Tropo Third-Party Libraries

The following is a list of third-party software required for Tropo.

Product or Library	Description	Site	License	Version	Components
@nnogen	JSR-175 annotations	http://annogen.code haus.org/Overview	Apache v2 License	0.1.0	
ActiveIO	I/O Library	http://activeio.codeh aus.org/Home	Apache License	3.0.1, 3.1.2	cdr, runtime
ANTLR	General purpose lexical parser	http://www.antlr.org/l icense.html	BSD	2.7.6	gateway, runtime
AOP Alliance	Aspect-oriented programming for transactions and security	http://aopalliance.so urceforge.net/	Public Domain	1	gateway
Apache ActiveMQ	CDR JMS listener	http://activemq.apac he.org/	Apache 2.0 License	5.3	cdr, runtime
Apache Ant		http://ant.apache.org /	Apache v2 License	1.7	cdr
Apache Axiom	XML Object Model	http://ws.apache.org/ axiom/	Apache v2 License	1.2.10	cdr
Apache Axis2	Web Services / SOAP / WSDL engine for CDR	http://axis.apache.or g/axis2/java/core/	Apache v2 License	1.5.1	cdr
Apache Commons Beanutils		http://commons.apac he.org/beanutils/	Apache v2 License	1.6, 1.7, 1.8	cdr, gateway
Apache Commons CLI	Command line parsing utility	http://commons.apac he.org	Apache 2.0	1.1	gateway
Apache Commons Codec	Library of encoding/decoding algorithms	http://commons.apac he.org/codec	Apache v2 License	1.2, 1.3, 1.4	cdr, gateway
Apache Commons CSV	CDR File saving	http://commons.apac he.org/csv/	Apache v2 License	1	cdr
Apache Commons Collections	Library of abstract data types	http://commons.apac he.org/collections/	Apache v2 License	2.1.1, 3.2	cdr, gateway
Apache Commons DBCP	DB Connection Pool	http://commons.apac he.org/dbcp/	Apache v2 License	1.2.2, 1.4	cdr, gateway
Apache Commons Digester	XMP parsing	http://commons.apac he.org/digester/	Apache v2 License	2.1.1	
Apache Commons Discovery		http://commons.apac he.org/discovery/	Apache v2 License	0.4	
Apache Commons FileUpload	Management Console	http://commons.apac he.org/fileupload/	Apache v2 License	1, 1.2.1	cdr
Apache Commons io	IO utilties	http://commons.apac he.org/io	Apache v2 License	1.3.1,1.3.2, 1.4	cdr, gateway
Apache Commons Lang	String manipulation	http://commons.apac he.org/lang/	Apache	2.0, 2.6	gateway
Apache Commons lang		http://commons.apac he.org/lang	Apache v2 License	2.4	cdr

Apache Commons Logging	Logging abtraction	http://commons.apache.org/logging	Apache v2 License	1.0.4, 1.1	cdr, gateway
Apache Commons Logging		http://commons.apache.org/logging	Apache v2 License	1.1	
Apache Commons Net	Internet protocol support	http://commons.apache.org/net/	Apache v2 License	2, 3.1	cdr, gateway
Apache Commons Pool	Object Pooling library	http://commons.apache.org/dbcp/	Apache v2 License	1.3,1.5.4	cdr, gateway
Apache Commons Validator		http://commons.apache.org/validator/	Apache v2 License	1.1.4	
Apache CXF	SOAP client	http://cxf.apache.org/	Apache	2.3.2	runtime, gateway
Apache FtpServer	CDR FTP server	http://mina.apache.org/ftpserver-project/index.html	Apache v2 License	1.0.5	cdr
Apache HTTP Client	rich http client	http://commons.apache.org/httpclient	Apache v2 License	3.0.1, 3.1, 4.0.1	logger
Apache HttpCore	HTTP utility code	http://hc.apache.org/httpcomponents-core-ga/	Apache v2 License	4.0.1	logger
Apache HttpMime	MIME encoding/decoding	http://hc.apache.org/httpcomponents-client-ga/httpmime/index.html	Apache v2 License	4	
Apache Mime4J	Stream parsing of MIME data	http://james.apache.org/mime4j/	Apache v2 License	0.6	runtime
Apache Mina	Apache MINA	http://mina.apache.org/	Apache v2 License	1.1.7	
Apache Neethi		http://ws.apache.org/neethi/	Apache v2	2.0.4	cdr
Apache Rampart	Axis2 security	http://axis.apache.org/axis2/java/rampart/	Apache v2 License	1.4, 1.5	cdr
Apache Tomcat/Jasper JSP compiler		http://tomcat.apache.org/	Apache License		
Apache Velocity	Java-based template engine	http://velocity.apache.org/	Apache v2 License	1.5	cdr
Apache XML-RPC	XML-RPC library	http://ws.apache.org/xmlrpc/	Apache	3.1.3	
Apache XML-commons	common packaging for the various externally-defined standards code relating to XML - things like the DOM, SAX, and JAXP interfaces	http://xerces.apache.org/xml-commons/	Apache v2 License	1.2	
Apache Xalan	XSLT processor for transforming XML documents into HTML, text, or other XML document types	http://xml.apache.org/xalan-j/	Apache License Version 2.0	2.7.0	

Apache Web Services-Woden	Java class library for reading, manipulating, creating and writing WSDL documents	http://ws.apache.org/woden/	Apache License, Version 2.0	1.0M8	
Aspectj	AOP Library	http://www.eclipse.org/aspectj/	CPL v1.0	1.5.3, 1.6.8, 1.6.9	runtime
Avalon	instrumentation framework	http://avalon.apache.org/	Apache 2.0	4.1	
Backport-util-concurrent	Concurrent API Backport	http://backport-jsr166.sourceforge.net/	Creative Commons	2.1	
Bind	DNS server used for resource lookup and routing	http://www.isc.org/software/bind	ISC License (BSD style)		
BouncyCastle	Encryption/security library	http://www.bouncycastle.org/	Adapted MIT license	1.36, 1.39, 1.40, 1.44, 1.45	cdr
c-ares	Open Source DNS Library	http://daniel.haxx.se/projects/c-ares/	MIT (http://daniel.haxx.se/projects/c-ares/license.html)		
cglib	Code Generation Library	http://cglib.sourceforge.net/	Apache	2.1_3, 2.2	runtime
dbunit	Unit testing	http://www.dbunit.org/	LGPL	2.2	
DNSJava	Management Console / Gut	http://www.dnsjava.org/index.html	BSD license	2.0.6, 2.1.0	
DOM4J	XML Parsing and generation	http://dom4j.org	BSD	1.5.2, 1.6.1	cdr
edtFTPj	FTP library	http://www.enterprisedt.com/products/edtftpj/	LGPL		
EHCache	Distribute cache and session replication	http://ehcache.sourceforge.net	Apache 2.0	1.2.3, 1.2.4, 2.3.1, 1.7	
extJS	Web Console	http://extjs.com	LGPL	3.0.0	
ezmorph	Transforming an Object to another Object	http://ezmorph.sourceforge.net/	Apache 2.0	1.0.6	cdr
geronimo-j2ee-management_1.0_spec		http://geronimo.apache.org/	Apache	1.1.1	cdr
geronimo-jms_1.1_spec		http://geronimo.apache.org/	Apache	1.1.1	cdr
geronimo-stax-api_1.0_spec		http://geronimo.apache.org/	Apache	1	cdr
gmock	Mocking library for groovy unit tests	http://code.google.com/p/gmock/	Apache v2	0.8.1	
Google Breakpad	core dump producing and analysis	http://code.google.com/p/google-breakpad/	New BSD license		
Groovy	Dynamic Language Implementation	http://groovy.codehaus.org/	BSD / Apache	1.5.4, 1.7.0, 1.7.6, 1.8.5	runtime
gson	JSON parsing/creation	http://code.google.com/p/google-gson/	Apache v2	1.3	commander, portal

GXT	Web toolkit	http://www.sencha.com/products/extgwt/	Proprietary	2.2, 2.1.2	
H2 Database	H2 Database Engine	http://www.h2database.com/html/main.html	MPL 1.1 (Mozilla Public License) or under the (unmodified) EPL 1.0 (Eclipse Public License)	1.3.164	
Hibernate	Object-relational DB mapping tool	http://www.hibernate.org	LGPL	3, 3.2.5, 3.3.0, 3.6.4.Final, 3.6.9	gateway, runtime
ICU4J	Unicode library	http://icu-project.org/apiref/icu4j/	BSD variant	2.6.1	
Innovation.ch HTTPClient	Legacy HTTP Client	http://www.innovation.ch/java/HTTPClient/	LGPL		
IPP	Intel Performance Primitives, math & codec library	http://software.intel.com/en-us/intel-ipp	Developer license	6.1.3	
jackson	JSON parsing/creation	http://jackson.codehaus.org/		1.7.4	rest
Jakarta Regexp	Regular Expression matching/substitution	http://jakarta.apache.org/regexp/	Apache License	2.0.7	
Jakarta Standard Taglib	Web Console	http://jakarta.apache.org/taglibs	Apache 2.0	1.1.2	
Jakartar Oro	text processing	http://jakarta.apache.org/oro/	Apache V2 License		
Java Activation Framework	MME processing	http://java.sun.com/javase/technologies/desktop/javabeans/jaf	Sun	1.1.1	
Java Service Wrapper	Clean shutdown of java applications as services	http://wrapper.tanukisoftware.org	BSD	3.2.3	
JavaMail	MIME processing	http://java.sun.com/products/javamail	Sun	1.4	rest
JAX-WS	JAX-WS implementation	http://jax-ws.java.net/	Dual license of CDDL v1.1 and GPL v2	2.1.1-b03	
JAX-WS RI	JAX-WS implementation	http://jax-ws.dev.java.net/	CDDL 1.0	2.1.1	
JAXB	XML to Java mapping API	https://jaxb.dev.java.net/	CDDL	2.1, 2.0.3	portal
Jaxen	XPath library	http://jaxen.codehaus.org/	Apache-style	1.1.1	
jaxen		jaxen.org			
Jbosscache	Enterprise-grade clustering solutions	http://www.jboss.org/jbosscache/	LGPL	3.2.5.GA	
jcommon		http://www.jfree.org/jcommon/	LGPL 2.1	1.0.12	
jcraft jsch	SSH/SFTP library	http://www.jcraft.com/jsch/	BSD	0.1.42	
JDOM	XML processing	http://www.jdom.org/	JDOM	1	

Jersey	Web services framework	http://jersey.java.net/	CDDL+GPL	1.4	rest
Jettison	JSON composition and parsing	http://jettison.codehaus.org/	Apache v2	1.2	
Jetty	Web server	http://jetty.codehaus.org/jetty/	Apache License 2.0 and Eclipse Public License 1.0	7.2.2	gateway, runtime
jfreechart	web console	http://www.jfree.org/jfreechart/	LGPL 2.1	1.0.8	
JGroups	Cluster heartbeat and mgmt	http://www.jgroups.org	LGPL 2.1	2.0,2.3,2.12.1	
JiBX	XML bindings for Java	http://jibx.sourceforge.net/	BSD	2.1.7	
JLine	Used by Groovy	http://jline.sourceforge.net/	BSD	0.9.94	
Joda Time	Replacement for Java Calendar API	http://joda-time.sourceforge.net/	Apache	1.4, 1.6	cdr, gateway, runtime
JRuby	Ruby interpreter for Java	http://jruby.org/	CPL, GPL, or LGPL (3-way License)	1.6.1	runtime
json-lib	JSON parser/creation	http://json-lib.sourceforge.net/		2.3	cdr
json-simple	Java toolkit for JSON	http://code.google.com/p/json-simple/	Apache v2	1.1	
JSONObject	JSON Parsing	http://json.org	MIT	40574	
jtds	MSSQL jdbc driver	http://jtds.sourceforge.net/	LGPL	1.2,1.2.4, 1.2.5	
Jython	Python interpreter for Java	http://www.jython.org	BSD variant	2.5.2	runtime
LAME	MP3 Codec used for Designer Transcription	http://lame.sourceforge.net/index.php	LGPL		
libcurl	CCXML/CallXML/Media server HTTP Client	http://curl.haxx.se/libcurl/	MIT/X derivate license (http://curl.haxx.se/docs/copyright.html)		
libogg	OGG format	http://www.xiph.org/ogg/	BSD		
libresample	Audio resampling (Is it used still? May have moved to proprietary code)	http://ftp.debian.org/pool/main/libr/libresample/	LGPL		
libspeex	Speex codec	http://www.speex.org/	Revised BSD		
libvorbis	Vorbis format	http://xiph.org/vorbis/	BSD		
libzip	Compression Library	http://www.nih.at/libzip/README.html	BSD		
Mini-UPnP	Enumerates Firewalls to control NAT	http://miniupnp.free.fr/	Mini-UPnP Specific		
MiniZip	Zlib Wrapper	http://www.winimage.com/zLibDll/minizip.html	MiniZip Specific	1.01	

Mozilla Rhino		http://www.mozilla.org/rhino/	NPL/MPL License		
Neethi	WS-Policy framework	http://ws.apache.org/neethi/	Apache v2	2.0.4	cdr
Not-Yet-Commons-SSL		http://juliusdavies.ca/commons-ssl/	Apache v2	0.3.9	cdr
NSPR	Abstraction of OS-level primitives	http://www.mozilla.org/projects/nspr/index.html	MPL License	4.7.1	
objenesis	Java reflection utilities	http://code.google.com/p/objenesis/	Apache v2	1	
OpenPGP SDK	Audio encryption	http://openpgp.nominet.org.uk/cgi-bin/trac.cgi	Apache License	pre-0.5 (rev. 01/2008)	
OpenSAML	SAML library	https://wiki.shibboleth.net/confluence/display/OpenSAML/Home		1.1, 2.5.1	cdr
OWASP-ESAPI	The OWASP Enterprise Security API	https://www.owasp.org/index.php/Main_Page	BSD license	2.0GA	cdr
Oracle JDBC driver	database access	http://www.oracle.com/technetwork/database/enterprise-edition/jdbc-10201-088211.html	OTN		
osgi	Enterprise java version mgmt framework	http://www.osgi.org/Main/HomePage		4.1.0	
Pager Taglib	Web Console	http://jsptags.com	LGPL 2.1	2	
pcre	CallXML3 xpath processing	http://www.pcre.org/	BSD		
Quartz	Task Scheduler	http://www.opensymphony.com/quartz/	Apache	1.5.2, 1.6.3, 1.8.4, 1.6.6	
Quercus	PHP interpreter for Java	http://caucho.com	GPL v2+	4	runtime
Rhino	Javascript interpreter for Java	http://www.mozilla.org/rhino/	MPL 1.1	1.7R2	runtime
slf4j	Logging	http://www.slf4j.org/		1.5.2,1.5.10,1.6.1	gateway, runtime
Spring	Dependency Injection Framework	http://www.springframework.org/	Apache	2.5.2, 2.5.5, 2.5.6, 3.0.5	gateway, runtime, cdr, rest, commander, portal
Spring-WS	SOAP/WS security	http://www.springframework.org/	Apache	1.5.4	
Sun Java Streaming XML Parser	SJXP implementation	http://sjsxp.java.net/	CDDL v1.0 and GPL v2	1.0.1	
Tomcat	HTTP serlvet container	http://tomcat.apache.org	Apache 2.0	5.x and 6.x, 7.X	
Tomcat Juli	Tomcat logging library	http://tomcat.apache.org/tomcat-6.0-doc/logging.html	Apache License	6.0.24	
Velocity	Template processing	http://velocity.apache.org/	Apache	1.4, 1.6.2	cdr

Virgo	OSGI implementation	http://www.eclipse.org/virgo/	Eclipse Public License Version 1.0 ("EPL")	2.1.0	
Woodstox	High-performance XML processor.	http://woodstox.codehaus.org/	LGPL 2.1 and Apache License 2.0	4.0.8	cdr, runtime
wsdl4j	WSDL Object Model	http://sourceforge.net/projects/wsdl4j	CPL	1.5.1, 1.5.4, 1.6.1, 1.6.2	cdr, runtime
XBeans	XML to XML mapping	http://www.xbeans.org/	Apache	3	
Xerces	XML processor	http://xml.apache.org/	Apache License	1.6 & 2.8, 2.8.1	cdr
Xml Pull Parser 3rd Edition	XMPP3 implementation	http://xmlpull.org	Free	1.1.4c	
XMLBeans	ACE	http://xmlbeans.apache.org/	Apache	2.2, 2.3.0	
XOM	XML Object Model	http://www.xom.nu	LGPL	1	
xsom	Allows parsing and inspection of XML schema objects	https://xsom.dev.java.net/	Multiple: CDDL, GPL v2, and portions BSD and Thai Open Source Center	20041202, 20070515	
xstream	Object serialization library (to XML)	http://xstream.codehaus.org	BSD	1.1.2, 1.3.1	
YUI	Javascript and CSS framework	http://developer.yahoo.com/yui/	BSD	2.2.5	
zlib	Compression library	http://www.zlib.net/	Independent	1.2.3	