompt and doesn't need to be typed).

2. Create or refresh the stored procedures

Log into the target database as the user that owns Oracle Enterprise Taxation Management schema objects using SQLPLUS and execute the script CDX\_rptsp.sql by entering the following command at the SQL prompt:

```
SQL> @CDX_rptsp.sql
```

3. Compile the invalid objects

If you see an Oracle error while executing the step#2, execute the database object compilation script CDX\_compsp.sql

```
SQL> @CDX_compsp.sql
```

4. Configure security.

This involves generating synonyms in RPTUSER and granting it privileges to execute the stored procedures and read the Oracle Enterprise Taxation Management tables. The utility prompts you to answer for the following questions:

- Enter the Oracle user that owns the schema (e.g. CISADM): cisadm
- Enter the password for the CISADM user: cisadm
- Enter the name of the Oracle Database: Your\_db
- Enter a comma-separated list of Oracle users in which synonyms need to be created (e.g. cisuser,cisread): rptuser

The utility runs and configures security for the Oracle Enterprise Taxation Management objects.

### MS SQL Server

The prerequisite for Oracle Enterprise Taxation Management reports to work against the target database is setting up of a RPTUSER database user. This user should have read access to all Oracle Enterprise Taxation Management database objects and execution privilege on the stored procedures that the reports access.

The steps involved in setting up the RPTUSER are:

1. Create the RPTUSER

To create the RPTUSER execute the following SQL in the database you re using. Replace the database-name with your database.

```
exec sp_addlogin 'RPTUSER','RPTUSER','database-name'
```

```
exec sp_adduser 'RPTUSER','RPTUSER', 'public'
```

Grant the database role db\_ddladmin to RPTUSER.

2. Generate Security for the RPTUSER in the system.

S - Configure Security for a database

Select an option : S

Enter the following information:

Name of the MS SQL Server administrator account(e.g. sa): sa

Password for MS SQL Server administrator account: sa

Database name (CD2102D1):CD2102C4

ODBC connection (CCBODBC):

Application user that will connect to CD2102C4 (AV2102D1):RPTUSER

Connecting to CD2102C4 database to configure security ...

Connecting to CD2102C4 as sa...

Generating security ...

3. Load the Stored Procedures into the database.
4. Create the ODBC connection information for the user CDX on the Reports Server. Driver to use : CR SQL Server Wire Protocol.

## DB2 on MVS

IBM's WorkLoad Manager is a prerequisite for Oracle Enterprise Taxation Management reports. Stored Procedures require that a WorkLoad Manager environment exist for Stored Procedure Builder to function correctly. Refer to IBM DB2 Installation Guide for more information on how to install WorkLoad Manager Environment for stored procedures.

The prerequisite for Oracle Enterprise Taxation Management reports to work against the target database is setting up of a RPTUSER database user. This user should have read access to all Oracle Enterprise Taxation Management database objects and execution privilege on the stored procedures that the reports access.

The steps involved in setting up the RPTUSER are:

1. Create the RPTUSER.

To create the RPTUSER (if it doesn't exist). In the RACF security add user definition example below the parameters need to be reviewed are: password of the user, default group, owner and name description for the user.

```
AU RPTUSER NAME('RPTUSER') PASSWORD(password)+
```

```
OWNER(owner) DFLTGRP(dfltgrp) UACC(READ) NAME('v150 stored proc reports')
```

Now have your RACF security administrator execute the reviewed and changed security parameters above to create the user.

2. Create or refresh the stored procedures

Log into the DB2 Stored Procedure Builder (Development Center) with user id RPTUSER.

After the login is successful, then you are ready to insert the DB2 stored procedures.

3. Configure security.

This involves generating synonyms in RPTUSER and granting it privileges to execute the stored procedures and read the Oracle Enterprise Taxation Management tables. The utility prompts you to answer for the following questions:

- Enter the location of the DB2 Database (e.g. LOCDB6B):
- Enter userid with SYSADM privileges (e.g. SYSADM):
- Enter the password for the SYSADM user:
- Enter the name of the DB2 user that owns the CDX schema (e.g. V150R):
- Enter a comma-separated list of DB2 users for which synonyms need to be created (e.g. AV150R,AV150S): RPTUSER

The utility runs and configures security for the Oracle Enterprise Taxation Management objects.

### DB2 on Unix

The prerequisite for Oracle Enterprise Taxation Management reports to work in a database is setting up of a RPTUSER database user. The RPTUSER should have permissions to create stored procedures in the database. All the stored procedures are then setup in the default schema of this user and permissions.

Following are the steps involved in setting up stored procedures in RPTUSER schema of a database:

1. Unzip the file Reports.zip on a Windows NT desktop with connectivity to the target database. The desktop should have Project Deployment center tool installed on it. The tool is delivered with DB2 Connect software.
2. Navigate into the Reports folder and execute CDXGenSec.bat script. The script will then prompt you for the database name, DBA user id, password, the application object schema owner and the name for user schema for synonyms (RPTUSER).
  - Enter the name of the DB2 Database (e.g. LOCDB6B): <DBNAME>
  - Enter userid with DBA privileges (e.g. SYSADM): <DBAUSER>
  - Enter the password for the db2inst8 user: <\*\*\*>
  - Enter the name of the DB2 user that owns the CDX schema (e.g. V140S): <CDXSchema>
  - Enter a comma-separated list of DB2 users for which synonyms need to be created (e.g. AV150S,AV150G): RPTUSER

The script then runs to create synonyms for RPTUSER and grants it privilege to access Oracle Enterprise Taxation Management objects.

3. Start the Project deployment center and choose 1510.zip file included in the delivered package as the deployment source. Click **Next**.
4. Choose the target database with RPTUSER as user for deployment. Click **Next**.
5. Choose all the stored procedures for deployment Click **Next**.
6. Choose the relevant options on the **Options** page. Click **Next**.
7. Choose the **Deploy** to finish the deployment of reports stored procedure in your target database.



## Prepare BO Enterprise Tomcat Server for Integration

Note: If you install Business Objects Enterprise in a location other than the default installation directory of C:\Program Files\Business Objects\, adjust the path descriptions to match your actual install directories.

1. Copy Java Server Pages to the BO Enterprise Tomcat server  
Extract the contents of the installation media Reports.zip and copy the folder spl-jsp to the following folder:  
C:\Program Files\Business Objects\Tomcat\webapps  
This will create a folder named spl-jsp that contains the Java Server Pages along with other files used for integration it also places the MessageCatalogRepository.class files under the following folder:  
C:\Program Files\Business Objects\Tomcat\webapps\spl-jsp\WEB-INF\classes\com\splwg\reportServer
2. Copy crystalreportviewer11  
This copy must be done while Apache (Tomcat) is running - the war file will be automatically expanded.  
Copy the folder crystalreportviewer115 from the following folder:  
C:\Program Files\Business Objects\common\3.5\crystalreportviewers115  
To the following location:  
C:\Program Files\Business Objects\Tomcat\webapps\spl-jsp\crystalreportviewers11
3. Copy jar files  
Copy \*.jar files from the following folders:  
C:\Program Files\Business Objects\common\3.5\java\lib  
C:\Program Files\Business Objects\common\3.5\java\lib\external  
Along with the subfolder "taglib":  
C:\Program Files\Business Objects\common\3.5\java\lib\external\taglib  
to the following folder:  
C:\Program Files\Business Objects\Tomcat\webapps\spl-jsp\WEB-INF\lib
4. Edit web.xml  
Open web.xml file located in the following folder:  
C:\Program Files\Business Objects\Tomcat\webapps\spl-jsp\WEB-INF  
Verify that the web.xml file includes a context parameter for crystal\_image\_uri pointed to the location of a folder created in the step 2: Copy crystalreportviewer11:  

```
<!-- Context Param -->
  <context-param>
    <param-name>crystal_image_uri</param-name>
    <param-value>crystalreportviewers11</param-value>
  </context-param>
<!-- Context Param End -->
```
5. Verify structure of web application  
Verify that your web application is set according to the following structure:  
/Tomcat/webapps/spl-jsp/

In the Oracle Enterprise Taxation Management, the Reporting Options Table should include the following information about Reporting Server and Folder:

- Reporting Folder: spl-jsp
- Reporting Server:
- Reporting Tool Password:
- Reporting Tool User ID:

Note. Server name defined on Reporting Server Options between http:// and port number (if it exists) must match CMS name defined in Business Objects Enterprise. For example, if the Reporting Server is http://nj-pdnt001:8080/, the CMS name is nj-pdnt001.

If you want to have a different name for your reporting folder, you can rename spl-jsp folder on the server and put the corresponding value on the Reporting options table.

#### 6. Restart Tomcat

Type %CATALINA\_HOME%\bin\shutdown in the Command Prompt window.

Type %CATALINA\_HOME%\bin\startup in the Command Prompt window.

Note. This installation guide assumes that you use Business Object Enterprise server for integration with only one Oracle Enterprise Taxation Management environment. If you need to have several Oracle Enterprise Taxation Management environments pointed to the same Business Objects Enterprise server, you need to create a new web application - repeat steps Prepare BO Enterprise Tomcat server for integration for a folder that will be used as a root for a web application.

### Define Company Title and Logo

The sample reports provided by the system expect the company title to be defined on the Installation Options - Messages page in Oracle Enterprise Taxation Management.

The Company Logo should be defined in a file named "company\_logo.bmp" and should be placed in the "C:\logo" folder on the server where Business Objects Enterprise is installed.

### Define a User for Integration with Oracle Enterprise Taxation Management

The user defined on Report Options transaction in Oracle Enterprise Taxation Management should exist in Business Objects Enterprise. It is possible to use one of the two users that are provided with every BO installation (Administrator or Guest) or define a new one using Crystal Management Console (for example, CDXUSER).

### Unzip Oracle Enterprise Taxation Management Report Files

Unzip the Reports.zip file from the installation media into an empty directory. We'll refer to this directory as the reports extract folder.

### Publish the Sample Reports in Business Objects Enterprise

The installation media contains sample reports provided with the system. The report files are in the reports extract folder. These are the files with a .rpt extension.

**Install Business Objects Enterprise.** This section assumes that you have already installed Business Objects Enterprise.

The first step you need to take in order to use any of the samples is to publish the report in Business Objects Enterprise. You need to create a folder in Business Objects Enterprise named as defined on Reporting Options table in Oracle Enterprise Taxation Management and publish there report extracted to the reports extract folder. You do not need to publish subreports - they are released as samples.

Please refer to the Business Objects Enterprise documentation for more information.

The remaining topics in this section provide information about settings needed to ensure that the report is accessible via Oracle Enterprise Taxation Management.

### Configuring the Database Access

The sample reports are written assuming that an ODBC System DSN named CDX is used to define the data source. If you have not defined the data source like this, you must modify the report source to reference the appropriate name. When publishing the sample report in Business Objects Enterprise, verify that the data source defined for the report matches your definition.

During the Business Objects Enterprise database access configuration, you must use the appropriate Crystal supplied ODBC driver when connecting to an Oracle database. For DB2 databases, you must use the ODBC driver provided with DB2 Connect. For SQL Server use CR SQL Server Wire Protocol

If you are using Oracle ODBC driver, you must select **Procedure Returns Results** option on the **Advanced** tab of the Driver Setup dialog box.

Data source of sample report is defined as stored procedure available under RPTUSER schema. If you have defined stored procedures under a different schema, you must modify the report source to reference the appropriate name.

When publishing a report in Business Objects Enterprise, you are asked for database logon information. The logon user name and password must be the user name and password that has access to the stored procedures related to this report in your database.

### Verify Parameter Definition

Once your report has been published, navigate to the Crystal Management Console (CMC). This is the web-based administration component for Business Objects Enterprise and provides access to all administrative functions.

To verify/change the settings of a report in the Crystal Management Console go to the Objects management area and select the desired report by clicking its link located in the Object Title column.

Once you have selected your report, click the Process tab to change the settings.

To set up report parameters follow Parameters link.

If your report requires parameters to be provided by the user, you must configure the parameter settings in the Crystal Management Console to ensure that parameter values are passed from Oracle Enterprise Taxation Management when submitting the report via the Report Submission page. If you plan to submit reports from Oracle Enterprise Taxation Management, the Prompt the user for new value(s) when viewing check box should be checked.

**Submitting Reports Through Business Objects Enterprise.** If you plan submit reports from Business Objects Enterprise, you must also define an appropriate initial value for each parameter, if applicable.

**Oracle Enterprise Taxation Management User ID and Report Code.** The Oracle Enterprise Taxation Management user id and report Code are defined as the required parameter in every sample report. These parameters are hidden when report is submitted from Oracle Enterprise Taxation Management, but must be defined in the report.

Report Code parameter (P\_REPORT\_CD) is a required parameter for all reports. If you plan to preview reports from Business Objects Enterprise, do not select Prompt the user for new value(s) when viewing check box. You need to populate Report Code value in Crystal Management Console and the preview functionality will use it. Report Submission from Oracle Enterprise Taxation Management always populates this parameter behind the scenes.

### Verify Authorization Level

To verify the user's access rights, navigate to the **Rights** tab in the Objects management area of the Crystal Management Console and check that Oracle Enterprise Taxation Management user has correct security level for the report.

Integration with Oracle Enterprise Taxation Management requires an access level of View On Demand for the Oracle Enterprise Taxation Management user.

## How To Copy A Report Definition From The Demonstration Database

In order to use one of the sample reports in your Oracle Enterprise Taxation Management region, you must define the meta data for the report. The demonstration database contains the report definition and all its related data for each sample report.

Refer to the Reports chapter of the Oracle Enterprise Taxation Management user guide for instructions on how to copy any or all of the report definitions from the demonstration database to your implementation's database.

## Reporting off multi-byte character set databases

Crystal version XI fully supports Unicode, and will automatically convert multi-byte characters in to Unicode output. If you have single-byte Windows environment, you will need to install the language pack and update report font on Report Definition transaction in order to see multi-byte characters in the reports.

### Example scenario

- An Oracle database has non-English data such as Traditional Chinese (supports AL32UTF8 character set).
- Business Objects Enterprise XI is installed on the machine with Windows 2000 operating system is English.

#### Steps to configure the environment on the CE server:

1. Configure the system environment on the database client side to Chinese character code by setting the NLS\_LANG variable set to AMERICAN\_AMERICA.UTF8 under the registry HKEY\_Local\_Machine\Software\Oracle\Homeo.
2. Install language pack for Traditional Chinese in Win2000.

#### Steps to configure Metadata in Oracle Enterprise Taxation Management

1. Open **Utilities, Report Definition** transaction. Set **Override Report Font** field to 'MingLiU' for all reports.

Now you will be able to see Chinese data in the reports.

# Reports Configuration for Oracle BI Publisher

This section describes the steps required to configure Oracle Enterprise Taxation Management and Oracle BI Publisher to support the Oracle Enterprise Taxation Management reporting solution using Oracle BI Publisher.

## Installing Oracle BI Publisher Enterprise

Oracle BI Publisher Enterprise™ provides the tools for:

- Making reports available over the web (establishing the required report server processes)
- Integrating reports with the Oracle Enterprise Taxation Management system
- Scheduling reports to run on a regular basis
- Managing instances of the reports that have been created by a previous run
- Managing user access to the report instances

This document assumes that you have already installed Oracle BI Publisher Enterprise such that requests can be pointed to the Oracle BI Publisher Enterprise running on Windows or Unix.

**Version Note:** We used Oracle BI Publisher 10.1.3.3.2 Enterprise Edition to develop sample reports that are distributed with the Oracle Enterprise Taxation Management system. We used Oracle BI Publisher 10.1.3.3.2 on Windows and Unix server for running reports on the web and for testing the integration with Oracle Enterprise Taxation Management. The report layouts have been created using the BI Publisher Desktop 10.1.3.2. The sample reports and integration may not work with other Oracle BI Publisher Enterprise versions and products.

In addition, the following database client software versions were used:

Oracle: the client must match the database server version, i.e. Oracle 10g client for an Oracle 10g database, Oracle 11g client for an Oracle 11g database.

**Version Note:** Images Do Not Generate Properly Without X Server in Unix version of BI Publisher. If you are running the BI Publisher server on a Linux or Unix machine that does not have an X Server installed reports that contain images may not be properly generated. Workaround: If you are running Java 1.4.2 or later, start the environment with a headless implementation. Specify the following property at the java command line:

```
-Djava.awt.headless=true
```

For JDK versions prior to 1.4.2 please see your documentation on how to implement X Host for your environment

## Configuring The System To Enable Reports

This section describes the steps needed to configure your system to enable reports.

### Configure the System to Invoke Oracle BI Publisher Enterprise Real-time

In order to invoke Oracle BI Publisher Enterprise from within Oracle Enterprise Taxation Management, the system must be configured so that Oracle Enterprise Taxation Management knows how to invoke reports.

### Specify Reporting Tool Options

The following information should be defined on Reporting Tool Options table:

- Reporting Server is the web server URL where the reporting tool is installed.
- Reporting Folder defines the name of the directory on the Oracle BI Publisher server where reports are located. The Oracle Enterprise Taxation Management reporting tool algorithm

constructs the URL to open Oracle BI Publisher Enterprise based on the information provided on Reporting Options. The same folder name should be used as a report folder in Oracle BI Publisher Enterprise where reports are published.

Refer to the Reports chapter of the Oracle Enterprise Taxation Management user guide for more information about the reporting options table.

### **Reporting Tool Algorithm**

The base product provides an installation algorithm plug-in spot called Reporting Tool. This plug-in spot should contain an algorithm that invokes the reporting tool real-time. Oracle Enterprise Taxation Management provides an algorithm type called F1-BIPR-INV, which invokes Oracle BI Publisher Enterprise.

This algorithm relies on information defined in the Reporting Options table: the reporting server and folder names for accessing the reporting tool. The algorithm constructs several strings, for example, the URL of the BI Publisher, information about the report being requested and user info in the format expected by Oracle BI Publisher Enterprise. The Java program returns the correct URL to the browser. The browser then opens a BI Publisher Enterprise window with the appropriate URL.

To use the F1-BIPR-INV algorithm type to invoke Oracle BI Publisher Enterprise, perform the following steps:

1. Create an algorithm for this algorithm type.
2. On the installation options, add an entry to the algorithm collection with an algorithm entity of Reporting Tool and indicate the algorithm created in the previous step.

### **Interface with Oracle BI Publisher Enterprise Batch Scheduler**

Presently Oracle Enterprise Taxation Management does not provide support for batch jobs with Oracle BI Publisher. Please use Oracle BI Publisher directly in order to schedule reports to run in batch.

## **Sample Reports Supplied with the Product**

The system provides several sample reports that may be used by your organization as they are to as a starting point for creating a new report. The following sections provide instructions on how to set up your implementation environment to use the sample reports.

Refer to the Reports chapter of the Oracle Enterprise Taxation Management user guide for a description of each sample report.

### **How to Use a Sample Report Provided with the System**

If you would like to use any of the sample reports, you need to perform some steps to be able to execute them in an implementation environment. This section walks you through the steps needed.

#### **Oracle Functions and Packages**

Each report has one or more corresponding database function, package that store the business logic to fetch the data from the database that is then presented in the report.

The prerequisite for Oracle Enterprise Taxation Management reports to work against the target database is setting up of a RPTUSER database user. This user should have read access to all Oracle Enterprise Taxation Management database objects and execution privilege on the stored procedures that the reports access.

The steps involved in setting up the RPTUSER are:

1. Create the RPTUSER

To create the RPTUSER (it doesn't exist), navigate to the Database\Oracle folder and edit the file CDX\_rptuser.sql to match your requirements. The parameters in this file that need review are: password of the user, default and temporary tablespace names for the user.

Now log into the target database as a DBA user using SQLPLUS and execute the script by entering following command at SQL prompt:

```
SQL> @CDX_rptuser.sql
```

("SQL>" denotes the SQL prompt and doesn't need to be typed).

## 2. Create or refresh the oracle functions and packages

Log into the target database as the user that owns Oracle Enterprise Taxation Management schema objects using SQLPLUS and execute the script CDX\_rptfn.sql by entering the following command at the SQL prompt:

```
SQL> @CDX_rptfn.sql
```

## 3. Compile the invalid objects

If you see an Oracle error while executing the step#2, execute the database object compilation script CDX\_compfn.sql

```
SQL> @CDX_compfn.sql
```

## 4. Configure security.

This involves generating synonyms in RPTUSER and granting it privileges to execute the stored procedures and read the Oracle Enterprise Taxation Management tables. The utility prompts you to answer for the following questions:

- Enter the Oracle user that owns the schema (e.g. CISADM): cisadm
- Enter the password for the CISADM user: cisadm
- Enter the name of the Oracle Database: Your\_db
- Enter a comma-separated list of Oracle users in which synonyms need to be created (e.g. cisuser,cisread): rptuser

The utility runs and configures security for the Oracle Enterprise Taxation Management objects.

## Unzip Oracle Enterprise Taxation Management Report Files

Unzip the ETMBIPublisherReports.zip file from the installation media into an empty directory. We'll refer to this directory as the reports extract folder.

## Publish the Sample Reports in Oracle BI Publisher Enterprise

The installation media contains sample reports provided with the system. The report files are in the reports extract folder.

Install Oracle BI Publisher Enterprise. This section assumes that you have already installed Oracle BI Publisher Enterprise.

Note: If you install Oracle BI Publisher Enterprise in a location other than the default installation directory of C:\oracle\BI101332, adjust the path descriptions to match your actual install directories.

The first step you need to take in order to use any of the samples is to publish the report in Oracle BI Publisher Enterprise. You need to create a folder in Oracle BI Publisher Enterprise named as defined on Reporting Options table in Oracle Enterprise Taxation Management and publish there report extracted to the reports extract folder.

Create a folder named ETM in the folder C:\oracle\BI101332\xmlp\XMLP\Reports. Copy all Oracle BI Publisher sample reports into the ETM folder.

Please refer to the Oracle BI Publisher Enterprise documentation for more information.

### Prepare Oracle BI Publisher Enterprise server for integration

The ETM Reporting Options Table should include the following information about Reporting Server and Folder:

Reporting Folder: ETM

Reporting Server: URL of reporting server. For example: http://sf-ugbu.splwg.com:9704

If you want to have a different name for your reporting folder, you can rename ETM folder on the server and put the corresponding value on the Reporting options table.

To configure the BI Publisher Server, follow these steps:

1. Login as "Administrator" to BI Publisher Server
2. Go to the **Admin** Tab

In the **JDBC Connection** section under **Data Sources**, add a new data source using **Add Data Source**. Create a new Data Source ETM with connection details pointing to the ETM database. Test Connection to make sure the Database connection is successful and save changes using Apply.

To define a User for Integration with Oracle Enterprise Taxation Management:

1. Log in as Administrator and go to the **Admin** tab. Go to the **Users** section under **Security Center**. Create a new User using **Create User** button. Create a user rptuser and specify the password.
2. Go to the **Roles and Permissions** tab under **Security Center** and use **Create Role** to create a new role. Create a new role called ETM Reports.

Once the role has been created, the role now appears in the Roles and Permissions tab.

For the Role Name ETM Reports just created, click on **Add Folders** to add the ETM sample reports to the Allowed Folders.

For Role Name ETM Reports, click on **Add Data Sources** to add the ETM data source to the Allowed Data Sources.

To include appropriate Roles for Role Name ETM Reports, click on **Add Role**.

To verify Sample BI Publisher reports on Server:

1. Log in to Oracle BI Publisher Server as user rptuser.
2. Verify that all sample reports provided appear in the CCB folder.

### Define Company Title and Logo

The sample reports provided by the system expect the company title to be defined on the **Installation Options - Messages** page in Oracle Enterprise Taxation Management.

The Company Logo should be defined in a file named "company\_logo.bmp" and should be placed in the "C:\oracle\BI101332\oc4j\_bi\j2ee\home\default-web-app\logo" folder on the server where Oracle BI Publisher Enterprise is installed.

### Oracle Enterprise Taxation Management User ID and Report Code.

The Oracle Enterprise Taxation Management user id and report Code are defined as the required parameter in every sample report. These parameters are hidden when report is submitted from Oracle Enterprise Taxation Management, but must be defined in the report.

### How To Copy A Report Definition From The Demonstration Database

In order to use one of the sample reports in your Oracle Enterprise Taxation Management region, you must define the meta-data for the report. The demonstration database contains the report definition and all its related data for each sample report.



Refer to the Reports chapter of the Oracle Enterprise Taxation Management user guide for instructions on how to copy any / all of the report definitions from the demonstration database to your implementation's database.

**Adding Custom Layout to existing reports in BI Publisher**

The layout of the sample reports have been created in Microsoft Word using BI Publisher Desktop 10.1.3.2 plug-in. Custom Layouts can be created in BI Publisher. The name of the Custom layout can be specified in the Report Definition: Customer Specific Font/Layout. BI Publisher will then use this custom layout when the report is invoked from Oracle Enterprise Taxation Management.



# Chapter 4

---

## Additional Products

This section discusses additional products that can be installed and configured for use with Oracle Enterprise Taxation Management, including:

- **Business Objects XI R2 Professional Edition**
- **On-line Document Display with DOC1**
- **Point-Of-Sale (POS) Printer Installation**

## Business Objects XI R2 Professional Edition

Oracle Enterprise Taxation Management is integrated with Business Objects Enterprise XI Release 2 multi language build (MLB) on Windows.

In order to use Business Objects with Oracle Enterprise Taxation Management some additional steps should be performed:

- Install all DataDirect ODBC drivers. Drivers can be downloaded from the Business Objects Web site.
- Deploy InfoView and the Business Object Enterprise Admin LaunchPad to Tomcat.
- Deploy the Java Web Component Adapter to Tomcat.

Business Objects Enterprise XI can be downloaded from the Oracle Utilities FTP site. Please contact Oracle Utilities Customer Support for more information.

Note. The machine should not have any previous version of Crystal, Business Objects, or Microsoft SQL Server installed. If the machine has any of the software listed above installed, you need to uninstall it following instructions provided by Business Objects Enterprise. We cannot guarantee that you will be able to install Business Objects Enterprise XI in this case. If the Java SDK is installed before Business Objects Enterprise installation, the Business Objects will only work with Java version 1.4.2. We also recommend that you disable IIS if it already installed.

In addition to this guide, please consult the instructions provided by Business Objects to install Business Objects IX - Professional Edition on Windows.

### Installing Business Objects XI Server

Select these specific options during the Business Object Enterprise XI installation setup:

1. When prompted for **Select Client or Server Installation:**  
Select the **Perform Server Installation** option - this will install all required application features required for Oracle Enterprise Taxation Management to interact with Business Objects IX
2. When prompted for **Install Type:**  
Select **New** and ensure **Install MSDE or use existing local SQL Server** is selected.
3. When prompted for **Choose Web Component Adapter Type:**  
Select **Java application server** and select **Install Tomcat application server** (JDK will be installed).  
You do not need to install IIS ASP.Net
4. When prompted to **Configure Tomcat**, you may install Tomcat on any available port.

Note: If you use connection port 80 ensure IIS is disabled

### Configure Business Object Enterprise

To deploy to Tomcat:

1. Configure the Java environment variable.
2. Set Tomcat properties.
3. Set up Jar files.
4. Deploy the WAR files.

Please consult the instruction provided by Business Objects in xir2\_bip\_install\_en.pdf

You can find helpful Information on the Business Objects Web site. Please refer to Business Objects knowledge database article ID: c2018319 - How to configure a WAR file that uses the Enterprise XI Release 2 Java SDK.

Refer to the **Chapter 3: Reports Configuration** for information how to configure Business Object Enterprise to interact with Oracle Enterprise Taxation Management

After completion of the installation, log on into Business Object Enterprise and verify that it is running.

## On-line Document Display with DOC1

Group 1 Software DOC1®, enables Adobe's Portable Document Format (PDF) to be used for on-line viewing and Internet delivery of on-line bills and other documents. This document describes how Oracle Enterprise Taxation Management can be integrated with DOC1® to allow bills and letters to be viewed online.

This facility requires the DOC1® software to already be installed. DOC1® can be purchased and licensed separately from GROUP1 Software (<http://www.g1.com>). Please refer to the Software Requirements section in the *Oracle Enterprise Taxation Management Installation Guide* for version and installation details.

### Supported DOC1 Reports

The following DOC1 online reports are supported for this release of ETM

- ONLN-BL-DSP - Creates a PDF of bill image by calling Doc1.
- ONLD-LT - Creates a PDF of letter image by calling Doc1.

### Installing and Integrating DOC1 Templates with ETM

Follow this process to integrate the supplied DOC1 templates with your ETM installation and to configure your system:

1. Login to the target server hosting the environment that you are setting up for online image display.

2. Initialize the target environment

On Unix:

```
$SPLEBASE/bin/splenvron.sh -e <SPLENVIRON>
```

On Windows:

```
%SPLEBASE%\bin\splenvron.cmd -e <SPLENVIRON>
```

3. Add an environment variable DOC1HOSTDIR to the system. The value of DOC1HOSTDIR should be set to the location where the DOC1 software is installed. Ensure that the environment variable DOC1HOSTDIR is set correctly
4. Run the initialSetup utility for the environment to generate the Oracle Enterprise Taxation Management related DOC1 INI files:

On Unix:

```
$SPLEBASE/bin/initialSetup.sh
```

On Windows:

```
%SPLEBASE%\bin\initialSetup.cmd
```

5. Stop and start the environment:

On Unix:

```
$SPLEBASE/bin/spl.sh stop/start
```

On Windows:

```
%SPLEBASE%\bin\spl.cmd stop/start
```

6. Unzip the DOC1 spl.zip file from the installation media into an empty directory. A directory called AppFiles will be created.

7. Copy the AppFiles directory into the DOC1 host directory on the target application server (see the section Software Requirements in the *Oracle Enterprise Taxation Management Installation Guide* for installation location). It should be at the same level as generate. Note: For UNIX, use binary ftp or a similar tool to transfer the entire directory.

Note: On UNIX, use binary ftp or a similar tool to transfer the entire directory.

8. Ensure that the Oracle Enterprise Taxation Management Administrator userid (typically cissys) has execute permissions to all files in the <DOC1HOSTDIR>/generate and <DOC1HOSTDIR>/AppFiles folders.

## Sample Directory sStructure

Directory	Contents
<DOC1HOSTDIR>/generate	DOC1 Binaries
<DOC1HOSTDIR>/AppFiles	ETM templates and driver programs
<DOC1HOSTDIR>/AppFiles/examples	ETM examples and sample extracts

## Sample Generated Ini File

The following files will be populated during the execution of the initialSetup utility:

### doc1dirfile.ini

```

ONLINE DOC HOST=<DOC1HOSTDIR>
ONLINE DOC TEMPLATE=<DOC1HOSTDIR>/AppFiles
DOC EXTRACT PATH=<SPLAPP>
DOC IMAGE PATH=<SPLEBASE>/splapp/billView/
DOC IMAGE SCRIPT=<DOC1HOSTDIR>/AppFiles/_ccbPrintDoc.sh
URL PREFIX=/spl/billView/

```

### billdirfile.ini

```

ONLINE BILL HOST=<DOC1HOSTDIR>
ONLINE BILL TEMPLATE=<DOC1HOSTDIR>/AppFiles/
BILL EXTRACT PATH=<SPLAPP>
BILL IMAGE PATH=<SPLEBASE> /splapp/billView/
BILL IMAGE SCRIPT=<DOC1HOSTDIR>AppFiles/_ccbPrint.sh
URL PREFIX=/spl/billView/

```

## Description of On-line Bill Display

The on-line bill display process is an algorithm (ONLN-BL-DSP), which is triggered when the **Display Bill** action button on the Bill Maintenance window is invoked. This algorithm is responsible for extracting bill information for the current bill. The bill information is created as a flat file, which is processed by DOC1® to create a bill image in PDF format. The URL of this PDF file is then returned back to the client browser, which renders the bill image.

Refer to the section Background Processes Addendum in the application user documentation for detailed information.

## On-line Bill Display Components

The on-line bill display process requires the following components:

### The ONLINEBILLINI environment variable

The full path location of the billdirfile.ini is contained in the ONLINEBILLINI environment variable (typically <SPLEBASE>/etc directory). This environment variable must be set when the

Oracle Utilities Application Framework is installed initially, or whenever you run the initialSetup utility to ensure that the INI files are generated correctly.

### The billdirfile.ini File

The billdirfile.ini file is used by the Online Bill Print Algorithm and the bill image generator script to render the bill image. The INI file contains the following externalized parameters:

- ONLINE BILL HOST=<DOC1 Host Path> - This parameter defines where DOC1 is installed. Value typically <DOC1HOSTDIR>. Value typically <DOC1HOSTDIR>
- ONLINE BILL TEMPLATE=<DOC1 Template Path> - This parameter defines the location of DOC1's template. Value typically <DOC1HOSTDIR>/AppFiles.
- BILL EXTRACT PATH=<Bill Extract Output Path> - This parameter defines the location where the bill print extract program creates its flat file output. Value Typically <SPLAPP>.
- BILL IMAGE PATH=<Full PDF Path> - This parameter defines the location where DOC1 creates the bill image PDF file. Typically <SPLEBASE>/splapp/billView. The DOC1 log files for specific reports are also in this directory.
- BILL IMAGE SCRIPT= <Bill Image Generator Script with full path> - This parameter defines the location of the script that invokes DOC1 to generate the PDF file from the extract file. <DOC1HOSTDIR>/AppFiles/\_ccbPrint.sh.
- URL PREFIX=<URL Prefix> - This parameter defines the prefix that will be affixed to the PDF filename in order to compose its full URL when displayed.

### Algorithm Type - CIPBONBX

CIPBONBX is the core of the on-line bill display processing. It is responsible for calling the bill extract program and then calling the bill image generator script component, which in turn calls DOC1®. It is also the responsibility of this program to return to the browser the full URL of the bill image, which is in PDF file format.

To make this program flexible, its configurable parameters are stored in an INI file. The full path of the INI file is defined by the ONLINEBILLINI environment variable.

This program utilizes the INI file to determine the target location for the bill extract program and the location of the bill image generator script (see above).

To activate this algorithm, within the application the following steps have to be executed by someone having access to the admin tables, that knows how to set up and define algorithms. (See also the Business Process Guide on Algorithms in the Oracle Enterprise Taxation Management user documentation)

- Create an algorithm with the following values:
  - Algorithm code: OB-DISP-DOC1
  - Description: Online Bill Display
  - Algorithm Type: ONLN-BL-DSP
  - Parameter
    - Bill Route Type
- In the Oracle Enterprise Taxation Management Application, navigate to the Installation Algorithm screen and add an Installation Algorithm with the following values (this will create a row on the CI\_INSTALL\_ALG table):
  - INSTALL\_OPT\_ID: 11111
  - INS\_ALG\_ENTITY\_FLG: ONBD
  - SEQ\_NUM: 1



- ALG\_CDOB-DISP-DOC: 1
- VERSION: 1

## Bill Image Generator Script

The bill print extract script and DOC1 ini files are provided to assist in the integration of DOC1 into the product. This code is provided as examples only and is not supported as part of the base product.

The Bill Image Generator shell script `_ccbPrint.sh` is invoked by the bill print extract algorithm. The call parameters are based on the contents the `billdirfile.ini` file identified through the `ONLINEBILLINI` environment variable. This script validates the input parameters passed to it in turn calls the main driver `splbill_s5_v3_main_batch_pdf.sh` which in turns call all related bill generation and DOC1 scripts responsible for creating a document image in PDF file. The output from this process as well as the PDF file are placed in the appropriate directory where it can be picked up by the application and displayed in the user's browser (usually `$SPLENVIRON/splapp/billView` folder).

## On-Line Document Display Components

DOC1 is responsible for creating a document image in PDF file format based on the document information (from the extract) and template supplied. The below script is used for all other sample reports excluding bill print.

The application will call `_ETMPrintDoc.sh` as defined in the `doc1dirfile.ini` file

This script validates the input and calls the main driver script, sets the template prefix depending on the parameter passed in to it. Each type of document displayed has a different template. Generic scripts handle all the rest of the reports.

For detailed information, see the section Background Processes Addendum in the user documentation.

The on-line document image display process requires the following components:

### The ONLINEDOCINI Environment Variable

The full path location of the `doc1dirfile.ini` is contained in the `ONLINEDOCINI` environment variable (typically `<SPLEBASE>/etc/doc1dirfile.ini`). This environment variable must be set when the Oracle Utilities Framework Application is installed initially, or whenever `initialSetup.sh` is run to ensure that the INI files are generated correctly

### The doc1dirfile.ini File

This file is used by the Online Image display and the online image generator script to render the bill image. The INI file contains the following externalized parameters:

- `ONLINE DOC HOST=<DOC1 Host Path>` - This parameter defines where DOC1 is installed. Value typically `<DOC1HOSTDIR>`
- `ONLINE DOC TEMPLATE=<DOC1 Template Path>` - This parameter defines the location of DOC1's template files. Value typically `<DOC1HOSTDIR>/AppFiles/`
- `DOC EXTRACT PATH=<Bill Extract Output Path>` - This parameter defines the location where the applicable extract program creates its flat file output. Value Typically `<SPLAPP>`
- `DOC IMAGE PATH=<Full PDF Path>` - This parameter defines the location where DOC1 creates the bill image PDF file. The DOC1 log files for a specific report is also in this directory. Value Typically `<SPLEBASE>/splapp/billView/`
- `DOC IMAGE SCRIPT= <Bill Image Generator Script with full path>` - This parameter defines the location of the script that invokes DOC1 to generate the PDF file from the extract file. Value typically `<DOC1HOSTDIR>/AppFiles/_ETMPrintDoc.sh`

- URL PREFIX= <URL prefix> - This parameter defines the prefix that will be affixed to the PDF filename in order to compose its full URL when displayed. This value dependant on the application middleware (Oracle Application Server, WebLogic, WebSphere).

### Algorithm Type

An algorithm type controls each type of document available for display, such as customer letters and bills). Each of these algorithm types has similar processing:

- It calls the appropriate extract algorithm, which returns the various records that contain the information that appears on the printed document.
- It passes these records to the DOC1 software. This software reconstructs the document's image (in a PDF).
- This PDF is returned to the calling program. This program then displays it in a separate page on the user's browser.

Please refer to the Oracle Enterprise Taxation Management user documentation for more detailed descriptions of the algorithms that control online image display.

### Examples provided

Examples to test the installation, infrastructure, and license are provided in the following directory: ../ AppFiles/examples

After the environment has been set, copy the .DAT files from this directory into the \$SPLAPP directory. Copy the sample\*.\* to ../ AppFiles folder. The example programs can be run directly from the command line, for example:

- sampletm: to generate an online bill without the GUI
- sampletmletr: for online letters.

The generated PDF file will be created in \$SPLEBASE/splapp/billView folder The output from the DOC1 generation process will also be copied to this directory.

Note: Additional examples and templates are provided but are not supported for ETM 2.2.0. The only templates that are supported are Online Bill Display and Online Letters.

## Point-Of-Sale (POS) Printer Installation

The OLE for POS Application Development Kit (OPOS ADK) is a Component Object Model (COM) software package developed by a group of Point-Of-Sale (POS) device manufacturers in partnership with Microsoft. It implements a set of standard interfaces that may be invoked by an application program to control a supported set of Point-Of-Sale devices.

The software used during development was obtained without charge by contacting Epson USA in Long Beach, California. There should be extensive documentation pertaining to the use of the software included as part of the Application Development Kit.

Epson USA is one of the principal members of the OLE for Retail POS Committee that developed the OLE for POS Application Development Kit. Other principal members are Fujitsu and NCR.

The Point-Of-Sale printer must be one of the supported devices listed in the documentation provided with the OLE for POS Application Development Kit. Although other printers might work, it is almost certain that the output will be incorrect.

### Installation

1. Obtain the latest version of the OLE for POS Application Development Kit (OPOS ADK) and install the software.
2. Configure the installation with the aid of the *OPOS ADK User's Guide*, which should have complete instructions for both installation and setup.
3. During the configuration, set the Logical Device Name (LDN) for the printer that is connected to the client machine to POSPRTR. The interface from Oracle Enterprise Taxation Management to the OLE for POS software uses the logical device name of POSPRTR for the device to print to. If the Logical Device Name is set to anything else, the application returns errors when printing is attempted.
4. On the application server, install the following files in the path `$$SPLEBASE/splapp/applications/root/c1/cm/` :

`cm_POSPrint.js`

Open this file and verify that the value of the variable of `paymentQuickAddPopUpExists` is set to 'true'.

`PayEventPOSPrinter.html`

`PayQuickAddPOSPrinter.html`

These files are available from your implementation team.

The directory path specified above may not exist. If it does not, it must be created and the files installed there. The application looks for these files in this location and the print functions do not work if they are placed elsewhere.

5. On the client machine, open the Web browser. Reset the local intranet security settings such that the browser will permit the free use of ActiveX objects. In Internet Explorer, go to **Tools, Internet Options**, select the **Security** tab, and click **Local Intranet** then **Custom Level**. Enable the options for **Run ActiveX controls and plug-ins**, **Initialize and script ActiveX controls not marked as safe**, and **Script ActiveX controls marked safe for scripting**. If this is not done, the printing functions do not work.

### Special Considerations

- The printer *must not* be installed at LPT1 via the operating system's hardware/printer installation services. If it is, the ActiveX software cannot control it and errors result.

- If desired, the content and format of the printer output may be changed to suit your business requirements. The following is a list of the source code files that may be edited to accomplish this:
  - \$SPLEBASE/splapp/applications/root/c1/cm/py/POSPrinter/PayEventPOSPrinter.html
  - \$SPLEBASE/splapp/applications/root/c1/cm/py/POSPrinter/PayQuickAddPOSPrinter.html
  - \$SPLEBASE/splapp/applications/root/c1/py/payEvent/paymentEventPrintControl.xml
  - \$SPLEBASE/splapp/applications/root/c1/py/payEvent/paymentEventPrintControl.xjs
  - \$SPLEBASE/splapp/applications/root/c1/py/payQuickAdd/paymentQuickAddPrintControl.xml
  - \$SPLEBASE/splapp/applications/root/c1/py/payQuickAdd/paymentQuickAddPrintControl.xjs
- It is beyond the scope of this section to provide comprehensive instructions regarding the customization of printer output. Careful study of the documentation for the OPOS standard interface, the data structure definitions for the relevant Oracle Enterprise Taxation Management components, and the existing JavaScript should provide sufficient knowledge from which a successful customization can proceed.
- Other than those requirements already set forth for a Oracle Enterprise Taxation Management workstation, there are no special requirements for a PC using a Point-Of-Sale printer. The application is configured for use with a printer connected to the PC via a parallel port; installation of a USB printer requires additional steps that are covered in the OLE for POS documentation.

# Appendix A

---

---

## License and Copyright Notices

License and Copyright notices for associated products.

### Third Party Products

#### Notice concerning usage of ANTLR

Oracle Corporation has used ANTLR in developing this software.

#### Notice concerning usage of Apache Software

The following are covered under the Apache 2.0 license.

- Apache Axis
- Cgilib
- Commons-BeanUtils
- Commons-Collections
- Commons-HttpClient
- Commons-lang
- Commons-logging
- Commons-Fileupload
- Commons-IO
- Log4j
- Maven
- Qdox
- Tomcat
- Velocity
- Woodstox XML processor

```
/*
 * Copyright 1999-2004 The Apache Software Foundation.
 *
 * Licensed under the Apache License, Version 2.0 (the "License");
 * you may not use this file except in compliance with the License.
 * You may obtain a copy of the License at
 *
```

---

\* <http://www.apache.org/licenses/LICENSE-2.0>  
\*  
\* Unless required by applicable law or agreed to in writing, software  
\* distributed under the License is distributed on an "AS IS" BASIS,  
\* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or  
implied.  
\* See the License for the specific language governing permissions and  
\* limitations under the License.  
\*/

## Apache License

Version 2.0, January 2004

<http://www.apache.org/licenses/>

### TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

#### 1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

---

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.

3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

You must give any other recipients of the Work or Derivative Works a copy of this License; and

You must cause any modified files to carry prominent notices stating that You changed the files; and

You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and

If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions. Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied,

---

including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

## Notice concerning usage of ASM

Copyright (c) 2000-2005 INRIA, France Telecom

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name of the copyright holders nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

## Notice concerning usage of CruiseControl

CruiseControl, a Continuous Integration Toolkit



---

Copyright (c) 2001, ThoughtWorks, Inc.

651 W Washington Ave. Suite 600

Chicago, IL 60661 USA

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

Neither the name of ThoughtWorks, Inc., CruiseControl, nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

## Notice concerning usage of dom4j

BSD style license

Redistribution and use of this software and associated documentation ("Software"), with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain copyright statements and notices. Redistributions must also contain a copy of this document.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. The name "DOM4J" must not be used to endorse or promote products derived from this Software without prior written permission of MetaStuff, Ltd. For written permission, please contact [dom4j-info@metastuff.com](mailto:dom4j-info@metastuff.com).
4. Products derived from this Software may not be called "DOM4J" nor may "DOM4J" appear in their names without prior written permission of MetaStuff, Ltd. DOM4J is a registered trademark of MetaStuff, Ltd.
5. Due credit should be given to the DOM4J Project - <http://www.dom4j.org>

THIS SOFTWARE IS PROVIDED BY METASTUFF, LTD. AND CONTRIBUTORS "AS IS" AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL

---

METASTUFF, LTD. OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Copyright 2001-2005 (C) MetaStuff, Ltd. All Rights Reserved.

## Notice concerning usage of Ehcache

The Apache Software License, Version 1.1

Copyright (c) 2000 The Apache Software Foundation. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. The end-user documentation included with the redistribution, if any, must include the following acknowledgment:

"This product includes software developed by the Apache Software Foundation (<http://www.apache.org/>)."

Alternately, this acknowledgment may appear in the software itself, if and wherever such third-party acknowledgments normally appear.

4. The names "Apache" and "Apache Software Foundation" must not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact [apache@apache.org](mailto:apache@apache.org).
5. Products derived from this software may not be called "Apache", nor may "Apache" appear in their name, without prior written permission of the Apache Software Foundation.

THIS SOFTWARE IS PROVIDED ``AS IS" AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE APACHE SOFTWARE FOUNDATION OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

=====  
=====

This software consists of voluntary contributions made by many individuals on behalf of the Apache Software Foundation. For more information on the Apache Software Foundation, please see <http://www.apache.org/>.

---

Portions of this software are based upon public domain software originally written at the National Center for Supercomputing Applications, University of Illinois, Urbana-Champaign.

## Notices concerning usage of Hibernate and c3p0

GNU LESSER GENERAL PUBLIC LICENSE

Version 2.1, February 1999

Copyright (C) 1991, 1999 Free Software Foundation, Inc.

51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

[This is the first released version of the Lesser GPL. It also counts as the successor of the GNU Library Public License, version 2, hence the version number 2.1.]

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public Licenses are intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users.

This license, the Lesser General Public License, applies to some specially designated software packages--typically libraries--of the Free Software Foundation and other authors who decide to use it. You can use it too, but we suggest you first think carefully about whether this license or the ordinary General Public License is the better strategy to use in any particular case, based on the explanations below.

When we speak of free software, we are referring to freedom of use, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish); that you receive source code or can get it if you want it; that you can change the software and use pieces of it in new free programs; and that you are informed that you can do these things.

To protect your rights, we need to make restrictions that forbid distributors to deny you these rights or to ask you to surrender these rights. These restrictions translate to certain responsibilities for you if you distribute copies of the library or if you modify it.

For example, if you distribute copies of the library, whether gratis or for a fee, you must give the recipients all the rights that we gave you. You must make sure that they, too, receive or can get the source code. If you link other code with the library, you must provide complete object files to the recipients, so that they can relink them with the library after making changes to the library and recompiling it. And you must show them these terms so they know their rights.

We protect your rights with a two-step method: (1) we copyright the library, and (2) we offer you this license, which gives you legal permission to copy, distribute and/or modify the library.

To protect each distributor, we want to make it very clear that there is no warranty for the free library. Also, if the library is modified by someone else and passed on, the recipients should know that what they have is not the original version, so that the original author's reputation will not be affected by problems that might be introduced by others.

Finally, software patents pose a constant threat to the existence of any free program. We wish to make sure that a company cannot effectively restrict the users of a free program by obtaining a restrictive license from a patent holder. Therefore, we insist that any patent license obtained for a version of the library must be consistent with the full freedom of use specified in this license.

Most GNU software, including some libraries, is covered by the ordinary GNU General Public License. This license, the GNU Lesser General Public License, applies to certain designated libraries, and is quite different from the ordinary General Public License. We use this license for certain libraries in order to permit linking those libraries into non-free programs.

---

When a program is linked with a library, whether statically or using a shared library, the combination of the two is legally speaking a combined work, a derivative of the original library. The ordinary General Public License therefore permits such linking only if the entire combination fits its criteria of freedom. The Lesser General Public License permits more lax criteria for linking other code with the library.

We call this license the "Lesser" General Public License because it does Less to protect the user's freedom than the ordinary General Public License. It also provides other free software developers Less of an advantage over competing non-free programs. These disadvantages are the reason we use the ordinary General Public License for many libraries. However, the Lesser license provides advantages in certain special circumstances.

For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library. A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by limiting the free library to free software only, so we use the Lesser General Public License.

In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

Although the Lesser General Public License is Less protective of the users' freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the wherewithal to run that program using a modified version of the Library.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, whereas the latter must be combined with the library in order to run.

#### TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License Agreement applies to any software library or other program which contains a notice placed by the copyright holder or other authorized party saying it may be distributed under the terms of this Lesser General Public License (also called "this License"). Each licensee is addressed as "you".

A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

1. You may copy and distribute verbatim copies of the Library's complete source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to

---

this License and to the absence of any warranty; and distribute a copy of this License along with the Library.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

- a) The modified work must itself be a software library.
- b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.
- c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.
- d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

---

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

- a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)
- b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.
- c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.
- d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

---

e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

7. You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:

a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above.

b) Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

8. You may not copy, modify, sublicense, link with, or distribute the Library except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, link with, or distribute the Library is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

9. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Library or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Library (or any work based on the Library), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Library or works based on it.

10. Each time you redistribute the Library (or any work based on the Library), the recipient automatically receives a license from the original licensor to copy, distribute, link with or modify the Library subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties with this License.

11. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Library at all. For example, if a patent license would not permit royalty-free redistribution of the Library by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Library.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply, and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through

---

that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

12. If the distribution and/or use of the Library is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Library under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

13. The Free Software Foundation may publish revised and/or new versions of the Lesser General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Library specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Library does not specify a license version number, you may choose any version ever published by the Free Software Foundation.

14. If you wish to incorporate parts of the Library into other free programs whose distribution conditions are incompatible with these, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

15. BECAUSE THE LIBRARY IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE LIBRARY, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE LIBRARY "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE LIBRARY IS WITH YOU. SHOULD THE LIBRARY PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

16. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE LIBRARY AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE LIBRARY (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE LIBRARY TO OPERATE WITH ANY OTHER SOFTWARE), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

END OF TERMS AND CONDITIONS

## Notice concerning usage of International Components for Unicode (ICU4J)

ICU License - ICU 1.8.1 and later

COPYRIGHT AND PERMISSION NOTICE Copyright (c) 1995-2003 International Business Machines Corporation and others All rights reserved. Permission is hereby granted, free of charge,



---

to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, provided that the above copyright notice(s) and this permission notice appear in all copies of the Software and that both the above copyright notice(s) and this permission notice appear in supporting documentation.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OF THIRD PARTY RIGHTS. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR HOLDERS INCLUDED IN THIS NOTICE BE LIABLE FOR ANY CLAIM, OR ANY SPECIAL INDIRECT OR CONSEQUENTIAL DAMAGES, OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE. Except as contained in this notice, the name of a copyright holder shall not be used in advertising or otherwise to promote the sale, use or other dealings in this Software without prior written authorization of the copyright holder.

-----  
All trademarks and registered trademarks mentioned herein are the property of their respective owners.

## Notice concerning usage of fcrypt

/ crypto/des/fcrypt.c /

/ Copyright (C) 1996 Eric Young (eay@mincom.oz.au)

All rights reserved.

This package is an SSL implementation written by Eric Young (eay@mincom.oz.au).

The implementation was written so as to conform with Netscapes SSL.

This library is free for commercial and non-commercial use as long as the following conditions are aheared to. The following conditions apply to all code found in this distribution, be it the RC4, RSA, lhash, DES, etc., code; not just the SSL code. The SSL documentation included with this distribution is covered by the same copyright terms except that the holder is Tim Hudson (tjh@mincom.oz.au).

Copyright remains Eric Young's, and as such any Copyright notices in the code are not to be removed. If this package is used in a product, Eric Young should be given attribution as the author of the parts of the library used.

This can be in the form of a textual message at program startup or in documentation (online or textual) provided with the package.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. All advertising materials mentioning features or use of this software must display the following acknowledgement: "This product includes cryptographic software written by Eric Young (eay@mincom.oz.au)"

---

The word 'cryptographic' can be left out if the routines from the library being used are not cryptographic related.

4. If you include any Windows specific code (or a derivative thereof) from the apps directory (application code) you must include an acknowledgement: "This product includes software written by Tim Hudson (tjh@mincom.oz.au)"

THIS SOFTWARE IS PROVIDED BY ERIC YOUNG ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED.

IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

The licence and distribution terms for any publically available version or derivative of this code cannot be changed. i.e. this code cannot simply be copied and put under another distribution licence [including the GNU Public Licence.]

## Notice concerning usage of Jaxen

Copyright 2003 (C) The Werken Company. All Rights Reserved.

Redistribution and use of this software and associated documentation ("Software"), with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain copyright statements and notices. Redistributions must also contain a copy of this document.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. The name "jaxen" must not be used to endorse or promote products derived from this Software without prior written permission of The Werken Company. For written permission, please contact bob@werken.com.
4. Products derived from this Software may not be called "jaxen" or may "jaxen" appear in their names without prior written permission of The Werken Company. "jaxen" is a registered trademark of The Werken Company.
5. Due credit should be given to The Werken Company. (<http://jaxen.werken.com/>).

THIS SOFTWARE IS PROVIDED BY THE WERKEN COMPANY AND CONTRIBUTORS ``AS IS" AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE WERKEN COMPANY OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

---

## Notice concerning usage of JOSSO

Copyright (c) 2004-2006, Novascope S.A. and the JOSSO team. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

\* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

\* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

\* Neither the name of the JOSSO team nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

## Notice concerning usage of libjpeg

The authors make NO WARRANTY or representation, either express or implied, with respect to this software, its quality, accuracy, merchantability, or fitness for a particular purpose. This software is provided "AS IS", and you, its user, assume the entire risk as to its quality and accuracy.

This software is copyright (C) 1991-1998, Thomas G. Lane.

All Rights Reserved except as specified below.

Permission is hereby granted to use, copy, modify, and distribute this software (or portions thereof) for any purpose, without fee, subject to these

conditions:

(1) If any part of the source code for this software is distributed, then this README file must be included, with this copyright and no-warranty notice unaltered; and any additions, deletions, or changes to the original files must be clearly indicated in accompanying documentation.

(2) If only executable code is distributed, then the accompanying documentation must state that "this software is based in part on the work of the Independent JPEG Group".

(3) Permission for use of this software is granted only if the user accepts full responsibility for any undesirable consequences; the authors accept NO LIABILITY for damages of any kind.

These conditions apply to any software derived from or based on the IJG code, not just to the unmodified library. If you use our work, you ought to acknowledge us.

---

Permission is NOT granted for the use of any IJG author's name or company name in advertising or publicity relating to this software or products derived from it. This software may be referred to only as "the Independent JPEG Group's software".

We specifically permit and encourage the use of this software as the basis of commercial products, provided that all warranty or liability claims are assumed by the product vendor.

## Notice concerning usage of libproj4

Copyright (c) 2000, Frank Warmerdam

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software. THE SOFTWARE IS PROVIDED "AS IS", WITHOUT

WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

## Notice concerning usage of libtiff

Copyright (c) 1988-1997 Sam Leffler

Copyright (c) 1991-1997 Silicon Graphics, Inc.

Permission to use, copy, modify, distribute, and sell this software and its documentation for any purpose is hereby granted without fee, provided that (i) the above copyright notices and this permission notice appear in all copies of the software and related documentation, and (ii) the names of Sam Leffler and Silicon Graphics may not be used in any advertising or publicity relating to the software without the specific, prior written permission of Sam Leffler and Silicon Graphics.

THE SOFTWARE IS PROVIDED "AS-IS" AND WITHOUT WARRANTY OF ANY KIND, EXPRESS, IMPLIED OR OTHERWISE, INCLUDING WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL SAM LEFFLER OR SILICON GRAPHICS BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT OR CONSEQUENTIAL DAMAGES OF ANY KIND, OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER OR NOT ADVISED OF THE POSSIBILITY OF DAMAGE, AND ON ANY THEORY OF LIABILITY, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

## Notice concerning usage of MX4J

This product includes software developed by the MX4J project (<http://mx4j.sourceforge.net>).

The MX4J License, Version 1.0

---

Copyright (c) 2001-2004 by the MX4J contributors. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

3. The end-user documentation included with the redistribution, if any, must include the following acknowledgment:

"This product includes software developed by the MX4J project (<http://mx4j.sourceforge.net>)."

Alternately, this acknowledgment may appear in the software itself, if and wherever such third-party acknowledgments normally appear.

4. The name "MX4J" must not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact [biorn\\_steedom@users.sourceforge.net](mailto:biorn_steedom@users.sourceforge.net)

5. Products derived from this software may not be called "MX4J", nor may "MX4J" appear in their name, without prior written permission of Simone Bordet.

THIS SOFTWARE IS PROVIDED ``AS IS" AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE MX4J CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

## Notice concerning usage of PicoContainer

Copyright (c) 2003-2004, PicoContainer Organization

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

Neither the name of the PicoContainer Organization nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE

---

DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

## Notice concerning usage of QDox

The license used for QDox is derived from the Apache Software License.

The IronSmith Software License, Version 1.1

(This license is derived and fully compatible with the Apache Software License - see <http://www.apache.org/LICENSE.txt>)

Copyright (c) 2002 The IronSmith Project. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. The end-user documentation included with the redistribution, if any, must include the following acknowledgment: "This product includes software developed by the IronSmith Project (<http://www.ironsmith.org/>).". Alternately, this acknowledgment may appear in the software itself, if and wherever such third-party acknowledgments normally appear.
4. The names "IronSmith" and "The IronSmith Project" must not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact [help@ironsmith.org](mailto:help@ironsmith.org).
5. Products derived from this software may not be called "IronSmith" or "QDox", nor may "IronSmith" or "QDox" appear in their name, without prior written permission of the IronSmith Project.

THIS SOFTWARE IS PROVIDED ``AS IS" AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE APACHE SOFTWARE FOUNDATION OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

## Notice concerning usage of XStream

XStream is an open source software, made available under a BSD license.

Copyright (c) 2003-2005, Joe Walnes

---

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

Neither the name of XStream nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

## Notice concerning usage of Perl

Perl Kit, Version 5

Copyright (C) 1993, 1994, 1995, 1996, 1997, 1998

1999, 2000, 2001, by Larry Wall and others

All rights reserved.

This program is free software; it is being redistributed under the terms of the "Artistic License".

### The Artistic License

Preamble

The intent of this document is to state the conditions under which a Package may be copied, such that the Copyright Holder maintains some semblance of artistic control over the development of the package, while giving the users of the package the right to use and distribute the Package in a more-or-less customary fashion, plus the right to make reasonable modifications.

Definitions:

"Package" refers to the collection of files distributed by the Copyright Holder, and derivatives of that collection of files created through textual modification.

"Standard Version" refers to such a Package if it has not been modified, or has been modified in accordance with the wishes of the Copyright Holder.

"Copyright Holder" is whoever is named in the copyright or copyrights for the package.

"You" is you, if you're thinking about copying or distributing this Package.

"Reasonable copying fee" is whatever you can justify on the basis of media cost, duplication charges, time of people involved, and so on. (You will not be required to justify it to the Copyright Holder, but only to the computing community at large as a market that must bear the fee.)

---

"Freely Available" means that no fee is charged for the item itself, though there may be fees involved in handling the item. It also means that recipients of the item may redistribute it under the same conditions they received it.

1.You may make and give away verbatim copies of the source form of the Standard Version of this Package without restriction, provided that you duplicate all of the original copyright notices and associated disclaimers.

2.You may apply bug fixes, portability fixes and other modifications derived from the Public Domain or from the Copyright Holder. A Package modified in such a way shall still be considered the Standard Version.

3.You may otherwise modify your copy of this Package in any way, provided that you insert a prominent notice in each changed file stating how and when you changed that file, and provided that you do at least ONE of the following:

1.place your modifications in the Public Domain or otherwise make them Freely Available, such as by posting said modifications to Usenet or an equivalent medium, or placing the modifications on a major archive site such as ftp.uu.net, or by allowing the Copyright Holder to include your modifications in the Standard Version of the Package.

2.use the modified Package only within your corporation or organization.

3.rename any non-standard executables so the names do not conflict with standard executables, which must also be provided, and provide a separate manual page for each non-standard executable that clearly documents how it differs from the Standard Version.

4.make other distribution arrangements with the Copyright Holder.

4.You may distribute the programs of this Package in object code or executable form, provided that you do at least ONE of the following:

a)distribute a Standard Version of the executables and library files, together with instructions (in the manual page or equivalent) on where to get the Standard Version.

b)accompany the distribution with the machine-readable source of the Package with your modifications.

c)accompany any non-standard executables with their corresponding Standard Version executables, giving the non-standard executables non-standard names, and clearly documenting the differences in manual pages (or equivalent), together with instructions on where to get the Standard Version.

d)make other distribution arrangements with the Copyright Holder.

5.You may charge a reasonable copying fee for any distribution of this Package. You may charge any fee you choose for support of this Package. You may not charge a fee for this Package itself. However, you may distribute this Package in aggregate with other (possibly commercial) programs as part of a larger (possibly commercial) software distribution provided that you do not advertise this Package as a product of your own.

6.The scripts and library files supplied as input to or produced as output from the programs of this Package do not automatically fall under the copyright of this Package, but belong to whomever generated them, and may be sold commercially, and may be aggregated with this Package.

7.C or perl subroutines supplied by you and linked into this Package shall not be considered part of this Package.

8.The name of the Copyright Holder may not be used to endorse or promote products derived from this software without specific prior written permission.

9.THIS PACKAGE IS PROVIDED "AS IS" AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.



---

The End

## Notice concerning usage of Mime-Base64 Perl Module

Copyright 1995-1999,2001-2004 Gisle Aas <gisle@ActiveState.com>

This library is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

The standard version of the package that is used can be obtained from <http://www.cpan.org>. Specifically, the software can be obtained from the following link :

<http://search.cpan.org/search%3fmodule=MIME::Base64>

## Notice concerning usage of Mime-Lite Perl Module

This is MIME::Lite 3.01 Maintenance release

TERMS AND CONDITIONS

Copyright (c) 1997 by Eryq.

Copyright (c) 1998 by ZeeGee Software Inc.

Copyright (c) 2003 Yves Orton. demerphq (at) hotmail.com.

All rights reserved. This program is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

This software comes with NO WARRANTY of any kind. See the COPYING file in the distribution for details.

The standard version of the package that is used can be obtained from <http://www.cpan.org>. Specifically, the software can be obtained from the following link :

<http://search.cpan.org/search%3fmodule=MIME::Lite>

## Notice concerning usage of DBD::DB2 Perl Module

License Agreement for DBD::DB2

---

PLEASE READ THIS AGREEMENT CAREFULLY BEFORE INSTALLING OR USING THIS PROGRAM. IF YOU INSTALL OR USE THIS PROGRAM, YOU AGREE TO THESE TERMS.

---

1. This DBD::DB2 code "Program" is owned by International Business Machines Corporation or its subsidiaries (IBM) or IBM's suppliers, and is copyrighted and licensed, not sold. IBM retains title to the Program, and grants the user of the Program "You" an:

irrevocable, worldwide, nonexclusive, perpetual, royalty-free and fully paid-up license

- (i) to use, execute, display, perform, and reproduce the Program,
- (ii) to prepare derivative works based on the Program,
- (iii) to distribute copies of the Program and derivative works thereof, and
- (iv) to authorize others to do all of the above.

2. You must reproduce the copyright notice and any other legend of ownership on each copy or partial copy of the Program.

3. IBM would appreciate receiving a copy of derivative works of the Program that You create. You may provide to IBM such derivative works pursuant to the terms of this Agreement and the

---

directions in the README file contained within the Program directory. You represent and warrant to IBM that You are the sole author of, and/or have full exclusive right, title and interest to any and all derivative works You provide to IBM. You further represent that You are under no obligation to assign your rights in such derivative works to any third-party, including without limitation, any current or former employer.

4. You agree that IBM may utilize all information, ideas, concepts, know-how or techniques furnished by You to IBM in connection with any derivative works You make or have made to the IBM Program, and that You provide to IBM and IBM may, but shall not be obligated to, include such derivative works in the IBM Program or in any IBM product without accounting to You.

5. With respect to any derivative works of the Program You provide to IBM, You grant to IBM an:

irrevocable, worldwide, non-exclusive, perpetual, royalty--free and fully paid-up license

- (i) to use, execute, display, perform, and reproduce your derivative works,
- (ii) to prepare derivative works based upon your derivative works,
- (iii) to distribute copies of your derivative works, and
- (iv) to authorize others to do all of the above.

6. YOU UNDERSTAND THAT THE PROGRAM IS BEING PROVIDED TO YOU "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY, QUALITY, PERFORMANCE, INTELLECTUAL PROPERTY INFRINGEMENT OR FITNESS FOR ANY PARTICULAR PURPOSE. IBM has no obligation to provide service, defect correction, or any maintenance for the Program. IBM has no obligation to supply any Program updates or enhancements to You even if such are or later become available.

7. IBM accepts no liability for damages You may suffer as a result of your use of the Program. Under no circumstances is IBM liable for any of the following:

- 1. third-party claims against You for losses or damages;
  - 2. loss of, or damage to, your records or data; or
  - 3. direct damages, lost profits, lost savings, incidental, special, or indirect damages or consequential damages, even if IBM or its authorized supplier, has been advised of the possibility of such damages.
8. Some jurisdictions do not allow these limitations or exclusions, so they may not apply to You.
9. You are responsible for the payment of any taxes resulting from this license.
10. You agree not to bring a legal action more than two years after the cause of action arose.
11. This license will be governed by and interpreted in accordance with the laws of the State of New York.
12. This license is the only understanding and agreement IBM has for your use of the Program.

The standard version of the package that is used can be obtained from <http://www.cpan.org>. Specifically, the software can be obtained from the following link :

<http://search.cpan.org/search%3fmodule=DBD::DB2>

## Notice concerning usage of DBI Perl Module

DBI by Tim Bunce. This pod text by Tim Bunce, J. Douglas Dunlop, Jonathan Leffler and others. Perl by Larry Wall and the perl5-porters.  
COPYRIGHT

---

The DBI module is Copyright (c) 1994-2004 Tim Bunce. Ireland.

All rights reserved.

This is distributed under the terms of the Artistic License.

The standard version of the package that is used can be obtained from <http://www.cpan.org>.  
Specifically, the software can be obtained from the following link :

<http://search.cpan.org/search%3fmodule=DBD::DB2>

