

Oracle Enterprise Taxation and Policy Management

Optional Products Installation Guide

Release 2.3.0

E21404-01

February 2011

Copyright © 2000, 2011, 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 America, Inc., 500 Oracle Parkway, Redwood City, CA 94065.

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

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

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

Contents

Preface	i-i
Audience	i-i
Related Documents	i-i
Conventions	i-ii
 Chapter 1	
Overview.....	1-1
Optional Products for Oracle Enterprise Taxation and Policy Management.....	1-2
What is this book?	1-2
 Chapter 2	
Reports Configuration	2-1
Reports Configuration for Oracle BI Publisher	2-2
Installing Oracle BI Publisher Enterprise	2-2
Configuring The System To Enable Reports	2-2
Sample Reports Supplied with the Product	2-3
 Chapter 3	
Additional Products	3-1
On-line Document Display with Oracle Documaker.....	3-2
Supported Documaker Versions	3-2
Supported Oracle Documaker Reports	3-2
Installing and Integrating Documaker Templates with ETPM	3-2
Sample Directory Structure	3-3
Sample Generated Ini File	3-3
Design Element - Documaker Integration	3-4
Examples provided.....	3-8
Oracle Policy Automation.....	3-9
SSN Validation	3-9
FW4 OPA Connector/Web Service Connector.....	3-9
 Appendix A	
License and Copyright Notices	A-1
Third Party Products.....	A-1
Notice concerning usage of ANTLR and Classycle	A-1
Notice concerning usage of Apache Software.....	A-1
Notice concerning usage of ASM.....	A-4
Notice concerning usage of Concurrent	A-5
Notice concerning usage of dom4j	A-5
Notice concerning usage of International Components for Unicode (ICU4J)	A-6
Notice concerning usage of Jaxen	A-6
Notice concerning usage of JCIP Annotations	A-7
Notice concerning usage of XStream	A-10
Notice concerning usage of slf4j	A-11
Notice concerning usage of Perl.....	A-11

Notice concerning usage of Mime-Base64 Perl Module.....	A-13
Notice concerning usage of Mime-Lite Perl Module	A-13
Notice concerning usage of DBD::DB2 Perl Module	A-13
Notice concerning usage of DBI Perl Module.....	A-14

Preface

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

This preface contains these topics:

- **Audience**
- **Related Documents**
- **Conventions**

Audience

Oracle Enterprise Taxation and Policy Management Optional Products Installation Guide is intended for anyone who needs to install and configure optional products such as Oracle BI Publisher for Oracle Enterprise Taxation and Policy Management

Related Documents

For more information, see these Oracle documents:

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

Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	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 products available for Oracle Enterprise Taxation and Policy Management, including:

- **Optional Products for Oracle Enterprise Taxation and Policy Management**
- **What is this book?**

Optional Products for Oracle Enterprise Taxation and Policy Management

This document discusses the following optional products that can be used with Oracle Enterprise Taxation and Policy Management

- Oracle BI Publisher
- Oracle Documaker

What is this book?

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

- **Chapter 1: Overview** (this chapter) provides an overview of the optional products used with Oracle Enterprise Taxation and Policy Management.
- **Chapter 2: Reports Configuration** discusses the reporting features of the software that can be used by Oracle Enterprise Taxation and Policy Management. It covers Oracle BI Publisher.
- **Chapter 3: Additional Products** discusses other software products such as Oracle Documaker.

Chapter 2

Reports Configuration

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

- **Reports Configuration for Oracle BI Publisher**

Reports Configuration for Oracle BI Publisher

This section describes the steps required to configure Oracle Enterprise Taxation and Policy Management and Oracle BI Publisher to support a reporting solution that uses 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 and Policy 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 and Policy 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 and Policy 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:

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 and Policy Management, the system must be configured so that Oracle Enterprise Taxation and Policy 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 and Policy 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 and Policy 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 and Policy 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 and Policy 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 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 and Policy 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 and Policy 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 and Policy 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 and Policy 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 and Policy 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 and Policy Management objects.

Unzip Oracle Enterprise Taxation and Policy Management Report Files

Unzip the ETPM-V231-Reportss.zip file from the installation media into an empty directory. We'll refer to this directory as the reports extract folder.

Note: By default, the reports provided are read only. You will need to reset the permissions on the files before making any changes, for example, to configure the default data source.

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 under ..\ETPM-V231-Reports\BIPublisher\reportFiles.

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 and Policy Management and publish there report extracted to the reports extract folder.

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

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

Prepare Oracle BI Publisher Enterprise server for integration

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

Reporting Folder: ETPM

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 the **ETPM** 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 named ETPM with connection details pointing to the ETPM 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 and Policy 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 ETPM Reports.

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

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

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

To include appropriate Roles for Role Name ETPM 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 ETPM 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 and Policy Management.

The Company Logo should be defined in a file named "company_logo.gif" and should be placed in the "C:\oracle\BI101332\oc4j_bi\jee\home\default-web-app\logo" folder on the server where Oracle BI Publisher Enterprise is installed.

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

The Oracle Enterprise Taxation and Policy 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 and Policy 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 and Policy 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 and Policy 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 and Policy Management.

Chapter 3

Additional Products

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

- **On-line Document Display with Oracle Documaker**

On-line Document Display with Oracle Documaker

Oracle Documaker 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 section describes how Oracle Enterprise Taxation and Policy Management can be integrated with Documaker to allow Bills, Letters, Statements, Field Orders and Quotes to be viewed online.

This facility requires the Documaker software to already be installed. Documaker can be purchased and licensed separately from Oracle E-Delivery (<http://edelivery.oracle.com/>).

Supported Documaker Versions

At the time of release the supported versions for Oracle Enterprise Taxation and Policy Management 2.3.1 are:

Windows: Documaker 11.4

Linux: Documaker 11.5

Supported Oracle Documaker Reports

The following Documaker online reports are supported for this release of ETPM:

- C1-BL-DISP - Creates a PDF of bill image by calling Documaker.
- C1-QT-DISP - Creates a PDF of quote image by calling Documaker.
- C1-LT-DISP - Creates a PDF of letter image by calling Documaker.
- C1-ST-DISP - Creates a PDF of statement image by calling Documaker.
- C1-FO-DISP - Creates a PDF of field order image by calling Documaker.

Installing and Integrating Documaker Templates with ETPM

Follow this process to integrate the supplied Documaker templates with your ETPM 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 DOCHOSTDIR to the system. The value of DOCHOSTDIR should be set to the location where the Documaker is installed. Ensure that the environment variable DOCHOSTDIR is set correctly
4. Run the initialSetup utility for the environment to generate the Oracle Enterprise Taxation and Policy Management related Documaker 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. Copy the file ETPM-OSplatform.jar to a temporary folder on the target server (referred to hereafter as <TEMPDIR>. If you are using FTP to transfer this file to a UNIX server, remember to use the BINARY option for the FTP transfer.
7. Decompress the file:


```
cd <TEMPDIR>
jar -xvf ETPM-OSplatform.jar
```

 ETPM folder will be extracted.
8. If one does not already exist, create a folder ETPM under the Documaker host directory <DOCHOSTDIR>. Copy the contents of the appropriate ETPM folder in the <TEMPDIR> to the ETPM directory Documaker host directory on the target application server (see the section Software Requirements in the Oracle Enterprise Taxation and Policy Management Installation Guide for installation location). It should be at the same level as FAP folder.
9. Ensure that the Oracle Enterprise Taxation and Policy Management Administrator user ID (typically cissys) has execute permissions to all files in the <DOCHOSTDIR>/FAP and <DOCHOSTDIR>/ETPM folders.

Sample Directory Structure

Directory	Contents
<DOCHOSTDIR>/FAP	Documaker Binaries
<DOCHOSTDIR>/ETPM	ETPM templates and driver programs
<DOCHOSTDIR>/ETPM/INPUT	ETPM sample extracts
<DOCHOSTDIR>/ETPM/DATA	ETPM example PDFs

Sample Generated Ini File

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

billfiledirectory.ini

```
ONLINE BILL HOST=<DOCHOSTDIR>
ONLINE BILL TEMPLATE=<DOCHOSTDIR>/ETPM
BILL EXTRACT PATH=<SPLOUTPUT>
BILL IMAGE PATH=<SPLEBASE>/splapp/billView/
BILL IMAGE SCRIPT=<DOCHOSTDIR>/ETPM/_etmPrint.sh
URL PREFIX=/spl/billView/
```

docfiledirectory.ini

```
ONLINE DOC HOST=<DOCHOSTDIR>
ONLINE DOC TEMPLATE=<DOCHOSTDIR>/ETPM/
DOC EXTRACT PATH=<SPLOUTPUT>
DOC IMAGE PATH=<SPLEBASE> /splapp/billView/
DOC IMAGE SCRIPT=<DOCHOSTDIR>ETPM/_etmPrintDoc.sh
```

URL_PREFIX=/spl/billView/

Design Element - Documaker Integration

This design element describes using Oracle Documaker to display Bills, Letters, Statements, Field Orders and Quotes.

On-line Bill Display Components

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

Plug-in Spot: Installation - Online Bill Display

The plug-in spot is used to generate a Bill Image.

Algorithm Type: Create PDF of bill image by calling Documaker (C1-BL-DISP) (New)

A new algorithm C1-BL-DISP (CIPBBLDX) will be created for on-line bill display using Documaker which is triggered when the Display Bill action button on the Bill Maintenance window is invoked. This algorithm is responsible for calling the bill extract program and passing the bill information flat file to the Bill Image Generator script 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.

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 BILLDISPINI 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 below).

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)

1. Create an algorithm with the following values:
 - Algorithm code: CM-BL-DISP
 - Description: Online Bill Display
 - Algorithm Type: C1-BL-DISP
 - Parameter
 - Bill Route Type
2. In Oracle Enterprise Taxation and Policy Management, 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):
 - INS_ALG_ENTITY_FLG : ONBD
 - SEQ_NUM : 1
 - ALG_CD : CM-BL-DISP
 - VERSION : 1

Bill Image Generator Script

The Bill Image Generator script _etmPrint.sh or _etmPrint.cmd is invoked by the bill print extract algorithm. The call parameters are based on the contents of the billfiledirectory.ini file identified through the BILLDISPINI environment variable. This script validates the input parameters passed to it, sets the environment variables for input file, output file and log file and calls the main driver BillRun.sh /BillRun.cmd. The driver file will in turn call the Oracle Documaker scripts. The output from this process as well as the PDF file are placed in the appropriate directory from the

billfiledirectory.ini file where it can be picked up by the application and displayed in the user's browser (usually \$SPLEBASE/splapp/billView or %SPLEBASE%\splapp\billView folder).

The path for the input and output files is specified in the fsisys.ini file and Documaker reads the INI file option values in lower case. There will be an error in UNIX if the path for the input/output files has directory/file names not in lower case. To avoid this error, the input file will be copied to an intermediate file with the input file name in lower case in documaker/11.4/ETPM/data folder and the output file from the same data folder will be copied to the original output directory specified in the billfiledirectory.ini file.

BILLDISPINI environment variable

The full path location of the billfiledirectory.ini is contained in the BILLDISPINI environment variable (typically <SPLEBASE>/etc directory).

The billfiledirectory.ini File

The billfiledirectory.ini file is used by the Bill Print Algorithm to render the bill image.

The INI file contains the following externalized parameters:

- ONLINE BILL HOST=<Oracle Documaker Host Path> - This parameter defines where Oracle Documaker is installed. Value typically <DOCHOSTDIR> (note that FAP will be a subfolder)
- ONLINE BILL TEMPLATE=<Oracle Documaker Template Path> - This parameter defines the location of Oracle Documaker's template. Value typically <DOCHOSTDIR>/ETPM
- 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 <SPLOUTPUT>
- BILL IMAGE PATH=<Full PDF Path> - This parameter defines the location where Documaker creates the bill image PDF file. Value is typically <SPLEBASE>/splapp/billView. The Documaker log files for a specific report is also in this directory.
- BILL IMAGE SCRIPT= <Bill Image Generator Script with full path> - This parameter defines the location of the script that invokes Oracle Documaker to generate the PDF file from the extract file. <DOCHOSTDIR>/ETPM/_etmPrint.sh or _etmPrint.cmd
- 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 (WebLogic, WebSphere, Tomcat)

On-line Quote Display Components

Plug-in Spot: Installation - Online Quote Display

The plug-in spot is used to generate a Quote Image.

Algorithm Type: Create PDF of Quote image by calling Documaker (C1-QT-DISP) (New)

A new algorithm C1-QT-DISP (CIPCQTDIX) will be created for on-line quote display using Documaker which is triggered when the Display Quote action button on the Quote Maintenance window is invoked. This algorithm is responsible for calling the quote extract program and passing the quote information flat file to the Document Image Generator script to create a quote image in PDF format. The URL of this PDF file is then returned back to the client browser, which renders the quote image.

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 DOCDISPINI environment variable.

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

To activate this, a new algorithm of this type should be created and should be plugged from the Installation Options.

Document Image Generator Script

The Document Image Generator script `_etmPrintDoc.sh` or `_etmPrintDoc.cmd` is invoked by the various document extract algorithms. The call parameters are based on the contents of the `docfiledirectory.ini` file identified through the `DOCDISPINI` environment variable. This script validates the input parameters passed to it, sets the environment variables for input file, output file and log file and calls the main driver depending on the document type. The driver file will in turn call the Oracle Documaker scripts. The output from this process as well as the PDF file are placed in the appropriate directory from the `docfiledirectory.ini` file where it can be picked up by the application and displayed in the user's browser (usually `$SPLEBASE/splapp/billView` or `%SPLEBASE%\splapp\billView` folder).

The path for the input and output files is specified in the `fsisys.ini` file and Documaker reads the INI file option values in lower case. There will be an error in UNIX if the path for the input/output files has directory/file names not in lower case. To avoid this error, the input file will be copied to an intermediate file with the input file name in lower case in `documaker/11.4/ETPM/data` folder and the output file from the same data folder will be copied to the original output directory specified in the `docfiledirectory.ini` file.

DOCDISPINI environment variable

The full path location of the `docfiledirectory.ini` is contained in the `DOCDISPINI` environment variable (typically `<SPLEBASE>/etc` directory).

The docfiledirectory.ini File

The `docfiledirectory.ini` file is used by the various Document Print Algorithms to render the document image.

The INI file contains the following externalized parameters:

- **ONLINE DOC HOST**=<Oracle Documaker Host Path> - This parameter defines where Oracle Documaker is installed. Value typically `<DOCHOSTDIR>` (note that FAP will be a subfolder)
- **ONLINE DOC TEMPLATE**=<Oracle Documaker Template Path> - This parameter defines the location of Oracle Documaker's template. Value typically `<DOCHOSTDIR>/ETPM`
- **DOC EXTRACT PATH**=<Document Extract Output Path> - This parameter defines the location where the various document print extract programs create their flat file output. Value Typically `<SPLOUTPUT>`
- **DOC IMAGE PATH**=<Full PDF Path> - This parameter defines the location where Documaker creates the document image PDF file. Value typically `<SPLEBASE>/splapp/billView` The Documaker log files for a specific report is also in this directory.
- **DOC IMAGE SCRIPT**= <Document Image Generator Script with full path> - This parameter defines the location of the script that invokes Oracle Documaker to generate the PDF file from the extract file. `<DOCHOSTDIR>/ETPM/_etmPrintDoc.sh` or `_etmPrintDoc.cmd`
- **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 (WebLogic, WebSphere, Tomcat)

On-line Letter Display Components

Plug-in Spot: Installation - Online Letter Image

The plug-in spot is used to generate a Letter Image.

Algorithm Type: Create PDF of Letter image by calling Documaker (C1-LT-DISP) (New)

A new algorithm C1-LT-DISP (CIPCLTDX) will be created for on-line letter display using Documaker which is triggered when the Display Letter action button on the Customer Contact Maintenance window is invoked. This algorithm is responsible for calling the letter extract program and passing the letter information flat file to the Document Image Generator script to create a letter image in PDF format. The URL of this PDF file is then returned back to the client browser, which renders the letter image.

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 DOCDISPINI environment variable.

This program utilizes the INI file to determine the target location for the letter extract program and the location of the document image generator script.

To activate this, a new algorithm of this type should be created and should be plugged from the Installation Options.

On-line Plug-in Spot: Installation - Online Letter Image

The plug-in spot is used to generate a Letter Image.

Algorithm Type: Create PDF of Letter image by calling Documaker (C1-LT-DISP) (New)

A new algorithm C1-LT-DISP (CIPCLTDX) will be created for on-line letter display using Documaker which is triggered when the Display Letter action button on the Customer Contact Maintenance window is invoked. This algorithm is responsible for calling the letter extract program and passing the letter information flat file to the Document Image Generator script to create a letter image in PDF format. The URL of this PDF file is then returned back to the client browser, which renders the letter image.

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 DOCDISPINI environment variable.

This program utilizes the INI file to determine the target location for the letter extract program and the location of the document image generator script.

To activate this, a new algorithm of this type should be created and should be plugged from the Installation Options.

Statement Display Components**Plug-in Spot: Installation - Online Statement Image**

The plug-in spot is used to generate a Statement Image.

Algorithm Type: Create PDF of Statement image by calling Documaker (C1-ST-DISP) (New)

A new algorithm C1-ST-DISP (CIPBSTDX) will be created for on-line Statement display using Documaker which is triggered when the Display Statement action button on the Statement Maintenance window is invoked. This algorithm is responsible for calling the Statement extract program and passing the Statement information flat file to the Document Image Generator script to create a Statement image in PDF format. The URL of this PDF file is then returned back to the client browser, which renders the Statement image.

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 DOCDISPINI environment variable.

This program utilizes the INI file to determine the target location for the Statement extract program and the location of the document image generator script.

To activate this, a new algorithm of this type should be created and should be plugged from the Installation Options.

On-line Field Order Display Components

Plug-in Spot: Installation - Online Field Order Image

The plug-in spot is used to generate a Field Order Image.

Algorithm Type: Create PDF of Field Order image by calling Documaker (C1-FO-DISP) (New)

A new algorithm C1-FO-DISP (CIPOFODX) will be created for on-line Field Order display using Documaker which is triggered when the Display Field Order action button on the Field Order Maintenance window is invoked. This algorithm is responsible for calling the Field Order extract program and passing the Field Order information flat file to the Document Image Generator script to create a Field Order image in PDF format. The URL of this PDF file is then returned back to the client browser, which renders the Field Order image.

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 DOCDISPINI environment variable.

This program utilizes the INI file to determine the target location for the Field Order extract program and the location of the document image generator script.

To activate this, a new algorithm of this type should be created and should be plugged from the Installation Options.

Examples provided

Examples to test the installation, infrastructure are provided in the following directory:

/ETPM/input/examples

Review the sample scripts samplebill.sh/.cmd to generate an online bill without the GUI and sampleletr.sh/.cmd for online letters.

The generated PDF file will be created in .../ETPM/data folder. The output from the Oracle Documaker generation process will also be copied to this directory.

Appendix A

License and Copyright Notices

License and Copyright notices for associated products:

Third Party Products

Notice concerning usage of ANTLR and Classycle

[The BSD License]

Copyright (c) 2010 Terence Parr

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 author 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 Apache Software

The following are covered under the Apache 2.0 license.

1. bsf-2.4.0.jar

-
2. castor-1.3.1-core.jar
 3. castor-1.3.1-xml.jar
 4. castor-1.3.1-xml-schema.jar
 5. cglib-2.2.jar
 6. classycle.1.1.jar
 7. commons-beanutils-core-1.8.1.jar
 8. commons-cli-1.1.jar
 9. commons-codec-1.4.jar
 10. commons-collections-3.1.jar
 11. commons-fileupload-1.2.1.jar
 12. commons-httpclient-3.0.1.jar
 13. commons-io-1.3.2.jar
 14. commons-lang-2.2.jar
 15. ehcache-1.2.3.jar
 16. log4j-1.2.15.jar
 17. qdox.1.6.1.jar
 18. serializer-2.7.1.jar
 19. stax2.jar
 20. velocity.1.4.jar
 21. wstx-asl-3.2.1.jar
 22. xalan-mod-2.7.1.jar
 23. xmlparserv2.jar

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 Concurrent

All classes are released to the public domain and may be used for any purpose whatsoever without permission or acknowledgment. <http://g.oswego.edu/dl/classes/EDU/oswego/cs/dl/util/concurrent/intro.html>

Notice concerning usage of dom4j

Copyright 2001-2010 (C) MetaStuff, Ltd. 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 "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.
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://dom4j.sourceforge.net>

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.

Notice concerning usage of International Components for Unicode (ICU4J)

COPYRIGHT AND PERMISSION NOTICE

Copyright (c) 1995-2010 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.

Notice concerning usage of Jaxen

/*

Copyright 2003-2006 The Werken Company. 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 Jaxen Project 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 JCIP Annotations

Attribution 2.5

CREATIVE COMMONS CORPORATION IS NOT A LAW FIRM AND DOES NOT PROVIDE LEGAL SERVICES. DISTRIBUTION OF THIS LICENSE DOES NOT CREATE AN ATTORNEY-CLIENT RELATIONSHIP. CREATIVE COMMONS PROVIDES THIS INFORMATION ON AN "AS-IS" BASIS. CREATIVE COMMONS MAKES NO WARRANTIES REGARDING THE INFORMATION PROVIDED, AND DISCLAIMS LIABILITY FOR DAMAGES RESULTING FROM ITS USE.

License

THE WORK (AS DEFINED BELOW) IS PROVIDED UNDER THE TERMS OF THIS CREATIVE COMMONS PUBLIC LICENSE ("CCPL" OR "LICENSE"). THE WORK IS PROTECTED BY COPYRIGHT AND/OR OTHER APPLICABLE LAW. ANY USE OF THE WORK OTHER THAN AS AUTHORIZED UNDER THIS LICENSE OR COPYRIGHT LAW IS PROHIBITED.

BY EXERCISING ANY RIGHTS TO THE WORK PROVIDED HERE, YOU ACCEPT AND AGREE TO BE BOUND BY THE TERMS OF THIS LICENSE. THE LICENSOR GRANTS YOU THE RIGHTS CONTAINED HERE IN CONSIDERATION OF YOUR ACCEPTANCE OF SUCH TERMS AND CONDITIONS.

1. Definitions

1. "Collective Work" means a work, such as a periodical issue, anthology or encyclopedia, in which the Work in its entirety in unmodified form, along with a number of other contributions, constituting separate and independent works in themselves, are assembled into a collective whole. A work that constitutes a Collective Work will not be considered a Derivative Work (as defined below) for the purposes of this License.
2. "Derivative Work" means a work based upon the Work or upon the Work and other pre-existing works, such as a translation, musical arrangement, dramatization, fictionalization, motion picture version, sound recording, art reproduction, abridgment, condensation, or any other form in which the Work may be recast, transformed, or adapted, except that a work that constitutes a Collective Work will not be considered a Derivative Work for the purpose of this License. For the avoidance of doubt, where the Work is a musical composition or sound recording, the synchronization of the Work in timed-relation with a moving image ("synching") will be considered a Derivative Work for the purpose of this License.
3. "Licensor" means the individual or entity that offers the Work under the terms of this License.
4. "Original Author" means the individual or entity who created the Work.
5. "Work" means the copyrightable work of authorship offered under the terms of this License.
6. "You" means an individual or entity exercising rights under this License who has not previously violated the terms of this License with respect to the Work, or who has received express permission from the Licensor to exercise rights under this License despite a previous violation.

2. Fair Use Rights. Nothing in this license is intended to reduce, limit, or restrict any rights arising from fair use, first sale or other limitations on the exclusive rights of the copyright owner under copyright law or other applicable laws.

3. License Grant. Subject to the terms and conditions of this License, Licensor hereby grants You a worldwide, royalty-free, non-exclusive, perpetual (for the duration of the applicable copyright) license to exercise the rights in the Work as stated below:

1. to reproduce the Work, to incorporate the Work into one or more Collective Works, and to reproduce the Work as incorporated in the Collective Works;
2. to create and reproduce Derivative Works;
3. to distribute copies or phonorecords of, display publicly, perform publicly, and perform publicly by means of a digital audio transmission the Work including as incorporated in Collective Works;
4. to distribute copies or phonorecords of, display publicly, perform publicly, and perform publicly by means of a digital audio transmission Derivative Works.
- 5.

For the avoidance of doubt, where the work is a musical composition:

1. Performance Royalties Under Blanket Licenses. Licensor waives the exclusive right to collect, whether individually or via a performance rights society (e.g. ASCAP, BMI, SESAC), royalties for the public performance or public digital performance (e.g. webcast) of the Work.

2. Mechanical Rights and Statutory Royalties. Licensor waives the exclusive right to collect, whether individually or via a music rights agency or designated agent (e.g. Harry Fox Agency), royalties for any phonorecord You create from the Work ("cover version") and distribute, subject to the compulsory license created by 17 USC Section 115 of the US Copyright Act (or the equivalent in other jurisdictions).

6. Webcasting Rights and Statutory Royalties. For the avoidance of doubt, where the Work is a sound recording, Licensor waives the exclusive right to collect, whether individually or via a performance-rights society (e.g. SoundExchange), royalties for the public digital performance (e.g. webcast) of the Work, subject to the compulsory license created by 17 USC Section 114 of the US Copyright Act (or the equivalent in other jurisdictions).

The above rights may be exercised in all media and formats whether now known or hereafter devised. The above rights include the right to make such modifications as are technically necessary to exercise the rights in other media and formats. All rights not expressly granted by Licensor are hereby reserved.

4. Restrictions. The license granted in Section 3 above is expressly made subject to and limited by the following restrictions:

1. You may distribute, publicly display, publicly perform, or publicly digitally perform the Work only under the terms of this License, and You must include a copy of, or the Uniform Resource Identifier for, this License with every copy or phonorecord of the Work You distribute, publicly display, publicly perform, or publicly digitally perform. You may not offer or impose any terms on the Work that alter or restrict the terms of this License or the recipients' exercise of the rights granted hereunder. You may not sublicense the Work. You must keep intact all notices that refer to this License and to the disclaimer of warranties. You may not distribute, publicly display, publicly perform, or publicly digitally perform the Work with any technological measures that control access or use of the Work in a manner inconsistent with the terms of this License Agreement. The above applies to the Work as incorporated in a Collective Work, but this does not require the Collective Work apart from the Work itself to be made subject to the terms of this License. If You create a Collective Work, upon notice from any Licensor You must, to the extent practicable, remove from the Collective Work any credit as required by clause 4(b), as requested. If You create a Derivative

Work, upon notice from any Licensor You must, to the extent practicable, remove from the Derivative Work any credit as required by clause 4(b), as requested.

2. If you distribute, publicly display, publicly perform, or publicly digitally perform the Work or any Derivative Works or Collective Works, You must keep intact all copyright notices for the Work and provide, reasonable to the medium or means You are utilizing: (i) the name of the Original Author (or pseudonym, if applicable) if supplied, and/or (ii) if the Original Author and/or Licensor designate another party or parties (e.g. a sponsor institute, publishing entity, journal) for attribution in Licensor's copyright notice, terms of service or by other reasonable means, the name of such party or parties; the title of the Work if supplied; to the extent reasonably practicable, the Uniform Resource Identifier, if any, that Licensor specifies to be associated with the Work, unless such URI does not refer to the copyright notice or licensing information for the Work; and in the case of a Derivative Work, a credit identifying the use of the Work in the Derivative Work (e.g., "French translation of the Work by Original Author," or "Screenplay based on original Work by Original Author"). Such credit may be implemented in any reasonable manner; provided, however, that in the case of a Derivative Work or Collective Work, at a minimum such credit will appear where any other comparable authorship credit appears and in a manner at least as prominent as such other comparable authorship credit.

5. Representations, Warranties and Disclaimer

UNLESS OTHERWISE MUTUALLY AGREED TO BY THE PARTIES IN WRITING, LICENSOR OFFERS THE WORK AS-IS AND MAKES NO REPRESENTATIONS OR WARRANTIES OF ANY KIND CONCERNING THE WORK, EXPRESS, IMPLIED, STATUTORY OR OTHERWISE, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF TITLE, MERCHANTIBILITY, FITNESS FOR A PARTICULAR PURPOSE, NONINFRINGEMENT, OR THE ABSENCE OF LATENT OR OTHER DEFECTS, ACCURACY, OR THE PRESENCE OF ABSENCE OF ERRORS, WHETHER OR NOT DISCOVERABLE. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OF IMPLIED WARRANTIES, SO SUCH EXCLUSION MAY NOT APPLY TO YOU.

6. Limitation on Liability. EXCEPT TO THE EXTENT REQUIRED BY APPLICABLE LAW, IN NO EVENT WILL LICENSOR BE LIABLE TO YOU ON ANY LEGAL THEORY FOR ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL, PUNITIVE OR EXEMPLARY DAMAGES ARISING OUT OF THIS LICENSE OR THE USE OF THE WORK, EVEN IF LICENSOR HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

7. Termination

1. This License and the rights granted hereunder will terminate automatically upon any breach by You of the terms of this License. Individuals or entities who have received Derivative Works or Collective Works from You under this License, however, will not have their licenses terminated provided such individuals or entities remain in full compliance with those licenses. Sections 1, 2, 5, 6, 7, and 8 will survive any termination of this License.

2. Subject to the above terms and conditions, the license granted here is perpetual (for the duration of the applicable copyright in the Work). Notwithstanding the above, Licensor reserves the right to release the Work under different license terms or to stop distributing the Work at any time; provided, however that any such election will not serve to withdraw this License (or any other license that has been, or is required to be, granted under the terms of this License), and this License will continue in full force and effect unless terminated as stated above.

8. Miscellaneous

1. Each time You distribute or publicly digitally perform the Work or a Collective Work, the Licensor offers to the recipient a license to the Work on the same terms and conditions as the license granted to You under this License.

2. Each time You distribute or publicly digitally perform a Derivative Work, Licensors offers to the recipient a license to the original Work on the same terms and conditions as the license granted to You under this License.

3. If any provision of this License is invalid or unenforceable under applicable law, it shall not affect the validity or enforceability of the remainder of the terms of this License, and without further action by the parties to this agreement, such provision shall be reformed to the minimum extent necessary to make such provision valid and enforceable.

4. No term or provision of this License shall be deemed waived and no breach consented to unless such waiver or consent shall be in writing and signed by the party to be charged with such waiver or consent.

5. This License constitutes the entire agreement between the parties with respect to the Work licensed here. There are no understandings, agreements or representations with respect to the Work not specified here. Licensors shall not be bound by any additional provisions that may appear in any communication from You. This License may not be modified without the mutual written agreement of the Licensors and You.

Creative Commons is not a party to this License, and makes no warranty whatsoever in connection with the Work. Creative Commons will not be liable to You or any party on any legal theory for any damages whatsoever, including without limitation any general, special, incidental or consequential damages arising in connection to this license. Notwithstanding the foregoing two (2) sentences, if Creative Commons has expressly identified itself as the Licensors hereunder, it shall have all rights and obligations of Licensors.

Except for the limited purpose of indicating to the public that the Work is licensed under the CCPL, neither party will use the trademark "Creative Commons" or any related trademark or logo of Creative Commons without the prior written consent of Creative Commons. Any permitted use will be in compliance with Creative Commons' then-current trademark usage guidelines, as may be published on its website or otherwise made available upon request from time to time.

Creative Commons may be contacted at <http://creativecommons.org/>.

Notice concerning usage of XStream

Copyright (c) 2003-2006, Joe Walnes

Copyright (c) 2006-2007, XStream Committers

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 slf4j

SLF4J source code and binaries are distributed under the MIT license.

Copyright (c) 2004-2008 QOS.ch

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, 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 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;

3. loss of, or damage to, your records or data; or

4. 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>

