



Contenta S1000D and LiveContent S1000D Cross-Product Graphics and Multimedia Support

Contenta S1000D and LiveContent S1000D 5.12

August 2022

Legal notice

Copyright and trademark information relating to this product release.

Copyright © 2009–2022 SDL as part of the RWS Holdings Plc group of companies ("RWS Group").

SDL means SDL Limited and its subsidiaries and affiliates. All intellectual property rights contained herein are the sole and exclusive rights of SDL. All references to SDL shall mean SDL Limited and its subsidiaries and affiliates details of which can be obtained upon written request.

All rights reserved. Unless explicitly stated otherwise, all intellectual property rights including those in copyright in the content of this website and documentation are owned by or controlled for these purposes by SDL. Except as otherwise expressly permitted hereunder or in accordance with copyright legislation, the content of this site, and/or the documentation may not be copied, reproduced, republished, downloaded, posted, broadcast or transmitted in any way without the express written permission of SDL.

Contenta S1000D is a registered trademark of SDL. All other trademarks are the property of their respective owners. The names of other companies and products mentioned herein may be the trademarks of their respective owners. Unless stated to the contrary, no association with any other company or product is intended or should be inferred.

This product may include open source or similar third-party software, details of which can be found by clicking the following link: "Acknowledgments" on page 7.

Although RWS Group takes all reasonable measures to provide accurate and comprehensive information about the product, this information is provided as-is and all warranties, conditions or other terms concerning the documentation whether express or implied by statute, common law or otherwise (including those relating to satisfactory quality and fitness for purposes) are excluded to the extent permitted by law.

To the maximum extent permitted by law, RWS Group shall not be liable in contract, tort (including negligence or breach of statutory duty) or otherwise for any loss, injury, claim liability or damage of any kind or arising out of, or in connection with, the use or performance of the Software Documentation even if such losses and/or damages were foreseen, foreseeable or known, for: (a) loss of, damage to or corruption of data, (b) economic loss, (c) loss of actual or anticipated profits, (d) loss of business revenue, (e) loss of anticipated savings, (f) loss of business, (g) loss of opportunity, (h) loss of goodwill, or (i) any indirect, special, incidental or consequential loss or damage howsoever caused.

All Third Party Software is licensed "as is." Licensor makes no warranties, express, implied, statutory or otherwise with respect to the Third Party Software, and expressly disclaims all implied warranties of non-infringement, merchantability and fitness for a particular purpose. **In no event will Licensor be liable for any damages, including loss of data, lost profits, cost of cover or other special, incidental, consequential, direct, actual, general or indirect damages arising from the use of the Third Party Software or accompanying materials, however caused and on any theory of liability. This limitation will apply even if Licensor has been advised of the possibility of such damage. The parties acknowledge that this is a reasonable allocation of risk.**

Information in this documentation, including any URL and other Internet website references, is subject to change without notice. Without limiting the rights under copyright, no part of this may be reproduced, stored in or introduced into a retrieval system, or transmitted in any form or by any means (electronic, mechanical, photocopying, recording, or otherwise), or for any purpose, without the express written permission of RWS Group.

Contents

1	Introduction to graphics and multimedia	1
	Graphics file formats	2
	Audio file formats	3
	Video file formats	4
	3D file formats	5
	Other file formats	6
A	Acknowledgments	7
	Acknowledgments	11
	Acknowledgments	15



1

Introduction to graphics and multimedia

Graphics and multimedia are supported across several products.

- Contenta S1000D
- LiveContent S1000D
- Arbortext Editor
- Oxygen XML Author
- XML Professional Publisher

Tip: For best performance, RWS recommends setting the Contenta S1000D **exportReferencedGraphics** preference to `no` before inserting references to multimedia files, which can be large and often don't need to be displayed in the editor. There are several ways to do this.

- In AppData, edit the `<user-name>/Settings/ Graphics/ exportReferencedGraphics` setting.
- Set the **exportReferencedGraphics** preference to `prompt` to display the **Do you want to export referenced graphics?** prompt during checkout, to allow users to specify whether media files are exported.
- In Arbortext Editor or Oxygen XML Author, select **Contenta > Set Preference for Graphics Export** to suppress export of media files by default. Note that changes take effect in future edit sessions.

Graphics file formats

Contenta products support several graphics file formats.

In the following table, read the column headers as follows.

- **Object type** refers to the Contenta S1000D Object Type
- **CaS** refers to Contenta S1000D 5.12
- **AE** refers to Arbortext Editor 8.x
- **OXA** refers to Oxygen XML Author 23.x
- **LCS** refers to LiveContent S1000D 5.12
- **XPP** refers to XML Professional Publisher 9.1 and later

File extension	Object type	CaS	AE	OXA	LCS ⁽⁴⁾	XPP
bmp	BMP	yes	yes	yes	no	yes
cgm	CGM	yes	yes	yes ⁽⁶⁾	yes	yes
edz, pvz	n/a	no	yes ⁽²⁾	no	no	no
eps	EPS	yes	yes	no	no	yes

File extension	Object type	CaS	AE	OXA	LCS ⁽⁴⁾	XPP
gif	GIF	yes	yes	yes	yes	yes
idr, idrz	n/a	no	yes ⁽³⁾	no	yes	no
iso, isoz	n/a	no	yes ⁽³⁾	no	no	no
jpg, jpeg	JPG	yes	yes	yes	yes	yes
png	PNG	yes	yes	yes	yes	yes
svg	SVG	yes	yes ⁽¹⁾	yes	yes	yes
svgz	Compressed SVG	yes	no	no	yes	no
tif	TIF	yes	yes	yes	yes ⁽⁵⁾	yes

1. Requires Arbortext IsoView.
2. Requires Arbortext Creo View.
3. Requires Arbortext IsoDraw.
4. Graphics support in LiveContent S1000D is browser-dependent: Internet Explorer supports the most formats, Firefox fewer, and iPad/Safari the fewest.
5. TIF graphics do not work natively in LiveContent S1000D on Linux. The plugins needed to view these formats in a browser on Windows (for example, IsoView) do not work on Linux.
6. When a DM is checked out in Contenta S1000D, any exported CGM graphics are converted to SVG for redlining and hotspotting, and converted back to CGM on checkin.

Audio file formats

Contenta products support several audio file formats.

In the following table, read the column headers as follows.

- **Object type** refers to the Contenta S1000D Object Type
- **CaS** refers to Contenta S1000D 5.12
- **AE** refers to Arbortext Editor 8.x
- **OXA** refers to Oxygen XML Author 23.x
- **LCS** refers to LiveContent S1000D 5.12
- **XPP** refers to XML Professional Publisher 9.1 and later

File extension	Object type	CaS	AE	OXA	LCS	XPP
adts, aac	n/a	no	no	no	yes ⁽²⁾	n/a
mid	n/a	no	maybe ⁽¹⁾	maybe ⁽⁶⁾	no	n/a
mp3	MP3	yes	maybe ⁽¹⁾	maybe ⁽⁶⁾	yes ⁽³⁾	n/a
oga, ogg	n/a	no	no	no	yes ⁽⁴⁾	n/a
wav	WAV	yes	maybe ⁽¹⁾	maybe ⁽⁶⁾	yes ⁽⁵⁾	n/a
wmv	WMV	yes	maybe ⁽¹⁾	maybe ⁽⁶⁾	yes ⁽⁵⁾	n/a

1. Arbortext Editor can be configured if a plug-in (ActiveX viewer) is available.
2. Supported by Microsoft Internet Explorer and Microsoft Edge, and for iPad on iOS.
3. Supported natively with HTML5 by all major browsers.
4. Supported without plug-ins by Mozilla Firefox and recent versions of Microsoft Edge.
5. Requires an external viewer (plug-in).
6. Requires an Oxygen add-in.

Video file formats

Contenta products support several video file formats.

In the following table, read the column headers as follows.

- **Object type** refers to the Contenta S1000D Object Type
- **CaS** refers to Contenta S1000D 5.12
- **AE** refers to Arbortext Editor 8.x
- **OXA** refers to Oxygen XML Author 23.x
- **LCS** refers to LiveContent S1000D 5.12
- **XPP** refers to XML Professional Publisher 9.1 and later

File extension	Object type	CaS	AE	OXA	LCS	XPP
avi	AVI	yes	maybe ⁽¹⁾	maybe ⁽⁶⁾	yes ⁽²⁾	n/a
mov	MOV	yes	maybe ⁽¹⁾	maybe ⁽⁶⁾	yes ⁽²⁾	n/a
mp4	MP4	yes	maybe ⁽¹⁾	maybe ⁽⁶⁾	yes ⁽³⁾	n/a
ogv	n/a	no	no	no	yes ⁽⁴⁾	n/a
rm, ram	RM	yes	maybe ⁽¹⁾	maybe ⁽⁶⁾	yes ⁽²⁾	n/a
webm	n/a	no	no	no	yes ^(4, 5)	n/a

File extension	Object type	CaS	AE	OXA	LCS	XPP
wmv	WMV	yes	maybe ⁽¹⁾	maybe ⁽⁶⁾	yes ⁽²⁾	n/a

1. Arbortext Editor can be configured if a plug-in (ActiveX viewer) is available.
2. Requires an external viewer (plug-in).
3. Supported natively with HTML5 by all major browsers.
4. Supported natively with HTML5 by Mozilla Firefox and recent versions of Microsoft Edge.
5. Supported by Microsoft Internet Explorer only with a manually installed codec.
6. Requires an Oxygen add-in.

3D file formats

Contenta products support several 3D file formats.

In the following table, read the column headers as follows.

- **Object type** refers to the Contenta S1000D Object Type
- **CaS** refers to Contenta S1000D 5.12
- **AE** refers to Arbortext Editor 8.x
- **OXA** refers to Oxygen XML Author 23.x
- **LCS** refers to LiveContent S1000D 5.12
- **XPP** refers to XML Professional Publisher 9.1 and later

File extension	Object type	CaS	AE	OXA	LCS	XPP
3ko	NGrain_3KO	yes	maybe ⁽¹⁾	maybe ⁽⁴⁾	no ⁽²⁾	n/a
rh	RHI	yes	maybe ⁽¹⁾	maybe ⁽⁴⁾	yes ⁽³⁾	n/a
vds	VDS	yes	maybe ⁽¹⁾	maybe ⁽⁴⁾	yes ⁽²⁾	n/a

1. Arbortext Editor can be configured if a plug-in (ActiveX viewer) is available.
2. The NGRain plug-in is not supported in LiveContent S1000D .
3. Requires an external viewer (plug-in).
4. Requires an Oxygen add-in.

Other file formats

Contenta products support several additional file formats.

In the following table, read the column headers as follows.

- **Object type** refers to the Contenta S1000D Object Type
- **CaS** refers to Contenta S1000D 5.12
- **AE** refers to Arbortext Editor 8.x
- **OXA** refers to Oxygen XML Author 23.x
- **LCS** refers to LiveContent S1000D 5.12
- **XPP** refers to XML Professional Publisher 9.1 and later

File extension	Object type	CaS	AE	OXA	LCS	XPP
pdf	PDF	yes	maybe ⁽¹⁾	maybe ⁽⁵⁾	yes	yes ⁽³⁾
swf	SWF	yes	maybe ⁽¹⁾	maybe ⁽⁵⁾	yes ⁽²⁾	n/a
fla	FLA ⁽⁴⁾	yes	maybe ⁽¹⁾	maybe ⁽⁵⁾	yes ⁽²⁾	n/a

1. Arbortext Editor can be configured if a plug-in (ActiveX viewer) is available.
2. Requires an external viewer (plug-in).
3. Single-page PDFs only.
4. CSS and JavaScript (JS) files are supported to work in conjunction with FLA multimedia files in SCORM packages.
5. Requires an Oxygen add-in.



Acknowledgments

Contenta S1000D includes open source or similar third-party software.

[Adobe FrameMaker](#)

Adobe FrameMaker is an XML editor for structured authoring.

[Apache Commons Codec](#)

Apache Commons Codec (TM) software provides implementations of common encoders and decoders such as Base64, Hex, Phonetic and URLs.

[Apache Commons FileUpload](#)

The Commons **FileUpload** package makes it easy to add robust, high-performance, file upload capability to your servlets and web applications.

[Apache Commons Logging](#)

The Logging package is an ultra-thin bridge between different logging implementations. A library that uses the commons-logging API can be used with any logging implementation at runtime. Commons-logging comes with support for a number of popular logging implementations, and writing adapters for others is a reasonably simple task.

[Apache HTTP Server](#)

Apache HTTP Server is an open-source HTTP server for modern operating systems including UNIX and Windows. The goal of this project is to provide a secure, efficient and extensible server that provides HTTP services in sync with the current HTTP standards.

[Apache Log4j](#)

Apache Log4j 2 is an upgrade to Log4j that provides significant improvements over its predecessor, Log4j 1.x, and provides many of the improvements available in Logback while fixing some inherent problems in Logback's architecture.

[Apache Lucene, SOLR](#)

The Apache Lucene™ project develops open-source search software.

[Arbortext](#)

PTC Arbortext is an XML editor for structured authoring.

[DWR \(Direct Web Remoting\)](#)

DWR is a Java library that enables Java on the server and JavaScript in a browser to interact and call each other as simply as possible.

[ICU \(International Components for Unicode\)](#)

ICU is a mature, widely used set of C/C++ and Java libraries providing Unicode and Globalization support for software applications. ICU is widely portable and gives applications the same results on all platforms and between C/C++ and Java software.

[InstallAnywhere](#)

InstallAnywhere is the leading multi-platform development solution for application producers who need to deliver a professional and consistent cross installation experience for physical, virtual and cloud environments. From a single project file and build environment, InstallAnywhere creates reliable installations for on-premises platforms - Windows, Linux, Apple OS X, Solaris, AIX , HP-UX, and IBM iSeries - and enables you to take existing and new software products to a virtual and cloud infrastructure.

InstallShield

Flexera InstallShield delivers a seamless user install, allowing you to develop MSI and EXE installers, and create Windows Server App and MSIX packages with minimal scripting, coding and rework.

jacORB

The free Java implementation of the OMG's CORBA standard.

JDOM

JDOM's mission: to provide a complete, Java-based solution for accessing, manipulating, and outputting XML data from Java code.

jQuery

jQuery is a fast, small, and feature-rich JavaScript library. It makes things like HTML document traversal and manipulation, event handling, animation, and Ajax much simpler with an easy-to-use API that works across a multitude of browsers. With a combination of versatility and extensibility, jQuery has changed the way that millions of people write JavaScript.

jQuery Splitter

A splitter plugin for jQuery.

jQuery UI

jQuery UI is a set of user interface interactions, effects, widgets, and themes built on top of the jQuery JavaScript Library.

jQuery.jstree

jsTree is a jquery plugin, that provides interactive trees. jsTree is easily extendable, themable and configurable, it supports HTML & JSON data sources, AJAX & async callback loading.

JustSystems XMetaL

JustSystems XMetaL is an XML editor for structured authoring.

LDAP C SDK

The C LDAP Application Program Interface Internet Draft defines a set of API functions that you can use to build LDAP-enabled clients. The functionality implemented in this SDK closely follows the interfaces outlined in the Internet Draft, which should become an RFC someday. Using the functionality provided with this SDK, you can enable your clients to connect to LDAPv3-compliant servers and perform standard LDAP functions.

Microsoft Internet Explorer

Microsoft Internet Explorer is a series of graphical web browsers developed by Microsoft and included in the Microsoft Windows line of operating systems, starting in 1995.

Microsoft SQL Server

Microsoft SQL Server is a SQL-based relational database management system designed for use in corporate applications, both on premises and in the cloud.

Visual C++ 2017 Redistributable

These are packages which install run-time components required to run C++ applications built in Visual Studio.

Microsoft Visual Studio (C++)

Microsoft Visual Studio is a fully featured IDE for Android, iOS, Windows, web, and cloud

Omnimark

OmniMark allows developers to build efficient content conversion pipelines that support the rapid insertion of multiple content filter elements without loss of processing speed.

OpenSSL

OpenSSL is an open source project that provides a robust, commercial-grade, and full-featured toolkit for the Transport Layer Security (TLS) and Secure Sockets Layer (SSL) protocols. It is also a general-purpose cryptography library.

Oracle DB

Oracle Database is a multi-model database management system produced and marketed by Oracle Corporation.

Oracle Java

Java offers developers a contemporary language and platform to create the next generation of rich, scalable, and secure enterprise applications.

Red Hat Linux

Red Hat Enterprise Linux OpenStack Platform delivers an integrated foundation to create, deploy, and scale a secure and reliable public or private OpenStack cloud. Red Hat Enterprise Linux OpenStack Platform combines the world's leading enterprise Linux and the fastest-growing cloud infrastructure platform to give you the agility to scale and quickly meet customer demands without compromising on availability, security, or performance.

Reprise License Manager

The Reprise License Manager (RLM) is a flexible and easy-to-use license manager with the power to serve enterprise users, and it comes to you from the creators of FLEXlm.

Stingray Studio

Stingray Studio provides tools for developing complex GUI applications that are easy to build, maintain, and evolve as new technologies improve the look and feel of user interfaces.

Strawberry Perl

Strawberry Perl is a perl environment for MS Windows containing all you need to run and develop perl applications. It is designed to be as close as possible to perl environment on UNIX systems.

Syncro Soft Oxygen XML Author

XML editor for structured authoring.

Windows

Microsoft Windows is a group of several graphical operating system families, all of which are developed, marketed, and sold by Microsoft.

Xalan-Java

Xalan-Java is an XSLT processor for transforming XML documents into HTML, text, or other XML document types. It implements XSL Transformations (XSLT) Version 1.0 and XML Path Language (XPath) Version 1.0 and can be used from the command line, in an applet or a servlet, or as a module in other program.

[Xerces-C++](#)

Xerces-C++ is a validating XML parser written in a portable subset of C++.

[Xerces Java Parser](#)

The Xerces Java Parser 1.4.4 supports the XML 1.0 recommendation and contains advanced parser functionality, such as support for the W3C's XML Schema recommendation version 1.0, DOM Level 2 version 1.0, and SAX Version 2, in addition to supporting the industry-standard DOM Level 1 and SAX version 1 APIs.

Acknowledgments

Contenta S1000D includes open source or similar third-party software.

[ActiveState ActivePerl](#)

ActivePerl is the industry-standard, commercial-grade Perl distribution used by millions of developers around the world for easy Perl installation and quality-assured code.

[AdoptOpenJDK](#)

AdoptOpenJDK provides prebuilt OpenJDK binaries from a fully open source set of build scripts and infrastructure.

[Annogen](#)

Annogen is a framework which helps you work with JSR175 Annotations. In a nutshell, Annogen generates a proxy layer in front of your Annotations.

[Apache Axis2](#)

Apache Axis2 is a Web Services / SOAP / WSDL engine, the successor to the widely used Apache Axis SOAP stack. There are two implementations of the Apache Axis2 Web services engine - Apache Axis2/Java and Apache Axis2/C.

[Apache Batik SVG Toolkit](#)

Batik is a Java-based toolkit for applications or applets that want to use images in the Scalable Vector Graphics (SVG) format for various purposes, such as display, generation or manipulation.

[Apache FOP](#)

Apache FOP (Formatting Objects Processor) is a print formatter driven by XSL formatting objects (XSL-FO) and an output independent formatter. It is a Java application that reads a formatting object (FO) tree and renders the resulting pages to a specified output. Output formats currently supported include PDF, PS, PCL, AFP, XML (area tree representation), Print, AWT and PNG, and to a lesser extent, RTF and TXT. The primary output target is PDF.

[Apache Geronimo](#)

Apache Geronimo is an open source server runtime that integrates the best open source projects to create Java/OSGi server runtimes that meet the needs of enterprise developers and system administrators.

[Apache Neethi](#)

Apache Neethi provides general framework for the programmers to use WS Policy. It is compliant with latest WS Policy specification which was published in March 2006. This framework is specifically written to enable the Apache Web services stack to use WS Policy

as a way of expressing its requirements and capabilities.

Apache XML Graphics Commons

Apache™ XML Graphics Commons is a library that consists of several reusable components used by Apache Batik and Apache FOP. Many of these components can easily be used separately outside the domains of SVG and XSL-FO.

Apache XMLSchema

XMLSchema is a lightweight Java object model that can be used to manipulate and generate XML schema representations. You can use it to read XML Schema (xsd) files into memory and analyze or modify them, or to create entirely new schemata from scratch.

backport-util-concurrent

This package is the backport of java.util.concurrent API, introduced in Java 5.0 and further refined in Java 6.0, to older Java platforms. The backport is based on public-domain sources from the JSR 166 CVS repository, the dl.util.concurrent package, and the Doug Lea's collections package.

Hammer JS

Javascript library for recognizing touch events and gestures.

InstallAnywhere

InstallAnywhere is the leading multi-platform development solution for application producers who need to deliver a professional and consistent cross installation experience for physical, virtual and cloud environments. From a single project file and build environment, InstallAnywhere creates reliable installations for on-premises platforms - Windows, Linux, Apple OS X, Solaris, AIX, HP-UX, and IBM iSeries - and enables you to take existing and new software products to a virtual and cloud infrastructure.

iTextSharp

iText is a PDF library that allows you to CREATE, ADAPT, INSPECT and MAINTAIN documents in the Portable Document Format (PDF):

- Generate documents and reports based on data from an XML file or a database
- Create maps and books, exploiting numerous interactive features available in PDF
- Add bookmarks, page numbers, watermarks, and other features to existing PDF documents
- Split or concatenate pages from existing PDF files
- Fill out interactive forms
- Serve dynamically generated or manipulated PDF documents to a web browser

iText is used by Java, .NET, Android and GAE developers to enhance their applications with PDF functionality. iTextSharp is the .NET port.

ICU (International Components for Unicode)

ICU is a mature, widely used set of C/C++ and Java libraries providing Unicode and Globalization support for software applications. ICU is widely portable and gives applications the same results on all platforms and between C/C++ and Java software.

Infonote-DB

Infonote-DB provides a comprehensive, lightweight solution for querying and storing large, distributed XML documents. It is based on two major components, the PDOM

engine which is a persistent implementation of the W3C DOM (Document Object Model) API, and the XQL engine which is a web-aware query engine supporting the XQL query language.

iOS

iOS is a mobile operating system created and developed by Apple Inc. exclusively for its hardware.

Jalopy

Jalopy is a source code formatter/beautifier/pretty printer for the Java programming language. It is aimed to provide a full-featured, yet free alternative to the well-known Jindent. Plug-ins for Ant, Eclipse, IDEA, JBuilder, JDeveloper, jEdit, NetBeans.

Java Runtime Environment (JRE)

This is part of Java Development Kit (JDK), a set of programming tools for developing Java applications.

JAXB

The goal of the JAXB project is to develop and evolve the code base for the Reference Implementation (RI) of JAXB, the Java Architecture for XML Binding. The JAXB specification is developed through the Java Community Process following the process described at jcp.org. This process involves an Expert Group with a lead that is responsible for delivering the specification, a reference implementation (RI) and a Technology Compatibility Kit (TCK). The primary goal of an RI is to support the development of the specification and to validate it. Specific RIs can have additional goals; the JAXB RI is a production-quality implementation that is used directly in a number of products by Oracle and other vendors.

Jettison

Jettison is a collection of Java APIs (like STaX and DOM) which read and write JSON. This allows nearly transparent enablement of JSON based web services in services frameworks like CXF or XML serialization frameworks like XStream.

Jetty

The Jetty Web Server provides an HTTP server and Servlet container capable of serving static and dynamic content either from a standalone or embedded instantiations. Starting from Jetty version 7, the Jetty webserver and other core components are hosted by the Eclipse Foundation.

JiBX

JiBX is a tool for binding XML data to Java objects. It's extremely flexible, allowing you to start from existing Java code and generate an XML schema, start from an XML schema and generate Java code, or bridge your existing code to a schema that represents the same data. It also provides very high performance, outperforming all other Java data binding tools across a wide variety of tests.

jQuery

jQuery is a fast, small, and feature-rich JavaScript library. It makes things like HTML document traversal and manipulation, event handling, animation, and Ajax much simpler with an easy-to-use API that works across a multitude of browsers. With a combination of versatility and extensibility, jQuery has changed the way that millions of people write JavaScript.

jQuery Highlight

Highlights the search keywords/terms in a preview.

jQuery-JSON

A JSON plugin for jQuery, provides simple ways to convert to JSON and back again.

jQuery Splitter

A splitter plugin for jQuery.

jQuery UI

jQuery UI is a set of user interface interactions, effects, widgets, and themes built on top of the jQuery JavaScript Library.

jQuery UI Touch Punch

Javascript plugin for adding touch support to jQuery.

Oracle JavaBeans Activation Framework

With the JavaBeans Activation Framework standard extension, developers who use Java technology can take advantage of standard services to determine the type of an arbitrary piece of data, encapsulate access to it, discover the operations available on it, and to instantiate the appropriate bean to perform said operation(s).

Oracle JavaMail

The JavaMail API provides a platform-independent and protocol-independent framework to build mail and messaging applications. The JavaMail API is available as an optional package for use with the Java SE platform and is also included in the Java EE platform.

Red Hat Linux

Red Hat Enterprise Linux OpenStack Platform delivers an integrated foundation to create, deploy, and scale a secure and reliable public or private OpenStack cloud. Red Hat Enterprise Linux OpenStack Platform combines the world's leading enterprise Linux and the fastest-growing cloud infrastructure platform to give you the agility to scale and quickly meet customer demands without compromising on availability, security, or performance.

Saxon

Saxon is an XSLT processor for transforming XML documents into HTML, text, or other XML document types. It implements XSL Transformations (XSLT) and XML Path Language (XPath) and can be used from the command line, in an applet or a servlet, or as a module in other program.

SDI Convert

SDI Convert provides graphics file conversion for CAD, CAE, Maps, Seismic & Well Logs.

StAX

StAX is a standard XML processing API that allows you to stream XML data from and to your application. This StAX implementation is the standard pull parser implementation for JSR-173 specification.

svg-pan-zoom

JavaScript library that enables panning and zooming of an SVG in an HTML document, with mouse events or custom JavaScript hooks.

Syncro Soft Oxygen XML Author

XML editor for structured authoring.

Woden

The Woden project is an incubation sub-project of the Apache Web Services Project to develop a Java class library for reading, manipulating, creating and writing WSDL documents, initially to support WSDL 2.0 but with the longer term aim of supporting past, present and future versions of WSDL.

Woodstox

Woodstox is a high-performance validating namespace-aware StAX-compliant (JSR-173) Open Source XML-processor written in Java.

Xerces Java Parser

The Xerces Java Parser 1.4.4 supports the XML 1.0 recommendation and contains advanced parser functionality, such as support for the W3C's XML Schema recommendation version 1.0, DOM Level 2 version 1.0, and SAX Version 2, in addition to supporting the industry-standard DOM Level 1 and SAX version 1 APIs.

Acknowledgments

The third-party libraries in this product

are licensed under a variety of licenses. Select "this link" on page 0 to see a NOTICE.pdf file that shows all licenses under which our third-party libraries are licensed.

"Java Concurrency In Practice" Book Annotations

Annotations for the book "Java Concurrency in Practice"

#ziplib

#ziplib (SharpZipLib, formerly NZipLib) is a Zip, GZip, Tar and BZip2 library written entirely in C# for the .NET platform. It is implemented as an assembly (installable in the GAC), and thus can easily be incorporated into other projects (in any .NET language).

.NET Core

.NET Core is a framework for Microsoft Windows, Apple macOS and Linux. While .NET Core shares a subset of .NET Framework APIs, it comes with its own API that is not part of .NET Framework. .NET Core's command-line interface offers an execution entry point for operating systems and provides developer services like compilation and package management.

7zip

Is a file archiver with a high compression ratio. 7-zip is delivered under the GNU LGPL License.

7zip SFX Modified Module

The SFX Modified Module is a plugin for creating self-extracting archives. It is compatible with three compression methods (LZMA, Deflate, PPMd) and provides an extended list of options. Reference website <http://7zsfx.info/>.

ActiveState ActivePerl

ActivePerl is the industry-standard, commercial-grade Perl distribution used by millions of developers around the world for easy Perl installation and quality-assured code.

ABBYY FineReader Engine SDK

The ABBYY FineReader Engine is used for converting scanned and editable PDFs when this option is enabled.

Adobe XMP Library for Java

The XMP Library for Java is based on the C++ XMPCore library and the API is similar.

Adobe FrameMaker

Adobe FrameMaker is an XML editor for structured authoring.

AdoptOpenJDK

AdoptOpenJDK provides prebuilt OpenJDK binaries from a fully open source set of build scripts and infrastructure.

ag-Grid

ag-Grid is a feature rich, fully- customizable data grid.

Ajax Minifier

The Microsoft Ajax Minifier enables you to improve the performance of your web applications by reducing the size of your Cascading Style Sheet and JavaScript files.

Akka

Akka is a toolkit and runtime for building highly concurrent, distributed, and fault tolerant event-driven applications on the JVM.

AlphaFS

AlphaFS is an Open Source library that provides a namespace (Alphaeonis.Win32.Filesystem) containing a number of classes. Most notable are replications of the System.IO.File, System.IO.Directory and System.IO.Path, all with support for the extended-length paths (up to 32000 chars), recursive file enumerations, native backups and manipulations with advanced flags and options. They also contain extensions to these, and there are many more features for several functions.

Amazon Ion Java

Amazon Ion Java is a Java streaming parser/serializer for Ion. It is the reference implementation of the Ion data notation for the Java Platform Standard Edition 8 and above.

Amazon SQS Java Messaging Library

This Amazon SQS Java Messaging Library holds the Java Message Service compatible classes, that are used for communicating with Amazon Simple Queue Service.

Angular-Gantt

Angular-Gantt provides a gantt chart component to your AngularJS application.

AngularJS

AngularJS is a toolset for building the framework most suited to your application development. It is fully extensible and works well with other libraries. Features can be modified or replaced to suit your unique development workflow and feature needs.

[**AngularJS Dropdown Multiselect**](#)

This directive uses Bootstrap's Dropdown with the power of AngularJS directives and binding.

[**AngularJS-Toaster**](#)

AngularJS Toaster is an AngularJS port of the toastr non-blocking notification jQuery.

[**Angular-Moment**](#)

AngularJS directive and filters for Moment.js.

[**Angular-Spinner**](#)

A library for easily managing loading spinners in complex Angular2+ applications.

[**Angular-UI-Bootstrap**](#)

Native AngularJS (Angular) directives for Bootstrap.

[**Angular UI Tree**](#)

Angular UI Tree is an AngularJS UI component that can sort nested lists, provides drag & drop support and doesn't depend on jQuery.

[**Animal Sniffer Annotations**](#)

Animal Sniffer Annotations provides Java 1.5+ annotations which allow marking methods which Animal Sniffer should ignore signature violations of.

[**Annogen**](#)

Annogen is a framework which helps you work with JSR175 Annotations. In a nutshell, Annogen generates a proxy layer in front of your Annotations.

[**Ant Design**](#)

Ant Design is a design system for enterprise-level products that lets you create an efficient and enjoyable work experience.

[**AntiXSS**](#)

AntiXSS provides a myriad of encoding functions for user input, including HTML, HTML attributes, XML, CSS and JavaScript.

[**ANTLR**](#)

ANTLR is a powerful parser generator that you can use to read, process, execute, or translate structured text or binary files.

[**Antlr3.Runtime**](#)

Generates code for parsing text content adhering to a given grammar (e.g. Adobe MIF).

[**AOP Alliance**](#)

AOP Alliance intends to facilitate and standardize the use of AOP to enhance existing middleware environments (such as J2EE), or development environments (e.g. JBuilder, Eclipse). The AOP Alliance also aims to ensure interoperability between Java/J2EE AOP implementations to build a larger AOP community.

[**Apache ActiveMQ**](#)

Apache ActiveMQ is the most popular and powerful open source messaging and Integration Patterns server.

Apache Ant

Apache Ant is a Java library and command-line tool whose mission is to drive processes described in build files as targets and extension points dependent upon each other. The main known usage of Ant is the build of Java applications. Ant supplies a number of built-in tasks allowing to compile, assemble, test and run Java applications. Ant can also be used effectively to build non Java applications, for instance C or C++ applications. More generally, Ant can be used to pilot any type of process which can be described in terms of targets and tasks.

Apache APR

The mission of the Apache Portable Runtime Project is to create and maintain software libraries that provide a predictable and consistent interface to underlying platform-specific implementations. The primary goal is to provide an API to which software developers may code and be assured of predictable if not identical behavior regardless of the platform on which their software is built, relieving them of the need to code special-case conditions to work around or take advantage of platform-specific deficiencies or features. APR and its companion libraries are implemented entirely in C and provide a common programming interface across a wide variety of operating system platforms without sacrificing performance.

Apache Avalon Framework

Apache Excalibur hosts the Apache Avalon Framework. The Avalon Framework consists of interfaces that define relationships between commonly used application components, best-of-practice pattern enforcements, and several lightweight convenience implementations of the generic components.

Apache Axiom

The Apache Axiom library provides an XML Infoset compliant object model implementation which supports on-demand building of the object tree. It supports a novel "pull-through" model which allows one to turn off the tree building and directly access the underlying pull event stream using the StAX API. It also has built in support for XML Optimized Packaging (XOP) and MTOM, the combination of which allows XML to carry binary data efficiently and in a transparent manner.

Apache Axis

Apache Axis is an implementation of the SOAP ("Simple Object Access Protocol") submission to W3C.

Apache Axis2

Apache Axis2 is a Web Services / SOAP / WSDL engine, the successor to the widely used Apache Axis SOAP stack. There are two implementations of the Apache Axis2 Web services engine - Apache Axis2/Java and Apache Axis2/C.

Apache Batik SVG Toolkit

Batik is a Java-based toolkit for applications or applets that want to use images in the Scalable Vector Graphics (SVG) format for various purposes, such as display, generation or manipulation.

Apache Cassandra

Apache Cassandra is an open source distributed database management system designed to handle large amounts of data across many commodity servers, providing high availability with no single point of failure.

Apache Commons BeanUtils

The Java language provides *Reflection* and *Introspection* APIs (see the `java.lang.reflect` and `java.beans` packages in the JDK Javadocs). However, these APIs can be quite complex to understand and utilize. The *BeanUtils* component provides easy-to-use wrappers around these capabilities.

Apache Commons BSF (Bean Scripting Framework)

Bean Scripting Framework (BSF) is a set of Java classes which provides scripting language support within Java applications, and access to Java objects and methods from scripting languages. BSF allows one to write JSPs in languages other than Java while providing access to the Java class library. In addition, BSF permits any Java application to be implemented in part (or dynamically extended) by a language that is embedded within it. This is achieved by providing an API that permits calling scripting language engines from within Java, as well as an object registry that exposes Java objects to these scripting language engines.

Apache Commons CLI

The Apache Commons CLI library provides an API for parsing command line options passed to programs. It's also able to print help messages detailing the options available for a command line tool.

Apache Commons Codec

Apache Commons Codec (TM) software provides implementations of common encoders and decoders such as Base64, Hex, Phonetic and URLs.

Apache Commons Collections

The Java Collections Framework was a major addition in JDK 1.2. It added many powerful data structures that accelerate development of most significant Java applications. Since that time it has become the recognized standard for collection handling in Java.

Apache Commons Compress

The Apache Commons Compress library defines an API for working with ar, cpio, Unix dump, tar, zip, gzip, XZ, Pack200, bzip2, 7z, arj, lzma, snappy, DEFLATE, lz4 and Z files.

Apache Commons Configuration

The Commons Configuration software library provides a generic configuration interface which enables a Java application to read configuration data from a variety of sources. Commons Configuration provides typed access to single, and multi-valued configuration parameters.

Apache Commons CSV

The Apache Commons CSV library provides a simple interface for reading and writing CSV files of various types.

Apache Commons Daemon

Apache Commons Daemon software is a set of utilities and Java support classes for running Java applications as server processes. These are commonly known as 'daemon' processes in Unix terminology (hence the name). On Windows they are called 'services'.

Apache Commons DBCP (Database Connection Pools)

Many Apache projects support interaction with a relational database. Creating a new connection for each user can be time consuming (often requiring multiple seconds of clock time), in order to perform a database transaction that might take milliseconds. Opening

a connection per user can be unfeasible in a publicly-hosted Internet application where the number of simultaneous users can be very large. Accordingly, developers often wish to share a "pool" of open connections between all of the application's current users. The number of users actually performing a request at any given time is usually a very small percentage of the total number of active users, and during request processing is the only time that a database connection is required. The application itself logs into the DBMS, and handles any user account issues internally. There are several Database Connection Pools already available, both within Apache products and elsewhere. This Commons package provides an opportunity to coordinate the efforts required to create and maintain an efficient, feature-rich package under the ASF license.

[Apache Commons Digester](#)

Many projects read XML configuration files to provide initialization of various Java objects within the system. There are several ways of doing this, and the *Digester* component was designed to provide a common implementation that can be used in many different projects.

Basically, the *Digester* package lets you configure an XML -> Java object mapping module, which triggers certain actions called *rules* whenever a particular pattern of nested XML elements is recognized. A rich set of predefined *rules* is available for your use, or you can also create your own.

[Apache Commons Discovery](#)

The Discovery component is about discovering, or finding, implementations for pluggable interfaces. It provides facilities for instantiating classes in general, and for lifecycle management of singleton (factory) classes.

Fundamentally, Discovery locates classes that implement a given Java interface. The discovery pattern, though not necessarily this package, is used in many projects including JAXP (SaxParserFactory and others) and commons-logging (LogFactory). By extracting this pattern, other projects can (re)use it and take advantage of improvements to the pattern as Discovery evolves.

Discovery improves over previous implementations by establishing facilities for working within managed environments. These allow configuration and property overrides without appealing to the global System properties (which are scoped across an entire JVM).

[Apache Commons Exec](#)

Apache Commons Exec is a library to reliably execute external processes from within the JVM.

[Apache Commons FileUpload](#)

The Commons **FileUpload** package makes it easy to add robust, high-performance, file upload capability to your servlets and web applications.

[Apache Commons HttpClient](#)

HttpClient was started in 2001 as a subproject of the Jakarta Commons, based on code developed by the Jakarta Slide project.

[Apache Commons IO](#)

Commons IO is a library of utilities to assist with developing IO functionality.

Apache Commons JEXL (Java EXpression Language)

JEXL is a library intended to facilitate the implementation of dynamic and scripting features in applications and frameworks written in Java.

JEXL implements an Expression Language based on some extensions to the JSTL Expression Language supporting most of the constructs seen in shell-script or ECMAScript. Its goal is to expose scripting features usable by technical operatives or consultants working with enterprise platforms.

Apache Commons Lang

The standard Java libraries fail to provide enough methods for manipulation of its core classes. Apache Commons Lang provides these extra methods.

Lang provides a host of helper utilities for the java.lang API, notably String manipulation methods, basic numerical methods, object reflection, concurrency, creation and serialization and System properties. Additionally it contains basic enhancements to java.util.Date and a series of utilities dedicated to help with building methods, such as hashCode, toString and equals.

Apache Commons Logging

The Logging package is an ultra-thin bridge between different logging implementations. A library that uses the commons-logging API can be used with any logging implementation at runtime. Commons-logging comes with support for a number of popular logging implementations, and writing adapters for others is a reasonably simple task.

Apache Commons Net

Apache Commons Net™ library implements the client side of many basic Internet protocols. The purpose of the library is to provide fundamental protocol access, not higher-level abstractions.

Apache Commons OGNL (Object-Graph Navigation Language)

OGNL stands for Object-Graph Navigation Language; it is an expression language for getting and setting properties of Java objects, plus other extras such as list projection and selection and lambda expressions. You use the same expression for both getting and setting the value of a property.

Apache Commons Pool

Pool provides an Object-pooling API, with three major aspects:

1. A generic object pool interface that clients and implementers can use to provide easily interchangeable pooling implementations.
2. A toolkit for creating modular object pools.
3. Several general purpose pool implementations.

Apache CXF Fediz

Fediz helps you to secure your web applications and delegates security enforcement to the underlying application server. With Fediz, authentication is externalized from your web application to an identity provider installed as a dedicated server component. The supported standard is WS-Federation Passive Requestor Profile. Fediz supports Claims Based Access Control beyond Role Based Access Control (RBAC).

Apache Derby

Apache Derby is an open source relational database implemented entirely in Java.

Apache Derby Client

The Derby network client provides network connectivity to the Derby Network Server. The Derby network client is a type 4, JDBC compliant Driver, which attempts to match the Derby Embedded JDBC driver as much as possible.

Apache Derby Tools

Derby is a database management system (DBMS), accessed by applications through the JDBC API. Included with the product are some standalone Java tools and utilities that make it easier to use and develop applications for Derby.

Apache FOP

Apache FOP (Formatting Objects Processor) is a print formatter driven by XSL formatting objects (XSL-FO) and an output independent formatter. It is a Java application that reads a formatting object (FO) tree and renders the resulting pages to a specified output. Output formats currently supported include PDF, PS, PCL, AFP, XML (area tree representation), Print, AWT and PNG, and to a lesser extent, RTF and TXT. The primary output target is PDF.

Apache Geronimo

Apache Geronimo is an open source server runtime that integrates the best open source projects to create Java/OSGi server runtimes that meet the needs of enterprise developers and system administrators.

Apache HTTP Server

Apache HTTP Server is an open-source HTTP server for modern operating systems including UNIX and Windows. The goal of this project is to provide a secure, efficient and extensible server that provides HTTP services in sync with the current HTTP standards.

Apache HttpComponents

The Apache HttpComponents™ project is responsible for creating and maintaining a toolset of low level Java components focused on HTTP and associated protocols.

Within the HttpComponents project, [HttpCore](#) is a set of low level HTTP transport components that can be used to build custom client and server side HTTP services with a minimal footprint. HttpCore supports two I/O models: blocking I/O model based on the classic Java I/O and non-blocking, event driven I/O model based on Java NIO

Apache HttpClient

Although the java.net package provides basic functionality for accessing resources via HTTP, it doesn't provide the full flexibility or functionality needed by many applications. HttpClient seeks to fill this void by providing an efficient, up-to-date, and feature-rich package implementing the client side of the most recent HTTP standards and recommendations.

Designed for extension while providing robust support for the base HTTP protocol, HttpClient may be of interest to anyone building HTTP-aware client applications such as web browsers, web service clients, or systems that leverage or extend the HTTP protocol for distributed communication.

Apache James Mime4j

Apache James Mime4j provides a parser, `MimeStreamParser`, for e-mail message streams in plain rfc822 and MIME format. The parser uses a callback mechanism to report parsing events such as the start of an entity header, the start of a body, etc.

Apache Log4j

Apache Log4j 2 is an upgrade to Log4j that provides significant improvements over its predecessor, Log4j 1.x, and provides many of the improvements available in Logback while fixing some inherent problems in Logback's architecture.

Apache log4net

The Apache log4net library is a tool to help the programmer output log statements to a variety of output targets. log4net is a port of the Apache log4j™ framework to the Microsoft® .NET runtime.

Apache Logkit

A logging framework that was part of the now defunct Apache Avalon Project.

Apache Lucene, SOLR

The Apache Lucene™ project develops open-source search software.

Apache Lucene core

The Apache Lucene™ project develops open-source search software.

Apache Maven

Apache Maven is a software project management and comprehension tool. Based on the concept of a project object model (POM), Maven can manage a project's build, reporting and documentation from a central piece of information.

Apache Neethi

Apache Neethi provides general framework for the programmers to use WS Policy. It is compliant with latest WS Policy specification which was published in March 2006. This framework is specifically written to enable the Apache Web services stack to use WS Policy as a way of expressing its requirements and capabilities.

Apache OpenNLP Tools

Apache OpenNLP is a machine learning based toolkit for the processing of natural language text.

Apache PDFBox

The Apache PDFBox library is an open source Java tool for working with PDF documents. This project allows creation of new PDF documents, manipulation of existing documents and the ability to extract content from documents. Apache PDFBox also includes several command line utilities.

Apache POI

Apache POI is a Java API to access Microsoft format files.

Apache SIS Common Storage

Provides the interfaces and base classes to be implemented by various storage formats. Apache Spatial Information System (SIS) is a free software, Java language library for developing geospatial applications. SIS provides data structures for geographic features and associated metadata along with methods to manipulate those data structures. The library is an implementation of GeoAPI 3.0.

Apache SIS Features

Representations of geographic features. Includes access to both vector and raster data. Apache Spatial Information System (SIS) is a free software, Java language library for developing geospatial applications. SIS provides data structures for geographic features and associated metadata along with methods to manipulate those data structures. The library is an implementation of GeoAPI 3.0.

Apache SIS Metadata

Implementations of metadata derived from ISO 19115. This module provides both an implementation of the metadata interfaces defined in GeoAPI, and a framework for handling those metadata through Java reflection. Apache Spatial Information System (SIS) is a free software, Java language library for developing geospatial applications. SIS provides data structures for geographic features and associated metadata along with methods to manipulate those data structures. The library is an implementation of GeoAPI 3.0.

Apache SIS NetCDF Storage

Bridge between netCDF Climate and Forecast (CF) convention and ISO 19115 metadata. Apache Spatial Information System (SIS) is a free software, Java language library for developing geospatial applications. SIS provides data structures for geographic features and associated metadata along with methods to manipulate those data structures. The library is an implementation of GeoAPI 3.0.

Apache SIS Referencing

Implementations of Coordinate Reference Systems (CRS), conversion and transformation services derived from ISO 19111. Apache Spatial Information System (SIS) is a free software, Java language library for developing geospatial applications. SIS provides data structures for geographic features and associated metadata along with methods to manipulate those data structures. The library is an implementation of GeoAPI 3.0.

Apache SIS Utilities

Miscellaneous utilities. Apache Spatial Information System (SIS) is a free software, Java language library for developing geospatial applications. SIS provides data structures for geographic features and associated metadata along with methods to manipulate those data structures. The library is an implementation of GeoAPI 3.0.

Apache Taglibs

This project is an open source repository for JSP(tm) Tag Libraries. In particular, Apache Taglibs hosts the Apache Standard Taglib, an implementation of the JSP Standard Tag Library (JSTL) specification. Versions 1.0, 1.1 and 1.2 of JSTL are all implemented.

Apache Tapestry

A component-oriented framework for creating highly scalable web applications in Java.

Apache Tika

The Apache Tika™ toolkit detects and extracts metadata and structured text content from various documents using existing parser libraries.

Apache Tika Plugin For Ogg, Vorbis and FLAC

A plugin for Apache Tika for the Ogg, Vorbis and FLAC file standards.

Apache Tomcat Connector

The HTTP Connector element represents a Connector component that supports the HTTP/1.1 protocol. It enables Catalina to function as a stand-alone web server, in addition to its ability to execute servlets and JSP pages. A particular instance of this component listens for connections on a specific TCP port number on the server.

Apache Tomcat, Tomcat Embed

Apache Tomcat is an open source software implementation of the Java Servlet and JavaServer Pages technologies.

Apache UIMA Base: Uimaj Core

The core implementation of the UIMA Java Framework. Apache UIMA is an Apache-licensed open source implementation of the UIMA specification. UIMA, short for Unstructured Information Management Architecture, is an OASIS standard for content analytics, originally developed at IBM. It provides a component software architecture for the development, discovery, composition, and deployment of multi-modal analytics for the analysis of unstructured information and integration with search technologies.

Apache UIMA UimaFIT Core

Factories, Injection, and Testing library for UIMA. UIMA, short for Unstructured Information Management Architecture, is an OASIS standard for content analytics, originally developed at IBM. It provides a component software architecture for the development, discovery, composition, and deployment of multi-modal analytics for the analysis of unstructured information and integration with search technologies.

Apache Velocity

Velocity is a Java-based template engine. It permits anyone to use a simple yet powerful template language to reference objects defined in Java code. When Velocity is used for web development, Web designers can work in parallel with Java programmers to develop web sites according to the Model-View-Controller (MVC) model, meaning that web page designers can focus solely on creating a site that looks good, and programmers can focus solely on writing top-notch code. Velocity separates Java code from the web pages, making the web site more maintainable over its lifespan and providing a viable alternative to Java Server Pages (JSPs) or PHP.

Apache WSS4J

The Apache WSS4J™ project provides a Java implementation of the primary security standards for Web Services, namely the OASIS Web Services Security (WS-Security) specifications from the OASIS Web Services Security TC.

Apache XBean :: Spring

XBean :: Spring provides a schema-driven proprietary namespace handler for Spring contexts.

Apache Xerces

The Apache Xerces Project is responsible for software licensed to the Apache Software Foundation intended for the creation and maintenance of:

- XML parsers
- related software components

Apache XML

The Apache XML Project used to be the home for many XML-related subprojects, many of which have moved to top-level project status recently or are currently in migration. The Apache XML Project slowly transforms into an place where you can find pointers to XML-related projects here in The Apache Foundation.

Apache XML Commons Resolver

The XML Commons Resolver can be used in a wide variety of XML parsing, processing and related programs to resolve various public or system identifiers into accessible URLs for use by your application.

Apache XML Commons External Components

The External Components portion of xml-commons contains interfaces that are defined by external standards organizations.

Apache XML Graphics Commons

Apache™ XML Graphics Commons is a library that consists of several reusable components used by Apache Batik and Apache FOP. Many of these components can easily be used separately outside the domains of SVG and XSL-FO.

Apache XMLBeans

XMLBeans is a technology for accessing XML by binding it to Java types. XMLBeans provides several ways to get at the XML, including:

- Through XML schema that has been compiled to generate Java types that represent schema types. In this way, you can access instances of the schema through JavaBeans-style accessors after the fashion of "getFoo" and "setFoo". The XMLBeans API also allows you to reflect into the XML schema itself through an XML Schema Object model.
- A cursor model through which you can traverse the full XML infoset.
- Support for XML DOM.

Apache XMLSchema

XMLSchema is a lightweight Java object model that can be used to manipulate and generate XML schema representations. You can use it to read XML Schema (xsd) files into memory and analyze or modify them, or to create entirely new schemata from scratch.

Apache Zookeeper Server

The Apache ZooKeeper system for distributed coordination is a high-performance service for building distributed applications.

AppSecInc. Community MSI Extensions

AppSecInc. Community MSI Extensions is a collection of MSI custom actions and WIX extensions that extend Windows installer.

Arbortext

PTC Arbortext is an XML editor for structured authoring.

ARC Welder

The App Runtime for Chrome (Beta), or ARC, lets you run your favorite Android apps on Chrome OS.

Ascender

The font library available at Font Squirrel is your best resource for FREE, hand-picked, high-quality, commercial-use fonts.

ASM

ASM is an all purpose Java bytecode manipulation and analysis framework. It can be used to modify existing classes or dynamically generate classes, directly in binary form. Provided common transformations and analysis algorithms allow to easily assemble custom complex transformations and code analysis tools.

ASM

ASM is an all purpose Java bytecode manipulation and analysis framework. It can be used to modify existing classes or dynamically generate classes, directly in binary form. Provided common transformations and analysis algorithms allow to easily assemble custom complex transformations and code analysis tools.

ASM based accessors helpers used by JSON smart

Java reflect gives poor performance on getter setter and constructor calls. Accessors-smart uses ASM to speed up those calls.

AspectJ

AspectJ is a seamless aspect-oriented extension to the Java programming language. It is Java platform compatible easy to learn and use.

Aspose.Cells

Aspose.Cells for .NET API is an Excel Spreadsheet Programming API to speed up spreadsheet management and processing tasks. Excel .NET API supports to build cross-platform applications having the ability to generate, modify, convert, render and print spreadsheets.

Aspose.Diagram

Aspose.Diagram for .NET API is a solution for Microsoft Visio file manipulation requirements. It allows the .NET applications to read, write, export and process Microsoft Visio diagrams while supporting all Visio objects & properties including shapes, pages, images, shape masters, stencils, text, layers, header, footers, user-defined cells, hyperlinks, file protection, geometries, text boxes, and comments.

Aspose.Email

Aspose.Email for .NET API allows you to work with MIME messages, appointments, Microsoft Outlook® items, Outlook storage files, various clients & protocols.

Aspose.PSD

Aspose.PSD for .NET API provides extensive manipulation capabilities for PSD and PSB file formats without requiring Adobe Photoshop and entry level export capabilities for AI file format without requiring Adobe Illustrator. Aspose.PSD for .NET allows to create and edit the Photoshop files as well as provides the ability to update layer properties, add watermarks, perform graphics operations or convert one file format to another.

Aspose.Slides

Aspose.Slides for .NET API is a cross-platform API that helps in developing applications with the ability to create, manipulate, inspect or convert Microsoft PowerPoint and OpenOffice presentation files without any dependency.

[Aspose.Words](#)

Aspose.Words for .NET API is a powerful on-premise class library that can be used for numerous document processing tasks. It enables developers to enhance their own applications with features such as generating, modifying, converting, rendering, and printing documents, without relying on third-party applications, for example, Microsoft Word, or automation.

[Async](#)

Async is a utility module which provides straight-forward, powerful functions for working with asynchronous JavaScript.

[Autofac](#)

This is an IoC container for Microsoft .NET which manages class dependencies, so that applications are easy to change when they grow in size or complexity.

[AutoMapper](#)

AutoMapper is a convention-based object-object mapper in .NET.

[AWS SDK for .NET](#)

AWS SDK for .NET (Amazon Web services Software Development Kit for .NET) helps take the complexity out of coding by providing .NET APIs for AWS services including Amazon S3, Amazon EC2, Amazon DynamoDB and more.

[AWS SDK for Amazon SQS](#)

The AWS Java SDK for Amazon SQS module holds the client classes that are used for communicating with Amazon Simple Queue Service.

[AWS SDK for Java Core](#)

The AWS SDK for Java - Core module holds the classes that are used by the individual service clients to interact with Amazon Web Services. Users need to depend on aws-java-sdk artifact for accessing individual client classes.

[Babel](#)

Babel is a JavaScript compiler.

[backport-util-concurrent](#)

This package is the backport of java.util.concurrent API, introduced in Java 5.0 and further refined in Java 6.0, to older Java platforms. The backport is based on public-domain sources from the JSR 166 CVS repository, the dl.util.concurrent package, and the Doug Lea's collections package.

[BCGControlBar Pro for MFC](#)

BCGControlBar ("Business Components Gallery ControlBar") is an MFC extension library that allows you to create Microsoft Office 2000/XP/2003/2007/2010/2013 and Microsoft Visual Studio-like applications with full customization options.

[Bluebird](#)

Bluebird is a fully featured promise library with focus on innovative features and performance.

[Boilerpipe](#)

The boilerpipe library provides algorithms to detect and remove the surplus "clutter" (boilerplate, templates) around the main textual content of a web page. The library already provides specific strategies for common tasks (for example: news article extraction) and

may also be easily extended for individual problem settings.

BonCode Apache Tomcat AJP 1.3 Connector

The BonCode AJP (Apache JServ Protocol version 1.3) Connector uses already existing pathways to connect to Apache Tomcat (or any compliant servlet engine).

Boost C++ Libraries

Boost provides free peer-reviewed portable C++ source libraries.

Bootstrap

Bootstrap is an HTML, CSS, and JS framework for developing responsive, mobile first projects on the web.

Bootstrap-Colorpicker

Bootstrap Colorpicker is a modular color picker plugin for Bootstrap 4.

Bootstrap.v3.Datetimepicker

Date/time picker widget based on twitter bootstrap.

Bootstrap-maxlength

This plug-in integrates by default with Twitter bootstrap using badges to display the maximum length of the field where the user is inserting text. Uses the HTML5 attribute "maxlength" to work.

Bootstrap-select

Bootstrap-select is a jQuery plug-in that utilizes Bootstrap's dropdown.js to style and bring additional functionality to standard select elements.

Bootstrap-treeview

Tree View for Twitter Bootstrap.

Bouncy Castle

A number of cryptography APIs for Java and C#, including providers, generators and processors.

Bower

Websites are made of lots of things - frameworks, libraries, assets, utilities, and rainbows. Bower manages all these things for you.

Brotli DEC

Decoder for Brotli, a generic-purpose lossless compression algorithm.

browser-locale

browser-locale normalizes weird cross-browser issues and tries to return the user's selected language in 100% client-side JavaScript by looking at various properties on the `window.navigator` object.

Byte Buddy

Byte Buddy is a code generation and manipulation library for creating and modifying Java classes during the runtime of a Java application and without the help of a compiler.

c3p0

c3p0 is an easy-to-use library for augmenting traditional (DriverManager-based) JDBC drivers with JNDI-bindable DataSources, including DataSources that implement

Connection and Statement Pooling, as described by the jdbc3 spec and jdbc2 std extension.

Caffeine

Caffeine is a high performance caching library for Java 8.

Cactus

Cactus is a simple test framework for unit testing server-side java code (Servlets, EJBs, Tag Libs, Filters, ...).

CAPICOM

CAPICOM can be used to digitally sign data, sign code, verify digital signatures, envelop data for privacy, hash data, encrypt/decrypt data and more.

Castle Core

Castle Core provides common Castle Project abstractions including logging services. It also features Castle DynamicProxy, a lightweight runtime proxy generator, and Castle DictionaryAdapter. Castle Project is an umbrella for a handful of open source projects for .NET.

CDI APIs

APIs for CDI (Contexts and Dependency Injection for Java).

cglib

cglib is a powerful, high performance and quality Code Generation Library, It is used to extend JAVA classes and implements interfaces at runtime.

Checker Qual

Checker Qual is the set of annotations (qualifiers) and supporting classes used by the Checker Framework to type check java source code.

Chef Server

Chef Server enables configuration management.

ChilkatDotNet

Best selling POP3/SMTP email .NET component for C#, VB.NET, and ASP.NET.

Chilkat .NET SSH / SFTP Component

The SSH / SFTP .NET component provides two objects: A client-side SSH2 implementation for executing commands and shell sessions on Unix/Windows SSH servers, and an SFTP implementation for file transfer and remote file management over SSH.

Castle.Core

Castle Core provides common Castle Project abstractions including logging services. It also features Castle DynamicProxy a lightweight runtime proxy generator, and Castle DictionaryAdapter.

ClassMate

ClassMate is a library for introspecting generic type information of types, member/static methods, fields. Especially useful for POJO/Bean introspection.

classnames

classnames is a simple JavaScript utility for conditionally joining classNames together.

[cldr-data](#)

An npm module for Unicode CLDR JSON data.

[cldr.js](#)

cldr.js provides a simple layer to facilitate internationalization software to access and use the official CLDR JSON data.

[Common Service Locator](#)

The Common Service Locator library contains a shared interface for service location which application and framework developers can reference. The library provides an abstraction over IoC containers and service locators. Using the library allows an application to indirectly access the capabilities without relying on hard references. The hope is that using this library, third-party applications and frameworks can begin to leverage IoC/Service Location without tying themselves down to a specific implementation.

[Compact Encoding Detection](#)

Compact Encoding Detection (CED for short) is a library written in C++ that scans given raw bytes and detect the most likely text encoding.

[CompareNetObjects](#)

Perform a deep compare of any two .NET objects using reflection. Shows the differences between the two objects.

[ComponentSpace SAML v2.0 for ASP.NET](#)

The SAML v2.0 component for ASP.NET is a SAML implementation that is fully compliant with the OASIS Security Assertion Markup Language v2.0 specification.

[Config \(Typesafe\)](#)

A configuration library for JVM languages.

[connected-react-router](#)

connected-react-router is a Redux binding for React Router v4

[Contextmenu](#)

Contextmenu is a javascript library (with no dependencies) that allows the creation of native-looking right-click menus within a web page.

[copy-to-clipboard](#)

copy-to-clipboard lets your users copy stuff into the system clipboard from your browser using JavaScript

[C++ Builder](#)

C++Builder gives you fast, powerful, modern C++; one compiler, one debugger, one IDE, four platforms; amazing frameworks; and lets you speed up your development, focus on your code and bring your app to market faster than any other C++ toolchain.

[Crc32C.NET.signed](#)

This is a hardware-accelerated implementation of CRC-32C (Castagnoli, polynomial 0x1EDC6F41 / 0x82F63B78) for Windows (C++ and .NET), open-sourced under zlib license and BSD license.

Cropper.js

Cropper.js is a JavaScript library for cropping image. With the Cropper.js, you can select an specific area of an image, and then upload the coordinates data to server-side to crop the image, or crop the image on browser-side directly.

CryptoJS

CryptoJS is a growing collection of standard and secure cryptographic algorithms implemented in JavaScript using best practices and patterns

CSizingControlBar

CSizingControlBar is an easy to use collection of classes, allowing you to focus on your application needs rather than on implementation tweaks.

Curvesapi

Implementation of various mathematical curves that define themselves over a set of control points. The API is written in Java. The curves supported are: Bezier, B-Spline, Cardinal Spline, Catmull-Rom Spline, Lagrange, Natural Cubic Spline, and NURBS.

d3.js

D3.js is a JavaScript library for manipulating documents based on data.

Dapper

A high performance Micro-ORM supporting SQL Server, MySQL, Sqlite, SqlCE, Firebird etc.

DataTables plug-ins

The stated goal of DataTables is "To enhance the accessibility of data in HTML tables".

deepmerge

deepmerge is a library for deep (recursive) merging of Javascript objects.

DITA-OT

The DITA Open Toolkit is a Java-based implementation of the OASIS DITA Technical Committee's specification for DITA DTDs and schemas. It contains ANT, SAXON,...

DnsClient.NET

DnsClient.NET is a simple yet very powerful and high performant open source library for the .NET Framework to do DNS lookups.

DockPanel Suite

.Net Docking Library for Windows Forms

DocumentFormat.OpenXml

This is an SDK library for working with Open XML Documents (DOCX, XLSX, PPTX).

Document-offset

Get offset of a DOM Element or Range within the document.

dom4j

dom4j is an easy to use, open source library for working with XML, XPath and XSLT on the Java platform using the Java Collections Framework and with full support for DOM, SAX and JAXP.

DotNetMagic

DotNetMagic is a suite of components that will allow you to add Office 2007, Visual Studio or Windows Media Player themes to your applications as well as a docking window

system that offers all the features found in Visual Studio .NET including auto hide and docking indicators.

DotNetOpenAuth

This is an open-source library that brings OpenID, OAuth capabilities to the .NET Framework.

DotNetZip

DotNetZip is a class library and toolset for manipulating zip files. Use VB, C# or any .NET language to easily create, extract, or update zip files.

Dozer

Dozer is a Java Bean to Java Bean mapper that recursively copies data from one object to another. Typically, these Java Beans will be of different complex types.

Drools Engine

Drools is a Business Rules Management System (BRMS) solution. It provides a core Business Rules Engine (BRE), a web authoring and rules management application (Drools Workbench) and an Eclipse IDE plugin for core development. The projects has community releases from JBoss.org that come without support.

Dropbox.Api

A powerful API for applications that work with files.

dsinfo

The dsinfo library enables you to easily use Scala-side information in implementations of embedded (internal) domain-specific languages. dsinfo is implemented using Scala macros which are an experimental feature of Scala 2.10 and 2.11.

DS OLE Document Properties Reader

This is a package which facilitates working with DS OLE Document Properties.

dsprofile

The dsprofile library provides general facilities to implement domain-specific profiling in Scala and Java programs.

DWR (Direct Web Remoting)

DWR is a Java library that enables Java on the server and JavaScript in a browser to interact and call each other as simply as possible.

Dynamic Delivery 4 Tridion (DD4T)

DD4T is a light-weight framework which links the Tridion Sites Content Management System to your MVC web application architecture.

It is available both for Java (Spring MVC) and .NET (ASP.NET MVC 3, 4 and 5), and it supports Tridion 2009, 2011 and 2013.

Dynamitey

Dynamitey (pronounced dyna-mighty) flexes DLR muscles to do meta-mazing things in .NET.

EasyLicenser

EasyLicenser is a licensing module.

Eclipse BIRT Chart Engine

The Eclipse Business Intelligence and Reporting Tools (BIRT) project is an open source project that is focused on the design, generation and delivery of reports and charts.

Eclipse Modeling Framework

The EMF project is a modeling framework and code generation facility for building tools and other applications based on a structured data model. From a model specification described in XMI, EMF provides tools and runtime support to produce a set of Java classes for the model, along with a set of adapter classes that enable viewing and command-based editing of the model, and a basic editor.

EdmLib

EdmLib contains classes to represent, construct, parse, serialize and validate entity data models.

edtFTPj/Free

Free Java FTP library gives Java developers extensive FTP functionality.

Ehcache

Ehcache is an open source, standards-based cache for boosting performance, offloading your database, and simplifying scalability. It's the most widely-used Java-based cache because it's robust, proven, and full-featured. Ehcache scales from in-process, with one or more nodes, all the way to mixed in-process/out-of-process configurations with terabyte-sized caches.

ElasticMQ

Message queueing system with an actor-based Scala and Amazon SQS-compatible interfaces. Apache ActiveMQ is the most popular and powerful open source messaging and Integration Patterns server.

Elasticsearch RESTful client

A RESTful client for the Elasticsearch search engine.

element-size

Get the size of an element in pixels, including margins.

Elmah - Error Logging Modules and Handlers

Elmah.io is the easy error logging and uptime monitoring service for .NET.

Enhydra Data Object Design Studio (DODS)

Enhydra DODS is a Code Generator for Object-to-Relational Mapping.

Enterprise Java Beans (EJB) technology

Enterprise JavaBeans (EJB) technology is the server-side component architecture for Java Platform, Enterprise Edition (Java EE). EJB technology enables rapid and simplified development of distributed, transactional, secure and portable applications based on Java technology.

Entity Framework

Entity Framework is Microsoft's recommended data access technology for new applications.

Erlang

This is a programming language used for developing robust systems of programs which can be distributed among different computers in a network - component required to run RabbitMQ.

Error Prone

Error Prone is a static analysis tool for Java that catches common programming mistakes at compile-time.

ESAPI

ESAPI (The OWASP Enterprise Security API) is a free, open source, web application security control library that makes it easier for programmers to write lower-risk applications. The ESAPI libraries are designed to make it easier for programmers to retrofit security into existing applications. The ESAPI libraries also serve as a solid foundation for new development.

eventemitter3

EventEmitter3 is a high performance EventEmitter. It has been micro-optimized for various of code paths making this, one of, if not the fastest EventEmitter available for Node.js and browsers.

eXist database

eXist is a high-performance native XML database engine and all-in-one solution for application building.

EXPath HTTP Client

The HTTP Client defines a set of functions to send HTTP & HTTPS requests and handle responses. This is a quite low-level functionality, allowing one to deal with most aspects of the HTTP protocol (redirections, headers, body contents, multipart...), while integrating smoothly within the XPath Data Model.

EXPath Package Repository Manager

A standard packaging system for several core XML technologies, like XSLT, XQuery, XProc and XML Schema. Once packaged, libraries can be deployed on every supporting processor.

Extended WPFToolkit Community Edition

Extended WPF Toolkit™ by Xceed is the number one collection of WPF controls, components and utilities for creating next generation Windows applications. Use it to build professional looking, modern, and easy to use WPF applications.

EZMorph

EZMorph is simple java library for transforming an Object to another Object.

ExtJS

This is a JavaScript application framework used for building interactive cross-platform web applications.

Facebook React

A declarative, efficient, and flexible JavaScript library for building user interfaces.

FakeItEasy

A .Net dynamic fake framework for creating all types of fake objects, mocks, stubs and so on.

[Fast Serialization](#)

Fast Serialization reimplements Java Serialization with focus on speed (up to 10 times faster), size and compatibility. This allows the use of FST with minimal code change.

[FastInfoSet](#)

Fast Infoset (or FI) is an international standard that specifies a binary encoding format for the XML Information Set (XML Infoset) as an alternative to the XML document format. It aims to provide more efficient serialization than the text-based XML format.

[Fastutil](#)

Fastutil extends the Java™ Collections Framework by providing type-specific maps, sets, lists and queues with a small memory footprint and fast access and insertion; provides also big (64-bit) arrays, sets and lists, and fast, practical I/O classes for binary and text files.

[Finj](#)

Programmatically controllable FTP client written in the Java language that targets any network oriented standalone application, and even applet, that needs to rely on FTP to exchange files over a network. Should replace the cryptic `sun.net.ftp.*` classes.

[FitVids.JS](#)

Fitvids is a lightweight, easy-to-use jQuery plugin for fluid width video embeds.

[flat](#)

flat flattens and unflattens nested Javascript objects.

[Flaticon](#)

A database of free icons available in PNG, SVG, EPS, PSD and BASE 64 formats.

[Flexcel](#)

100% managed code Excel file manipulation engine & Excel & PDF report generation for .NET & .NET Compact Framework.

[Fluent Assertions](#)

A very extensive set of extension methods that allow you to more naturally specify the expected outcome of a TDD or BDD-style unit test.

[focus-visible](#)

focus-visible is a mechanism for exposing focus ring styles only when the keyboard is the user's current input modality.

[Fody](#)

Extensible tool for weaving .Net assemblies.

[Font Awesome](#)

Font Awesome gives you scalable vector icons that can instantly be customized - size, color, drop shadow, and anything that can be done with the power of CSS.

[FontBox](#)

FontBox is an open source Java library for parsing font files and providing low level data structures for accessing font information.

[Fonto Editor](#)

Fonto is an online XML editor designed for people with no knowledge of XML or any other technology that comes with structured content authoring.

Freemarker

Apache FreeMarker™ is a template engine: a Java library to generate text output (HTML web pages, e-mails, configuration files, source code, etc.) based on templates and changing data.

FromHeaderAttribute

FromHeaderAttribute provides a means of using model binding to get and validate HTTP headers in Web API 2

Fst

A fast java serialization drop in-replacement and some serialization based utils such as Structs and OffHeap Memory.

Fuse.js

Fuse.js is a powerful, lightweight fuzzy-search library, with zero dependencies.

GeckoFX

Gecko is a free and open source layout engine used in many applications developed by the Mozilla Foundation and the Mozilla Corporation (notably the Firefox web browser).

GeoAPI

The development community in building GIS solutions is sustaining an enormous level of effort. The GeoAPI project aims to reduce duplication and increase interoperability by providing neutral, interface-only APIs derived from OGC/ISO Standards.

Getopt For Java

Port of the GNU getopt family of functions from C to Java.

Glimpse

Glimpse is a web debugging and diagnostics tool used to gain a better understanding of what is happening inside of your ASP.NET 4.0 application.

Glimpse ASP.NET

Glimpse is a web debugging and diagnostics tool used to gain a better understanding of what is happening inside of your ASP.NET 4.0 application.

Glimpse Mvc4

Glimpse is a web debugging and diagnostics tool used to gain a better understanding of what is happening inside of your ASP.NET MVC 4.0 application.

globalize

JavaScript globalization and localization. Formats and parses strings, dates and numbers in over 350 cultures.

globalize.TypeScript.DefinitelyTyped

TypeScript Definitions (d.ts) for globalize.

GNU Aspell

GNU Aspell is a Free and Open Source spell checker designed to eventually replace Ispell. It can either be used as a library or as an independent spell checker. Its main feature is that it does a superior job of suggesting possible replacements for a misspelled word than just about any other spell checker out there for the English language. Unlike Ispell, Aspell can also easily check documents in UTF-8 without having to use a special dictionary. Aspell will also do its best to respect the current locale setting. Other advantages over

IsPELL include support for using multiple dictionaries at once and intelligently handling personal dictionaries when more than one AsPELL process is open at once.

Specifically we are using GNUASPELL dictionaries for de-CH, de-DE, en-CA, en-GB, en-US, es-ES, fr-FR, fr-CH, nl-NL.

[GNU Regular Expressions for Java](#)

The `gnu.regexp` package provides a Java language implementation of standard NFA regular expression features and a convenient API for compiling, matching and manipulating regular expressions in a variety of popular syntaxes (Perl-style is the default).

[Google Analytics API](#)

The API for Google Analytics.

[Google API Client](#)

Google APIs client libraries.

[Google APIs](#)

APIs to Google resources.

[google-code-prettify](#)

`google-code-prettify` is a Javascript module and CSS file that allows syntax highlighting in an html page.

[Google Findbugs JSR305](#)

JSR305 Annotations for Findbugs.

[google-gson](#)

`google-gson` is a Java library to convert JSON to Java objects and vice-versa.

[Google Guava](#)

The Guava project contains several of Google's core libraries that we rely on in our Java-based projects: collections, caching, primitives support, concurrency libraries, common annotations, string processing, I/O, and so forth.

[Google Guice](#)

Guice (pronounced 'juice') is a lightweight dependency injection framework for Java 6 and above, brought to you by Google.

[Google HTTP Client](#)

The Google HTTP client library.

[Google ISO Parser](#)

A generic parser and writer for all ISO 14496 based files (MP4, Quicktime, DCF, PDCF, ...).

[Google J2ObjC](#)

J2ObjC is an open-source command-line tool from Google that translates Java source code to Objective-C for the iOS (iPhone/iPad) platform. This tool enables Java source to be part of an iOS application's build, as no editing of the generated files is necessary.

[Google JSON-simple](#)

JSON.simple is a simple Java toolkit for JSON. You can use JSON.simple to encode or decode JSON text.

Google Maps APIs

Google Maps APIs let you create engaging Web and mobile apps with Google's mapping platform.

Google OAuth Client

The Google OAuth client library

Google.Protobuf

C# runtime library for Protocol Buffers - Google's data interchange format.

Google Protocol Buffers

Core Protocol Buffers library. Protocol Buffers are a way of encoding structured data in an efficient yet extensible format.

Google Translation API

Google Translate API provides a simple programmatic interface for translating an arbitrary string into any supported language.

gRaphael

gRaphael's goal is to help you create stunning charts on your website. It is based on Raphael graphics library.

Graphite Server

Graphite Server stores numeric time series data and renders graphs on demand.

GraphQL-Java

The Java implementation of GraphQL.

GraphQL Spring Boot

GraphQL Spring Framework Boot

Graylog

Graylog is used for log management.

GRIB Decoder API

Decoder for the GRIB format.

GRPC

GRPC is a high performance, open-source universal RPC framework.

Grunt

Grunt is a JavaScript task runner.

GTK+

GTK+, or the GIMP Toolkit, is an open-source, multi-platform toolkit for creating graphical user interfaces developed by the GNU Project.

gudusoft.sqlparser.dll

Provides the class gudusoft.gsqlparser.TGSqlParse necessary to create a SQL Parser and the classes a SQL Parser uses internally to handle different SQL dialects.

h2

H2 provides an embeddable relational database in Java.

Hammer JS

Javascript library for recognizing touch events and gestures.

Handlebars

Handlebars lets you build semantic templates effectively.

Hawtbuf

An Ant/Maven based protobuf compiler and Java API. Plus helper classes to make it easy to work with byte arrays.

Hazelcast

Hazelcast is an open-source In-Memory Data Grid.

HdrHistogram

A High Dynamic Range Histogram that supports recording and analyzing sampled data value counts across a configurable integer value range with configurable value precision within the range. Value precision is expressed as the number of significant digits in the value recording, and provides control over value quantization behavior across the value range and the subsequent value resolution at any given level.

Hibernate 2.0

Hibernate is a high-performance Object/Relational persistence and query service. The most flexible and powerful Object/Relational solution on the market, Hibernate takes care of the mapping from Java classes to database tables and from Java data types to SQL data types. It provides data query and retrieval facilities that significantly reduce development time. Hibernate's design goal is to relieve the developer from 95% of common data persistence-related programming tasks by eliminating the need for manual, hand-crafted data processing using SQL and JDBC.

Hibernate 2.1

Hibernate is a high-performance Object/Relational persistence and query service. The most flexible and powerful Object/Relational solution on the market, Hibernate takes care of the mapping from Java classes to database tables and from Java data types to SQL data types. It provides data query and retrieval facilities that significantly reduce development time. Hibernate's design goal is to relieve the developer from 95% of common data persistence-related programming tasks by eliminating the need for manual, hand-crafted data processing using SQL and JDBC.

Hibernate

Hibernate is a high-performance Object/Relational persistence and query service. The most flexible and powerful Object/Relational solution on the market, Hibernate takes care of the mapping from Java classes to database tables and from Java data types to SQL data types. It provides data query and retrieval facilities that significantly reduce development time. Hibernate's design goal is to relieve the developer from 95% of common data persistence-related programming tasks by eliminating the need for manual, hand-crafted data processing using SQL and JDBC.

Highcharts.js

Highcharts is a charting library written in pure JavaScript, offering an easy way of adding interactive charts to your web site or web application.

[HikariCP](#)

Ultimate JDBC Connection Pool.

[HK2 Framework](#)

HK2 is a light-weight and dynamic dependency injection framework.

[HPPC \(High Performance Primitive Collections\)](#)

HPPC provides template-generated implementations of typical collections, such as lists, sets and maps, for all Java primitive types. The primary driving force behind HPPC is optimization for highest performance and memory efficiency.

[HSQldb \(HyperSQL DataBase\)](#)

HSQldb (HyperSQL DataBase) is the leading SQL relational database engine written in Java. It offers a small, fast multithreaded and transactional database engine with in-memory and disk-based tables and supports embedded and server modes. It includes a powerful command line SQL tool and simple GUI query tools.

[HTML Agility Pack \(HAP\)](#)

Html Agility Pack is an agile HTML parser that builds a read/write DOM and supports plain XPATH or XSLT. It is a .NET code library that allows you to parse "out of the web" HTML files. The parser is very tolerant with "real world" malformed HTML. The object model is very similar to what proposes `System.Xml`, but for HTML documents (or streams).

HTML Compare

HTML Compare is the best way to find changes in different versions of HTML pages and websites.

[HttpClient Wrappers](#)

HttpClient Wrappers.

[Hunspell](#)

Hunspell is the spell checker of LibreOffice, OpenOffice.org, Mozilla Firefox 3 & Thunderbird, Google Chrome, and it is also used by proprietary software packages, like Mac OS X, InDesign, MemoQ, Opera and Trados Studio.

[i18next](#)

I18next is an internationalization-framework written in and for JavaScript that not only provides standard i18n features such as plurals, context, interpolation, and format, but also includes a complete solution to localize your product from web to mobile and desktop.

[iCal4j](#)

iCal4j is a Java API that provides support for the iCalendar specification as defined in RFC2445.

[iCanHaz.js](#)

A clean solution for templating with Mustache.js and jQuery or Zepto.

[ICSharpCode Zip Lib](#)

#ziplib (SharpZipLib, formerly NZipLib) is a Zip, GZip, Tar and BZip2 library written entirely in C# for the .NET platform. It is implemented as an assembly (installable in the GAC), and thus can easily be incorporated into other projects (in any .NET language).

ICU (International Components for Unicode)

ICU is a mature, widely used set of C/C++ and Java libraries providing Unicode and Globalization support for software applications. ICU is widely portable and gives applications the same results on all platforms and between C/C++ and Java software.

ICSharpCode.SharpZipLibrary

This is an open-source C# library, implemented as an assembly, for the .NET platform to provide gzip/zip compression.

IdentityModel

A .NET standard helper library for claims-based identity, OAuth 2.0 and OpenID Connect.

IdentityModel OidcClient

A C#/NetStandard OpenID Connect Client Library for native Applications.

IdentityServer4

IdentityServer4 is an OpenID Connect and OAuth 2.0 framework for ASP.NET Core.

Ignite UI

Built for high-performance browser, hybrid and mobile apps, Ignite UI delivers best-in-class performance for high-demand data needs. Its virtualized, load-on-demand data grids can handle any data scenario, and its data visualization UI widgets can take on anything from real-time data feeds to millions of rows of data.

IIS URL Rewrite Module 2

This is an extension which enables Web administrators to set up rules to define URL rewriting behavior based on HTTP headers.

IKVM.net

IKVM.NET is an implementation of Java for Mono and the Microsoft .NET Framework. It includes the following components:

- A Java Virtual Machine implemented in .NET
- A .NET implementation of the Java class libraries
- Tools that enable Java and .NET interoperability

immer

immer creates the next immutable state by mutating the current one.

Immutable

Immutable.js provides many Persistent Immutable data structures including: List, Stack, Map, OrderedMap, Set, Ordered Set, Record.

Impromptu Interface

Static interface to dynamic implementation (duck casting). Uses the DLR combined with Reflect.Emit.

InfluxDB

InfluxDB is an open-source time series database.

Infonyte-DB

Infonyte-DB provides a comprehensive, lightweight solution for querying and storing large, distributed XML documents. It is based on two major components, the PDOM engine which is a persistent implementation of the W3C DOM (Document Object Model)

API, and the XQL engine which is a web-aware query engine supporting the XQL query language.

InMethod Grid

A data grid component with the following features:

- Fully Ajaxified
- Editable cells
- Pageable
- OSGi-ready

InstallAnywhere

InstallAnywhere is the leading multi-platform development solution for application producers who need to deliver a professional and consistent cross installation experience for physical, virtual and cloud environments. From a single project file and build environment, InstallAnywhere creates reliable installations for on-premises platforms - Windows, Linux, Apple OS X, Solaris, AIX, HP-UX, and IBM iSeries - and enables you to take existing and new software products to a virtual and cloud infrastructure.

InstallShield

Flexera InstallShield delivers a seamless user install, allowing you to develop MSI and EXE installers, and create Windows Server App and MSIX packages with minimal scripting, coding and rework.

invariant

invariant is a mirror of Facebook's invariant (e.g. React, flux). It's a way to provide descriptive errors in development but generic errors in production.

iOS

iOS is a mobile operating system created and developed by Apple Inc. exclusively for its hardware.

Itadaki Jbzip 2

jbzip2 is a Java bzip2 compression/decompression library. It can be used as a replacement for the Apache CBZip2InputStream / CBZip2OutputStream classes.

iTextSharp

iText is a PDF library that allows you to CREATE, ADAPT, INSPECT and MAINTAIN documents in the Portable Document Format (PDF):

- Generate documents and reports based on data from an XML file or a database
- Create maps and books, exploiting numerous interactive features available in PDF
- Add bookmarks, page numbers, watermarks, and other features to existing PDF documents
- Split or concatenate pages from existing PDF files
- Fill out interactive forms
- Serve dynamically generated or manipulated PDF documents to a web browser

iText is used by Java, .NET, Android and GAE developers to enhance their applications with PDF functionality. iTextSharp is the .NET port.

[Jackcess](#)

Jackcess is a pure Java library for reading from and writing to MS Access databases

[Jackson tooling](#)

Inspired by the quality and variety of XML tooling available for the Java platform (StAX, JAXB, etc.), the Jackson is a multi-purpose Java library for processing JSON data format. Jackson aims to be the best possible combination of fast, correct, lightweight, and ergonomic components for developers.

[Jackson 2 Extensions to The Google HTTP Client Library For Java](#)

Jackson 2 Extensions to The Google HTTP Client Library For Java.

[JACOB](#)

JACOB is a JAVA-COM Bridge that allows you to call COM Automation components from Java. It uses JNI to make native calls to the COM libraries. JACOB runs on x86 and x64 environments supporting 32 bit and 64 bit JVMs.

[jacORB](#)

The free Java implementation of the OMG's CORBA standard.

[Jakarta Activation API](#)

The JavaBeans Activation Framework API JAR.

[Jakarta-ORO](#)

The Jakarta-ORO Java classes are a set of text-processing Java classes that provide Perl5 compatible regular expressions, AWK-like regular expressions, glob expressions, and utility classes for performing substitutions, splits, filtering filenames, etc.

[Jakarta POI](#)

The Apache POI Project's mission is to create and maintain Java APIs for manipulating various file formats based upon the Office Open XML standards (OOXML) and Microsoft's OLE 2 Compound Document format (OLE2).

[Jakarta Taglibs xtags](#)

A library for xtags tag libraries.

[Jakarta XML Bind API](#)

Jakarta's XML bind API.

[Jalopy](#)

Jalopy is a source code formatter/beautifier/pretty printer for the Java programming language. It is aimed to provide a full-featured, yet free alternative to the well-known Jindent. Plug-ins for Ant, Eclipse, IDEA, JBuilder, JDeveloper, jEdit, NetBeans.

[Janino](#)

Janino is a super-small, super-fast Java compiler.

[jarsigner](#)

Signs and verifies Java Archive (JAR) files.

[Jasmine](#)

Jasmine is a behavior-driven development framework for testing JavaScript code.

Jasmine-js

Jasmine is a behavior-driven development framework for testing JavaScript code. The package contains only jasmine.js which is useful for using together with Chutzpah.

Jasmine.Test

DOM-less simple JavaScript testing framework.

Jasmine.TypeScript.DefinitelyTyped

TypeScript Definitions (d.ts) for jasmine.

JasperReports Server

JasperReports Server is a stand-alone and embeddable reporting server. It provides reporting and analytics that can be embedded into a web or mobile application as well as operate as a central information hub for the enterprise by delivering mission critical information on a real-time or scheduled basis to the browser, mobile device, printer, or email inbox in a variety of file formats. JasperReports Server is optimized to share, secure, and centrally manage your Jaspersoft reports and analytic views.

Jasypt

Jasypt is a java library which allows the developer to add basic encryption capabilities to his/her projects with minimum effort, and without the need of having deep knowledge on how cryptography works.

Java 8

Java 8 is used as Java Runtime Virtual Machine.

Java Advanced Imaging

Java Advanced Imaging is a Java platform extension API which allows developers to create their own image manipulation routines.

Java API for XML Parsing (JAXP)

Java API for XML Processing (JAXP) enables applications to parse, transform, validate and query XML documents using an API that is independent of a particular XML processor implementation. JAXP provides a pluggability layer to enable vendors to provide their own implementations without introducing dependencies in application code. Using this software, application and tool developers can build fully-functional XML-enabled Java applications for e-commerce, application integration, and web publishing.

Java API for RESTful services (JAX-RS)

The Java API for RESTful services (JAX-RS).

Java API for RESTful services (JAX-RS)

Provides specification and API for the RESTful Services (JAX-RS).

Java API for RESTful web services (javax.ws.rs)

Java API for RESTful Web Services.

Java Common Annotations

Common Annotations for the JavaTM Platform API

Java Hamcrest

Hamcrest is a framework for writing matcher objects allowing 'match' rules to be defined declaratively. Used for implementing flexible testing scenarios.

Java Libpst

A library to read PST files with java, without need for external libraries.

Java Mail

The Java Mail API offers e-mail functionality.

Java Native Access (JNA)

Java Native Access.

Java Native Access Platform

Java Native Access Platform.

Java SE (formerly Java Development Kit)

Java Platform, Standard Edition lets you develop and deploy Java applications on desktops and servers, as well as in today's demanding embedded environments.

Java Servlet API

Java Servlet API.

Java Unrar

Java Unrar.

java2com

This is a development tool for bridging the communication gap between Java and COM applications. It enables the integration of both COM and Java based components in one application and allow these components to communicate bi-directionally through Java Native Interface technology.

JavaBeans Activation Framework

With the JavaBeans Activation Framework standard extension, developers who use Java technology can take advantage of standard services to determine the type of an arbitrary piece of data, encapsulate access to it, discover the operations available on it, and to instantiate the appropriate bean to perform said operation(s).

JavaBeans Validation

Bean Validation (JSR-303) API.

JavaMelody

The goal of JavaMelody is to monitor Java or Java EE applications in QA and production environments. It is a tool to measure and calculate statistics on real operation of an application depending on the usage of the application by users.

Java Runtime Environment (JRE)

This is part of Java Development Kit (JDK), a set of programming tools for developing Java applications.

JavaScript-detect-element-resize

A Cross-Browser, Event-based, Element Resize Detection.

JavaScript Flash Detection Library

A JavaScript library designed to simplify the process of detecting if the Adobe Flash Player is installed in a Web Browser.

Javassist (*Java Programming Assistant*)

Javassist (*Java Programming Assistant*) makes Java bytecode manipulation simple. It is a class library for editing bytecodes in Java; it enables Java programs to define a new class at runtime and to modify a class file when the JVM loads it. Unlike other similar bytecode editors, Javassist provides two levels of API: source level and bytecode level. If the users use the source-level API, they can edit a class file without knowledge of the specifications of the Java bytecode. The whole API is designed with only the vocabulary of the Java language. You can even specify inserted bytecode in the form of source text; Javassist compiles it on the fly. On the other hand, the bytecode-level API allows the users to directly edit a class file as other editors.

Javatuples

Provides a set of java classes that allow you to work with tuples.

javax.activation

Activation Java API

javax.annotation

JSR 250 Common Annotations For The Java Platform.

javax.cache

Caching Java API

JavaX Expression Language

Expression Language Java API

javax.inject

Dependency Injection Java API

javax.jms

The Java Message Service (JMS) API is a messaging standard that allows application components based on the Java 2 Platform, Enterprise Edition (J2EE) to create, send, receive, and read messages. It enables distributed communication that is loosely coupled, reliable, and asynchronous.

JavaX Persistence API

Java(TM) Persistence API

javax.servlet

The javax.servlet package contains a number of classes and interfaces that describe and define the contracts between a servlet class and the runtime environment provided for an instance of such a class by a conforming servlet container.

javax.validation

Bean Validation API

javax.xml.parsers

Provides classes allowing the processing of XML documents.

javax.xml.transform

This package defines the generic APIs for processing transformation instructions, and performing a transformation from source to result.

javolution

A library that makes Java applications more time-predictable.

JAXB

The goal of the JAXB project is to develop and evolve the code base for the Reference Implementation (RI) of JAXB, the Java Architecture for XML Binding. The JAXB specification is developed through the Java Community Process following the process described at jcp.org. This process involves an Expert Group with a lead that is responsible for delivering the specification, a reference implementation (RI) and a Technology Compatibility Kit (TCK). The primary goal of an RI is to support the development of the specification and to validate it. Specific RIs can have additional goals; the JAXB RI is a production-quality implementation that is used directly in a number of products by Oracle and other vendors.

JAXB2 Basics

JAXB2 Basics is a part of JAXB2 Commons project which implements plugins and tools for JAXB 2.x reference implementation.

jaxen

jaxen is an open source XPath library written in Java. It is adaptable to many different object models, including DOM, XOM, dom4j, and JDOM. It is also possible to write adapters that treat non-XML trees such as compiled Java byte code or Java beans as XML, thus enabling you to query these trees with XPath too.

JAX-RPC

The Standard Implementation for JAX-RPC.

JBoss Cache

JBoss Cache's goal is to provide enterprise-grade clustering solutions to Java-based frameworks, application servers or custom-designed Java SE applications.

JBoss Common

Common libraries for JBoss.

JBoss EJB Interceptors

The EJB 3.0 spec defines the ability to apply custom made interceptors to the business methods of your session and message driven beans (and of course to the JBoss `@Service` and `@Consumer` beans). EJB 3.0 interceptors take the form of methods annotated with the `@javax.ejb.AroundInvoke` annotation.

JBoss EWS

Red Hat® JBoss Web Server simplifies the development and management of open source-based web application environments. By including all of the popular open source technologies for building, deploying, and maintaining web applications and large scale websites, JBoss Web Server makes it easy for enterprises to manage, administer, and secure web environments of any size.

JBoss Java Annotation Indexer (Jandex)

A Java Annotation Indexer for JBoss

JBoss Java Transaction 1.1 API

The Java Transaction 1.1 API classes, from JBoss.

JBoss Java Transaction 1.2 API

The Java Transaction 1.2 API classes, from JBoss.

JBoss Logging Framework

The JBoss Logging Framework.

JCache

JCache is the API being defined in JSR107. It defines a standard Java Caching API for use by developers and a standard SPI ("Service Provider Interface") for use by implementers.

JCL Core

JCL Core.

JCommander

JCommander is a very small Java framework that makes it trivial to parse command line parameters.

JCommon

JCommon is a Java class library that contains miscellaneous classes supporting configuration and dependency management code, a general logging framework text utilities, user interface classes for displaying information about applications, custom layout managers, a date chooser panel, serialization utilities.

Jcraft JSch

JSch (Java Secure Channel) is a pure Java implementation of SSH2. JSch allows you to connect to an sshd server and use port forwarding, X11 forwarding, file transfer, etc.

JDBC Connection Pool

The JDBC Connection Pool `org.apache.tomcat.jdbc.pool` is a replacement or an alternative to the Apache Commons DBCP connection pool.

JDOM

JDOM's mission: to provide a complete, Java-based solution for accessing, manipulating, and outputting XML data from Java code.

JEDI Code Library

The JEDI Code Library (JCL) consists of a set of thoroughly tested and fully documented utility functions and non-visual classes which can be instantly reused in your Delphi and C++ Builder projects.

jedis

A blazingly small and sane Redis Java client.

JempBox

JempBox is an open source Java library that implements the Adobe XMP specification.

Jersey RESTful WS

Developing RESTful Web services that seamlessly support exposing your data in a variety of representation media types and abstract away the low-level details of the client-server communication is not an easy task without a good toolkit. In order to simplify development of RESTful Web services and their clients in Java, a standard and portable JAX-RS API has been designed. Jersey RESTful Web Services framework is open source, production quality, framework for developing RESTful Web Services in Java that provides

support for JAX-RS APIs and serves as a JAX-RS (JSR 311 & JSR 339) Reference Implementation.

[Jetbrains Java Annotations](#)

A set of annotations used for code inspection support and code documentation.

[Jettison](#)

Jettison is a collection of Java APIs (like STaX and DOM) which read and write JSON. This allows nearly transparent enablement of JSON based web services in services frameworks like CXF or XML serialization frameworks like XStream.

[Jetty](#)

The Jetty Web Server provides an HTTP server and Servlet container capable of serving static and dynamic content either from a standalone or embedded instantiations. Starting from Jetty version 7, the Jetty webserver and other core components are hosted by the Eclipse Foundation.

[JFreeChart](#)

JFreeChart is a free 100% Java chart library that makes it easy for developers to display professional quality charts in their applications.

[JGroups](#)

JGroups is a toolkit for reliable messaging. It can be used to create clusters whose nodes can send messages to each other.

[JHighlight](#)

JHighlight is an embeddable pure Java syntax highlighting library that supports Java, HTML, XHTML, XML and LZX languages and outputs to XHTML. It also supports RIFE templates tags and highlights them clearly so that you can easily identify the difference between your RIFE markup and the actual marked up source.

[JiBX](#)

JiBX is a tool for binding XML data to Java objects. It's extremely flexible, allowing you to start from existing Java code and generate an XML schema, start from an XML schema and generate Java code, or bridge your existing code to a schema that represents the same data. It also provides very high performance, outperforming all other Java data binding tools across a wide variety of tests.

[JLine](#)

JLine is a Java library for handling console input. It is similar in functionality to BSD editline and GNU readline. People familiar with the readline/editline capabilities for modern shells (such as bash and tcsh) will find most of the command editing features of JLine to be familiar.

[JMatIO](#)

Matlab's MAT-file I/O API in JAVA. Supports Matlab 5 MAT-file format reading and writing. Written in pure JAVA.

[JMESPath Java](#)

JMESPath is a query language for JSON. You can extract and transform elements from a JSON document. This is a Java implementation

JMS

The Java Message Service (JMS) API provides a common way for Java programs to create, send, receive and read an enterprise messaging system's messages.

JNDI (Java Naming and Directory Interface)

The Java Naming and Directory Interface (JNDI) is part of the Java platform, providing applications based on Java technology with a unified interface to multiple naming and directory services. You can build powerful and portable directory-enabled applications using this industry standard.

Joda-Convert

Joda-Convert provides a small set of classes to provide round-trip conversion between Objects and Strings. It does not tackle the wider problem of Object to Object transformation.

Joda-Time

Joda-Time provides a quality replacement for the Java *date* and *time* classes. The design allows for multiple *calendar* systems, while still providing a simple API. The 'default' calendar is the http://www.joda.org/joda-time/cal_iso.html standard which is used by XML. The Gregorian, Julian, Buddhist, Coptic, Ethiopic and Islamic systems are also included, and we welcome further additions. Supporting classes include time zone, duration, format and parsing.

JOL (Java Object Layout)

JOL (Java Object Layout) is the tiny toolbox to analyze object layout schemes in JVMs. These tools are using Unsafe, JVMTI, and Serviceability Agent (SA) heavily to decoder the *actual* object layout, footprint, and references.

Jolokia

Jolokia is a JMX-HTTP bridge giving an alternative to JSR-160 connectors. It is an agent-based approach with support for many platforms. In addition to basic JMX operations it enhances JMX remoting with unique features like bulk requests and fine-grained security policies.

JOpt Simple

JOpt Simple is a Java library for parsing command line options, such as those you might pass to an invocation of `javac`.

jqPlot

jqPlot is a plotting and charting plugin for the jQuery Javascript framework.

jQuery

jQuery is a fast, small, and feature-rich JavaScript library. It makes things like HTML document traversal and manipulation, event handling, animation, and Ajax much simpler with an easy-to-use API that works across a multitude of browsers. With a combination of versatility and extensibility, jQuery has changed the way that millions of people write JavaScript.

jQuery CheckBoxTree

A jQuery based checkbox tree plugin that displays your hierarchical data in a tree structure with checkboxes.

[jquery-cookie](#)

jQuery plugin for reading, writing and deleting cookies.

[jquery.datatables](#)

DataTables is a plug-in for the jQuery Javascript library. It is a highly flexible tool, based upon the foundations of progressive enhancement, which will add advanced interaction controls to any HTML table.

[jquery.dataTables.columnFilter](#)

Adds advanced filter capabilities to the DataTables. JS file.

[jQueryFileUpload](#)

File Upload widget with multiple file selection, drag&drop support, progress bar, validation and preview images, audio and video for jQuery.

[jquery.TypeScript.DefinitelyTyped](#)

TypeScript Definitions (d.ts) for jquery.

[jQuery.Gantt](#)

Draw Gantt charts with the famous jQuery ease of development.

[jQuery Highlight](#)

Highlights the search keywords/terms in a preview.

[jQuery-JSON](#)

A JSON plugin for jQuery, provides simple ways to convert to JSON and back again.

[jQuery.jstree](#)

jsTree is a jquery plugin, that provides interactive trees. jsTree is easily extendable, themable and configurable, it supports HTML & JSON data sources, AJAX & async callback loading.

[jQuery Splitter](#)

A splitter plugin for jQuery.

[jQuery UI](#)

jQuery UI is a set of user interface interactions, effects, widgets, and themes built on top of the jQuery JavaScript Library.

[jQuery.UI.Combined](#)

jQuery UI is an open source library of interface components - interactions, full-featured widgets, and animation effects - based on the stellar jQuery javascript library . Each component is built according to jQuery's event-driven architecture (find something, manipulate it) and is themeable, making it easy for developers of any skill level to integrate and extend into their own code.

[jQuery UI Combobox](#)

Customizations and enhancements to the jQuery UI library

[jQuery UI Touch Punch](#)

Javascript plugin for adding touch support to jQuery.

[jQuery Validation](#)

This jQuery plugin makes simple clientside form validation trivial, while offering lots of option for customization. That makes a good choice if you're building something new from

scratch, but also when you're trying to integrate it into an existing application with lots of existing markup. The plugin comes bundled with a useful set of validation methods, including URL and email validation, while providing an API to write your own methods.

Jscape SFTP

Secure FTP Factory is a set of Java based client components for secure file transfer. Including Java FTP (File Transfer Protocol), Java FTPS (FTP over SSL), Java SFTP (FTP over SSH) and Java SCP (Secure Copy over SSH) components developers will appreciate the easy-to-use API making it possible to transfer files securely using just a few lines of code.

JSch (Java Secure Channel)

JSch is a pure Java implementation of SSH2. JSch allows you to connect to an sshd server and use port forwarding, X11 forwarding, file transfer, etc., and you can integrate its functionality into your own Java programs.

Jscolor

jscolor is a web color picker component.

JSON-js

JSON is a light-weight, language independent, data interchange format. See <http://www.JSON.org> / The files in this collection implement JSON encoders/decoders in JavaScript. JSON became a built-in feature of JavaScript when the ECMAScript Programming Language Standard - Fifth Edition was adopted by the ECMA General Assembly in December 2009. Most of the files in this collection are for applications that are expected to run in obsolete web browsers. For most purposes, json2.js is the best choice.

Json.NET

Json.NET is a popular high-performance JSON framework for .NET.

json-path

Java port of Stefan Goessner JsonPath.

JSON Small and Fast Parser

JSON (JavaScript Object Notation) is a lightweight data-interchange format. It is easy for humans to read and write. It is easy for machines to parse and generate. It is based on a subset of the JavaScript Programming Language, Standard ECMA-262 3rd Edition - December 1999. JSON is a text format that is completely language independent but uses conventions that are familiar to programmers of the C-family of languages, including C, C++, C#, Java, JavaScript, Perl, Python, and many others.

Json-smart

Json-smart is a performance focused, JSON processor lib.

JSON Schema Faker

Use JSON Schema along with fake generators to provide consistent and meaningful fake data for your system.

JSON Server

Get a full fake REST API with zero coding in less than 30 seconds. Created for front-end developers who need a quick back-end for prototyping and mocking.

jsoup

jsoup is a Java library for working with real-world HTML. It provides a very convenient API

for extracting and manipulating data, using the best of DOM, CSS, and jquery-like methods.

JSR 311: JAX-RS

This JSR develops an API for providing support for RESTful(Representational State Transfer) Web Services in the Java Platform.

JSTL (JavaServer Pages Standard Tag Library)

JavaServer Pages Standard Tag Library (JSTL) encapsulates as simple tags the core functionality common to many Web applications.

jsTree

jsTree is jquery plugin, that provides interactive trees. It is absolutely free, open source and distributed under the MIT license. jsTree is easily extendable, themable and configurable, it supports HTML & JSON data sources and AJAX loading.

JTA (Java Transaction API)

The `javax.transaction` package. It is appropriate for inclusion in a classpath, and may be added to a Java 2 installation.

jTDS

jTDS is an open source 100% pure Java (type 4) JDBC 3.0 driver for Microsoft SQL Server (6.5, 7, 2000, 2005, 2008 and 2012) and Sybase Adaptive Server Enterprise (10, 11, 12 and 15). jTDS is based on FreeTDS and is currently the fastest production-ready JDBC driver for SQL Server and Sybase ASE.

JUH

Helper library for Java UNO.

JUnit

JUnit is a simple framework to write repeatable tests. It is an instance of the xUnit architecture for unit testing frameworks.

Juniversalchardet

Java port of universalchardet.

JURT (Java Uno RunTime)

JURT is the core of Java-UNO and the Java UNO language binding. It includes base functionality for accessing bridges/mappings and environments. Also some basic components are placed here (like components placed in stoc for binary uno).

JustSystems XMetaL

JustSystems XMetaL is an XML editor for structured authoring.

Karma

Karma is a tool which spawns a web server that executes source code against test code for each of the browsers connected. The results for each test against each browser are examined and displayed via the command line to the developer such that they can see which browsers and tests passed or failed

Katana

Katana is a flexible set of components for building and hosting OWIN-based web applications on .NET Framework.

Kiama

The Kiama test library contains a collection of examples, tests that use those examples, and useful test support code.

Kibana

Kibana is a free and open-user interface enabling visualization of Elasticsearch data and navigation of the Elastic Stack.

Knockout JavaScript library

Knockout is a JavaScript library that helps you to create rich, responsive display and editor user interfaces with a clean underlying data model. Any time you have sections of UI that update dynamically (e.g., changing depending on the user's actions or when an external data source changes), KO can help you implement it more simply and maintainably.

knockoutjs

A JavaScript MVVM library to help you create rich, dynamic user interfaces with clean maintainable code.

KnockoutJS.Validation

A validation plugin for KnockoutJS.

knockout.TypeScript.DefinitelyTyped

TypeScript Definitions (d.ts) for knockout.

knockout.validation.typeScript.DefinitelyTyped

TypeScript Definitions (d.ts) for knockout.validation.

Kotlin

Kotlin is a cross-platform, statically typed, general-purpose programming language with type inference. Kotlin is designed to interoperate fully with Java, and the JVM version of its standard library depends on the Java Class Library, but type inference allows its syntax to be more concise.

Korzh

Ad-hoc query builder is a useful addition to WebForms and the MVC web-app that requires some functionality for advanced searching and/or filtering.

Kryo

Kryo is a fast and efficient binary object graph serialization framework for Java. The goals of the project are high speed, low size, and an easy to use API. The project is useful any time objects need to be persisted, whether to a file, database, or over the network.

Kryo can also perform automatic deep and shallow copying/cloning. This is direct copying from object to object, not object to bytes to object.

Kubernetes

Kubernetes is an open-source system for automating deployment, scaling, and management of containerized applications.

kXML 2

kXML is a small XML pull parser, specially designed for constrained environments such as Applets, Personal Java or MIDP devices. In contrast to kXML 1, kXML 2 is based on the XML pull API.

[Larson Convert CGM to Vector](#)

Converts CGM vector elements, including lines, text, bezier curves and filled paths, to equivalent PDF context preserving fonts and retaining graphical accuracy.

[LatencyUtils](#)

The LatencyUtils package includes useful utilities for tracking latencies. Especially in common in-process recording scenarios, which can exhibit significant coordinated omission sensitivity without proper handling.

[LDAP C SDK](#)

The C LDAP Application Program Interface Internet Draft defines a set of API functions that you can use to build LDAP-enabled clients. The functionality implemented in this SDK closely follows the interfaces outlined in the Internet Draft, which should become an RFC someday. Using the functionality provided with this SDK, you can enable your clients to connect to LDAPv3-compliant servers and perform standard LDAP functions.

[Less](#)

Less is a CSS pre-processor, meaning that it extends the CSS language, adding features that allow variables, mix-ins, functions and many other techniques that allow you to make CSS that is more maintainable, themable and extendable.

[linq.js](#)

Linq to Objects for JavaScript.

[linq.js-jQuery](#)

Linq to Objects for JavaScript. This version is plugin integrated with jQuery.

[linq.TypeScript.DefinitelyTyped](#)

TypeScript Definitions (d.ts) for linq. Generated based off the DefinitelyTyped repository [git commit: 44592d79b86a2b940212511775d92b437e54ceea]. <http://github.com/DefinitelyTyped>.

[Liquibase](#)

Liquibase provides source control for your database.

[Lodash](#)

Lodash is a JavaScript library which provides utility functions for common programming tasks using the functional programming paradigm.

[Logback](#)

Logback is intended as a successor to the popular log4j project, picking up where log4j leaves off.

[Logstash](#)

Logstash is a free and open server-side data processing pipeline that ingests data from a multitude of sources, transforms it, and then sends it to your favorite "stash."

[Lombok](#)

Project Lombok is a java library that automatically plugs into your editor and build tools, spicing up your java. Never write another getter or equals method again, with one annotation your class has a fully featured builder, Automate your logging variables, and much more.

[Lucene.Net](#)

Lucene.Net is a high performance search engine library for .NET.

[Lucene.Net.Contrib](#)

Lucene.Net Contrib adds a set of advanced functionalities to Lucene.net, like faceted search, spatial queries, highlighters, spell check and more.

[Magick.NET](#)

ImageMagick is a powerful image manipulation library that supports over 100 major file formats (not including sub-formats). With Magick.NET you can use ImageMagick without having to install ImageMagick on your server or desktop.

[Magnific Popup](#)

Magnific Popup is a responsive lightbox & dialog script with focus on performance and providing best experience for user with any device (for jQuery or Zepto.js).

[MapStruct](#)

MapStruct is a code generator that greatly simplifies the implementation of mappings between Java bean types based on a convention over configuration approach. The generated mapping code uses plain method invocations and thus is fast, type-safe and easy to understand.

[Markdig.Signed](#)

Markdig is a fast, powerful, CommonMark compliant, extensible Markdown processor for .NET.

[marked](#)

Marked is:

- built for speed
- a low-level markdown compiler for parsing markdown without caching or blocking for long periods of time
- light-weight while implementing all markdown features from the supported flavors & specifications
- available as a command line interface (CLI) and running in client- or server-side JavaScript projects

[matches-selector](#)

Check if an element matches a given selector.

[MathJAX](#)

MathJax is an open-source JavaScript display engine for LaTeX, MathML, and AsciiMath notation that works in all modern browsers. It was designed with the goal of consolidating the recent advances in web technologies into a single, definitive, math-on-the-web platform supporting the major browsers and operating systems.

[memoize-one](#)

memoize-one is a memoization library which only remembers the latest invocation.

[Metadata Extractor](#)

Java library for extracting EXIF, IPTC, XMP, ICC and other metadata from image and video files.

Metrics.NET.Graphite

Graphite reporter for Metrics.NET.

Micrometer

Micrometer provides a simple facade over the instrumentation clients for the most popular monitoring systems, allowing you to instrument your JVM-based application code without vendor lock-in. Think SLF4J, but for metrics.

Microsoft Application Request Routing 3.0 (IIS ARR)

This is an extension that provides rule-based routing. This further enables Web application scalability through load balancing and distributed disk caching

Microsoft ASP.NET Cors

This package contains the core components to enable Cross-Origin Resource Sharing (CORS) in ASP.NET.

Microsoft ASP.NET.SignalR

This package pulls in the server components and JavaScript client required to use SignalR in an ASP.NET application.

Microsoft ASP.NET.SignalR.Core

Async signaling library for .NET to help build real-time, multi-user interactive web applications.

Microsoft ASP.NET Identity Core

Core interfaces for ASP.NET.

Microsoft ASP.NET.Identity.Owin

Owin implementation for ASP.NET Identity.

Microsoft ASP.NET MVC

This package contains the runtime assemblies for ASP.NET MVC. ASP.NET MVC gives you a powerful, patterns-based way to build dynamic websites that enables a clean separation of concerns and that gives you full control over markup.

Microsoft ASP.NET.Odata

This package contains everything you need to create OData v4.0 endpoints using ASP.NET Web API and to support OData query syntax for your web APIs.

Microsoft ASP.NET Razor

This package contains the runtime assemblies for ASP.NET Web Pages. ASP.NET Web Pages and the new Razor syntax provide a fast, terse, clean and lightweight way to combine server code with HTML to create dynamic web content.

Microsoft ASP.NET Web API

This package contains everything you need to host ASP.NET Web API on IIS. ASP.NET Web API is a framework that makes it easy to build HTTP services that reach a broad range of clients, including browsers and mobile devices. ASP.NET Web API is an ideal platform for building RESTful applications on the .NET Framework.

RWS uses the Web API client libraries, core libraries, the API for OData 4.0, and the Web host.

Microsoft ASP.NET.WebApi.Cors

This package contains the components to enable Cross-Origin Resource Sharing (CORS) in ASP.NET Web API.

Microsoft ASP.NET.WebApi.HelpPage

The ASP.NET Web API Help Page automatically generates help page content for the web APIs on your site. Visitors to your help page can use this content to learn how to call your web APIs. Everything generated by the help page is fully customizable using ASP.NET MVC and Razor. ASP.NET Web API Help Page is a great addition to any ASP.NET Web API project.

Microsoft ASP.NET.WebApi.Owin

This package allows you to host ASP.NET Web API within an OWIN server and provides access to additional OWIN features.

Microsoft ASP.NET.WebApi.WebHost

This package contains everything you need to host ASP.NET Web API on IIS. ASP.NET Web API is a framework that makes it easy to build HTTP services that reach a broad range of clients, including browsers and mobile devices. ASP.NET Web API is an ideal platform for building RESTful applications on the .NET Framework.

Microsoft ASP.NET.WebHelpers

This package contains web helpers to easily add functionality to your site such as Captcha validation, Twitter profile and search boxes, Gravatars, Video, Bing search, site analytics or themes.

Microsoft ASP.NET Web Optimization

ASP.NET Optimization introduces a way to bundle and optimize CSS and JavaScript files.

Microsoft ASP.NET Web Pages

This package contains core runtime assemblies shared between ASP.NET MVC and ASP.NET Web Pages.

Microsoft ASP.NET Web Pages Data

This package contains the runtime assemblies for ASP.NET Web Pages. ASP.NET Web Pages and the new Razor syntax provide a fast, terse, clean and lightweight way to combine server code with HTML to create dynamic web content.

Microsoft ASP.NET WebPages.WebData

This package contains the runtime assemblies for ASP.NET Web Pages. ASP.NET Web Pages and the new Razor syntax provide a fast, terse, clean and lightweight way to combine server code with HTML to create dynamic web content.

Microsoft Azure Active Directory Identity Model Extensions for .NET

IdentityModel Extensions for .NET provide assemblies that are interesting for web developers that wish to use federated identity providers for establishing the caller's identity.

Microsoft Azure Active Directory Software Development Kit for .NET

The repository for active development of the Azure SDK for .NET. For consumers of the SDK, Microsoft recommends visiting their [public developer docs](#) or their versioned [developer docs](#).

Microsoft CoreFx

CoreFX is the foundational class libraries for .NET Core. It includes types for collections, file systems, console, JSON, XML, async and many others.

Microsoft Entity Framework Core

Entity Framework (EF) Core is a lightweight, extensible, open source and cross-platform version of the popular Entity Framework data access technology.

Microsoft.Extensions

.NET APIs for commonly used programming patterns and utilities, such as dependency injection, logging, and configuration.

Microsoft Internet Explorer

Microsoft Internet Explorer is a series of graphical web browsers developed by Microsoft and included in the Microsoft Windows line of operating systems, starting in 1995.

Microsoft JDBC Driver for SQL Server

Microsoft provides a Java Database Connectivity (JDBC) driver for use with SQL Server, and Azure SQL Database. The driver provides Java database connectivity from any Java application, application server, or Java-enabled applet. This driver is a Type 4 JDBC driver that provides database connectivity through the standard JDBC application program interfaces (APIs).

Microsoft Management Console (MMC)

This is a component which provides system administrators an interface for system configuration and monitoring.

Microsoft.Odata.Core

Classes to serialize, deserialize and validate OData JSON payloads. Supports OData v4 only. Enables construction of OData producers and consumers. Targets .NET Core 5, and .NET Portable Lib with support for .NET 4.0, SL 5.0, Win Phone 8, Win Phone 8.1, and Win 8. Localized for CHS, CHT, DEU, ESN, FRA, ITA, JPN, KOR and RUS.

OData .NET library is open source at <http://github.com/OData/odata.net>.

Microsoft.Odata.Edm

Classes to represent, construct, parse, serialize and validate entity data models. Supports OData v4 only. Targets .NET Core 5, and .NET Portable Lib with support for .NET 4.0, SL 5.0, Win Phone 8, Win Phone 8.1, and Win 8. Localized for CHS, CHT, DEU, ESN, FRA, ITA, JPN, KOR and RUS.

OData .NET library is open source at <http://github.com/OData/odata.net>.

Microsoft OLE DB Driver for SQL Server

The Microsoft OLE DB Driver for SQL Server provides native connectivity from Windows to Microsoft SQL Server and Microsoft Azure SQL Database.

Microsoft.Owin

Provides a set of helper types and abstractions for simplifying the creation of OWIN components.

Microsoft.Owin.Cors

This package contains the components to enable Cross-Origin Resource Sharing (CORS) in OWIN middleware.

Microsoft.Owin.Diagnostics

This package provides middleware components to assist in developing OWIN-based applications.

Microsoft.Owin.Host.HttpListener

OWIN server built on the .NET Framework's HttpListener class. Currently the default server used for self-hosting.

Microsoft.Owin.Host.SystemWeb

OWIN server that enables OWIN-based applications to run on IIS using the ASP.NET request pipeline.

Microsoft.Owin.Hosting

Provides default infrastructure types for hosting and running OWIN-based applications.

Microsoft.Owin.Security

Common types which are shared by the various authentication middleware components.

Microsoft.Owin.Security.Cookies

Middleware that enables an application to use cookie based authentication, similar to ASP.NET's forms authentication.

Microsoft.Owin.Security.OAuth

Middleware that enables an application to support any standard OAuth 2.0 authentication workflow.

Microsoft.Owin.SelfHost

Includes components needed to host an OWIN-based application in a custom process.

Microsoft.Owin.StaticFiles

This package contains OWIN middleware that handle requests for file system resources including files and directories.

Microsoft BCL Build Components

This package provides build infrastructure components so that projects referencing specific Microsoft packages can successfully build. Do not directly reference this package unless you receive a build warning that instructs you to add a reference.

Microsoft BCL Portability Pack

This packages enables projects targeting down-level platforms to use some of the types added in later versions.

Microsoft Data UnitTesting

Part of Visual Studio, the Microsoft.VisualStudio.TestTools.UnitTesting namespace supplies classes that provide unit testing support.

Microsoft Enterprise Library

Microsoft Enterprise Library is a collection of application blocks designed to assist developers with common enterprise development challenges. Application blocks are a type of guidance, provided as source code that can be used "as is," extended, or modified by developers for use in their development projects.

Microsoft.EntityFrameworkCore.Sqlite

SQLitePCLRaw is a Portable Class Library (PCL) for low-level (raw) access to SQLite.

Microsoft HTTP Client Libraries

This package includes `HttpClient` for sending requests over HTTP, as well as `HttpRequestMessage` and `HttpResponseMessage` for processing HTTP messages. This package is not supported in Visual Studio 2010, and is only required for projects targeting .NET Framework 4.5, Windows 8, or Windows Phone 8.1 when consuming a library that uses this package.

Microsoft jQuery Unobtrusive Ajax

jQuery plugin that unobtrusively sets up jQuery Ajax.

Microsoft jQuery Unobtrusive Validation

jQuery plugin that unobtrusively sets up jQuery.Validation.

Microsoft.Spatial

Contains classes and methods that facilitate geography and geometry spatial operations. Support OData v4 only. Targets .NET Portable Lib with support for .NET 4.0, SL 5.0, Win Phone 8, Win Phone 8.1, and Win 8. Localized for CHS, CHT, DEU, ESN, FRA, ITA, JPN, KOR and RUS.

Microsoft SQL Server

Microsoft SQL Server is a SQL-based relational database management system designed for use in corporate applications, both on premises and in the cloud.

Microsoft SQL Server 2012 Management Objects (SMO)

Objects designed for programmatic management of Microsoft SQL Server.

Microsoft System CLR Types for SQL Server 2012

Package which translates SQL Server 2012 data types to .NET equivalents.

Microsoft System.Management

System.Management provides access to a rich set of management information and management events about the system, devices, and applications instrumented to the Windows Management Instrumentation (WMI) infrastructure.

Microsoft TraceEvent Library

The `Microsoft.Diagnostics.Tracing.TraceEvent` library provides Event Tracing for Windows (ETW), a powerful logging mechanism built into the Windows OS and used extensively in Windows. You can also log ETW events yourself using the `System.Diagnostics.Tracing.EventSource` class. The `TraceEvent` library contains the classes needed to control ETW providers (including .NET `EventSources`) and parse the events they emit. The library includes:

- `TraceEventSession` which can enable ETW providers
- `EtwTraceEventSource` which lets you read the stream of ETW events
- `TraceLog` which is a digested form of ETW events which include decoded stack traces associated with the events

Microsoft Visual Studio (C++)

Microsoft Visual Studio is a fully featured IDE for Android, iOS, Windows, web, and cloud

Microsoft Web Administration

The `Microsoft.Web.Administration` namespace contains classes that a developer can use to administer IIS Manager. With the classes in this namespace, an administrator can read and write configuration information to `ApplicationHost.config`, `Web.config`, and

Administration.config files. For more details, see: <http://blogs.msdn.com/b/carlosag/archive/2006/04/17/microsoftwebadministration.aspx>.

Microsoft Web Infrastructure

This package contains the Microsoft.Web.Infrastructure assembly that lets you dynamically register HTTP modules at run time.

milton, endrick

Integrates your Java Web application with desktop and mobile devices for files, calendars and contacts

mimepull.jar

Provides a streaming API to access attachments parts in a MIME message.

Minlog

MinLog is a tiny Java logging library.

MKS Toolkit

PTC MKS Toolkit for Developers, the award winning and industry-leading Windows / UNIX interoperability solution, dramatically improves the compatibility between Windows and UNIX environments.

Mockito

Mockito is a mocking framework that lets you write tests with a clean & simple API. The tests are very readable and they produce clean verification errors.

Modernizr

Modernizr is a JavaScript library that detects HTML5 and CSS3 features in the user's browser.

Mozilla Universal Charset Detector

This library, also called UDE.CSharp is a compiled version of the C# port of Mozilla Universal Charset Detector.

Moment

Parses, validates, manipulates, and display dates in javascript.

MongoDB

This is a free, open-source, cross-platform, document-oriented, NoSQL database program which uses JSON-like documents with schemas. MongoDB is published under a combination of the GNU Affero General Public License and the Apache License.

Mono.Cecil

Cecil enables you to load existing managed assemblies, browse all the contained types, modify them on the fly and save back to the disk the modified assembly.

MOQ

Moq is the most popular and friendly mocking framework for .NET.

Mousetrap-Rm-Fork

Mousetrap is a simple library for handling keyboard shortcuts in Javascript.

MSCaptcha

MSCaptcha provides a user control for randomly generating CAPTCHA images.

[Murmurhash-net](#)

.NET implementation of the murmurhash.

[Mvc.JQuery.Datatables](#)

Strongly type html helpers for rendering jquery.datatables tables from IQueryable.

[MVC Web Projects](#)

Auxiliary MVC Web Project libraries.

[MVEL](#)

MVEL is a powerful expression language for Java-based applications. It provides a plethora of features and is suited for everything from the smallest property binding and extraction, to full blown scripts.

[MXP1](#)

MXP1 is a stable XmlPull parsing engine that is based on ideas from XPP and in particular XPP2 but completely revised and rewritten to take the best advantage of latest JIT JVMs such as Hotspot in JDK 1.4+.

[MySQL Community](#)

MySQL Community is used for reporting and data warehousing.

[MySQL Connector/J](#)

MySQL Connector/J is the official JDBC driver for MySQL.

[MySql.Data.EntityFrameworkCore for Entity Framework](#)

MySql.Data.EntityFrameworkCore for Entity Framework, by Oracle.

[MyWorkspace](#)

MyWorkspace is a collection of documentation and sample applications that illustrates various open source technologies (Tapestry, JGoodies, Gravity etc.) and the integration of these technologies in both standard and enterprise architectures.

[Nalpeiron](#)

The Patented (8,843,745) Nalpeiron Licensing & Analytics Service is a hosted product that enables you to control your applications and understand your Customers usage with flexible and easy to implement Software License Management.

[Namotion.Reflection](#)

.NET library with advanced reflection APIs like XML documentation reading, Nullable Reference Types (C# 8) reflection and string based type checks.

[NekoHTML](#)

NekoHTML is a simple HTML scanner and tag balancer that enables application programmers to parse HTML documents and access the information using standard XML interfaces. The parser can scan HTML files and "fix up" many common mistakes that human (and computer) authors make in writing HTML documents. NekoHTML adds missing parent elements; automatically closes elements with optional end tags; and can handle mismatched inline element tags.

[Newtonsoft.Json](#)

Json.NET is a popular high-performance JSON framework for .NET.

NetCDF

NetCDF 4 IOSP JNI Connection to C Library

Netflix OSS

Netflix OSS provides the following open-source libraries: Eureka, Zuul, Hystrix.

NetSpell

The NetSpell project is a spell checking engine written entirely in managed C# .NET code. NetSpell's suggestions for a misspelled word are generated using phonetic (sounds like) matching and ranked by a typographical (looks like) score. NetSpell supports multiple languages and the dictionaries are based on the OpenOffice Affix compression format. The library can be used in Windows or Web Form projects.

Netty/Buffer

Netty/Buffer

Netty/Codec

Netty/Codec

Netty/Codec/Http

Netty/Codec/Http

Netty/Common

Netty/Common

Netty/Handler

Netty/Handler

Netty/Handler/Proxy

Netty/Handler/Proxy

Netty/Transport

Netty/Transport

Netty/Codec/Socks

Netty/Codec/Socks

Netty/Resolver

Netty/Resolver

NHunspell

NHunspell brings the spell checking, hyphenation and thesaurus to the Microsoft® .NET Framework. NHunspell is C# library and wraps native libraries for Hunspell, Hyphen and MyThes. One design goal of this library and wrapper is to keep the source code of the included libraries as unmodified as possible. New versions of the base libraries can therefore easily adopted to NHunspell.

The integrated libraries are used in OpenOffice and they work with the dictionaries published on OpenOffice.org.

Ninject

This is an open-source dependency injector for .NET.

NJsonSchema

NJsonSchema is a .NET library to read, generate and validate JSON Schema draft v4+ schemas. The library can read a schema from a file or string and validate JSON data against it. A schema can also be generated from an existing .NET class. With the code generation APIs you can generate C# and TypeScript classes or interfaces from a schema.

NLog

NLog is a free logging platform for .NET, Silverlight and Windows Phone with rich log routing and management capabilities. NLog makes it easy to produce and manage high-quality logs for your application regardless of its size or complexity.

Node.js

Node.js® is a platform built on Chrome's JavaScript runtime for easily building fast, scalable network applications. Node.js uses an event-driven, non-blocking I/O model that makes it lightweight and efficient, perfect for data-intensive real-time applications that run across distributed devices.

Noggit

Noggit is the world's fastest streaming JSON parser for Java.

Novell.Directory.Ldap.NETStandard

LDAP client library supported on the .NET Standard

npm-run-all

npm-run-all is a CLI tool to run multiple npm-scripts in parallel or sequential.

nQuant

Library used for compressing images on HTML previews.

NSubstitute

A friendly substitute for .NET mocking libraries.

NSwag

NSwag is a Swagger/OpenAPI 2.0 and 3.0 toolchain for .NET, .NET Core, Web API, ASP.NET Core, TypeScript (jQuery, AngularJS, Angular 2+, Aurelia, KnockoutJS and more) and other platforms, written in C#.

Numeral

A javascript library for formatting and manipulating numbers. <http://numeraljs.com>

Numeral.languages

Numeral.js languages (official) - A library for formatting and manipulating numbers. <http://numeraljs.com>

Object-Cloner

Object-Cloner

Objenesis

Objenesis is a small Java library that serves one purpose: to instantiate a new object of a particular class.

OData Client for .NET

LINQ-enabled client API for issuing OData queries and consuming OData JSON payloads. Supports OData v4 only. Targets .NET 4.0, and .NET Portable Lib with support for .NET

4.5, Win Phone 8, Win Phone 8.1, and Win 8. Localized for CHS, CHT, DEU, ESN, FRA, ITA, JPN, KOR and RUS.

ODataLib

ODataLib contains classes to serialize, deserialize and validate OData JSON payloads.

oidc-client-js

OpenID Connect (OIDC) and OAuth2 protocol support for browser-based JavaScript applications

Ogg and Vorbis for Java, Core

Ogg and Vorbis For Java, Core

okhttp

An HTTP+HTTP/2 client for Android and Java applications.

okio

A modern I/O API for Java.

Omnimark

OmniMark allows developers to build efficient content conversion pipelines that support the rapid insertion of multiple content filter elements without loss of processing speed.

OpenCensus

OpenCensus

OpenCSV

Opencsv is an easy-to-use CSV (comma-separated values) parser library for Java.

Open JSON

A clean-room Apache-licensed implementation of simple JSON processing.

OpenSAML

OpenSAML is a set of open source C++ & Java libraries used in support of the Shibboleth Project's implementation of the Security Assertion Markup Language (SAML).

OpenSSL

OpenSSL is an open source project that provides a robust, commercial-grade, and full-featured toolkit for the Transport Layer Security (TLS) and Secure Sockets Layer (SSL) protocols. It is also a general-purpose cryptography library.

OpenXmlPowerTools

This is a package which assists in programming with Open XML Documents (DOCX, XLSX, PPTX).

OpenXML SDK

The SDK is built on the System.IO.Packaging API and provides strongly-typed classes to manipulate documents that adhere to the Office Open XML File Formats specification.

Oracle Berkeley DB Java Edition

Oracle Berkeley DB Java Edition (free version) is an open source embeddable database allowing developers the choice of, among others, Key/Value and Java Object storage for their data model. At its core is a fast, scalable, transactional database engine with proven reliability and availability.

Oracle DB

Oracle Database is a multi-model database management system produced and marketed by Oracle Corporation.

Oracle Containers for Java

Oracle Containers for J2EE, or OC4J, provides a complete Java 2 Enterprise Edition (J2EE) 1.4-compliant environment. OC4J provides all the containers, APIs, and services mandated by the J2EE specification.

Oracle Data Provider for .NET (ODP.NET), x86 and x64

Oracle Data Provider for .NET (ODP.NET) features optimized ADO.NET data access to the Oracle database. ODP.NET allows developers to take advantage of advanced Oracle database functionality, including Real Application Clusters, XML DB, and self-updating client caches.

Oracle Data Provider for .NET (ODP.NET) x64

Oracle Data Provider for .NET (ODP.NET) features optimized ADO.NET data access to the Oracle database. ODP.NET allows developers to take advantage of advanced Oracle database functionality, including Real Application Clusters, XML DB, and self-updating client caches.

Oracle.EntityFrameworkCore

An Oracle Data Provider for .NET (ODP.NET) Entity Framework Core for Oracle Database.

Oracle Java

Java offers developers a contemporary language and platform to create the next generation of rich, scalable, and secure enterprise applications.

Oracle JavaBeans Activation Framework

With the JavaBeans Activation Framework standard extension, developers who use Java technology can take advantage of standard services to determine the type of an arbitrary piece of data, encapsulate access to it, discover the operations available on it, and to instantiate the appropriate bean to perform said operation(s).

Oracle JavaMail

The JavaMail API provides a platform-independent and protocol-independent framework to build mail and messaging applications. The JavaMail API is available as an optional package for use with the Java SE platform and is also included in the Java EE platform.

Oracle JDBC Drivers

Drivers used for making a JDBC connection from Java to an Oracle database.

Oracle.ManagedDataAccess

ODP.NET, Managed Driver is a 100% native .NET code driver. No additional Oracle Client software is required to be installed to connect to Oracle Database.

Oracle Multimedia

Oracle Multimedia integrates multimedia data with enterprise information stored in Oracle Database. Multimedia data can be stored, managed and retrieved with SQL, PL/SQL and Java in the same way as standard relational data.

Oracle PKI (Public Key Infrastructure)

Oracle public key infrastructure (PKI) is used by Oracle Enterprise Security Manager, LDAP-enabled Oracle Enterprise Manager, Oracle's Secure Socket Layer (SSL)

authentication, Oracle Database, and Oracle Application Server.

Oracle Security Developer Tools (OSDT)

Oracle Security Developer Tools provide you with the cryptographic building blocks necessary for developing robust security applications, ranging from basic tasks like secure messaging to more complex projects such as securely implementing a service-oriented architecture. The tools build upon the core foundations of cryptography, public key infrastructure, web services security, and federated identity management.

Oracle Ultra Search Query

The new Oracle Ultra Search Query API and the Email API for the Oracle 9iAS release.

org.w3c.dom

Provides the interfaces for the Document Object Model (DOM).

Orika

Orika is a Java Bean mapping framework that recursively copies data from one object to another.

OSGi Resource Locator

Part of HK2 - A light-weight and dynamic dependency injection framework. Used by various API providers that rely on META-INF/services mechanism to locate providers.

OWASP Java HTML Sanitizer

The OWASP HTML Sanitizer is a fast and easy to configure HTML Sanitizer written in Java which lets you include HTML authored by third-parties in your web application while protecting against XSS.

Owin

OWIN IAppBuilder startup interface

PATRICIA Trie in Java

An implementation of the Practical Algorithm to Retrieve Information Coded in Alphanumeric (PATRICIA).

Pentaho Data Integration (community edition)

Data Integration (or Kettle) delivers powerful Extraction, Transformation, and Loading (ETL) capabilities, using a ground breaking, metadata-driven approach.

PhantomJS

PhantomJS is a headless WebKit scriptable with a JavaScript API. It has fast and native support for various web standards: DOM handling, CSS selector, JSON, Canvas, and SVG.

PHP

PHP is a scripting language used for server-side rendering.

Pikaday

A JavaScript Datepicker.

Polar SpellChecker

Polar SpellChecker for .NET enables you to implement wide range of spell checking features in your application using a .NET interface.

Polly

This is a .NET resilience and transient-fault-handling library which allows developers to express policies such as: Retry, Circuit, Breaker, Timeout, Bulkhead Isolation, and Fallback.

Postal.Mvc5

Generate emails using ASP.NET MVC views

PostgreSQL JDBC driver

PostgreSQL JDBC Driver (PgJDBC for short) allows Java programs to connect to a PostgreSQL database using standard, database independent Java code. Is an open source JDBC driver written in Pure Java (Type 4), and communicates in the PostgreSQL native network protocol.

PostSharp

This is a Visual Studio extension including ready-made implementations of the most common patterns found in .NET.

Progress® DataDirect® drivers

Progress® DataDirect® offers unique data connectivity solutions for enterprises needing to better integrate data across relational, big data and cloud databases.

Project Reactor

Reactor is a fourth-generation Reactive library for building non-blocking applications on the JVM based on the Reactive Streams Specification.

Proto Google Common Protos

PROTO library for proto-google-common-protos

PS Cmdlet Help Editor

PowerShell Cmdlet Help Editor is the tool that helps you to create and edit XML-based help files for your PowerShell modules and PSSnap-Ins.

Purify

PurifyPlus™ software is a set of dynamic software analysis tools that help you improve application reliability and performance. PurifyPlus software offers memory debugging, memory leak detection, performance profiling, and code coverage analysis. PurifyPlus helps you locate errors in your code, identify performance bottlenecks as well as untested code, and analyze each component even those without source code.

Python

Python is a programming language that lets you work more quickly and integrate your systems more effectively.

Q

A library for making and composing asynchronous promises in JavaScript.

Q.TypeScript.DefinitelyTyped

TypeScript Definitions (d.ts) for q. Generated based off the DefinitelyTyped repository [git commit: 13308a020d67ad90337790d51f635747e307161c]. <http://github.com/DefinitelyTyped>.

Quartz

Quartz is a richly featured, open source job scheduling library that can be integrated

within virtually any Java application - from the smallest stand-alone application to the largest e-commerce system.

[query-string](#)

query-string Parse and stringify URL query strings

[Qunit](#)

A JavaScript unit testing framework used by the jQuery, jQuery UI and jQuery Mobile projects to test any generic JavaScript code.

[RabbitMQ Server](#)

This is an open-source, scalable implementation of an AMQP broker, a message broker software.

[RaptorDB](#)

This is a JSON-based, small size, NoSQL document store database which offers hybrid bitmap indexing and LINQ query filters.

[RazorEngine](#)

RazorEngine - A Templating Engine based on the Razor parser.

[RazorGenerator.Mvc](#)

MVC View engine that supports precompiled Razor views.

[React](#)

React is a JavaScript library for building user interfaces.

[ReactJS](#)

React is a JavaScript library for building user interfaces.

[react-addons-create-fragment](#)

Used to reorder react children elements in the DOM.

[react-app-polyfill](#)

Polyfills for various browsers including commonly used language features.

[react-collapsed](#)

react-collapsed is a tiny React custom-hook for creating flexible and accessible expand/collapse components.

[react-dnd](#)

react-dnd implements drag and drop for React.

[react-dom](#)

React package for working with the DOM.

[react-dropzone](#)

react-dropzone implements a simple HTML5 drag-drop zone with React.js.

[react-helmet](#)

react-helmet is a document head manager for React.

[react-i18next](#)

react-i18next implements internationalization for react using the i18next i18n ecosystem.

Reactive Streams

A Protocol for Asynchronous Non-Blocking Data Sequence

react-localize-redux

Localization library for handling translations in React.

react-pure-renders

A function, a component and a mixin for React pure rendering.

Reactor Core

Reactor Core is a non-blocking reactive foundation for the JVM.

react-redux

Official React bindings for Redux.

react-resize-detector

react-resize-detector is a cross-browser, event-based, element resize detection library for React.

react-router

react-router is an implementation of declarative routing for React.

react-router-dom

DOM bindings for React Router.

react-router-page-transition

Highly customizable page transition component for your React Router.

react-scripts

Configuration and scripts for Create React App.

react-smooth-dnd

react-smooth-dnd is a set of React wrapper components for smooth-dnd.

react-spring

react-spring is a spring physics-based React animation library.

react-sticky

Sticky component for React.

react-transition-group

A react component toolset for managing animations.

react-widgets

A set of polished, extensible, and accessible form inputs built for React.

react-window

react-window is a set of React components for efficiently rendering large lists and tabular data.

reCaptcha.AspNet.Mvc

Google reCaptcha ASP.NET MVC.

Red Hat Linux

Red Hat Enterprise Linux OpenStack Platform delivers an integrated foundation to create, deploy, and scale a secure and reliable public or private OpenStack cloud. Red Hat

Enterprise Linux OpenStack Platform combines the world's leading enterprise Linux and the fastest-growing cloud infrastructure platform to give you the agility to scale and quickly meet customer demands without compromising on availability, security, or performance.

Redis

Redis is an open source (BSD licensed), in-memory data structure store, used as database, cache and message broker. It supports data structures such as strings, hashes, lists, sets, sorted sets with range queries, bitmaps, hyperloglogs and geospatial indexes with radius queries. Redis has built-in replication, Lua scripting, LRU eviction, transactions and different levels of on-disk persistence, and provides high availability via Redis Sentinel and automatic partitioning with Redis Cluster.

redux

Predictable state container for JavaScript apps.

redux-saga

Saga middleware for Redux to handle Side Effects.

ReflectASM

ReflectASM is a very small Java library that provides high performance reflection by using code generation. An access class is generated to set/get fields, call methods, or create a new instance. The access class uses bytecode rather than Java's reflection, so it is much faster. It can also access primitive fields via bytecode to avoid boxing.

Relinq

With re-linq, it's now easier than ever to create full-featured LINQ providers. Yes, you've heard that before. But re-linq is the real thing: it is used by Entity Framework 7 and NHibernate.

re-motion Framework

This is an open-source, development framework for .NET under the LPGL License.

Reprise License Manager

The Reprise License Manager (RLM) is a flexible and easy-to-use license manager with the power to serve enterprise users, and it comes to you from the creators of FLEXlm.

RequireJS

RequireJS is a JavaScript file and module loader. It is optimized for in-browser use, but it can be used in other JavaScript environments.

requirejs.TypeScript.DefinitelyTyped

TypeScript Definitions (d.ts) for requirejs.

Restlet Core API and Engine

RESTful web framework for Java (API and Engine).

Restlet Extension Servlet

Integration with Servlet API.

Robot Framework

Robot Framework is a generic test automation framework for acceptance testing and acceptance test-driven development (ATDD).

ROME

All Roads Lead to ROME. ROME is a set of Atom/RSS Java utilities that make it easy to work in Java with most syndication formats. Today it accepts all flavors of RSS (0.90, 0.91, 0.92, 0.93, 0.94, 1.0 and 2.0), Atom 0.3 and Atom 1.0 feeds. Rome includes a set of parsers and generators for the various flavors of feeds, as well as converters to convert from one format to another. The parsers can give you back Java objects that are either specific for the format you want.

ROME Utilities

Utility classes for ROME projects.

Roslyn

Roslyn provides open-source C# and Visual Basic compilers with rich code analysis APIs. It enables building code analysis tools with the same APIs that are used by Visual Studio.

Rsyslog

Rsyslog is a central logging tool.

Rx .NET

Reactive Extensions for .NET library used to validate entered values

RxJS Library

RxJS (Reactive Extensions for JavaScript) is a library for reactive programming using observables that makes it easier to compose asynchronous or callback-based code.

SAAJ (SOAP with Attachments API for Java)

SOAP with Attachments API for Java (SAAJ) support for Spring-WS soap message infrastructure.

SAC

Using the SAC I/O library, one can write stand-alone codes in C or FORTRAN to read and write SAC formatted data files.

SafeNet Sentinel

SafeNet's Sentinel software licensing products and software protection solutions provides software publishers control and visibility into how their applications are deployed and used.

SAML Suite

The SAML Suite for ASP.NET includes the SAML v1.1 component for ASP.NET and the SAML v2.0 components for ASP.NET and ASP.NET Core. The SAML components are fully compliant with the OASIS Security Assertion Markup Language specifications and enable SAML SSO from ASP.NET web applications.

SAX (Simple API for XML)

SAX is the Simple API for XML, originally a Java-only API. SAX was the first widely adopted API for XML in Java, and is a "de facto" standard. The current version is SAX 2.0.1, and there are versions for several programming language environments other than Java.

SAX for Pascal

SAX is the Simple API for XML, originally a Java-only API. SAX was the first widely adopted API for XML in Java, and is a de facto standard.

Saxon

Saxon is an XSLT processor for transforming XML documents into HTML, text, or other XML document types. It implements XSL Transformations (XSLT) and XML Path Language (XPath) and can be used from the command line, in an applet or a servlet, or as a module in other program.

Saxon

Saxon 9 is an XSLT processor for transforming XML documents into HTML, text, or other XML document types. It implements XSL Transformations (XSLT) Version 2.0 and XML Path Language (XPath) Version 2.0 and can be used from the command line, in an applet or a servlet, or as a module in other program.

Scala

The Scala programming language fuses object-oriented and functional programming in a statically typed programming language. It is aimed at the construction of components and component systems.

Scallop

Scallop is a command line parser.

Schlichtherle TrueZip

This module provides the TFile* classes for simple, uniform, transparent, thread-safe, read/write access to archive files as if they were virtual directories in a file system path. This module also provides Swing GUI classes for viewing file trees and choosing entries in archive files.

ScriptUtils(ASPForm x64)

This installation package contains ScriptUtilities libraries.

SDI Convert

SDI Convert provides graphics file conversion for CAD, CAE, Maps, Seismic & Well Logs.

Selenium.WebDriver

A set of tools supporting browser automation.

SentimentAnalysisParser

Combines Apache OpenNLP and Apache Tika and provides facilities for automatically deriving sentiment from text.

Sentry Spelling Checker Engine

Sentry Spelling Engine is a Windows DLL you can call from your applications to add a powerful, professional quality spell checker in minutes. The Sentry Windows SDK includes everything you need to integrate the Sentry DLL with your apps.

Serilog

This is an open-source, diagnostic logging library for .NET applications.

SFTP

SFTP.

SharpCompress

SharpCompress is a compression library for .NET/Mono/Silverlight/WP7/WindowsStore that can unrar, decompress 7zip, zip/unzip, tar/untar bzip2/unbzip2 and gzip/ungzip with

forward-only reading and file random access APIs. Write support for zip/tar/bzip2/gzip is implemented.

[SharpZipLib](#)

SharpZipLib (#ziplib, formerly NZipLib) is a compression library for Zip, GZip, BZip2, and Tar written entirely in C# for .NET.

[SignalR](#)

ASP.NET SignalR is a new library for ASP.NET developers that makes it incredibly simple to add real-time web functionality to your applications.

[SinonJS](#)

SinonJS is a standalone test spies that stubs and mocks for JavaScript.

[SimpleInjector](#)

Simple Injector is an easy, flexible and fast dependency injection library that uses best practice to guide your solutions toward the pit of success.

[SimpleInjector.Extensions.ExecutionContextScoping](#)

The Execution Context Scoping package adds the 'Execution Context Scope' lifestyle, which allows instances to live within an explicitly defined execution context scope (or logical call context) and get disposed when this scope ends. This scope allows flowing through asynchronous method calls.

[SimpleInjector.Integration.Web](#)

The Simple Injector ASP.NET Integration package adds a lifestyle to the Simple Injector called 'Per Web Request', which allows instances to live within a single HTTP request and get disposed when the request ends.

[SimpleInjector.Integration.Web.Mvc](#)

Simple Injector ASP.NET MVC Integration.

[SimpleInjector.Integration.Web.Api](#)

Simple Injector ASP.NET MVC Integration.

[SitemapGen4j](#)

SitemapGen4j is a library to generate XML sitemaps in Java.

[SizzleJS](#)

A pure-JavaScript CSS selector engine designed to be easily dropped in to a host library.

[SLF4J](#)

The Simple Logging Facade for Java (SLF4J) serves as a simple facade or abstraction for various logging frameworks (e.g. java.util.logging, logback, log4j) allowing the end user to plug in the desired logging framework at deployment time.

[SlickGrid](#)

A JavaScript grid/spreadsheet.

[SnakeYAML](#)

YAML is a data serialization format designed for human readability and interaction with scripting languages. SnakeYAML is a YAML parser and emitter for the Java programming language.

Solr

Solr is an open source search engine used to locate XML elements and attributes, as well as content.

SNMP4J

SNMP4J is an enterprise class free open source and state-of-the-art SNMP implementation for Java™ 2SE 1.4 or later. SNMP4J supports command generation (managers) as well as command responding (agents). Its clean object oriented design is inspired by SNMP++, which is a well-known SNMPv1/v2c/v3 API for C++.

SolidFramework SDK

This is a package which gives you the possibility to create, modify and convert PDFs into a variety of editable formats.

Spark View Engine

Spark is a view engine for ASP.NET MVC and Castle Project MonoRail frameworks. The idea is to allow the html to dominate the flow and any code to fit seamlessly.

Spatial4j

Spatial4j is a general purpose spatial / geospatial ASL licensed open-source Java library. It's core capabilities are 3-fold: to provide common geospatially-aware shapes, to provide distance calculations and other math, and to read shape formats like WKT and GeoJSON.

SpecFlow NuGet package

This is a package which facilitates the transformation of human-readable specifications into automated tests.

Spin

Spin.js dynamically creates spinning activity indicators that can be used as resolution-independent replacement for AJAX loading GIFs.

Spinnaker

Spinnaker is an open-source continuous delivery platform for releasing software changes with high velocity and confidence.

SpringFox

Automated JSON API documentation for API's built with Spring.

Spring Boot

Spring Boot makes it easy to create stand-alone, production-grade Spring based Applications that you can "just run".

Spring Framework

The Spring Framework provides a comprehensive programming and configuration model for modern Java-based enterprise applications - on any kind of deployment platform. A key element of Spring is infrastructural support at the application level: Spring focuses on the "plumbing" of enterprise applications so that teams can focus on application-level business logic, without unnecessary ties to specific deployment environments.

Spring.NET

Spring.NET is an application framework that provides comprehensive infrastructural support for developing enterprise .NET applications. It allows you to remove incidental complexity when using the base class libraries makes best practices, such as test driven development, easy practices.

SQLite

SQLite is an in-process library that implements a self-contained, serverless, zero-configuration, transactional SQL database engine.

SQLitePCLRaw

SQLitePCLRaw is a Portable Class Library (PCL) for low-level (raw) access to SQLite.

Strawberry Perl

Strawberry Perl is a perl environment for MS Windows containing all you need to run and develop perl applications. It is designed to be as close as possible to perl environment on UNIX systems.

SSHTools

SSHTools is an implementation of the SSH protocol in Java.

StAX

StAX is a standard XML processing API that allows you to stream XML data from and to your application. This StAX implementation is the standard pull parser implementation for JSR-173 specification.

StAX-Ex: Extended StaX API

Extensions to JSR-173 StAX API.

StAX2

Stax2 API extends STAX to provide additional functionality that may at some point become the next Stax (via JCP process).

Steal

Steal is a collection of command line and JavaScript client utilities to build, package, and share JavaScript applications

Stimulsoft

This all-in-one solution is a comprehensive platform that includes a complete set of tools to build reports under JavaScript, ASP.NET, ASP.NET MVC, WPF, Silverlight, WinRT, HTML5, Windows Forms, PHP, Java, and Flex.

Stingray Studio

Stingray Studio provides tools for developing complex GUI applications that are easy to build, maintain, and evolve as new technologies improve the look and feel of user interfaces.

StringTemplate

StringTemplate is a java template engine (with ports for C#, JavaScript, Python) for generating source code, web pages, emails, or any other formatted text output.

StructureMap

StructureMap is a Dependency Injection / Inversion of Control tool for .Net that can be used to improve the architectural qualities of an object oriented system by reducing the mechanical costs of good design techniques.

structuremap.automocking

Test utility to instantiate a class by creating mocks for each of its dependencies.

styled-components

styled-components are visual primitives for the component age, enabling you to use ES6 and CSS to style your apps.

Sun Istack

Sun Istack.

SVG.NET

Public fork of the C# SVG rendering library. This started out as a minor modification to enable the writing of proper SVG strings. But now after almost two years we have so many fixes and improvements that we decided to share our current codebase to the public in order to improve it even further.

svg-pan-zoom

JavaScript library that enables panning and zooming of an SVG in an HTML document, with mouse events or custom JavaScript hooks.

Swagger

Swagger is a simple yet powerful representation of your RESTful API. With the largest ecosystem of API tooling on the planet, thousands of developers are supporting Swagger in almost every modern programming language and deployment environment. With a Swagger-enabled API, you get interactive documentation, client SDK generation and discoverability.

Swagger-Net

Swagger-Net combines ApiExplorer and Swagger/swagger-ui(3.x) to provide a rich discovery, documentation and playground experience to API consumers.

Swashbuckle

Swagger tooling for APIs built with ASP.NET Core.

Swashbuckle.Core

Seamlessly adds a Swagger to WebApi projects.

Syncro Soft Oxygen XML Author

XML editor for structured authoring.

System Buffers

Provides resource pooling of any type for performance-critical applications that allocate and deallocate objects frequently.

System.IO.Abstractions

Makes file access code more testable.

System.Reactive

Reactive Extensions (Rx) for .NET.

t-digest

t-digest is a new data structure for accurate on-line accumulation of rank-based statistics such as quantiles and trimmed means. The t-digest algorithm is also very friendly to parallel programs making it useful in map-reduce and parallel streaming applications implemented using, say, Apache Spark.

[**T4MVC**](#)

T4MVC is a T4 template for ASP.NET MVC apps that creates strongly typed helpers that eliminate the use of literal strings in many places.

[**T4MVCExtensions**](#)

Runtime helpers used by code generated by T4MVC.

[**T4Toolbox**](#)

T4 Toolbox extends the code generation functionality of the T4 text templates in Visual Studio 2015.

[**TagSoup**](#)

A SAX-compliant parser written in Java that, instead of parsing well-formed or valid XML, parses HTML as it is found in the wild

[**Tanuki Java Service Wrapper**](#)

The Java Service Wrapper is an application which has evolved out of a desire to solve a number of problems common to many Java applications.

[**TechTrader Bytecode Toolkit**](#)

The TechTrader Bytecode Toolkit is a library for creating and manipulating Java bytecode. The toolkit is designed to be as developer-friendly as possible, providing a rich set of high-level, intuitive APIs that abstract the developer from the details of the .class file format. Unlike some frameworks which focus on compiling another language into JVM-compatible code, the TechTrader toolkit is designed specifically to modify/enhance the bytecode of existing Java classes and create new Java classes on the fly. From adding detailed logging or performance profiling instructions to existing classes, to enhancing code for transparent data store persistence, to creating EJBs from normal Java objects, to compiling complex XSL expressions into custom classes at runtime -- it's all possible via bytecode modification.

[**Telerik**](#)

Telerik UI for ASP.NET MVC is a suite of products containing Kendo UI Professional and server wrappers for Microsoft's ASP.NET MVC framework.

[**Telerik OpenAccess**](#)

OpenAccess ORM is an Enterprise-grade ORM that does the data access plumbing in desktop and web applications.

[**Text Plugin for RequireJS**](#)

A RequireJS/AMD loader plugin for loading text resources.

[**Thinktecture IdentityModel**](#)

Helpers and client libraries for OpenID Connect, OAuth 2.0 and claims-based Identity.

[**Thinktecture IdentityServer**](#)

Front-end Secure Token Service to serve SAML tokens.

[**TidyCOM**](#)

A quorum of developers have pitched in on a SourceForge project to maintain and further develop Dave Raggett's excellent HTML Tidy program. We have two primary goals. First, to provide a home where all the patches and fixes that folks contribute can be collected and incorporated into the program. Second, a library form of Tidy has been created to make it easier to incorporate Tidy into other software.

[**Tiny MCE**](#)

JavaScript library for rich text editing

[**TNT Delphi Unicode Cont**](#)

TNT Unicode controls for Delphi.

[**TouchSwipe**](#)

TouchSwipe is a jQuery plugin to be used with jQuery on touch input devices such as iPad, iPhone etc.

[**TwelveMonkeys Common**](#)

TwelveMonkeys Common library contains common utility classes relating to languages, I/O and images.

[**TwelveMonkeys ImageIO**](#)

TwelveMonkeys ImageIO is a collection of plugins and extensions for Java's ImageIO. These plugins extends the number of image file formats supported in Java, using the `javax.imageio.*` package. The main purpose of this project is to provide support for formats not covered by the JRE itself.

[**Twitter.Typeahead**](#)

A flexible JavaScript library that provides a strong foundation for building robust typeaheads.

[**TXW2**](#)

TXW is a library that allows you to write XML documents.

[**ua-parser**](#)

A multi-language port of Browserscope's user agent parser.

[**UDUNITS**](#)

The `ucar.units` Java package is for decoding and encoding formatted unit specifications (e.g. "m/s"), converting numeric values between compatible units (e.g. between "m/s" and "knot"), and for performing arithmetic operations on units (e.g. dividing one unit by another, raising a unit to a power).

[**Unitils**](#)

Unitils is an open source library aimed at making unit and integration testing easy and maintainable. It is divided into several modules, each of them providing extra support for a certain aspect of your unit and integration tests.

[**Units of Measurement API \(javax.measure\)**](#)

Units of Measurement Standard - This JSR specifies Java packages for modeling and working with measurement values, quantities and their corresponding units.

[**Unity**](#)

The Unity Application Block (Unity) is a lightweight extensible dependency injection container with support for constructor, property, and method call injection.

[**Uno Development Kit for Apache OpenOffice**](#)

Uno stands for Universal Network Objects and is one of the accepted projects of OpenOffice.org. Uno is the component model of OpenOffice.org. Uno offers interoperability between programming languages, other components models and hardware architectures, either in process or over process boundaries, in the Intranet as

well as in the Internet. Uno components may be implemented in and accessed from any programming language for which a Uno implementation (AKA language binding) and an appropriate bridge or adapter exists.

VeracodeAnnotations

Annotations used by Veracode's software analysis framework.

Visual C++ 2008 Redistributable SP1

These are packages which install run-time components required to run C++ applications built in Visual Studio.

Visual C++ 2013 Redistributable

These are packages which install run-time components required to run C++ applications built in Visual Studio.

Visual C++ 2008 Redistributable SP1

These are packages which install run-time components required to run C++ applications built in Visual Studio.

Visual C++ 2017 Redistributable

These are packages which install run-time components required to run C++ applications built in Visual Studio.

WAFFLE

WAFFLE is a native Windows Authentication Framework consisting of two C# and Java libraries that perform functions related to Windows authentication, supporting Negotiate, NTLM and Kerberos. Waffle also includes libraries that enable drop-in Windows Single Sign On for popular Java web servers, when running on Windows. While Waffle makes it ridiculously easy to do Windows Authentication in Java, on Windows, Waffle does not work on *nix.

WAFFLE Tomcat 7

Tomcat 7 integration for WAFFLE

WebActivator

WebActivator is a NuGet package that allows other packages to easily bring in Startup and Shutdown code into a web application. This gives a much cleaner solution than having to modify global.asax with the startup logic from many packages.

WebActivatorEx

A package that allows other packages to execute some startup code in web apps. This package should be used over the older WebActivator, which was not strong named.

WebFX

Dynamic HTML samples that you can use on your own pages, all the samples may be used freely for personal use or you may change the source code for your own applications.

WebGrease

Web Grease is a suite of tools for optimizing javascript, css files and images.

WebSocket Server API

JSR 356: Java API for WebSocket.

WildFly

WildFly is an application server that implements the Java Platform, Enterprise Edition (Java EE) specification. It runs on multiple platforms.

Windows

Microsoft Windows is a group of several graphical operating system families, all of which are developed, marketed, and sold by Microsoft.

Windows Azure Storage

The `WindowsAzure.Storage` client library enables working with the Microsoft Azure storage services which include the blob and file service for storing binary and text data, the table service for storing structured non-relational data, and the queue service for storing messages that may be accessed by a client.

WinWrap Basic

WinWrap® Basic is a .NET/WPF/COM component which is an alternative to ActiveX, VBScript, VB6, VBA, Sax Basic and VSTA scripting. WinWrap provides advanced end-user scripting and automation.

WiX

The WiX toolset builds Windows installation packages from XML source code. The tool-set integrates seamlessly into build processes.

Wicket Framework

With proper mark-up/logic separation, a POJO data model, and a refreshing lack of XML, Apache Wicket makes developing web-apps simple and enjoyable again. Swap the boilerplate, complex debugging and brittle code for powerful, reusable components written with plain Java and HTML.

Woden

The Woden project is an incubation sub-project of the Apache Web Services Project to develop a Java class library for reading, manipulating, creating and writing WSDL documents, initially to support WSDL 2.0 but with the longer term aim of supporting past, present and future versions of WSDL.

Woodstox

Woodstox is a high-performance validating namespace-aware StAX-compliant (JSR-173) Open Source XML-processor written in Java.

WSDL4J (Web Services Description Language for Java Toolkit)

The Web Services Description Language for Java Toolkit (WSDL4J) allows the creation, representation, and manipulation of WSDL documents. Is the reference implementation for JSR110 'JWSDL'.

WSTX-ASL

Woodstox is a high-performance XML processor that implements Stax (JSR-173) and SAX2 APIs.

Xalan-C++

Xalan is an XSLT processor for transforming XML documents into HTML, text, or other XML document types.

Xalan-C++ version 1.10 is a robust implementation of the W3C Recommendations for XSL Transformations (XSLT) and the XML Path Language (XPath). It works with a compatible

release of the Xerces-C++ XML parser: Xerces-C++ version 2.7.0.

[Xalan-Java](#)

Xalan-Java is an XSLT processor for transforming XML documents into HTML, text, or other XML document types. It implements XSL Transformations (XSLT) Version 1.0 and XML Path Language (XPath) Version 1.0 and can be used from the command line, in an applet or a servlet, or as a module in other program.

[XCEED .NET FTP library](#)

XCEED offers efficient FTP and FTPS (FTP over SSL) file transfer to .NET or ASP.NET apps.

[Xerces-C++](#)

Xerces-C++ is a validating XML parser written in a portable subset of C++.

[Xerces Java Parser](#)

The Xerces Java Parser 1.4.4 supports the XML 1.0 recommendation and contains advanced parser functionality, such as support for the W3C's XML Schema recommendation version 1.0, DOM Level 2 version 1.0, and SAX Version 2, in addition to supporting the industry-standard DOM Level 1 and SAX version 1 APIs.

[XLIFF2-Object-Model](#)

The XLIFF 2.0 Object Model contains classes and methods for generating and manipulating XLIFF 2.0 documents as described in the XLIFF 2.0 Standard. The library is built using the Portable Class Library enabling developers to generate XLIFF documents using various platforms.

[Xming](#)

Xming is the leading X Window System Server for Microsoft Windows. It is fully featured, lean, fast, simple to install and because it is standalone native Windows, easily made portable (not needing a machine-specific installation or access to the Windows registry).

[XMLDiffPatch](#)

Generates difference files based on the comparison of two XML documents. This code is based on a very old .Net 1.0 example project.

[XML Pull Parsing](#)

An XML Pull Parsing API.

[xqDoc conversion](#)

The xqDoc conversion package is a collection of vendor-neutral Java classes with the sole responsibility of converting valid XQuery library modules and main modules into xqDoc XML.

[XStream](#)

XStream is a simple library to serialize objects to XML and back again.

[XULRunner](#)

XULRunner is a runtime environment developed by the Mozilla Foundation to provide a common back-end for previewing.

[XZ for Java \(by Tukaani\)](#)

A complete implementation of XZ data compression in pure Java.

YAF.NET

YAF.NET is an open-source software component for Web forums.

YamlDotNet

A .NET library for YAML. YamlDotNet provides low level parsing and emitting of YAML as well as a high level object model similar to XmlDocument.

yup

yup provides simple object validation.

ZipArchive library

C++ library that adds ZIP compression functionality to software.

Zip4j

Zip4j is the most comprehensive Java library for zip files or streams.

zlib

zlib is a software library used for data compression. zlib was written by Jean-loup Gailly and Mark Adler and is an abstraction of the DEFLATE compression algorithm used in their gzip file compression program.

