

License Guide
Oracle FLEXCUBE Universal Banking
Release 14.1.0.6.1
Part No. E94300-01
[August] [2020]





License Guide
[April] [2020]
Version 14.1.0.6.1

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. PREFACE | 1-1 |
| 1.1 INTRODUCTION | 1-1 |
| 1.2 AUDIENCE | 1-1 |
| 1.3 DOCUMENTATION ACCESSIBILITY | 1-1 |
| 1.4 ORGANIZATION | 1-1 |
| 1.5 RELATED DOCUMENTS | 1-1 |
| 2. ORACLE FLEXCUBE UNIVERSAL BANKING LICENSING | 2-1 |
| 2.1 INTRODUCTION | 2-1 |
| 2.2 GENERAL LICENSING RULES | 2-1 |
| 2.3 COMPONENTS INCLUDED IN LICENSE | 2-2 |
| 2.4 SEPARATELY LICENSED PRE-REQUISITE PRODUCTS AND LICENSING METRIC | 2-3 |
| 2.5 RESTRICTED USE LICENSE | 2-9 |
| 3. SOFTWARE PREREQUISITES | 3-1 |
| 3.1 SOFTWARE PREREQUISITES | 3-1 |
| 3.1.1 <i>Tech Stack – Oracle</i> | 3-1 |
| 3.1.2 <i>Tech Stack – IBM</i> | 3-5 |
| 3.2 MODULE-WISE SOFTWARE PREREQUISITES | 3-7 |
| 4. THIRD PARTY LICENSES | 4-1 |
| 4.1 INTRODUCTION | 4-1 |
| 4.2 APACHE LICENSE 2.0 | 4-1 |
| 4.3 FASTERXML, LLC | 4-27 |
| 4.4 JCRAFT | 4-27 |
| 4.5 BSD-STYLE LICENSE | 4-28 |
| 4.6 MIT LICENSE | 4-29 |
| 4.7 THIRD PARTY LIBRARIES | 4-33 |
| 4.7.1 <i>Apache 2.0</i> | 4-33 |
| 4.7.2 <i>MIT License</i> | 4-34 |
| 4.7.3 <i>BSD-Style Licenses</i> | 4-34 |
| 4.7.4 <i>Other</i> | 4-34 |

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 | <i>Oracle FLEXCUBE Universal Banking Licensing</i> provides information on Oracle FLEXCUBE Universal Banking licensing. |
| Chapter 3 | <i>Software Pre-requisites</i> 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.

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

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

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 Pre-requisites.

| Module Description | Separately Licensed Prerequisites | Licensing Metric(s) |
|--|---|---|
| Oracle FLEXCUBE Universal Banking Base* | <ul style="list-style-type: none"> Oracle FLEXCUBE Development Workbench Oracle FLEXCUBE Integration Gateway | <ul style="list-style-type: none"> Application User Custom Suite User Account Financial Inclusion Account |
| Oracle FLEXCUBE Universal Banking Process Framework Base | <ul style="list-style-type: none"> Oracle FLEXCUBE Development Workbench | <ul style="list-style-type: none"> Application User Custom Suite User Account |
| Oracle FLEXCUBE Universal Banking Current Accounts and Savings Accounts | <ul style="list-style-type: none"> Oracle FLEXCUBE Universal Banking Base | <ul style="list-style-type: none"> Application User Custom Suite User Account Financial Inclusion Account |
| Oracle FLEXCUBE Universal Banking Relationship Pricing | <ul style="list-style-type: none"> Oracle FLEXCUBE Universal Banking Base Either Oracle FLEXCUBE Universal Banking Current Accounts & Savings Accounts OR Oracle FLEXCUBE Universal Banking Term Deposits | <ul style="list-style-type: none"> Account |
| Oracle FLEXCUBE Universal Banking Term Deposits | <ul style="list-style-type: none"> Oracle FLEXCUBE Universal Banking Base | <ul style="list-style-type: none"> Account |
| Oracle FLEXCUBE Universal Banking Retail and Small and Medium Enterprise Loans | <ul style="list-style-type: none"> Oracle FLEXCUBE Universal Banking Base | <ul style="list-style-type: none"> Account |
| Oracle FLEXCUBE Universal Banking Payments and Collections | <ul style="list-style-type: none"> Oracle FLEXCUBE Universal Banking Base | <ul style="list-style-type: none"> Application User Custom Suite User Account |

| | | |
|---|--|--|
| Oracle FLEXCUBE Universal Banking Funds Transfer | <ul style="list-style-type: none"> • Oracle FLEXCUBE Universal Banking Base | <ul style="list-style-type: none"> • Application User • Custom Suite User • Account |
| Oracle FLEXCUBE Universal Banking Nostro Reconciliation | <ul style="list-style-type: none"> • Oracle FLEXCUBE Universal Banking Base | <ul style="list-style-type: none"> • Application User • Custom Suite User • Account |
| Oracle FLEXCUBE Universal Banking Standing Instructions | <ul style="list-style-type: none"> • Oracle FLEXCUBE Universal Banking Base | <ul style="list-style-type: none"> • Application User • Custom Suite User • Account |
| Oracle FLEXCUBE Universal Banking Cash Management | <ul style="list-style-type: none"> • Oracle FLEXCUBE Universal Banking Base | <ul style="list-style-type: none"> • Application User • Custom Suite User • Account |
| Oracle FLEXCUBE Universal Banking Branch | <ul style="list-style-type: none"> • Oracle FLEXCUBE Universal Banking Base | <ul style="list-style-type: none"> • Account • Financial Inclusion Account |
| Oracle FLEXCUBE Universal Banking ATM Interface | <ul style="list-style-type: none"> • Oracle FLEXCUBE Universal Banking Base | <ul style="list-style-type: none"> • Account • Financial Inclusion Account |
| Oracle FLEXCUBE Universal Banking Point of Sale Interface | <ul style="list-style-type: none"> • Oracle FLEXCUBE Universal Banking Base | <ul style="list-style-type: none"> • Account |
| Oracle FLEXCUBE Universal Banking Interactive Voice Response Interface | <ul style="list-style-type: none"> • Oracle FLEXCUBE Universal Banking Base | <ul style="list-style-type: none"> • Account |
| Oracle FLEXCUBE Universal Banking Mortgages | <ul style="list-style-type: none"> • Oracle FLEXCUBE Universal Banking Base | <ul style="list-style-type: none"> • Account |
| Oracle FLEXCUBE Universal Banking Consumer Leasing | <ul style="list-style-type: none"> • Oracle FLEXCUBE Universal Banking Base | <ul style="list-style-type: none"> • Account |
| Oracle FLEXCUBE Universal Banking Commercial Leasing | <ul style="list-style-type: none"> • Oracle FLEXCUBE Universal Banking Base | <ul style="list-style-type: none"> • Application User • Custom Suite User • Account |

| | | |
|--|--|--|
| Oracle FLEXCUBE Universal Banking Inventory Management | <ul style="list-style-type: none"> • Oracle FLEXCUBE Universal Banking Base • Oracle FLEXCUBE Universal Banking Current Accounts & Savings Accounts | <ul style="list-style-type: none"> • Account |
| Oracle FLEXCUBE Universal Banking Collections | <ul style="list-style-type: none"> • Oracle FLEXCUBE Universal Banking Base | <ul style="list-style-type: none"> • Application User • Custom Suite User • Account |
| Oracle FLEXCUBE Universal Banking Microfinance | <ul style="list-style-type: none"> • Oracle FLEXCUBE Universal Banking Base • Oracle FLEXCUBE Universal Banking Retail and Small and Medium Enterprise Loans | <ul style="list-style-type: none"> • Account |
| Oracle FLEXCUBE Universal Banking Safe Deposit Box | <ul style="list-style-type: none"> • Oracle FLEXCUBE Universal Banking Base | <ul style="list-style-type: none"> • Account |
| Oracle FLEXCUBE Universal Banking Corporate Deposits | <ul style="list-style-type: none"> • Oracle FLEXCUBE Universal Banking Base | <ul style="list-style-type: none"> • Application User • Custom Suite User |
| Oracle FLEXCUBE Universal Banking Commercial Loans | <ul style="list-style-type: none"> • Oracle FLEXCUBE Universal Banking Base | <ul style="list-style-type: none"> • Application User • Custom Suite User |
| Oracle FLEXCUBE Universal Banking Loan Syndication | <ul style="list-style-type: none"> • Oracle FLEXCUBE Universal Banking Base | <ul style="list-style-type: none"> • Application User • Custom Suite User |
| Oracle FLEXCUBE Universal Banking Bills & Collection | <ul style="list-style-type: none"> • Oracle FLEXCUBE Universal Banking Base | <ul style="list-style-type: none"> • Application User • Custom Suite User |
| Oracle FLEXCUBE Universal Banking Letters of Credit | <ul style="list-style-type: none"> • Oracle FLEXCUBE Universal Banking Base | <ul style="list-style-type: none"> • Application User • Custom Suite User |
| Oracle FLEXCUBE Universal Banking Foreign Exchange | <ul style="list-style-type: none"> • Oracle FLEXCUBE Universal Banking Base | <ul style="list-style-type: none"> • Application User • Custom Suite User |
| Oracle FLEXCUBE Universal Banking Money Markets | <ul style="list-style-type: none"> • Oracle FLEXCUBE Universal Banking Base | <ul style="list-style-type: none"> • Application User • Custom Suite User |

| | | |
|--|--|---|
| Oracle FLEXCUBE Universal Banking Swaps and Forward Rate Agreements | <ul style="list-style-type: none"> • Oracle FLEXCUBE Universal Banking Base | <ul style="list-style-type: none"> • Application User • Custom Suite User |
| Oracle FLEXCUBE Universal Banking Exchange Traded Derivatives for Commodities Futures and Options | <ul style="list-style-type: none"> • Oracle FLEXCUBE Universal Banking Base | <ul style="list-style-type: none"> • Application User • Custom Suite User |
| Oracle FLEXCUBE Universal Banking Exchange Traded Derivatives for Currency Futures and Options | <ul style="list-style-type: none"> • Oracle FLEXCUBE Universal Banking Base | <ul style="list-style-type: none"> • Application User • Custom Suite User |
| Oracle FLEXCUBE Universal Banking Exchange Traded Derivatives for Equity and Index Futures and Options | <ul style="list-style-type: none"> • Oracle FLEXCUBE Universal Banking Base | <ul style="list-style-type: none"> • Application User • Custom Suite User |
| Oracle FLEXCUBE Universal Banking Exchange Traded Derivatives for Interest Rate Futures and Options | <ul style="list-style-type: none"> • Oracle FLEXCUBE Universal Banking Base | <ul style="list-style-type: none"> • Application User • Custom Suite User |
| Oracle FLEXCUBE Universal Banking Over the Counter Currency Options | <ul style="list-style-type: none"> • Oracle FLEXCUBE Universal Banking Base | <ul style="list-style-type: none"> • Application User • Custom Suite User |
| Oracle FLEXCUBE Universal Banking Over the Counter Interest Rate Options | <ul style="list-style-type: none"> • Oracle FLEXCUBE Universal Banking Base | <ul style="list-style-type: none"> • Application User • Custom Suite User |
| Oracle FLEXCUBE Universal Banking Securities | <ul style="list-style-type: none"> • Oracle FLEXCUBE Universal Banking Base | <ul style="list-style-type: none"> • Application User • Custom Suite User |
| Oracle FLEXCUBE Universal Banking Fixed Assets | <ul style="list-style-type: none"> • Oracle FLEXCUBE Universal Banking Base | <ul style="list-style-type: none"> • Application User • Custom Suite User |

| | | |
|---|--|---|
| <p>Oracle FLEXCUBE Universal Banking Asset Management</p> | <ul style="list-style-type: none"> • Oracle FLEXCUBE Universal Banking Base and EITHER of the below modules: <ul style="list-style-type: none"> ➤ 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 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 Options ➤ Oracle FLEXCUBE Universal Banking Over the Counter Interest Rate Options ➤ Oracle FLEXCUBE Universal Banking Swaps and Forward Rate Agreements | <ul style="list-style-type: none"> • Application User • Custom Suite User |
| <p>Oracle FLEXCUBE Universal Banking Expense Processing</p> | <ul style="list-style-type: none"> • Oracle FLEXCUBE Universal Banking Base | <ul style="list-style-type: none"> • Application User • Custom Suite User |

| Oracle FLEXCUBE Universal Banking Origination | | |
|---|--|--|
| Oracle FLEXCUBE Universal Banking Account Origination | <ul style="list-style-type: none"> • Oracle FLEXCUBE Universal Banking Base | <ul style="list-style-type: none"> • Application User • Custom Suite User • Account |
| Oracle FLEXCUBE Universal Banking Term Deposits Origination | <ul style="list-style-type: none"> • Oracle FLEXCUBE Universal Banking Base | <ul style="list-style-type: none"> • Account |
| Oracle FLEXCUBE Universal Banking Letters of Credit Origination | <ul style="list-style-type: none"> • Oracle FLEXCUBE Universal Banking Base | <ul style="list-style-type: none"> • Application User • Custom Suite User |
| Oracle FLEXCUBE Universal Banking Retail Loan Origination | <ul style="list-style-type: none"> • Oracle FLEXCUBE Universal Banking Base | <ul style="list-style-type: none"> • Application User • Custom Suite User • Account |
| Oracle FLEXCUBE Universal Banking Commercial Loans Origination | <ul style="list-style-type: none"> • Oracle FLEXCUBE Universal Banking Base | <ul style="list-style-type: none"> • Application User • Custom Suite User • Account |
| Oracle FLEXCUBE Open Development Tools | | |
| Oracle FLEXCUBE Development Workbench | <ul style="list-style-type: none"> • Oracle FLEXCUBE Universal Banking Base | <ul style="list-style-type: none"> • Application User |
| Oracle FLEXCUBE Testing Workbench for Universal Banking | <ul style="list-style-type: none"> • Oracle FLEXCUBE Universal Banking Base | <ul style="list-style-type: none"> • Application User |
| Oracle FLEXCUBE Interfaces and Tools | | |
| Oracle FLEXCUBE Integration Gateway | <ul style="list-style-type: none"> • Oracle FLEXCUBE Universal Banking Base | <ul style="list-style-type: none"> • Application User • Custom Suite User • Account • Processor • Financial Inclusion Account |
| Oracle FLEXCUBE Universal Banking Connector for Oracle Identity Manager | <ul style="list-style-type: none"> • Oracle FLEXCUBE Universal Banking Base | <ul style="list-style-type: none"> • Connector |

| | | |
|---|---|--|
| Oracle FLEXCUBE Electronic Messaging Service | <ul style="list-style-type: none"> • Oracle FLEXCUBE Universal Banking Base | <ul style="list-style-type: none"> • Application User • Custom Suite User • Account |
| Oracle FLEXCUBE Information Server | | |
| Oracle FLEXCUBE Information Server Base for Universal | <ul style="list-style-type: none"> • Oracle FLEXCUBE Universal Banking Base | <ul style="list-style-type: none"> • Account |
| Oracle FLEXCUBE Information Server Retail Liabilities Data Mart for Universal Banking | <ul style="list-style-type: none"> • Oracle FLEXCUBE Information Server Base for Universal Banking • Oracle FLEXCUBE Universal Banking Current Accounts and Savings Accounts • Oracle FLEXCUBE Universal Banking Term Deposits | <ul style="list-style-type: none"> • Account |
| Oracle FLEXCUBE Information Server Retail Assets Data Mart for Universal Banking | <ul style="list-style-type: none"> • 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 | <ul style="list-style-type: none"> • Account |

* When Component pricing model is used, Oracle FLEXCUBE Universal Banking Base program should be licensed for cumulative number of Application Users of Oracle FLEXCUBE Universal Banking and Oracle FLEXCUBE Open Development Tools and Oracle FLEXCUBE Interfaces and Tools programs.

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 | <ul style="list-style-type: none"> • Customer creation along with account creation is done in a single go without the option of Signature capture and verification. |

| | |
|---|---|
| | <ul style="list-style-type: none"> • 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 | <ul style="list-style-type: none"> • 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 | <ul style="list-style-type: none"> • 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 Tech Stack – Oracle

| 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) | Oracle Fusion Middleware Infrastructure | 12.2.1.4.0 |
| | | | | Java HotSpot(TM) JDK (with WebLogic Application Server) | JDK 1.8 Update 241 |
| | | | | Open Symphony Quartz | 2.3.2 |
| | | | | Oracle Toplink | 12.2.1.4.0 |
| | | Document Management System | Oracle Enterprise Linux Server 7.6 (x86 64 Bit) | Oracle WebLogic | 12.2.1.4.0 |
| | | | | JDK | JDK 1.8 Update 241 |
| | | | | Oracle Database (for RCU) | 19.6.0.0.0 |
| | | | | Repository Creation Utility | 12.2.1.4.0 |
| | | | | 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 Linux Server 7.6 (x86 64 Bit) | Oracle WebLogic | 12.2.1.4.0 |
| | | | | JDK | JDK 1.8 Update 241 |
| | | | | Oracle Database (for RCU) | 12.2.0.1.0 |

| | | | | | |
|--|--|--|---|---|-------------------------|
| | | | | Repository Creation Utility | 12.2.1.3.0 |
| | | | | Oracle BI Publisher | 5.5.0 |
| | | FLEXCUBE Information Server – Analytics | Oracle Enterprise Linux Server 7.6 (x86 64 Bit) | Oracle WebLogic | 12.2.1.4.0 |
| | | | | JDK | JDK 1.8 Update 241 |
| | | | | Oracle Database (for RCU) | 19.6.0.0.0 |
| | | | | Repository Creation Utility | 12.2.1.4.0 |
| | | | | Oracle Business Intelligence Enterprise Edition (OBIEE) | 5.5.0 |
| | | | | | |
| | | FLEXCUBE Information Server - Data warehouse | Oracle Enterprise Linux Server 7.6 (x86 64 Bit) | Oracle Golden Gate | 19.1.0.0.4 |
| | | | | Oracle Database (for RCU) | 19.6.0.0.0 |
| | | | | 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 Server 7.6 (x86 64 Bit) | JDK | JDK 1.8 Update 241 |
| | | | | Oracle WebLogic | 12.2.1.4.0 |
| | | | | Repository Creation Utility | 12.2.1.4.0 |
| | | | | Oracle Identity Management | 12.2.1.4.0 |
| | | | | Oracle SOA | 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 |
| | UI Decentralized branch | Branch Application Server – Decentralized | Oracle Enterprise Linux Server 7.6 (x86 64 Bit) | JDK | 1.8 Update 241 |
| | | | | Oracle WebLogic Server | 12.2.1.4.0 |
| | | Database Branch for Decentralized mode | | Oracle RDBMS Standard Edition (SE2) | 19.6.0.0.0 |
| | | | | JDK | 1.8 Update 241 |

| | | | | | |
|--|----------------------------|--------------------|---|------------------------------------|----------------|
| Oracle FLEXCUBE Universal Banking BPEL/BPM N Processes and Process Framework | UI-Host and Centralized | Application Server | Oracle Enterprise Linux Server 7.6 (x86 64 Bit) | Oracle WebLogic Server | 12.2.1.4.0 |
| | | | | 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 Banking Integration Gateway | Web services (incoming) | Integration Server | Oracle Enterprise Linux Server 7.6 (x86 64 Bit) | Oracle WebLogic Server | 12.2.1.4.0 |
| | HTTP Servlet (incoming) | | | | |
| | 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 Banking REST | Web services | Integration Server | Oracle Enterprise Linux Server 7.3 (x86 64 Bit) | JDK | 1.8 Update 241 |
| | | | | 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 Tech Stack – IBM

| 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 |
| | | | | Open Symphony Quartz | 2.3.2 |
| | | 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 Release (73+) |
| | | | 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 |

| Component | Deployment option | Machine | Operating System | Software | Version Number |
|--|----------------------------|--------------------|---|--|-----------------|
| | 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 | 12.2.1.3.0 | 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 171 | Optional – Required for Oracle FLEXCUBE Universal Banking and Oracle FLEXCUBE Universal Banking Integration Gateway on WebLogic. |
| Open Symphony Quartz | 2.3.1-9f9e400 | Standard requirement |
| Oracle Toplink | 12.2.1.3.0 | Optional - Required only if limits tracking is required. |
| Oracle WebCenter Content Imaging | 12.2.1.3.0 | 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 | 12.2.1.3.0 | Standard requirement. Refer to section 3.1.1 for dependent software (Reporting Server). |
| Oracle Business Intelligence Enterprise Edition (OBIEE) | 12.2.1.3.0 | 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 | 12.2.1.3.0 | 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 | 12.2.1.3.0 | 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) | 12.2.1.3.0 | Optional - Required if Single Sign On is required. Refer to section 3.1.1 for dependent software (Single Sign On Server). |

| Product Name | Product Version | Requirements |
|--|------------------------|---|
| Oracle Identity And Access Management | 12.2.1.3.0 | 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 | 12.2.1.3.0 | Optional - Required for Oracle FLEXCUBE Universal Banking Origination. Refer to section 3.1.1 for related software (BPEL/BPMN Processes and Process Framework). |
| Oracle BPM Suite | 12.2.1.3.0 | 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_151). | 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 that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

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

5. Submission of Contributions

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

6. Trademarks

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

7. Disclaimer of Warranty

Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability

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

9. Accepting Warranty or Additional Liability

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

END OF TERMS AND CONDITIONS

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]. 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.

Apache Commons Net

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

Commons Lang

Copyright 2001-2011 The Apache Software Foundation

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

Log4J

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

Velocity

Apache Velocity

Copyright (C) 2000-2007 The Apache Software Foundation

This product includes software developed at

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

Ant

Apache Ant

Copyright 1999-2017 The Apache Software Foundation

This product includes software developed at

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

The task is based on code Copyright (c) 2002, Landmark Graphics Corp that has been kindly donated to the Apache Software Foundation.

* 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 addition 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 Work 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 that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

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

5. Submission of Contributions

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

6. Trademarks

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

7. Disclaimer of Warranty

Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability

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

9. Accepting Warranty or Additional Liability

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

END OF TERMS AND CONDITIONS

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.

*/

W3C® SOFTWARE NOTICE AND LICENSE

<http://www.w3.org/Consortium/Legal/2002/copyright-software-20021231>

This work (and included software, documentation such as READMEs, or other related items) is being provided by the copyright holders under the following license. By obtaining, using and/or copying this work, you (the licensee) agree that you have read, understood, and will comply with the following terms and conditions. Permission to copy, modify, and distribute this software and its documentation, with or without modification, for any purpose and without fee or royalty is hereby granted, provided that you include the following on ALL copies of the software and documentation or portions thereof, including modifications:

1. The full text of this NOTICE in a location viewable to users of the redistributed or derivative work.

2. Any pre-existing intellectual property disclaimers, notices, or terms and conditions. If none exist, the W3C Software Short Notice should be included (hypertext is preferred, text is permitted) within the body of any redistributed or derivative code.

3. Notice of any changes or modifications to the files, including the date changes were made. (We recommend you provide URIs to the location from which the code is derived.)

THIS SOFTWARE AND DOCUMENTATION IS PROVIDED "AS IS," AND COPYRIGHT HOLDERS MAKE NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF THE SOFTWARE OR DOCUMENTATION WILL NOT INFRINGE ANY THIRD PARTY PATENTS, COPYRIGHTS, TRADEMARKS OR OTHER RIGHTS. COPYRIGHT HOLDERS WILL NOT BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF ANY USE OF THE SOFTWARE OR DOCUMENTATION.

The name and trademarks of copyright holders may NOT be used in advertising or publicity pertaining to the software without specific, written prior permission.

Title to copyright in this software and any associated documentation will at all times remain with copyright holders.

This formulation of W3C's notice and license became active on December 31 2002.

This version removes the copyright ownership notice such that this license can be used with materials other than those owned by the W3C, reflects that ERCIM is now a host of the W3C, includes references to this specific dated version of the license, and removes the ambiguous grant of "use". Otherwise, this version is the same as the previous version and is written so as to preserve the Free Software Foundation's assessment of GPL compatibility and OSI's certification under the Open Source Definition. Please see our Copyright FAQ for common questions about using materials from our site, including specific terms and conditions for packages like libwww, Amaya, and Jigsaw. Other questions about this notice can be directed to site-policy@w3.org.

Joseph Reagle

This license came from: <http://www.megginson.com/SAX/copying.html>

However please note future versions of SAX may be covered under <http://saxproject.org/?selected=pd>

SAX2 is Free!

I hereby abandon any property rights to SAX 2.0 (the Simple API for XML), and release all of the SAX 2.0 source code, compiled code, and documentation contained in this distribution into the Public Domain. SAX comes with NO WARRANTY or guarantee of fitness for any purpose.

David Megginson, david@megginson.com

2000-05-05

commons-beanutils

Apache License

Version 2.0, January 2004

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

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 that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

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

5. Submission of Contributions

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

6. Trademarks

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

7. Disclaimer of Warranty

Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability

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

9. Accepting Warranty or Additional Liability

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

END OF TERMS AND CONDITIONS

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, /www.bea.com/>.

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:

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 (<https://www.apache.org/>).

This product contains parts that were originally based on software from BEA.
Copyright (c) 2000-2003, BEA Systems, /www.bea.com/>.

This product contains 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)

This product contains the Piccolo XML Parser for Java (<http://piccolo.sourceforge.net/>). Copyright 2002 Yuval Oren.

This product contains the chunks_parse_cmds.tbl file from the vsdump program. Copyright (C) 2006-2007 Valek Filippov (frob@df.ru)

This product contains parts of the eID Applet project (<http://eid-applet.googlecode.com>). Copyright (c) 2009-2014 FedICT (federal ICT department of Belgium), e-Contract.be BVBA (<https://www.e-contract.be>), Bart Hanssens from FedICT

Apache Velocity

Copyright (C) 2000-2007 The Apache Software Foundation

This product includes software developed at

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

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 <http://stevemorse.org/phoneticinfo.htm> with permission from the original authors.

Original source copyright:

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

Apache Commons Transaction

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 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 that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

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

5. Submission of Contributions

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

6. Trademarks

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

7. Disclaimer of Warranty

Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability

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

9. Accepting Warranty or Additional Liability

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

END OF TERMS AND CONDITIONS

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:

Apache Jakarta Commons Transaction
Copyright 1999-2004 The Apache Software Foundation

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

Apache Commons Collections

Copyright 2001-2008 The Apache Software Foundation

This product includes software developed by

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

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 <http://www.apache.org/licenses/LICENSE-2.0> . 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 that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

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

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

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

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

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

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

END OF TERMS AND CONDITIONS

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 (<http://www.apache.org/>).

Commons Logging

Apache Commons Logging

Copyright 2003-2016 The Apache Software Foundation

This product includes software developed at

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

Commons-collections

Apache Commons Collections

Copyright 2001-2008 The Apache Software Foundation

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

Quartz

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 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 that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

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

5. Submission of Contributions

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

6. Trademark

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.

4th Party components : SLF 4J

Copyright (c) 2004-2017 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.

4.3 **FasterXML, LLC**

jackson-annotations

Apache License

Version 2.0, January 2004

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

jackson-core

Apache License

Version 2.0, January 2004

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

jackson-databind

Apache License

Version 2.0, January 2004

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

4.4 **JCraft**

JSch

<http://www.jcraft.com/jsch/LICENSE.txt>

JSch 0.0.* was released under the GNU LGPL license. Later, we have switched over to a BSD-style license.

Copyright (c) 2002-2015 Atsuhiko Yamanaka, JCraft, Inc.

All rights reserved.

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

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. The names of the authors may not be used to endorse or promote products derived from this software without specific prior written permission.

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

4.5 **BSD-Style License**

YUI Compressor

Copyright (c) 2013, 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, 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.

Additionally, this software contains modified versions of the following component files from the Rhino Library:

[org/mozilla/javascript/Decompiler.java]

[org/mozilla/javascript/Parser.java]

[org/mozilla/javascript/Token.java]

[org/mozilla/javascript/TokenStream.java]

The modified versions of these files are distributed under the MPL v 1.1

(<http://www.mozilla.org/MPL/MPL-1.1.html>)

4.6 **MIT License**

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."

OGNL

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 that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

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

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

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

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

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

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

END OF TERMS AND CONDITIONS

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_____.

4.7 **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
- Other

4.7.1 **Apache 2.0**

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

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-d56e1d0.jar
- Slf4j 1.7.29

- Swagger 1.6.0
- SnakeYAML 1.25
- Zipler 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

4.7.2 MIT License

The below library include software developed by jsoup.org

- jsoup 1.10.3.jar

4.7.3 BSD-Style Licenses

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

For license information, See “BSD-Style License”

- yuicompressor- 2.4.8-958491d.jar
- JSch 0.1.54

4.7.4 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)

4.7.5 Google

- Closure Compiler 1.0