License Guide Oracle FLEXCUBE Universal Banking Release 14.0.0.7.1 Part No. E88855-01 [August] [2020]

FINANCIAL SERVICES





License Guide [August] [2020] Version 14.0.0.7.1

Oracle Financial Services Software Limited Oracle Park Off Western Express Highway Goregaon (East) Mumbai, Maharashtra 400 063 India

Worldwide Inquiries: Phone: +91 22 6718 3000 Fax:+91 22 6718 3001 https://www.oracle.com/industries/financial-services/index.html

Copyright © 2007, 2020, Oracle and/or its affiliates. All rights reserved.

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

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

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

This software 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.

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

1. PR	EFACE	
1.1	INTRODUCTION	
1.2	AUDIENCE	
1.3	DOCUMENTATION ACCESSIBILITY	
1.4	ORGANIZATION	
1.5	RELATED DOCUMENTS	
2. OF	RACLE FLEXCUBE UNIVERSAL BANKING LICENSING	
2.1	INTRODUCTION	
2.2	GENERAL LICENSING RULES	
2.3	COMPONENTS INCLUDED IN LICENSE	
2.4	SEPARATELY LICENSED PRE-REQUISITE PRODUCTS AND LICENSING METRIC	
2.5	RESTRICTED USE LICENSE	
3. SO	FTWARE PREREQUISITES	
3.1	SOFTWARE PREREQUISITES	
3.1	.1 Tech Stack – Oracle	
3.1	.2 Tech Stack – IBM	
3.2	MODULE-WISE SOFTWARE PREREQUISITES	
4. TH	IIRD PARTY LICENSES	4-1
4.1	INTRODUCTION	
4.2	APACHE LICENSE 2.0	
4.3	BSD-Style License	
4.4	MIT LICENSE	
4.5	OPENSYMPHONY	
4.6	THIRD PARTY LIBRARIES	
4.6		
4.6		
4.6		
4.6	5.4 Other	

1. Preface

1.1 Introduction

This document helps you understand the guiding rules for Oracle FLEXCUBE Universal Banking licensing, the components included in the license and the units that are separately licensed.

This document also provides information on the third party software that are packaged with Oracle FLEXCUBE Universal Banking.

1.2 Audience

This document is intended for the following audience:

- Customers
- Partners

1.3 **Documentation Accessibility**

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

1.4 **Organization**

This manual is organized into the following chapters:

Chapter	Description	
Chapter 1	<i>Preface</i> gives information on the intended audience. It also lists the various chapters covered in this license guide.	
Chapter 2	Oracle FLEXCUBE Universal Banking Licensing provides information on Oracle FLEXCUBE Universal Banking licensing.	
Chapter 3	Software Pre-requisites consists of the technology pre-requisites required for Oracle FLEXCUBE Universal Banking.	
Chapter 4	<i>Third Party Licenses</i> provides information on licensing of third party software that are packaged with Oracle FLEXCUBE Universal Banking.	

1.5 Related Documents

For more information, refer to the following documents:

- End user license agreement
- Oracle FLEXCUBE User Manuals



2. Oracle FLEXCUBE Universal Banking Licensing

2.1 Introduction

This chapter provides information on Oracle FLEXCUBE Universal Banking licensing. It contains the following sections:

- General licensing rules
- Components included in the license
- Separately licensed pre-requisite products and licensing metric
- Restricted use license

2.2 General Licensing Rules

Oracle FLEXCUBE Universal Banking has 14 modules that can be licensed by either account metric or by application user metric.

The following table lists out the modules, which are primarily retail or corporate. The licensing rule against each of them defines how these modules will get licensed based on the usage of the bank.

SI. No.	Module Description	Licensing Rule(s)
Retai	l Modules	
1	Oracle FLEXCUBE Universal Banking Current Accounts and Savings Accounts	If the customer is using Universal Banking for Retail programs, these
2	Oracle FLEXCUBE Universal Banking Payments and Collections	applications may only be licensed by the Account metric.
3	Oracle FLEXCUBE Universal Banking Standing Instructions	However, if the customer is using Universal Banking for
4	Oracle FLEXCUBE Universal Banking Collections	Corporate, and is not using Universal
5	Oracle FLEXCUBE Universal Banking Loans*	Banking for Retail, then a customer may
6	Oracle FLEXCUBE Universal Banking Account Origination	license these programs under the Application User metric.
7	Oracle FLEXCUBE Universal Banking Retail Loan Origination	

1 Oracle FLEXCUBE Universal Banking Loans module is available as (i) Oracle FLEXCUBE Universal Banking Retail and Small and Medium Enterprise Loans, licensable by the Account metric, in the Enterprise Price List; and as (ii) Oracle FLEXCUBE Universal Banking Commercial Loans, licensable by the Application User metric, in the Component Price List.



SI. No.	Module Description	Licensing Rule(s)
Corp	orate Modules	
8	Oracle FLEXCUBE Universal Banking Funds Transfer	If the customer is using Universal
9	Oracle FLEXCUBE Electronic Messaging Service	Banking for Corporate programs, these applications may only
10	Oracle FLEXCUBE Universal Banking Nostro Reconciliation	be licensed by the Application User. However, if the
11	Oracle FLEXCUBE Universal Banking Cash Management	customer is using Universal Banking for Retail, and is not using
12	Oracle FLEXCUBE Universal Banking Commercial Leasing	Universal Banking for Corporate, then a customer may license
13	Oracle FLEXCUBE Integration Gateway	these programs under the Account metric.
14	Oracle FLEXCUBE Universal Banking Commercial Loans Origination	

2.3 Components Included in License

The following components are included in the Oracle FLEXCUBE Universal Banking license:

- 1. **Signature Verification**: is included with Oracle FLEXCUBE Universal Banking Current Accounts and Savings Accounts license.
- 2. Utility Payments: is included with Oracle FLEXCUBE Universal Banking Branch license.
- 3. **Islamic Banking Support**: The following Oracle FLEXCUBE Universal Banking module licenses have support for Islamic Banking.
 - Oracle FLEXCUBE Universal Banking Base
 - Oracle FLEXCUBE Universal Banking Asset Management
 - Oracle FLEXCUBE Universal Banking Bills and Collection
 - Oracle FLEXCUBE Universal Banking Cash Management
 - Oracle FLEXCUBE Universal Banking Collections
 - Oracle FLEXCUBE Universal Banking Current Accounts and Savings Accounts
 - Oracle FLEXCUBE Universal Banking Fixed Assets
 - Oracle FLEXCUBE Universal Banking Letters of Credit
 - Oracle FLEXCUBE Universal Banking Money Markets
 - Oracle FLEXCUBE Universal Banking Relationship Pricing
 - Oracle FLEXCUBE Universal Banking Retail and Small and Medium Enterprise Loans



- Oracle FLEXCUBE Universal Banking Retail Loan Origination
- Oracle FLEXCUBE Universal Banking Swaps and Forward Rate Agreements
- Oracle FLEXCUBE Universal Banking Term Deposits

2.4 <u>Separately Licensed Pre-requisite Products and</u> <u>Licensing Metric</u>

The module wise list of separately licensed products and the licensing metric is given below.

For other separately licensable software pre-requisites, refer to the section Software Prerequisites.

Module Description	Separately Licensed Prerequisites	Licensing Metric(s)
Oracle FLEXCUBE Universal Banking Base	 Oracle FLEXCUBE Development Workbench Oracle FLEXCUBE Integration Gateway 	 Application User Custom Suite User Account Financial Inclusion Account
Oracle FLEXCUBE Universal Banking Process Framework Base	Oracle FLEXCUBE Development Workbench	 Application User Custom Suite User Account
Oracle FLEXCUBE Universal Banking Current Accounts and Savings Accounts	Oracle FLEXCUBE Universal Banking Base	 Application User Custom Suite User Account Financial Inclusion Account
Oracle FLEXCUBE Universal Banking Relationship Pricing	 Oracle FLEXCUBE Universal Banking Base Either Oracle FLEXCUBE Universal Banking Current Accounts & Savings Accounts OR Oracle FLEXCUBE Universal Banking Term Deposits 	Account
Oracle FLEXCUBE Universal Banking Term Deposits	Oracle FLEXCUBE Universal Banking Base	Account



Oracle FLEXCUBE Universal Banking Retail and Small and Medium Enterprise Loans	Oracle FLEXCUBE Universal Banking Base	Account
Oracle FLEXCUBE Universal Banking Payments and Collections	Oracle FLEXCUBE Universal Banking Base	 Application User Custom Suite User Account
Oracle FLEXCUBE Universal Banking Funds Transfer	 Oracle FLEXCUBE Universal Banking Base 	Application UserCustom Suite UserAccount
Oracle FLEXCUBE Universal Banking Nostro Reconciliation	Oracle FLEXCUBE Universal Banking Base	 Application User Custom Suite User Account
Oracle FLEXCUBE Universal Banking Standing Instructions	Oracle FLEXCUBE Universal Banking Base	 Application User Custom Suite User Account
Oracle FLEXCUBE Universal Banking Cash Management	Oracle FLEXCUBE Universal Banking Base	Application UserCustom Suite UserAccount
Oracle FLEXCUBE Universal Banking Branch	Oracle FLEXCUBE Universal Banking Base	 Account Financial Inclusion Account
Oracle FLEXCUBE Universal Banking ATM Interface	Oracle FLEXCUBE Universal Banking Base	 Account Financial Inclusion Account
Oracle FLEXCUBE Universal Banking Point of Sale Interface	Oracle FLEXCUBE Universal Banking Base	Account
Oracle FLEXCUBE Universal Banking Interactive Voice Response Interface	Oracle FLEXCUBE Universal Banking Base	Account
Oracle FLEXCUBE Universal Banking Mortgages	Oracle FLEXCUBE Universal Banking Base	Account



Oracle FLEXCUBE Universal Banking Consumer Leasing	Oracle FLEXCUBE Universal Banking Base	Account
Oracle FLEXCUBE Universal Banking Commercial Leasing	 Oracle FLEXCUBE Universal Banking Base 	Application UserCustom Suite UserAccount
Oracle FLEXCUBE Universal Banking Inventory Management	 Oracle FLEXCUBE Universal Banking Base Oracle FLEXCUBE Universal Banking Current Accounts & Savings Accounts 	Account
Oracle FLEXCUBE Universal Banking Collections	 Oracle FLEXCUBE Universal Banking Base 	Application UserCustom Suite UserAccount
Oracle FLEXCUBE Universal Banking Microfinance	 Oracle FLEXCUBE Universal Banking Base Oracle FLEXCUBE Universal Banking Retail and Small and Medium Enterprise Loans 	Account
Oracle FLEXCUBE Universal Banking Safe Deposit Box	Oracle FLEXCUBE Universal Banking Base	 Account
Oracle FLEXCUBE Universal Banking Corporate Deposits	Oracle FLEXCUBE Universal Banking Base	 Application User Custom Suite User
Oracle FLEXCUBE Universal Banking Commercial Loans	Oracle FLEXCUBE Universal Banking Base	 Application User Custom Suite User
Oracle FLEXCUBE Universal Banking Loan Syndication	Oracle FLEXCUBE Universal Banking Base	 Application User Custom Suite User
Oracle FLEXCUBE Universal Banking Bills & Collection	Oracle FLEXCUBE Universal Banking Base	 Application User Custom Suite User
Oracle FLEXCUBE Universal Banking Letters of Credit	Oracle FLEXCUBE Universal Banking Base	 Application User Custom Suite User



Oracle FLEXCUBE Universal Banking Foreign Exchange	Oracle FLEXCUBE Universal Banking Base	Application UserCustom Suite User
Oracle FLEXCUBE Universal Banking Money Markets	Oracle FLEXCUBE Universal Banking Base	 Application User Custom Suite User
Oracle FLEXCUBE Universal Banking Swaps and Forward Rate Agreements	 Oracle FLEXCUBE Universal Banking Base 	 Application User Custom Suite User
Oracle FLEXCUBE Universal Banking Exchange Traded Derivatives for Commodities Futures and Options	 Oracle FLEXCUBE Universal Banking Base 	 Application User Custom Suite User
Oracle FLEXCUBE Universal Banking Exchange Traded Derivatives for Currency Futures and Options	 Oracle FLEXCUBE Universal Banking Base 	 Application User Custom Suite User
Oracle FLEXCUBE Universal Banking Exchange Traded Derivatives for Equity and Index Futures and	Oracle FLEXCUBE Universal Banking Base	 Application User Custom Suite User
Oracle FLEXCUBE Universal Banking Exchange Traded Derivatives for Interest Rate Futures and Options	 Oracle FLEXCUBE Universal Banking Base 	 Application User Custom Suite User
Oracle FLEXCUBE Universal Banking Over the Counter Currency	Oracle FLEXCUBE Universal Banking Base	 Application User Custom Suite User
Oracle FLEXCUBE Universal Banking Over the Counter Interest Rate Options	Oracle FLEXCUBE Universal Banking Base	 Application User Custom Suite User
Oracle FLEXCUBE Universal Banking Securities	Oracle FLEXCUBE Universal Banking Base	 Application User Custom Suite User
Oracle FLEXCUBE Universal Banking Fixed Assets	Oracle FLEXCUBE Universal Banking Base	 Application User Custom Suite User



Oracle FLEXCUBE Universal Banking Asset Management	 Oracle FLEXCUBE Universal Banking Base and EITHER of the below modules: Oracle FLEXCUBE Universal Banking Securities Oracle FLEXCUBE Universal Banking Exchange Traded Derivatives for Interest Rate Futures and Options, Oracle FLEXCUBE Universal Banking Exchange Traded Derivatives for Currency Futures and Options Oracle FLEXCUBE Universal Banking Exchange Traded Derivatives for Currency Futures and Options Oracle FLEXCUBE Universal Banking Exchange Traded Derivatives for Equity and Index Futures and Options Oracle FLEXCUBE Universal Banking Exchange Traded Derivatives for Equity and Index Futures and Options Oracle FLEXCUBE Universal Banking Exchange Traded Derivatives for Commodities Futures and Options Oracle FLEXCUBE Universal Banking Over the Counter Currency 	 Application User Custom Suite User
	> Oracle FLEXCUBE	
Oracle FLEXCUBE Universal Banking Expense Processing	Oracle FLEXCUBE Universal Banking Base	 Application User Custom Suite User



Oracle FLEXCUBE U	niversal Banking Origination	
Oracle FLEXCUBE Universal Banking Account Origination	Oracle FLEXCUBE Universal Banking Base	 Application User Custom Suite User Account
Oracle FLEXCUBE Universal Banking Term Deposits Origination	Oracle FLEXCUBE Universal Banking Base	Account
Oracle FLEXCUBE Universal Banking Letters	Oracle FLEXCUBE Universal Banking Base	 Application User Custom Suite User
Oracle FLEXCUBE Universal Banking Retail Loan Origination	Oracle FLEXCUBE Universal Banking Base	 Application User Custom Suite User Account
Oracle FLEXCUBE Universal Banking Commercial Loans Origination	Oracle FLEXCUBE Universal Banking Base	 Application User Custom Suite User Account
Oracle FLEXCUBE O	pen Development Tools	
Oracle FLEXCUBE Development Workbench	Oracle FLEXCUBE Universal Banking Base	 Application User
Oracle FLEXCUBE Testing Workbench for Universal Banking	Oracle FLEXCUBE Universal Banking Base	 Application User
Oracle FLEXCUBE Ir	terfaces and Tools	
Oracle FLEXCUBE Integration Gateway	Oracle FLEXCUBE Universal Banking Base	 Application User Custom Suite User Account Processor Financial Inclusion Account
Oracle FLEXCUBE Universal Banking Connector for Oracle Identity Manager	Oracle FLEXCUBE Universal Banking Base	Connector



Oracle FLEXCUBE Electronic Messaging Service	Oracle FLEXCUBE Universal Banking Base	 Application User Custom Suite User Account
Oracle FLEXCUBE In	formation Server	
Oracle FLEXCUBE Information Server Base for Universal	Oracle FLEXCUBE Universal Banking Base	Account
Oracle FLEXCUBE Information Server Retail Liabilities Data Mart for Universal Banking	 Oracle FLEXCUBE Information Server Base for Universal Banking Oracle FLEXCUBE Universal Banking Current Accounts and Savings Accounts Oracle FLEXCUBE Universal Banking Term Deposits 	Account
Oracle FLEXCUBE Information Server Retail Assets Data Mart for Universal Banking	 Oracle FLEXCUBE Information Server Base for Universal Banking Oracle FLEXCUBE Universal Banking Current Accounts and Savings Accounts Oracle FLEXCUBE Universal Banking Retail and Small and Medium Enterprises Loans 	Account

2.5 Restricted Use License

The following modules have restricted features or functionality for use under the license metric Financial Inclusion Account

Product or Component	Restrictions/Features Omitted
Oracle FLEXCUBE Universal Banking Base	 Customer creation along with account creation is done in a single go without the option of Signature capture and verification.
	 These customers will not have the Limits linkage
	 Only Individual type of customers alone can be created. (Corporate/ Bank kind of customers cannot be created)



Oracle FLEXCUBE Universal Banking Current Accounts and Savings Accounts	 System will allow the FI customer to open only a Single Holder savings CASA account and in branch currency only 	
	 Temporary OD on FI customer's CASA accounts is allowed for a short term without attaching any collateral or credit line backing. 	
	 Allow mapping an account class with only a single IC product of type "Interest". This IC product is restricted to contain only general conditions and One Debit and One Credit product attached to it. 	
	 Check book and Debit card features are not available for FI customer accounts. 	
	The account cannot be salary account	
Oracle FLEXCUBE Universal Banking Branch	 Allow only the below Branch transactions for a FI customer, 	
	Cash Deposit	
	Cash Withdrawal	
	Transfers	
	 Utility payment without external Utility Provider interface 	
Oracle FLEXCUBE Universal Banking ATM Interface	No restrictions brought in. Will be contractual restriction.	
Oracle FLEXCUBE Integration Gateway	No restrictions brought in. Will be contractual restriction.	



3. Software Prerequisites

Following are the separately licensable software prerequisites for Oracle FLEXCUBE Universal Banking Products.

3.1 Software Prerequisites

3.1.1 <u>Tech Stack – Oracle</u>

Component	Deployment option	Machine	Operating System	Software	Version Number				
Oracle FLEXCUBE Universal	UI-Host and Centralized	Application Server	Oracle Enterprise Linux	Oracle Fusion Middleware Infrastructure	12.2.1.4.0				
Banking			Server 7.6 (x86 64 Bit)	Java HotSpot (TM) JDK (with WebLogic Application Server)	JDK 1.8 Update 241				
				Open Symphony Quartz	2.3.2				
				Oracle Platform Security Services	12.2.1.4.0				
				Oracle Toplink	12.2.1.4.0				
		Document Manageme nt System	Manageme	Oracle Enterprise	Oracle WebLogic	12.2.1.4.0			
			Linux Server 7.6 (x86 64 Bit)	JDK	JDK 1.8 Update 241				
									Oracle Database (for RCU)
				Repository Creation Utility	12.1.1.4.0				
				Oracle WebCenter Content Imaging	12.2.1.4.0				
		Database Server	Oracle Enterprise Linux Server 7.6 (x86 64 Bit)	Oracle RDBMS Enterprise Edition	19.6.0.0.0				



	Reporting Server	Oracle Enterprise	Oracle WebLogic	12.2.1.4.0
		Linux Server 7.6 (x86 64 Bit)	JDK	JDK 1.8 Update 241
			Oracle Database (for RCU)	19.6.0.0.0
			Repository Creation Utility	12.2.1.4.0
			Oracle BI Publisher	5.5.0
	FLEXCUB E Information	Oracle Enterprise Linux	Oracle WebLogic	12.2.1.4.0
	Server – Analytics	Server 7.6 (x86 64 Bit)	JDK	5.5.0 12.2.1.4.0 JDK 1.8 Update 241 12.1.0.2.0 12.2.1.4.0 5.5.0 19.1.0.0.4
			Oracle Database (for RCU)	12.1.0.2.0
			Repository Creation Utility	12.2.1.4.0
			Oracle Business Intelligence Enterprise Edition (OBIEE)	5.5.0
	FLEXCUB E Information	Oracle Enterprise Linux	Gate	19.1.0.0.4
	Server - Data warehouse	Server 7.6 (x86 64 Bit)		19.6.0.0.0
	warenouse		Repository Creation Utility	12.2.1.4.0
			Oracle Data integrator	12.2.1.4.0
			Oracle Data integrator Java EE Agent	12.2.1.4.0
			Oracle WebLogic Server Infrastructure	12.2.1.4.0



	#Client Machines	Windows 10	Internet Explorer	Internet Explorer (11+)
			Mozilla Firefox	Mozilla Firefox Release (66+)
			Google Chrome	Google Chrome Release (73+)
			Microsoft Edge	Microsoft Edge 44+
		Mac OS X	Mozilla Firefox	Mozilla Firefox for Mac (62+)
			Safari	Safari 12+
			Google Chrome	Google Chrome Release (73+)
	Single Sign On Server	Oracle Enterprise Linux	JDK	JDK 1.8 Update 241
		Server 7.6 (x86 64 Bit)	Oracle WebLogic	12.2.1.4.0
			Creation Utility Oracle Identity Management	12.2.1.4.0
				12.2.1.4.0
				12.2.1.4.0
			Oracle Identity And Access Management	12.2.1.4.0
			Oracle Webtier Utilities	12.2.1.4.0
			Oracle Webgate	12.2.1.4.0
			OID Connector	OID 11.1.1.6.0
			JDK	1.8 Update 241



	UI Decentralized branch	Branch Application Server – Decentraliz ed	Linux	Oracle WebLogic Server	12.2.1.4.0
		Database Branch for Decentraliz ed mode		Oracle RDBMS Standard Edition (SE2)	19.6.0.0.0
Oracle FLEXCUBE Universal	UI-Host and Centralized	Application Server	Oracle Enterprise Linux	JDK	1.8 Update 241
Banking BPEL/BPM N Processes and Process			Server 7.6 (x86 64 Bit)	Oracle WebLogic Server	12.2.1.4.0
Framework				Oracle Database (for RCU)	19.6.0.0.0
				Repository Creation Utility	12.2.1.4.0
				Oracle SOA Suite, Oracle BPM Suite	12.2.1.4.0
Oracle FLEXCUBE Universal	Web services (incoming)	Integration Server	Oracle Enterprise Linux	Oracle WebLogic Server	12.2.1.4.0
Banking Integration Gateway	HTTP Servlet (incoming)		Server 7.6 (x86 64 Bit)	Server	
	EJB (incoming)				
	MDB (incoming)				
	Notifications (outgoing)				
Oracle FLEXCUBE Universal Banking Switch Integration Gateway	Switch Integration Gateway	Integration Server	Oracle Enterprise Linux Server 7.6 (x86 64 Bit)	JDK	1.8 Update 241



Oracle FLEXCUBE Universal	Web services	Integration Server	Oracle Enterprise Linux	JDK	1.8 Update 241
Banking ReST			Server 7.6 (x86 64 Bit)	Oracle WebLogic Server	12.2.1.4.0
				Oracle Toplink	12.2.1.4.0

Note: # Browser support is no longer based on Operating Systems but strictly tied to the browser themselves, no matter which Operating Systems they are installed on. Current release is certified on client workstations with Windows 7, 8, 10 and Mac OS X.

3.1.2 <u>Tech Stack – IBM</u>

Component	Deployment option	Machine	Operating System	Software	Version Number
Oracle FLEXCUBE Universal Banking	UI-Host and Centralized	Application Server	Oracle Enterprise Linux Server 7.6 (x86 64 Bit)	IBM WebSphere Application Server with inbuilt JVM (IBM JDK 1.8_64)	9.0.0.0
				IBM WebSphere MQ Server	9.0.0.0
				Oracle Toplink	12.2.1.4.0
				Open Symphony Quartz	2.3.2
				Oracle WebCenter Content: Imaging	11.1.1.9.0
		Database Server	Oracle Enterprise Linux Server 7.6 (x86 64 Bit)	Oracle RDBMS Enterprise Edition	19.6.0.0.0
		#Client Machines	Windows 10	Internet Explorer	Microsoft Edge 11 +



				Mozilla Firefox	Mozilla Firefox
					Release (66+)
				Google Chrome	Google Chrome 1 Release (73+)
				Microsoft Edge	42+
			Mac OS X	Mozilla Firefox	Mozilla Firefox for Mac (62+)
				Safari	Safari 12+
				Google Chrome	Google Chrome Release(73+)
Oracle FLEXCUBE Universal Banking Integration Gateway	Web services (incoming)	Integration Server	Oracle Enterprise Linux Server 7.6 (x86 64 Bit)	IBM WebSphere Application Server with inbuilt JVM (IBM JDK 1.8_64)	9.0.0.0
	HTTP Servlet (incoming)	Integration Server	Oracle Enterprise Linux Server 7.1 (x86 64 Bit)	IBM WebSphere Application Server with inbuilt JVM (IBM JDK 1.8_64)	9.0.0.0
	EJB (incoming)	Integration Server	Oracle Enterprise Linux Server 7.6 (x86 64 Bit)	IBM WebSphere Application Server with inbuilt JVM (IBM JDK 1.8_64)	9.0.0.0
	MDB (incoming)	Integration Server	Oracle Enterprise Linux Server 7.6 (x86 64 Bit)	IBM WebSphere Application Server with inbuilt JVM (IBM JDK 1.8_64)	9.0.0.0
				IBM WebSphere MQ Server	9.0.0.0



	Notifications (outgoing)	Integration Server	Oracle Enterprise Linux Server 7.6 (x86 64 Bit)	IBM WebSphere Application Server with inbuilt JVM (IBM JDK 1.8_64)	9.0.0.0
				IBM WebSphere MQ Server	9.0.0.0
Oracle FLEXCUBE Universal Banking	Switch Integration Gateway	Integration Server		JDK	IBM JDK 1.8_241
Oracle FLEXCUBE Universal Banking ReST	Web services	Integration Server	Oracle Enterprise Linux Server 7.6 (x86 64 Bit)	IBM WebSphere Application Server with inbuilt JVM (IBM JDK 1.8_64)	9.0.0.0
				Oracle Toplink	12.2.1.4.0

Note: # Browser support is no longer based on Operating Systems but strictly tied to the browser themselves, no matter which Operating Systems they are installed on. Current release is certified on client workstations with Windows 7, 8, 10 and Mac OS X.

3.2 Module-wise Software Prerequisites

Product Name	Product Version	Requirements
Oracle Fusion Middleware Infrastructure	12.2.1.2.0	Optional - Oracle FLEXCUBE Universal Banking and Oracle FLEXCUBE Universal Banking Integration Gateway supports both Oracle Weblogic Server (Fusion Middleware) and WebSphere.
Java HotSpot(TM) JDK (with WebLogic Application Server)	JDK 1.8 Update 144	Optional – Required for Oracle FLEXCUBE Universal Banking and Oracle FLEXCUBE Universal Banking Integration Gateway on WebLogic.
Open Symphony Quartz	2.2.3	Standard requirement
Oracle Toplink	12.2.1.2.0	Optional - Required only if limits tracking is required.



Product Name	Product Version	Requirements
Oracle WebCenter Content Imaging	11.1.1.9.0	Optional - Required only if Document Management System integration is required. Refer to section 3.1.1 for other related software (Document Management System).
Oracle RDBMS Enterprise Edition	12.2.0.1.0	Standard requirement
Oracle BI Publisher	12.2.1.2.0	Standard requirement. Refer to section 3.1.1 for dependent software (Reporting Server).
Oracle Business Intelligence Enterprise Edition (OBIEE)	12.2.1.2.0	Optional - Required only if Oracle FLEXCUBE Information Server is installed or if metadata repository based Adhoc reporting is needed. Refer to section 3.1.1 for dependent software (FLEXCUBE Information Server -Analytics).
Oracle Golden Gate	12.2.0.1.0	Optional - Required only if Oracle FLEXCUBE Information Server is installed. Refer to section 3.1.1 for dependent software (FLEXCUBE Information Server -Data warehouse).
Oracle Data integrator	12.2.1.2.0	Optional - Required only if Oracle FLEXCUBE Information Server is installed. Refer to section 3.1.1 for dependent software (FLEXCUBE Information Server -Data warehouse).
Oracle Identity Management (OID)	11.1.1.9.0	Optional - Required if Single Sign On is required. Refer to section 3.1.1 for dependent software (Single Sign On Server).
Oracle Identity And Access Management	11.1.2.3.0	Optional - Required if Single Sign On is required. Refer to section 3.1.1 for dependent software (Single Sign On Server).
Oracle RDBMS Standard Edition (SE2)	12.2.0.1.0	Optional - Required if decentralized branch support is required. Refer to section 3.1.1 for related software (Decentralized branch).
Oracle SOA Suite	12.2.1.2.0	Optional - Required for Oracle FLEXCUBE Universal Banking Origination. Refer to section 3.1.1 for related software (BPEL/BPMN Processes and Process Framework).



Product Name	Product Version	Requirements
Oracle BPM Suite	12.2.1.2.0	Optional - Required for Oracle FLEXCUBE Universal Banking Origination. Refer to section 3.1.1 for related software (BPEL/BPMN Processes and Process Framework).
IBM WebSphere Application Server with inbuilt JVM (IBM JDK 1.8_64).	9.0.0.0	Optional - Oracle FLEXCUBE Universal Banking and Oracle FLEXCUBE Universal Banking Integration Gateway supports both Weblogic and Websphere.
IBM WebSphere MQ Server	9.0.0.0.0	Optional – Required for Oracle FLEXCUBE Universal Banking and Oracle FLEXCUBE Universal Banking Integration Gateway on WebSphere



4. Third Party Licenses

4.1 Introduction

This chapter provides information on licensing of third party software that are packaged with Oracle FLEXCUBE Universal Banking. It contains the following sections:

- Apache License 2.0
- MIT License
- BSD-Style License
- Third Party Libraries
- Other Java Transaction API

4.2 Apache License 2.0

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:

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

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

(c) 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



(d) 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, 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

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright © 2016, Oracle and/or its affiliates. All rights reserved.

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.

Commons Net

Copyright in source:

Copyright 2001-2008 The Apache Software Foundation

Notice in source:

Apache Commons Net

Copyright 2001-2017 The Apache Software Foundation

Instructions for Documentation.

Apache Commons Net



Copyright 2001-2017 The Apache Software Foundation. This product includes software developed at The Apache Software Foundation (<u>http://www.apache.org/</u>)

Commons Lang

Copyright 2001-2011 The Apache Software Foundation

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

Log4J

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

Apache POI

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:

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

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

(c) 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



(d) 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, 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



APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

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.

== NOTICE file corresponding to section 4(d) of the Apache License, ==

== Version 2.0, in this case for the Apache XmlBeans distribution. ==

This product includes software developed by

The Apache Software Foundation (http://www.apache.org/).

Portions of this software were originally based on the following:

- software copyright (c) 2000-2003, BEA Systems, .

Aside from contributions to the Apache XMLBeans project, this software also includes:

- one or more source files from the Apache Xerces-J and Apache Axis

products, Copyright (c) 1999-2003 Apache Software Foundation

- W3C XML Schema documents Copyright 2001-2003 (c) World Wide Web

Consortium (Massachusetts Institute of Technology, European Research

Consortium for Informatics and Mathematics, Keio University)

- resolver.jar from Apache Xml Commons project,



Copyright (c) 2001-2003 Apache Software Foundation

- Piccolo XML Parser for Java from http://piccolo.sourceforge.net/,

Copyright 2002 Yuval Oren under the terms of the Apache Software License 2.0

- JSR-173 Streaming API for XML from http://sourceforge.net/projects/xmlpullparser/,

Copyright 2005 BEA under the terms of the Apache Software License 2.0

APACHE POI SUBCOMPONENTS:

Apache POI includes subcomponents with separate copyright notices and license terms. Your use of these subcomponents is subject to the terms and conditions of the following licenses:

Office Open XML schemas (ooxml-schemas-1.*.jar)

The Office Open XML schema definitions used by Apache POI are a part of the Office Open XML ECMA Specification (ECMA-376, [1]).

As defined in section 9.4 of the ECMA bylaws [2], this specification is available to all interested parties without restriction:

9.4 All documents when approved shall be made available to all interested parties without restriction.

Furthermore, both Microsoft and Adobe have granted patent licenses to this work [3,4,5].

[1] http://www.ecma-international.org/publications/standards/Ecma-376.htm

[2] http://www.ecma-international.org/memento/Ecmabylaws.htm

[3] http://www.microsoft.com/openspecifications/en/us/programs/osp/default.aspx

[4] http://www.ecma-international.org/publications/files/ECMA-ST/Ecma%20PATENT/

Patent%20statements%20ok/ECMA-376%20Edition%202%20Microsoft%20Patent%20Declaration.pdf

[5] http://www.ecma-international.org/publications/files/ECMA-ST/Ecma%20PATENT/

Patent%20statements%20ok/ECMA-376%20Adobe%20Patent%20Declaration.pdf

Bouncy Castle library (bcprov-*.jar, bcpg-*.jar, bcpkix-*.jar)

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.

JUnit test library (junit-4.*.jar) & JaCoCo (*jacoco*)

Eclipse Public License - v 1.0

THE ACCOMPANYING PROGRAM IS PROVIDED UNDER THE TERMS OF THIS ECLIPSE PUBLIC LICENSE ("AGREEMENT"). ANY USE, REPRODUCTION OR DISTRIBUTION OF THE PROGRAM CONSTITUTES RECIPIENT'S ACCEPTANCE OF THIS AGREEMENT.

1. DEFINITIONS

"Contribution" means:

a) in the case of the initial Contributor, the initial code and documentation distributed under this Agreement, and

b) in the case of each subsequent Contributor:

i) changes to the Program, and

ii) additions to the Program;

where such changes and/or additions to the Program originate from and are distributed by that particular Contributor. A Contribution 'originates' from a Contributor if it was added to the Program by such Contributor itself or anyone acting on such Contributor's behalf. Contributions do not include additions to the Program which: (i) are separate modules of software distributed in conjunction with the Program under their own license agreement, and (ii) are not derivative works of the Program.

"Contributor" means any person or entity that distributes the Program.

"Licensed Patents" mean patent claims licensable by a Contributor which are necessarily infringed by the use or sale of its Contribution alone or when combined with the Program.

"Program" means the Contributions distributed in accordance with this Agreement.

"Recipient" means anyone who receives the Program under this Agreement, including all Contributors.

2. GRANT OF RIGHTS

a) Subject to the terms of this Agreement, each Contributor hereby grants Recipient a nonexclusive, worldwide, royalty-free copyright license to reproduce, prepare derivative works of, publicly display, publicly perform, distribute and sublicense the Contribution of such Contributor, if any, and such derivative works, in source code and object code form.



b) Subject to the terms of this Agreement, each Contributor hereby grants Recipient a nonexclusive, worldwide, royalty-free patent license under Licensed Patents to make, use, sell, offer to sell, import and otherwise transfer the Contribution of such Contributor, if any, in source code and object code form. This patent license shall apply to the combination of the Contribution and the Program if, at the time the Contribution is added by the Contributor, such addition of the Contribution causes such combination to be covered by the Licensed Patents. The patent license shall not apply to any other combinations which include the Contribution.

No hardware per se is licensed hereunder.

c) Recipient understands that although each Contributor grants the licenses to its Contributions set forth herein, no assurances are provided by any Contributor that the Program does not infringe the patent or other intellectual property rights of any other entity. Each Contributor disclaims any liability to Recipient for claims brought by any other entity based on infringement of intellectual property rights or otherwise. As a condition to exercising the rights and licenses granted hereunder, each Recipient hereby assumes sole responsibility to secure any other intellectual property rights needed, if any. For example, if a third party patent license is required to allow Recipient to distribute the Program, it is Recipient's responsibility to acquire that license before distributing the Program.

d) Each Contributor represents that to its knowledge it has sufficient copyright rights in its Contribution, if any, to grant the copyright license set forth in this Agreement.

3. REQUIREMENTS

A Contributor may choose to distribute the Program in object code form under its own license agreement, provided that:

a) it complies with the terms and conditions of this Agreement; and

b) its license agreement:

i) effectively disclaims on behalf of all Contributors all warranties and conditions, express and implied, including warranties or conditions of title and non-infringement, and implied warranties or conditions of merchantability and fitness for a particular purpose;

ii) effectively excludes on behalf of all Contributors all liability for damages, including direct, indirect, special, incidental and consequential damages, such as lost profits;

iii) states that any provisions which differ from this Agreement are offered by that Contributor alone and not by any other party; and

iv) states that source code for the Program is available from such Contributor, and informs licensees how to obtain it in a reasonable manner on or through a medium customarily used for software exchange.

When the Program is made available in source code form:

a) it must be made available under this Agreement; and

b) a copy of this Agreement must be included with each copy of the Program.

Contributors may not remove or alter any copyright notices contained within the Program.



Each Contributor must identify itself as the originator of its Contribution, if any, in a manner that reasonably allows subsequent Recipients to identify the originator of the Contribution.

4. COMMERCIAL DISTRIBUTION

Commercial distributors of software may accept certain responsibilities with respect to end users, business partners and the like. While this license is intended to facilitate the commercial use of the Program, the Contributor who includes the Program in a commercial product offering should do so in a manner which does not create potential liability for other Contributors.

Therefore, if a Contributor includes the Program in a commercial product offering, such Contributor ("Commercial Contributor") hereby agrees to defend and indemnify every other Contributor ("Indemnified Contributor") against any losses, damages and costs (collectively "Losses") arising from claims, lawsuits and other legal actions brought by a third party against the Indemnified Contributor to the extent caused by the acts or omissions of such Commercial Contributor in connection with its distribution of the Program in a commercial product offering. The obligations in this section do not apply to any claims or Losses relating to any actual or alleged intellectual property infringement.

In order to qualify, an Indemnified Contributor must:

a) promptly notify the Commercial Contributor in writing of such claim, and b) allow the Commercial Contributor to control, and cooperate with the Commercial Contributor in, the defense and any related settlement negotiations. The Indemnified Contributor may participate in any such claim at its own expense.

For example, a Contributor might include the Program in a commercial product offering, Product X. That Contributor is then a Commercial Contributor. If that Commercial Contributor then makes performance claims, or offers warranties related to Product X, those performance claims and warranties are such Commercial Contributor's responsibility alone. Under this section, the

Commercial Contributor would have to defend claims against the other Contributors related to those performance claims and warranties, and if a court requires any other Contributor to pay any damages as a result, the Commercial Contributor must pay those damages.

5. NO WARRANTY

EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, THE PROGRAM IS PROVIDED 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.

Each Recipient is solely responsible for determining the appropriateness of using and distributing the Program and assumes all risks associated with its exercise of rights under this Agreement, including but not limited to the risks and costs of program errors, compliance with applicable laws, damage to or loss of data, programs or equipment, and unavailability or interruption of operations.



6. DISCLAIMER OF LIABILITY

EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, NEITHER RECIPIENT NOR ANY CONTRIBUTORS SHALL HAVE ANY LIABILITY FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING WITHOUT LIMITATION LOST PROFITS), 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 OR DISTRIBUTION OF THE PROGRAM OR THE EXERCISE OF ANY RIGHTS GRANTED HEREUNDER, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

7. GENERAL

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

If Recipient institutes patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Program itself (excluding combinations of the Program with other software or hardware) infringes such Recipient's patent(s), then such Recipient's rights granted under Section 2(b) shall terminate as of the date such litigation is filed.

All Recipient's rights under this Agreement shall terminate if it fails to comply with any of the material terms or conditions of this Agreement and does not cure such failure in a reasonable period of time after becoming aware of such noncompliance. If all Recipient's rights under this Agreement terminate, Recipient agrees to cease use and distribution of the Program as soon as reasonably practicable. However, Recipient's obligations under this Agreement and any licenses granted by Recipient relating to the Program shall continue and survive.

Everyone is permitted to copy and distribute copies of this Agreement, but in order to avoid inconsistency the Agreement is copyrighted and may only be modified in the following manner. The Agreement Steward reserves the right to publish new versions (including revisions) of this Agreement from time to time. No one other than the Agreement Steward has the right to modify this Agreement. The Eclipse Foundation is the initial Agreement Steward. The Eclipse Foundation may assign the responsibility to serve as the Agreement Steward to a suitable separate entity. Each new version of the Agreement will be given a distinguishing version number. The Program (including Contributions) may always be distributed subject to the version of the Agreement under which it was received. In addition, after a new version of the Agreement is published, Contributor may elect to distribute the Program (including its Contributions) under the new version. Except as expressly stated in Sections 2(a) and 2(b) above, Recipient receives no rights or licenses to the intellectual property of any Contributor under this Agreement, whether expressly, by implication, estoppel or otherwise.

All rights in the Program not expressly granted under this Agreement are reserved.

This Agreement is governed by the laws of the State of New York and the intellectual property laws of the United States of America. No party to this Agreement will bring a legal action under this Agreement more than one year after the cause of action arose. Each party waives its rights to a jury trial in any resulting litigation.

Hamcrest library (hamcrest-*.jar) & CuvesAPI / Curve API



BSD License

Copyright (c) 2000-2006, www.hamcrest.org

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 Hamcrest 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.

SLF4J library (slf4j-api-*.jar)

Copyright (c) 2004-2013 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 File:

Apache POI

Copyright 2003-2016 The Apache Software Foundation

This product includes software developed by

The Apache Software Foundation (<u>https://www.apache.org/</u>).

This product contains parts that were originally based on software from BEA.

Copyright (c) 2000-2003, BEA Systems, .

This product contains W3C XML Schema documents. Copyright 2001-2003 (c)

World Wide Web Consortium (Massachusetts

Apache Velocity

Copyright (C) 2000-2007 The Apache Software Foundation

This product includes software developed at

The Apache Software Foundation (http://www.apache.org/).

Serializer (Xalan-Java)

Apache Xalan (Xalan serializer)

Copyright 1999-2006 The Apache Software Foundation

This product includes software developed at

The Apache Software Foundation (<u>http://www.apache.org/</u>).

Portions of this software was originally based on the following:

- software copyright (c) 1999-2002, Lotus Development Corporation.,

http://www.lotus.com

- software copyright (c) 2001-2002, Sun Microsystems.,

http://www.sun.com

- software copyright (c) 2003, IBM Corporation.,

http://www.ibm.com

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION



Apache Commons Codec

Copyright 2002-2014 The Apache Software Foundation

This product includes software developed at

The Apache Software Foundation (http://www.apache.org/).

src/test/org/apache/commons/codec/language/DoubleMetaphoneTest.java

contains test data from http://aspell.net/test/orig/batch0.tab

Copyright (C) 2002 Kevin Atkinson (kevina@gnu.org)

The content of package org.apache.commons.codec.language.bm has been translated from the original php source code available at <u>http://stevemorse.org/phoneticinfo.htm</u> with permission from the original authors.

Original source copyright:

Copyright (c) 2008 Alexander Beider & Stephen P. Morse.

Apache Commons Collections

Copyright 2001-2008 The Apache Software Foundation

This product includes software developed by

The Apache Software Foundation (<u>http://www.apache.org/</u>).

The following applies to all products licensed under the Apache 2.0 License:

You may not use the identified files except in compliance with the Apache License, Version 2.0 (the "License.")

You may obtain a copy of the License at <u>http://www.apache.org/licenses/LICENSE-2.0</u>. A copy of the license is also reproduced below.

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:

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

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

3. 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

4. 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, 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

APPENDIX: How to apply the Apache License to your work

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

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.

commons-io

Apache Commons IO

Copyright 2002-2016 The Apache Software Foundation



This product includes software developed by

The Apache Software Foundation (<u>http://www.apache.org/</u>).

Commons Logging

Apache Commons Logging

Copyright 2003-2014 The Apache Software Foundation

This product includes software developed at

The Apache Software Foundation (<u>http://www.apache.org/</u>).

Commons-collections

Apache Commons Collections

Copyright 2001-2008 The Apache Software Foundation

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

Quartz Job Scheduler

Copyright © 2003-2016 Software AG, Darmstadt, Germany and/or Software AG USA Inc., Reston, VA, USA, and/or its subsidiaries and/or its affiliates and/or their licensors.

Copyright 2001-2012 Terracotta, Inc.

Apache License

Version 2.0, January 2004

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

4.3 BSD-Style License

DOM4J

DOM4J Project - https://dom4j.github.io/

Copyright 2001-2016 (C) MetaStuff, Ltd. and DOM4J contributors. 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 - https://dom4j.github.io/

THIS SOFTWARE IS PROVIDED BY METASTUFF, LTD. AND CONTRIBUTORS``AS IS" AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUTNOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY ANDFITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALLMETASTUFF, 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 ORSERVICES; 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 ADVISEDOF THE POSSIBILITY OF SUCH DAMAGE.

YUI Compressor

Copyright (c) 2011, Yahoo! Inc.

All rights reserved.

Redistribution and use of this software 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 Yahoo! Inc. nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission of Yahoo! Inc.

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



4.4 MIT License

Simple Logging Façade for Java (SLF4J)

Copyright (c) 2004-2013 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.

jsoup

jsoup License

The jsoup code-base (include source and compiled packages) are distributed under the open source MIT license as described below.

The MIT License

Copyright © 2009 - 2016 Jonathan Hedley (jonathan@hedley.net)

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."



4.5 **OpenSymphony**

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:

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

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

(c) 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

(d) 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, 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

APPENDIX: How to apply the Apache License to your work. To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

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.

NOTICE Text:



Notice for 4th party dependency- Javassist

The Original Code is Javassist.

The Initial Developer of the Original Code is Shigeru Chiba. Portions created by the Initial Developer are

Copyright (C) 1999- Shigeru Chiba. All Rights Reserved.

Contributor(s): __Bill Burke, Jason T. Greene_____.

4.6 Third Party Libraries

This section provides details of the libraries that use the following third party software.

- Apache 2.0
- MIT License
- BSD-Style License
- OpenSymphony
- Other

4.6.1 Apache 2.0

The following libraries include software developed by The Apache Software Foundation (<u>http://www.apache.org/</u>).

For license information, See "Apache License 2.0"

- Apache Commons Codec -1.13.jar
- poi-4.1.1.jar
- commons-collections-44.jar
- commons-io-2.7.jar
- Commons-Lang-3.9.jar
- commons-net- 3.7.jar
- log4j_ 2.12.1.jar
- Ant 1.10.7.jar
- commons-logging- 1.2.1.jar
- Quartz 2.3.2.jar
- Slf4j 1.7.29
- Swagger 1.6.0
- SnakeYAML 1.25
- Ziplet 2.4.1
- Quartz Enterprise Job Scheduler 2.3.2
- jackson-annotations 2.10.1
- jackson-core 2.10.1



- jackson-databind 2.10.1
- jackson-dataformat-yaml 2.10.1
- Mina SSHD 2.3.0

4.6.2 MIT License

The below libraries includes software developed by SLF4J (http://www.slf4j.org/).

SLF4J 1.7.25.jarFor license information, See "MIT License"

- Simple Logging Façade for Java (slf4j-api-1.7.25.jar)
- Simple Logging Façade for Java (slf4j-log4j12-1.7.25.jar)

The below library include software developed by jsoup.org

• jsoup 1.10.3.jar

4.6.3 BSD-Style Licensess

DOM4J is a registered trademark of MetaStuff, Ltd. (<u>http://www.dom4j.org</u>) For license information, *See "BSD-Style License"*

• dom4j-2.0.1.jar

The below library includes software developed by The Yahoo (http://developer.yahoo.com/yui).

For license information, See "BSD-Style License"

• yuicompressor-2.4.8.jar

4.6.4 Other

Sun Components are now Oracle Intellectual Property. However, before using this Component, contact Legal for confirmation that no third party components with additional development, attribution, or other requirements are included in this Component.

• Java Transaction API (jta_1.1.jar)

4.6.5 <u>Google</u>

Closure Compiler 1.0

