

#### Version 5.1



# **Review Supported Technologies**



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For a listing of open source software used by each Pentaho component, navigate to the folder that contains the Pentaho component. Within that folder, locate a folder named licenses. The licenses folder contains HTML.files that list the names of open source software, their licenses, and required attributions.

Contact Us

Global Headquarters Pentaho Corporation Citadel International, Suite 340

5950 Hazeltine National Drive Orlando, FL 32822

Phone: +1 407 812-OPEN (6736)

Fax: +1 407 517-4575

http://www.pentaho.com

Sales Inquiries: <a href="mailto:sales@pentaho.com">sales@pentaho.com</a>



## **Components Reference**

Pentaho aims to accommodate diverse computing environments. This list provides details about the environment components and versions we support. If you have questions about your particular computing environment, please contact Pentaho support.

#### Server

Pentaho server software is hardware-independent and runs on server-class computers that comply with these specifications for minimum hardware and required operation systems.

- Pentaho Business Analysis Server
- Pentaho Data Integration Server

Hardware—64 bit	Operating System—64 bit
Processor:  • Apple Macintosh Pro Quad-Core or Macintosh Mini Quad-Core • Intel EM64T or AMD64 Dual-Core  RAM: 8 GB with 4 GB dedicated to Pentaho servers  Disk Space: 20 GB free after installation	<ul> <li>Apple Macintosh OS X Server 10.8 &amp; 10.9</li> <li>CentOS Linux 5 &amp; 6</li> <li>Microsoft Windows 2008 Server R2, 2012 Server</li> <li>Red Hat Enterprise Linux 5 &amp; 6</li> <li>Solaris 10</li> <li>Ubuntu Server 10.x &amp; 12.x</li> </ul>

#### Workstation

These Pentaho design tools are hardware-independent and run on client-class computers that comply with these specifications for minimum hardware and required operation systems.

- Pentaho Aggregation Designer
- Pentaho Data Integration
- Pentaho Metadata Editor
- Pentaho Report Designer
- Pentaho Schema Workbench

Hardware—32 or 64 bit	Operating System—32 or 64 bit
<ul> <li>Processors:</li> <li>Apple Macintosh Dual-Core, 64 bit only</li> <li>Intel EM64T or AMD64 Dual-Core</li> <li>RAM: 2 GB RAM for most of the design tools, PDI requires 2 GB dedicated</li> <li>Disk Space: 2 GB free after installation</li> <li>Minimum Screen Size: 1280 x 960</li> </ul>	<ul> <li>Apple Macintosh OS 10.8 &amp; 10.9, 64 bit only</li> <li>Microsoft Windows 7 &amp; 8</li> <li>Ubuntu Desktop 12.x</li> </ul>

#### **Embedded Software**

When embedding Pentaho software into other applications, the computing environment should comply with these specifications for minimum hardware and required operation systems.

- Embedded Pentaho Reporting
- Embedded Pentaho Analysis
- Embedded Pentaho Data Integration

Hardware—64 bit	Operating System—64 bit
<ul> <li>Processors:</li> <li>Apple Macintosh Pro Quad-Core or Macintosh Mini Quad-Core</li> <li>Intel EM64T or AMD64 Dual-Core</li> <li>RAM: 8 GB with 4 GB dedicated to Pentaho servers</li> <li>Disk Space: 20 GB free after installation</li> </ul>	<ul> <li>Apple Macintosh OS X Server 10.7 &amp; 10.8</li> <li>CentOS Linux 5 &amp; 6</li> <li>Microsoft Windows 2008 Server R2</li> <li>Microsoft Windows 7</li> <li>Red Hat Enterprise Linux 5 &amp; 6</li> <li>Solaris 10</li> <li>Ubuntu Server 10.x &amp; 12.x</li> </ul>

#### **Application Servers**

Servers to which you deploy Pentaho software must run one of these application servers.

Pentaho Software	Application Server
Pentaho Business Analysis Server Pentaho Data Integration Server	<ul><li>JBoss 7.x (EAP 6.x.x)</li><li>Tomcat 7.0.x</li></ul>

## **Solution Database Repositories**

Pentaho software stores processing artifacts in these solution database repositories.

Pentaho Software	Database Repository
Pentaho Business Analysis Server Pentaho Data Integration Server	<ul><li>MySQL 5.x</li><li>Oracle 10g/11i</li><li>PostgreSQL 8.4 &amp; 9.1.x*</li></ul>

<sup>\*</sup>Default installed solution database

#### **Data Sources**

Pentaho software connects to these relational and non-relational data sources.

Pentaho Software	Data Source
Pentaho Reporting	<ul> <li>JDBC 3**</li> <li>ODBC</li> <li>OLAP4J</li> <li>XML</li> <li>MongoDB 2.6</li> <li>Pentaho Analysis</li> <li>Pentaho Data Integration</li> <li>Pentaho Metadata</li> <li>Scriptable</li> </ul>
Pentaho Business Analysis Server, Action Sequences	<ul> <li>Relational (JDBC)</li> <li>Hibernate</li> <li>Javascript</li> <li>Metadata (MQL)</li> <li>Mondrian (MDX)</li> <li>XML (XQuery)</li> <li>Security User/Role List Provider</li> <li>Data Integration Steps (PDI)</li> <li>Other Action Sequences</li> <li>Web Services</li> <li>XMLA</li> </ul>
Pentaho Data Integration	• JDBC 3**

Pentaho Software	Data Source
	<ul> <li>OLAP4J</li> <li>Salesforce</li> <li>XML</li> <li>CSV</li> <li>Microsoft Excel</li> <li>Pentaho Analysis</li> <li>Hadoop distributions, click here for versions <ul> <li>Cloudera</li> <li>Intel</li> <li>Hortonworks</li> <li>MapR</li> </ul> </li> <li>Cassandra <ul> <li>Apache 2.0.x</li> <li>DataStax DSE 4.0, includes Cassandra 2.0.x</li> </ul> </li> <li>MongoDB 2.6</li> </ul>

<sup>\*\*</sup>Use a JDBC 3.x compliant driver that is compatible with SQL-92 standards when communicating with relational data sources. For your convenience, we provide a <u>list of drivers</u> used to get data from relational JDBC databases.

## **SQL Dialect-Specific**

Pentaho software generates dialect-specific SQL when communicating with these data sources.

Pentaho Software	Data Source
Pentaho Analysis	<ul> <li>Access</li> <li>Amazon Redshift</li> <li>DB2</li> <li>Derby</li> <li>Firebird</li> <li>Greenplum</li> <li>Hsqldb</li> <li>Impala***</li> <li>Infobright</li> <li>Informix</li> <li>Ingres</li> <li>Interbase</li> <li>LucidDb</li> <li>MicrosoftSqlServer</li> </ul>

Pentaho Software	Data Source
	<ul> <li>MonetDB</li> <li>MySql</li> <li>Neoview</li> <li>Netezza</li> <li>Oracle</li> <li>PostgreSQL</li> <li>SqlStream</li> <li>Sybase</li> <li>Teradata</li> <li>Vectorwise</li> <li>Vertica</li> <li>Other SQL-89 compliant****</li> </ul>
Pentaho Metadata	<ul> <li>Amazon Redshift</li> <li>DB2</li> <li>Firebird</li> <li>H2</li> <li>Hive 2</li> <li>Hypersonic</li> <li>Impala</li> <li>Ingres</li> <li>MS Access</li> <li>ASSQL</li> <li>MSSQLNative</li> <li>MySQL</li> <li>Netezza</li> <li>Oracle</li> <li>PostgresSQL</li> <li>Sybase</li> <li>Vertica</li> <li>Other SQL-92 compliant****</li> </ul>
Pentaho Data Integration	<ul> <li>Apache Derby</li> <li>AS/400</li> <li>InfiniDB</li> <li>Exasol 4</li> <li>Firebird SQL</li> <li>Greenplum</li> <li>H2</li> <li>Hive</li> </ul>

Pentaho Software	Data Source
	<ul> <li>Hive 2</li> <li>Hypersonic</li> <li>IBM DB2</li> <li>Impala</li> <li>Infobright</li> <li>Informix</li> <li>Ingres</li> <li>Ingres VectorWise</li> <li>LucidDB</li> <li>MaxDB (SAP DB)</li> <li>MonetDB</li> <li>MySQL</li> <li>MS SQL Server</li> <li>Neoview</li> <li>Netezza</li> <li>Oracle</li> <li>Oracle RDB</li> <li>PostgreSQL</li> <li>SQLite</li> <li>Teradata</li> <li>UniVerse database</li> <li>Vertica</li> <li>Other SQL-92 compliant****</li> </ul>

\*\*\*Current capability supports only a single table and does not support star or snowflake schemas

\*\*\*\*If your data source is not in this list and is compatible with SQL-92, Pentaho software uses a generic SQL dialect.

#### **Security**

Pentaho software integrates with these third-party security authentication systems.

Pentaho Software	Authentication System
Pentaho Business Analysis Server Pentaho Data Integration Server	<ul> <li>Active Directory</li> <li>CAS</li> <li>Integrated Microsoft Windows Authentication</li> <li>LDAP</li> <li>RDBMS</li> </ul>

#### Java Virtual Machine

All Pentaho software, except the Pentaho Mobile App, requires the Sun/Oracle version 1.7 distribution of the Java Runtime Environment (JRE) or Java Development Kit (JDK).

#### **Web Browsers**

Pentaho supports these major versions of Web browsers that are publicly available six weeks prior to when Pentaho begins to finalize a release. We also support the preceding major version.

Pentaho Software	Web Browser
Pentaho User Console  Pentaho Report Designer****	<ul> <li>Apple Safari 5.x, 6.x, &amp; 7.x on OSX only</li> <li>Google Chrome 32 &amp; 33</li> <li>Microsoft Internet Explorer 8 - 11</li> <li>Mozilla Firefox 26 &amp; 27</li> </ul>

<sup>\*\*\*\*\*</sup>Requires a web browser to preview exported HTML reports.

## **Mobile Apps**

The Pentaho mobile app runs on the Apple iPad 2 and later, with iOS 6.x & 7.x using Safari mobile.



## **JDBC Drivers Reference**

This reference is a continuous work in progress. If you are viewing it in the Pentaho InfoCenter and see something that is not correct, know of a driver that is not listed here, or have a tip you want to share, please let us know by using the comments fields found in the bottom right corner.

Database	Vendor	URL
Apache Derby	IBM	http://db.apache.org/derby/ derby_downloads.html
Cache'	InterSystems	http://www.cachemonitor.de/ intersystems-documentation/cache- jdbc-driver
CUBRID	CUBRID	http://www.cubrid.org/ ?mid=downloadsitem=jdbc_driver
Daffodil DB	Daffodil Software	http://sourceforge.net/projects/ daffodildb/
DB2 AS/400	IBM	http://www-03.ibm.com/systems/i/ software/toolbox/
DB2 Universal Database	IBM	http://www-306.ibm.com/software/ data/db2/java
<u>Firebird</u>	Firebird Foundation	http://www.firebirdsql.org/en/jdbc-driver/
FrontBase	FrontBase	http://www.frontbase.com/cgi-bin/ WebObjects/FBWebSite
Greenplum	EMC2	http://jdbc.postgresql.org/ download.html
H2 Database	H2	http://www.h2database.com
<u>Hive</u>	Apache	http://hive.apache.org/
Hive2	Apache	
HSQLDB	HyperSQL	http://sourceforge.net/projects/ hsqldb/
<u>Impala</u>	Cloudera	http://www.cloudera.com/ content/cloudera-content/

Database	Vendor	URL
		cloudera-docs/Impala/latest/ Installing-and-Using-Impala/ ciiu_impala_jdbc.html
Informix	IBM	http://www-01.ibm.com/software/
Ingres	Actian	http://esd.actian.com/product/ drivers/JDBC/java
InterBase	Embarcadero	http://edn.embarcadero.com
jTDS Free MS Sybase	jTDS	http://jtds.sourceforge.net/
<u>LucidDB</u>	LucidDB	http://sourceforge.net/projects/ luciddb
MaxDB	SAP	http://maxdb.sap.com
Mckoi	Mckoi SQL Database	http://www.mckoi.com/ originalmckoisql/index.html
Mimer	Mimer Information Technology	http://www.mimer.com
<u>MonetDB</u>	MonetDB	http://www.monetdb.org/
MySQL	Oracle	http://dev.mysql.com/downloads/ connector/j/
Neoview	НР	https://h20392.www2.hp.com/portal/ swdepot/ displayProductInfo.do?productNumber=NEO10
<u>Netezza</u>	IBM	http://www.netezza.com
OpenBase SQL	OpenBase International	http://www.openbase.com/ index.php/products/downloads
<u>Oracle</u>	Oracle	http://www.oracle.com/technetwork/ database/features/jdbc/index.html
<u>Pervasive</u>	Pervasive	http://www.pervasivedb.com/ download/Pages/PDBDownloads. aspx
PostgreSQL	PostgreSQL Global Development Group	http://jdbc.postgresql.org/
SAP DB	SAP DB	http://www.sapdb.org/ sap_db_jdbc.htm
SQLite	Xerial	http://www.xerial.org/trac/Xerial/wiki/ SQLiteJDBC
SQL Server	Microsoft	http://msdn.microsoft.com/en-us/ sqlserver/aa937724.aspx

Database	Vendor	URL
Sybase ASE	SAP	http://www.sybase.com/products/ allproductsa-z/softwaredeveloperkit/ jconnect
Sybase SQL Anywhere	SAP	http://www.sybase.com/products/ allproductsa-z/softwaredeveloperkit/ jconnect
SmallSQL	SmallSQL	http://www.smallsql.de/ download.html
<u>Teradata</u>	Teradata	http://downloads.teradata.com/ download/connectivity/jdbc-driver
<u>Vertica</u>	НР	http://www.vertica.com

# **Apache Derby**

Vendor Name	Det	ails
Recommended Native Driver		
IBM	Company URL  http://www.ibm.com	
	Driver URL  http://db.apache.org/derby/derby_c	downloads.html
	JDBC URL Syntax by Type  Server—jdbc:derby:// <server>[:<poi <databasename="">[;<url attribute="">=&gt;value&gt;]  Embedded—jdbc:derby:<databasenamenamenamenamenamenamenamenamenamenam< td=""><td></td></databasenamenamenamenamenamenamenamenamenamenam<></url></poi></server>	
	JDBC Class  org.apache.derby.jdbc.ClientDriver  org.apache.derby.jdbc.EmbeddedD	
	Shipped with Pentaho Products Pentaho Data Integration	

Vendor Name	Details
	Comments Open source database

## Caché

Vendor Name	Det	ails
Recommended Native Driver		
InterSystems	Company URL  http://www.cachemonitor.de	
	Driver URL  http://www.cachemonitor.de/intersydriver	ystems-documentation/cache-jdbc-
	JDBC URL Syntax by Type  Server—jdbc:Cache:// <server>[:<po <namespace=""></po></server>	Default Port rt≯∯72
	JDBC Class com.intersys.jdbc.CacheDriver	JDBC JAR File Name cachedb.jar

## **CUBRID**

Vendor Name	Details
Recommended Native Driver	
CUBRID	Company URL <a href="http://www.cubrid.org">http://www.cubrid.org</a>
	Driver URL <a href="http://www.cubrid.org/?mid=downloads&amp;item=jdbc_driver">http://www.cubrid.org/?mid=downloads&amp;item=jdbc_driver</a>

Vendor Name	Details	
	JDBC URL Syntax by Type  Server—jdbc:cubrid: <server>:<port> <databasename>:<username>: <password>:[?<url attribute="">=<value> [&amp;<url attribute="">=<value>] ]</value></url></value></url></password></username></databasename></port></server>	Default Port :33000
	JDBC Class cubrid.jdbc.driver.CUBRIDDriver	JDBC JAR File Name N/A
	Comments  Open source database highly optim	ized for Web applications.

## **Daffodil DB**

Vendor Name	Det	ails
Recommended Native Driver		
Daffodil Software	Company URL  http://db.daffodilsw.com	
	Driver URL  http://sourceforge.net/projects/daff	fodildb/
	JDBC URL Syntax by Type  Server—jdbc:daffodilDB:// <server>[ <databasename>  Embedded—jdbc:daffodilDB_embed</databasename></server>	N/A
	JDBC Class in.co.daffodil.db.rmi.RmiDaffodilDB in.co.daffodil.db.jdbc.DaffodilDBDri	-

Vendor Name	Details	
		DaffodilDB_Common.jar
	Comments	
	Open source database	

## **DB2 AS/400**

Vendor Name	Det	ails
Recommended Native Driver		
IBM	Company URL <a href="http://www.ibm.com">http://www.ibm.com</a>	
	Driver URL  http://www-03.ibm.com/systems/i/s  JDBC URL Syntax by Type	
	Server—jdbc:as400:// <server>namin</server>	Default Port ng=sql;errors=full N/A
	JDBC Class com.ibm.as400.access.AS400JDBCD	JDBC JAR File Name rijuel00.jar
	Shipped with Pentaho Products Pentaho Data Integration	

## **DB2 Universal Database**

Vendor Name	Details
Recommended Native Driver	
IBM	Company URL

Vendor Name	Details	
	http://www.ibm.com  Driver URL  http://www-306.ibm.com/software/data/db2/java	
	JDBC URL Syntax by Type  Server—jdbc:db2:// <server>[:<port> <databasename>[;<url attribute="">=<value>]</value></url></databasename></port></server>	Default Port -]50000
	JDBC Class com.frontbase.jdbc.FBJDriver	JDBC JAR File Name frontbasejdbc.jar

## **Firebird**

Vendor Name	Details	
Recommended Native Driver		
Firebird Foundation	Company URL <a href="http://www.firebirdsql.org">http://www.firebirdsql.org</a> Driver URL <a href="http://www.firebirdsql.org/en/jdbc-driver/">http://www.firebirdsql.org/en/jdbc-driver/</a>	
	JDBC URL Syntax by Type  Server—jdbc:firebirdsql: <server>[/ <port>]:/<database-file></database-file></port></server>	Default Port 3050
	(JDBC Type 4, official format)	3050
	Server—jdbc:firebirdsql:// <server>[: <database-file></database-file></server>	<pre>&lt;3050 <port>]/ 3050</port></pre>
	(JDBC Type 4, compatibility format)	N/A

Vendor Name	Details	
	Server—jdbc:firebirdsql:native// <se <port="">]:/<database-file> (JDBC Type 2, compatibility format) Server—jdbc:firebirdsql:native://<se <database-file="">  JDBC Type 2, compatibility format. Requires libraries) Embedded—jdbc:firebirdsql:embed <local-database-file> (JDBC Type 2, compatibility format. Requires libraries)</local-database-file></se></database-file></se>	erver>[: <port>]/</port>
	JDBC Class org.firebirdsql.jdbc.FBDriver	JDBC JAR File Name jaybird-full-xxx.jar
	Shipped with Pentaho Products Pentaho Data Integration	

#### **FrontBase**

Vendor Name	Det	tails
Recommended Native Driver		
FrontBase	Company URL <a href="http://www.frontbase.com">http://www.frontbase.com</a> Driver URL <a href="http://www.frontbase.com/cgi-bin/WebObjects/FBWebSite">http://www.frontbase.com/cgi-bin/WebObjects/FBWebSite</a>	
	JDBC URL Syntax by Type Server—	Default Port

Vendor Name	Details	
	jdbc:FrontBase:// <host>[:<port>]/ <databasename></databasename></port></host>	N/A
	JDBC Class com.frontbase.jdbc.FBJDriver	JDBC JAR File Name frontbasejdbc.jar

# Greenplum

Vendor Name	Details	
Recommended Native Driver		
Greenplum	Company URL <a href="http://www.greenplum.com">http://www.greenplum.com</a>	
	Driver URL <a href="http://jdbc.postgresql.org/download.html">http://jdbc.postgresql.org/download.html</a>	
	JDBC URL Syntax by Type  Server—jdbc:postgresql:// <server>[ <databasename></databasename></server>	Default Port :<5፮ያ4፻-]/
	JDBC Class org.postgresql.Driver	JDBC JAR File Name postgresql-8.x-xxx.jdbc4.jar
	Comments Greenplum uses the Postgresql JDBC dr	iver

## **H2 Database**

Vendor Name	Details
Recommended Native Driver	

Vendor Name	Details	
H2	Company URL  http://www.h2database.com	
	Driver URL  http://www.h2database.com	
	JDBC URL Syntax by Type  Server—jdbc:h2:tcp://server[:port]/ file-path  Embedded—jdbc:h2:file-name	Default Port 9092 N/A
	JDBC Class  jdbc:h2:tcp://server[:port]/file- path  org.h2.Driver	JDBC JAR File Name h2-x.x.xxx.jar
	Shipped with Pentaho Products  • Pentaho Business Analysis Ser  • Pentaho Data Integration  • Pentaho Metadata-Editor  Pentaho Report-Designer	ver
	Comments  Open source Java SQL database	

## Hive

Vendor Name	Details
Recommended Native Driver	
Apache	Company URL

Vendor Name	Details	
	http://hive.apache.org/	
	Driver URL Built in	
	JDBC URL Syntax by Type  Server—jdbc:hive:// <server>[:<port default<="" td=""><td>Default Port &gt;]/10000</td></port></server>	Default Port >]/10000
	JDBC Class  org.apache.hadoop.hive.jdbc.  HiveDriver	JDBC JAR File Name pentaho-hadoop-hive-jdbc-shim- x.x.x.jar
	<ul> <li>Shipped with Pentaho Products</li> <li>Pentaho Business Analysis Ser</li> <li>Pentaho Data Integration</li> <li>Pentaho Metadata-Editor</li> <li>Pentaho Report-Designer</li> </ul>	ver
	Comments  The pentaho-hadoop-hive-jdbc-shim-xxx.jar library is a proxy drive The actual Hive JDBC implementation for the specific distribution a version of Hadoop is located in the Pentaho Configuration (shim) for that distro. See <a href="Hadoop Configuration">Hadoop Configuration</a> for more information.  Hive does not support the full SQL capabilities. It uses a subset an more accurately referred to as HiveQL.	

## Hive2

Vendor Name	Details
Recommended Native Driver	
Apache	Company URL

Vendor Name	Details	
	http://hive.apache.org/	
	Driver URL Built in	
	JDBC URL Syntax by Type  Server—jdbc:hive2:// <server>[:<por <db=""></por></server>	Default Port t>¶Ø000
	JDBC Class org.apache.hive.jdbc. HiveDriver	JDBC JAR File Name  pentaho-hadoop-hive-jdbc-shim- x.x.x.jar
	<ul> <li>Shipped with Pentaho Products</li> <li>Pentaho Business Analysis Ser</li> <li>Pentaho Data Integration</li> <li>Pentaho Metadata-Editor</li> <li>Pentaho Report-Designer</li> </ul>	ver
	Comments  The pentaho-hadoop-hive-jdbc-shim-xxx.jar library is a proxy driver. The actual Hive JDBC implementation for the specific distribution ar version of Hadoop is located in the Pentaho Configuration (shim) for that distro. See <a href="Hadoop Configuration">Hadoop Configuration</a> for more information.  Hive2 does not support the full SQL capabilities. It uses a subset and more accurately referred to as HiveQL.	

## **HSQLDB**

Vendor Name	Details
Recommended Native Driver	
HyperSQL	Company URL

Vendor Name	Details	
	http://www.hsqldb.org	
	Driver URL  http://sourceforge.net/projects/hsq	ldb/
	JDBC URL Syntax by Type  Server—jdbc:hsqldb:hsql:// <server> <databasename>  Embedded  Memory—jdbc:hsqldb:mem:<database embedded="" file="" —jdbc:hsqldb:file:<database-file=""></database></databasename></server>	9001 N/A
	JDBC Class org.hsqldb.jdbcDriver	JDBC JAR File Name hsqldb.jar
	Shipped with Pentaho Products  Pentaho Enterprise-Console Pentaho Business Analysis Serve Pentaho Aggregation-Designer Pentaho Data Integration Pentaho Metadata-Editor Pentaho Report-Designer	r

## Impala

Vendor Name	Details
Recommended Native Driver	
Cloudera	Company URL  http://cloudera.com
	Driver URL Built in

Vendor Name	Details	
	JDBC URL Syntax by Type jdbc:hive2:// <server>[<port>]/ ;auth=noSasl</port></server>	Default Port 21050
	JDBC Class  org.apache.hadoop.hive.jdbc.  HiveDriver	JDBC JAR File Name  pentaho-hadoop-hive-jdbc-shim- x.x.x.jar
	<ul> <li>Shipped with Pentaho Products</li> <li>Pentaho Business Analysis Ser</li> <li>Pentaho Data Integration</li> <li>Pentaho Metadata-Editor</li> <li>Pentaho Report-Designer</li> </ul>	ver
	Comments  The pentaho-hadoop-hive-jdbc-shire The actual Hive JDBC implementation version of Hadoop is located in the that distro. See Hadoop Configurait Hive does not support the full SQL of more accurately referred to as Hive	on for the specific distribution and Pentaho Configuration (shim) for on for more information.  capabilities. It uses a subset and is

## Informix

Vendor Name	Details
Recommended Native Driver	
IBM	Company URL <a href="http://www.ibm.com">http://www.ibm.com</a>
	Driver URL

Vendor Name	Details	
	http://www14.software.ibm.com jsp?go=y&rs=ifxjdbc	n/webapp/download/search.
	JDBC URL Syntax by Type  Server—jdbc:informix- sqli:// <server>[:<port>]/ <databasename>:informixserver= <dbservername></dbservername></databasename></port></server>	Default Port 1533
	JDBC Class com.informix.jdbc.lfxDriver	JDBC JAR File Name ifxjdbc.jar
	Shipped with Pentaho Products Pentaho Data Integration	

## **Ingres**

Vendor Name	Details			
Recommended Native Driver	Recommended Native Driver			
Actian	Company URL <a href="http://www.actian.com/">http://www.actian.com/</a>			
	Driver URL <a href="http://esd.actian.com/product/drivers/JDBC/java">http://esd.actian.com/product/drivers/JDBC/java</a>			
	JDBC URL Syntax by Type  Server—jdbc:ingres:// <server>[:<po <databasename=""></po></server>	Default Port rt>]/ 21071		
	JDBC Class com.ingres.jdbc.lngresDriver	JDBC JAR File Name iijdbc.jar		
	Comments			

Vendor Name	Details
	Open source relational database management system

#### **InterBase**

Vendor Name	Details		
Recommended Native Driver	Recommended Native Driver		
Embarcadero	Company URL <a href="http://edn.embarcadero.com">http://edn.embarcadero.com</a>		
	Driver URL N/A		
	JDBC URL Syntax by Type  Server—jdbc:interbase:// <server>/ <full_db_path></full_db_path></server>	Default Port N/A	
	JDBC Class interbase.interclient.Driver	JDBC JAR File Name interclient.jar	
	Shipped with Pentaho Products Pentaho Data Integration		

# jTDS Free MS SQL Sybase

Vendor Name	Details
Recommended Native Driver	
jTDS	Company URL <a href="http://jtds.sourceforge.net/">http://jtds.sourceforge.net/</a>
	Driver URL

Vendor Name	Details	
	N/A	
	JDBC URL Syntax by Type  SQL  Server—jdbc:jtds: <server_type>//<s <database="">][;<property>=<value>[;. Sybase—jdbc:jtds:<server_type>://&lt;</server_type></value></property></s></server_type>	]]]
	<pre><database>]  JDBC Class interbase.interclient.Driver</database></pre>	JDBC JAR File Name jtds-x.x.x.jar
	<ul> <li>Shipped with Pentaho Products</li> <li>Pentaho Enterprise-Console</li> <li>Pentaho Business Analysis Ser</li> <li>Pentaho Aggregation-Designer</li> <li>Pentaho Data Integration</li> <li>Pentaho Metadata-Editor</li> <li>Pentaho Report-Designer</li> </ul>	

## LucidDB

Vendor Name	Details	
Recommended Native Driver		
DynamoDB	Company URL  http://www.luciddb.com  Driver URL http://sourceforge.net/projects/luciddb/	
	JDBC URL Syntax by Type Server—jdbc:luciddb:http:// <server< td=""><td>Default Port &gt;[:<port>] 8034</port></td></server<>	Default Port >[: <port>] 8034</port>

Vendor Name	Details	
	JDBC Class org.luciddb.jdbc.LucidDbClientDrive Shipped with Pentaho Products	JDBC JAR File Name r LucidDbClient-x.x.x.jar
	Pentaho Data Integration	
	Comments  Open source BI solution for Big Da	ta

## **MaxDB**

Vendor Name	Details		
Recommended Native Driver	Recommended Native Driver		
SAP	Company URL <a href="http://www.sap.com">http://www.sap.com</a>		
	Driver URL <a href="http://maxdb.sap.com">http://maxdb.sap.com</a>		
	JDBC URL Syntax by Type  Server—jdbc:sapdb:// <server>[:<po <databasename=""></po></server>	Default Port rtኞ <b>ያ</b> /10	
	JDBC Class com.sap.dbtech.jdbc.DriverSapDB	JDBC JAR File Name sapdbc.jar	
	Comments  Database management system develop	ed and supported by SAP AG	

## Mckoi SQL Database

Vendor Name	Details		
Recommended Native Driver	Recommended Native Driver		
Mckoi	Company URL <a href="http://www.mckoi.com">http://www.mckoi.com</a>		
	Driver URL  http://www.mckoi.com/originalmckoisql/index.html		
	JDBC URL Syntax by Type  Server—jdbc:mckoi:// <server>[:<por> <schema>]/</schema></por></server>	<b>Default Port</b> rt>][/ 9157	
	JDBC Class com.mckoi.JDBCDriver	JDBC JAR File Name mckoidb.jar	
	Comments  Open source SQL database written	in Java	

#### Mimer

Vendor Name	Details	
Recommended Native Driver		
Mimer Information Technology	Company URL  http://www.mimer.com  Driver URL  N/A	
	JDBC URL Syntax by Type  Server—jdbc:mimer: <pre>col&gt;://<s< pre=""></s<></pre>	Default Port eflæfው[: <port>]/</port>

Vendor Name	Details	
	JDBC Class	JDBC JAR File Name
	com.mimer.jdbc.Driver	mimer.jar

#### **MonetDB**

Vendor Name	Det	tails
Recommended Native Driver		
MonetDB	Company URL  http://www.monetdb.org  Driver URL  N/A	
	JDBC URL Syntax by Type  Server—jdbc:monetdb:// <server>[:&lt; database&gt;</server>	Default Port <p\$ଉପସ୍ଥି0< td=""></p\$ଉପସ୍ଥି0<>
	JDBC Class nl.cwi.monetdb.jdbc.MonetDriver	JDBC JAR File Name monetdb-jdbc-x.x.jar
	Shipped with Pentaho Products Pentaho Data Integration	
	Comments  An open source database system	

## MY SQL

Vendor Name	Details
Recommended Native Driver	

Vendor Name	Details	
Oracle	Company URL <a href="http://www.mysql.com">http://www.mysql.com</a>	
	Driver URL <a href="http://dev.mysql.com/downloads/connector/j/">http://dev.mysql.com/downloads/connector/j/</a>	
	JDBC URL Syntax by Type	Default Port
	Server—jdbc:mysql:// <hostname>[,-/<dbname>[?<url attribute="">=<value>[&amp;<url attribute="">=<value>] ]</value></url></value></url></dbname></hostname>	<faੇਖੋ0ਓerhost>][:<port>]</port></faੇਖੋ0ਓerhost>
	JDBC Class  com.mysql.jdbc.Driver (official class name)  org.gjt.mm.mysql.Driver (older class name)	JDBC JAR File Name mysql-connector-java-5.x.xx- bin.jar
	<ul> <li>Shipped with Pentaho Product</li> <li>Pentaho Enterprise-Console</li> <li>Pentaho Business Analysis Ser</li> <li>Pentaho Aggregation-Designer</li> <li>Pentaho Metadata-Editor</li> <li>Pentaho Report-Designer</li> </ul>	

## **Neoview**

Vendor Name	Details
Recommended Native Driver	
НР	Company URL

Vendor Name	Details	
	http://www.hp.com  Driver URL  https://h20392.www2.hp.com/portal/swdepot/ displayProductInfo.do?productNumber=NEO10  JDBC URL Syntax by Type  Default Port	
	Server—jdbc:hpt4jdbc:// <system>[: [:][<url attribute="">= <value>[;<url attribute="">=<value> ]</value></url></value></url></system>	<pre><pre><pre>pl@f5]y</pre></pre></pre>
	JDBC Class com.hp.t4jdbc.HPT4Driver	JDBC JAR File Name N/A

#### Netezza

Vendor Name	Details	
Recommended Native Driver		
IBM	Company URL  http://www.netezza.com  Driver URL  N/A	
	JDBC URL Syntax by Type  jdbc:netezza:// <server>[:<port>]/  <database></database></port></server>	Default Port 5480
	JDBC Class org.netezza.Driver	JDBC JAR File Name

# **OpenBase SQL**

Vendor Name	Details	
Recommended Native Driver		
OpenBase International	Company URL <a href="http://www.openbase.com">http://www.openbase.com</a>	
	Driver URL  http://www.openbase.com/index.php/products/downloads	
	JDBC URL Syntax by Type  Server—jdbc:openbase:// <server>/  <databasename></databasename></server>	Default Port N/A
	JDBC Class com.openbase.jdbc.ObDriver	JDBC JAR File Name OpenBaseJDBC.jar

## Oracle

Vendor Name	Details	
Recommended Native Driver		
Oracle	Company URL  http://www.oracle.com  Driver URL  http://www.oracle.com/technetworkindex.html	k/database/features/jdbc/
	JDBC URL Syntax by Type Thin Server—jdbc:oracle:thin:@ <server> <sid></sid></server>	Default Port [: <port>]:</port>

Vendor Name	Details	
	OCI Server —jdbc:oracle:oci:@ <server>[:<port> <sid></sid></port></server>	]:
	JDBC Class oracle.jdbc.driver.OracleDriver oracle.jdbc.OracleDriver	JDBC JAR File Name ojdbcx.jar, ora18n.jar
	Comments  The OCI server requires OCI librarie	S

## **Pervasive**

Vendor Name	Details	
Recommended Native Driver		
Pervasive	Company URL  http://www.pervasivedb.com/Pages/default.aspx  Driver URL  http://www.pervasivedb.com/download/Pages/PDBDownloads.aspx	
	JDBC URL Syntax by Type  Server—jdbc:pervasive:// <server>[:- <datasource></datasource></server>	Default Port <pts%3] <="" td=""></pts%3]>
	JDBC Class com.pervasive.jdbc.v2.Driver	JDBC JAR File Name
	<ul> <li>Shipped with Pentaho Products</li> <li>Pentaho Data Integration</li> <li>Pentaho Report-Designer</li> </ul>	

Vendor Name	Details
	Comments The data source is the ODBC DSN

## **PostgreSQL**

Vendor Name	Details	
Recommended Native Driver		
PostgreSQL Global Development Group	Company URL <a href="http://www.postgresql.org/">http://www.postgresql.org/</a>	
	Driver URL <a href="http://jdbc.postgresql.org/">http://jdbc.postgresql.org/</a>	
	JDBC URL Syntax by Type  Server—jdbc:postgresql:// <server>[:</server>	<b>Default Port</b> : <port>]/ 5342</port>
	JDBC Class org.postgresql.Driver	JDBC JAR File Name postgresql-8.x-xxx.jdbc4.jar
	<ul> <li>Shipped with Pentaho Products</li> <li>Pentaho Data Integration</li> <li>Pentaho Report-Designer</li> </ul>	

## SAP DB

Vendor Name	Details
Recommended Native Driver	
SAP DB	Company URL N/A

Vendor Name	Details	
	Driver URL <a href="http://www.sapdb.org/sap_db_jdbc.htm">http://www.sapdb.org/sap_db_jdbc.htm</a>	
	JDBC URL Syntax by Type  Server—jdbc:sapdb:// <server>/ <database_name></database_name></server>	Default Port N/A
	JDBC Class com.sap.dbtech.jdbc.DriverSapDB	JDBC JAR File Name sapdbc-x.x.x.jar
	Shipped with Pentaho Products Pentaho Data Integration	
	Comments  FREE Enterprise Open Source Datab	pase

## **SQLite**

Vendor Name	Details	
Recommended Native Driver		
Xerial	Company URL N/A	
	Driver URL  http://www.xerial.org/trac/Xerial/wiki/SQLiteJDBC	
	JDBC URL Syntax by Type Server—jdbc:sqlite: <filename.db></filename.db>	Default Port
	JDBC Class org.sqlite.JDBC	JDBC JAR File Name sqlite-jdbc-x.x.x.jar

Vendor Name	Details
	Shipped with Pentaho Products Pentaho Data Integration

## **SQL** Server

Vendor Name	Details	
Recommended Native Driver		
Microsoft	Company URL  http://www.microsoft.com	
	Driver URL  http://msdn.microsoft.com/en-us/s	qlserver/aa937724.aspx
	JDBC URL Syntax by Type  Server—jdbc:sqlserver:// <server>[:&lt; <databasename></databasename></server>	Default Port <pୀଃ୍ୟଞ୍ଜି;databasename=< td=""></pୀଃ୍ୟଞ୍ଜି;databasename=<>
	JDBC Class  com.microsoft.sqlserver.jdbc.  SQLServerDriver	JDBC JAR File Name sqljdbc4.jar
	Comments  The open source jtds driver also works with MSSQL	

## Sybase ASE

Vendor Name	Details
Recommended Native Driver	
SAP	Company URL

Vendor Name	Details	
	http://www.sybase.com	
	Driver URL  http://www.sybase.com/products/allproductsa-z/softwaredeveloperkit/ jconnect	
	JDBC URL Syntax by Type  Server—jdbc:sybase:Tds: <server>[:&lt; <databasename></databasename></server>	Default Port ୍ଦର୍ଗ୍ରଫତ୍ରୀ/
	JDBC Class com.sybase.jdbc4.jdbc.SybDriver	JDBC JAR File Name
	Comments  The open source jTDS driver works with Sybase as well. Note that although you can use jTDS open source JDBC driver, we recommend that you use the Sybase-supplied JDBC driver instead. Connections might not work reliably if you use the jTDS JDBC driver.	

# Sybase SQL Anywhere

Vendor Name	Details	
Recommended Native Driver		
SAP	Company URL  http://www.sybase.com  Driver URL  http://www.sybase.com/products/allproductsa-z/softwaredeveloperkit/ jconnect	
	JDBC URL Syntax by Type	Default Port 2638

Vendor Name	Details	
	Server—jdbc:sybase:Tds: <server>[:&lt; <databasename></databasename></server>	<port>]/</port>
	JDBC Class com.sybase.jdbc4.jdbc.SybDriver	JDBC JAR File Name
	Comments  This open source jTDS driver works with Sybase as well. Note that although you can use jTDS open source JDBC driver, we recommend that you use the Sybase-supplied JDBC driver instead. Connections might not work reliably if you use the jTDS JDBC driver.	

# SmallSQL

Vendor Name	Details	
Recommended Native Driver		
SmallSQL	Company URL  http://www.smallsql.de/	
	Driver URL <a href="http://www.smallsql.de/download.html">http://www.smallsql.de/download.html</a>	
	JDBC URL Syntax by Type Embedded—jdbc:smallsql:database attribute=value[URLattribute=value]	
	JDBC Class smallsql.database.SSDriver	JDBC JAR File Name smallsql.jar
	Comments  Java desktop SQL database engine	

Vendor Name	Details

## **Teradata**

Vendor Name	Details	
Please see the <u>Teradata JDBC Driver Reference</u> for information about required drivers.		
Teradata	Company URL <a href="http://www.teradata.com">http://www.teradata.com</a>	
	Driver URL  http://downloads.teradata.com/download/connectivity/jdbc-driver	
	JDBC URL Syntax by Type  Server—jdbc:teradata:// <dbshost>[. <url attribute="">[;<url attribute="">]]</url></url></dbshost>	Default Port / N/A
	JDBC Class com.teradata.jdbc.TeraDriver	JDBC JAR File Name terajdbc4.jar tdgssconfig.jar

## Vertica

Vendor Name	Details
Recommended Native Driver	
HP	Company URL <a href="http://www.vertica.com">http://www.vertica.com</a>
	Driver URL

Vendor Name	Details	
	TBD	
	JDBC URL Syntax by Type  Server—jdbc:vertica:// <server>[:<pc< td=""><td>Default Port</td></pc<></server>	Default Port
	<databasename></databasename>	
	JDBC Class	JDBC JAR File Name
	com.vertica.Driver	N/A