



DBMaster bundle version manual

Version: 5.4 (UNIX)

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Table of Content

1. Introduction	3
1.1 Other Sources of Information	3
1.2 Notice	3
1.3 Technical Support.....	3
2. Installation Flow	5
2.1 Single User Mode	5
2.2 Client/Server Mode – Server Side	5
2.3 Client/Server User Mode – Client Side.....	5
3. Database Binary Components	7
3.1 Files List for Installation Types.....	7
3.2 Packages for DBMaster bundle version in different language environments	23
3.3 Customize the bundle size after developing	24
3.4 3rd party of DBMaster	25
3.4.1 PDFTOTEXT	25
3.4.2 XDELTA.....	25
4. Features	26
4.1 Using Stored Procedure.....	26
4.2 Using JTools	26
4.3 Not included features	27
5. License Key	28
5.1 DBMaster.Lic content	28
5.2 How to Upgrade License Key	28
5.3 Activation File Content.....	28
6. Client Setting - UnixODBC Registry	30
6.1 Registering an ODBC Driver.....	30

6.2	Registering UnixODBC Data Source Name (DSN)...	30
6.2.1	VERIFY THE DSN SETTING	31
6.3	Setting Environment Variable.....	31
7.	Backup/Restore about DBMaster Bundle.....	33
8.	Sample Programs.....	34
8.1	How to build and run ODBC sample	34
8.2	How to test JDBC.....	34
9.	Frequently Asked Questions	35

1. Introduction

This document provides application vendors with a guide to install their own application and DBMaster. With this document, the AP vendors should install their own application and connect to the underground DBMaster database without problems. Most of the processes mentioned here should be implemented in installation aided tools. The AP vendors should be aware of the processes and acquire the appropriate License Key from DBMaster in accordance with their own usage. Unlike official version, which put DBMaster executable files and configuration file into some directory, Bundle Version will put executable files and configuration file into the directory you wanted and work independently without intervening DBMaster official or other bundle files. This is very convenient for AP vendor who wants to put his application and embedded database into one directory for easy management.

1.1 Other Sources of Information

DBMaster standard version provides many other user's guides and reference manuals in addition to this reference. For more information on a particular subject, consult one of these books:

- For more information on the designing, administering, and maintaining a DBMaster database, refer to the "Database Administrator's Guide".
- For more information on the SQL language implemented by DBMaster, refer to the "SQL Command and Function Reference".
- For more information on the ESQL/C language implemented by DBMaster, refer to the "ESQL/C Programmer's Guide".
- For more information on error and warning messages, refer to the "Error and Message Reference".
- For more information on using stored procedure, refer to the "Stored Procedure user's guide".

1.2 Notice

For beginners, the best way to understand this document is to manually implement it. Using the systematic process in this document, a user can catch the fundamentals and learn DBMaster rapidly. If no problems are incurred, a user can proceed to use the most popular installation aided packages, such as Install-Anywhere, to perform the tasks.

1.3 Technical Support

CASEMaker provides thirty days of complimentary email and phone support during the evaluation period. When software is registered an additional thirty days of support will be included. Thus

extend the total support period for software to sixty days. However, CASEMaker will continue to provide email support for any bugs reported after the complimentary support or registered support has expired (free of charges).

Additional support is available beyond the sixty days for most products and may be purchased for twenty percent of the retail price of the product. Please contact sales@casemaker.com for more details and prices.

CASEMaker support contact information for your area (by snail mail, phone, or email) can be located at: www.casemaker.com/support. It is recommended that the current database of FAQ's be searched before contacting CASEMaker support staff.

Please have the following information available when phoning support for a troubleshooting enquiry or include the information with a snail mail or email enquiry:

- Product name and version number
- Registration number
- Registered customer name and address
- Supplier/distributor where product was purchased
- Platform and computer system configuration
- Specific action(s) performed before error(s) occurred
- Error message and number, if any
- Any additional information deemed pertinent

2. Installation Flow

DBMaster can run in a Single-User Mode, Client Mode, or Server Mode. Thus, an AP vendor should install the various components and registry settings based solely on these three types of modes. The installation is illustrated as follows:

2.1 Single User Mode

- ✓ Place the DBMaster dmconfig.ini, DBMaster.Lic file, Activation File, DBMaster Execution Files, and Components into a specific user and folder.
- ✓ Place the Applications into a specific user and folder.
- ✓ Place the Data Files into a folder, indicated in the dmconfig.ini.
- ✓ Place the files in Single User mode into one directory, or separate directories.
- ✓ Set up the Unix ODBC Driver, ODBC DSN, if required.
- ✓ If a License Key is required, update the License Key. Note that this procedure is set during the installation phase.

2.2 Client/Server Mode – Server Side

- ✓ Place the DBMaster dmconfig.ini, DBMaster.Lic file, Activation File, DBMaster Execution Files and Components into a specific user and folder.
- ✓ Place the Applications developed by an AP vendor into another specific folder, which will run on the server site.
- ✓ Place the files in Server Side mode into one directory, or into separate directories.
- ✓ Place the Data Files into another folder, which will be indicated in the dmconfig.ini.
- ✓ If a License Key is required, update the License Key.

2.3 Client/Server User Mode – Client Side

- ✓ Place the dmconfig.ini and DBMaster drivers into a specific user and folder.
- ✓ Place the Applications developed by an AP vendor into another specific folder.
- ✓ Place the files in Client Side mode into one directory, or into separate directories.
- ✓ Setup the Unix ODBC Driver, ODBC DSN if necessary.

NOTE: In HP-UX platform, after installed the DBMaster bundle version, please EXPORT DBMaster bundle installation path in shell initialization file.

For example;

For sh (.profile), bash (.bashrc), add

```
DBMASTER=/opt/bundle  
export DBMASTER
```

For csh/tcsh (.cshrc), add

```
setenv DBMASTER /opt/bundle
```

3. Database Binary Components

3.1 Files List for Installation Types

Following table is an example for using DBMaster 5.4 bundle version, lists all files generated after installation in different modes.

Note (OP) means it is optional.

File	Client	Single	Server	Description
dmconfig.ini	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	This file is the DBMaster configuration file; dmconfig.ini only should be under installation directory. The server site uses it to indicate the locations of Data Files. The client site uses it to indicate the IP Address and Port Number of server site.
dmjava_wrapper	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	This file is a symbolic link file to java application.
dmclassloader.jar			<input checked="" type="checkbox"/> (Op)	This file is a dynamic class loader for java sp.
rollover		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	This file is a command line utility used to restore a database from backup files.
libdmapic.so	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	This file is the elemental DBMaster ODBC API Driver. Even when using the JDBC Driver, this file is still required.
dmjdbc20.jar	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	This file is consisted the JDBC classes of DBMaster. If a Java program needs to use JDBC 2.0, without XA protocol support, users need to add this file to CLASSPATH environment. For example, J2SE 1.3 SDK contains the JDBC 2.0 but not XA API.

dmjdbc20xa.jar	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	This file is consisted the JDBC classes of DBMaster. If a Java program needs to use JDBC 2.0, with XA protocol support, users need to add this file to CLASSPATH environment. For example, J2EE 1.3 SDK contains the JDBC 2.0 and XA API.
dmjdbc30.jar	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	This file is consisted the JDBC classes of DBMaster. If a Java program needs to use JDBC 3.0, which contains XA as its standard API, please add this file to CLASSPATH environment. For example, J2SE 1.4 SDK and J2EE 1.4 SDK both support JDBC 3.0.
dmjdbct3c.jar	<input checked="" type="checkbox"/> (Op)			This file consists of classes supported by Type III JDBC client. If a Java program needs to use Type III JDBC, please place this file under the directory set by the environment variable CLASSPATH. For example, J2SE 1.4 SDK and J2EE 1.4 SDK both support Type III JDBC.
dmjdbct3s.war			<input checked="" type="checkbox"/> (Op)	This file consists of classes supported by Type III JDBC server. If a Java program needs to use Type III JDBC, please place dmjdbc3c.jar under the directory set by the environment variable CLASSPATH.
dmxtm.jar	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	The jar file for XTM Tool reference.
dmxtt.jar	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	The jar file for XTT Tool reference.
jsql.jar	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	The jar file for JSQL Tool all class files.
jtools.jar	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	The jar file for JDBATool all class files.
startup.jar	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	The jar file for Java Tool launching checking setting.
xtm.jar	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	The jar file for XTM tool all class files.
xtt.jar	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	The jar file for XTT Tool all class files.
libdmjdbc54.so	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	The binary for JDBC bridge.
libdmapis.so		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	The binary for JServer Manager Tool Creation database.
libdmdttut.so	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	Jdatatransfer tool engine library.
libdmjdbaut.so	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	Jdbatool internal link library.
libdmjsvrut.so	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	Jserver manager internal reference library.
libiconv.so		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Using for xml solution in xml function.

libxml2.so		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Using for xml solution in xml function.
libiconv.so.2.4.0		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Using for libxml2 when xml file encoding convert.
libiconv.so.2		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Using for libxml2 when xml file encoding convert.
libxml2.so.2		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Using for libxml2 when xml file encoding convert.
libxml2.so.2.6.27		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Using for xml solution in xml function.
dmeditor	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	The entry of launching JConfiguration Tool.
dmppcc		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	Compile ESQL/C into C language file.
dmppspc			<input checked="" type="checkbox"/> (Op)	This tool is the SQL stored procedure pre-processor. It is used when dmserver create the SQL stored procedure.
jdatatransfer	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	The entry of launching JDatatransfer Tool.
jdba	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	The entry of launching JDBATool.
jmonitor	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	The entry of launching JMonitor Tool.
jsql	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	The entry of launching JSQL Tool.
jsvrmgr	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	The entry of launching JServer Manager Tool.
xtm	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	The entry of launching XTM Tool.
xtt	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	The entry of launching XTT Tool.
dmserver			<input checked="" type="checkbox"/>	DBMaster C/S Mode main Server Program.
dmsqlc	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	Interactive SQL command tools provided by DBMaster. It is particularly useful when debugging the ODBC settings. However, it is not suggested to deploy this tool during installing your applications.
dmsqls	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	Interactive SQL command tools provided by DBMaster. It is particularly useful when debugging the ODBC settings. However, it is not suggested to deploy this tool during installing your applications.
grammar.sql	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	This file contains the SQL syntax for user's reference. It is very particularly useful when using dmSQL utility.
libdmudf.so		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	DBMaster User Defined Function dynamic link lib Program.

libexpat.so		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	XML Parser dynamic link lib Program.
shminfo	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	Check database is started or not.
DBMaster.lic		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	DBMaster License Key File. Please refer to Chapter 4 for its details.
COPYRIGHT		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	DBMaster copyright file.
dmschsvr			<input checked="" type="checkbox"/> (Op)	Schedule task service program.
\shared\3rd\xdelta\directory				
COPYING		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	Xdelta copyright file
README		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	The readme file of xdelta3.
xdelta3		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	A tools for DBMaster differential backup
\shared\3rd\xpdf\directory				
COPYING		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	Pdftotext copyright file.
pdftotext		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	The executable program which can converts Portable Document Format (PDF) files to plain text
pdftotext.1		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	Man pages of pdftotext.
pdftotext.cat		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	The pdftotext digital signature file.
pdftotext.hlp		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	The pdftotext help file.
README		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	The readme file.
xpdfrc		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	The pdftotext configuration file.
\shared\3rd\xpdf\pdfmaps\ directory				
Adobe-CNS1.cidToUnicode		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	The file is used to specify mapping between Adobe-CNS1 character collection and Unicode.
Adobe-GB1.cidToUnicode		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	The file is used to specify mapping between Adobe-GB1 character collection and Unicode.
Adobe-Japan1.cidToUnicode		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	The file is used to specify mapping between Adobe-Japan1.cid and Unicode.
\shared\3rd\xpdf\pdfmaps\CMap\ directory				
78-EUC-H		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	CMap files of pdftotext for support Japanese.
78-EUC-V		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
78-H		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
78ms-RKSJ-H		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	

78ms-RKSJ-V		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
78-RKSJ-H		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
78-RKSJ-V		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
78-V		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
83pv-RKSJ-H		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
90msp-RKSJ-H		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
90msp-RKSJ-V		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
90ms-RKSJ-H		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
90ms-RKSJ-UCS2		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
90ms-RKSJ-V		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
90pv-RKSJ-H		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
90pv-RKSJ-UCS2		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
90pv-RKSJ-UCS2C		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
90pv-RKSJ-V		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
Add-H		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
Add-RKSJ-H		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
Add-RKSJ-V		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
Add-V		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
Adobe-Japan1-0		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
Adobe-Japan1-1		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
Adobe-Japan1-2		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
Adobe-Japan1-3		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
Adobe-Japan1-4		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
Adobe-Japan1-UCS2		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
EUC-H		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
EUC-V		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
Ext-H		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
Ext-RKSJ-H		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
Ext-RKSJ-V		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
Ext-V		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
H		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)

Hankaku		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
Hiragana		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
Katakana		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
NWP-H		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
NWP-V		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
RKSJ-H		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
RKSJ-V		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
Roman		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
UniJISPro-UCS2-HW-V		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
UniJISPro-UCS2-V		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
UniJISPro-UTF8-V		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
UniJIS-UCS2-H		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
UniJIS-UCS2-HW-H		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
UniJIS-UCS2-HW-V		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
UniJIS-UCS2-V		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
UniJIS-UTF8-H		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
UniJIS-UTF8-V		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
UniJIS-UTF16-H		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
UniJIS-UTF16-V		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
V		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
WP-Symbol		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
Adobe-CNS1-0		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	CMap files of pdftotext for support Traditional Chinese.
Adobe-CNS1-1		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
Adobe-CNS1-2		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
Adobe-CNS1-3		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
Adobe-CNS1-UCS2		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
B5-H		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
B5pc-H		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	

B5pc-UCS2		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
B5pc-UCS2C		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
B5pc-V		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
B5-V		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
CNS1-H		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
CNS1-V		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
CNS2-H		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
CNS2-V		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
CNS-EUC-H		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
CNS-EUC-V		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
ETen-B5-H		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
ETen-B5-UCS2		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
ETen-B5-V		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
ETenms-B5-H		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
ETenms-B5-V		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
ETHK-B5-H		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
ETHK-B5-V		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
HKdla-B5-H		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
HKdla-B5-V		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
HKdlb-B5-H		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
HKdlb-B5-V		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
HKgccs-B5-H		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
HKgccs-B5-V		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
HKm314-B5-H		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
HKm314-B5-V		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
HKm471-B5-H		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
HKm471-B5-V		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
HKscs-B5-H		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
HKscs-B5-V		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
UniCNS-UCS2-H		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
UniCNS-UCS2-V		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
UniCNS-UTF8-H		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)
UniCNS-UTF8-V		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)

UniCNS-UTF16-H		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
UniCNS-UTF16-V		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
Adobe-GB1-0		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	CMap files of pdftotext for support Simplified Chinese.
Adobe-GB1-1		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
Adobe-GB1-2		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
Adobe-GB1-3		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
Adobe-GB1-4		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
Adobe-GB1-UCS2		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
GB-EUC-H		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
GB-EUC-V		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
GB-H		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
GBK2K-H		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
GBK2K-V		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
GBK-EUC-H		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
GBK-EUC-UCS2		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
GBK-EUC-V		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
GBKp-EUC-H		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
GBpc-EUC-H		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
GBpc-EUC-UCS2		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
GBpc-EUC-UCS2C		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
GBpc-EUC-V		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
GBKp-EUC-V		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
GBT-EUC-H		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
GBT-EUC-V		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
GBT-H		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
GBTpc-EUC-H		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
GBTpc-EUC-V		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
GBT-V		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
GB-V		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
UniGB-UCS2-H		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	

UniGB-UCS2-V		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
UniGB-UTF8-H		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
UniGB-UTF8-V		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
UniGB-UTF16-H		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
UniGB-UTF16-V		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	
\shared\codeorder\directory				
big5_stroke.ord		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	This file could be used for the “sort order” purpose. In this case, if set in dmconfig.ini, the “sort order” will conform to the Big5 stroke sequence. A user could use another kind of “sort order” or totally ignore this when using default alphanumeric order. Please read the “Database Administrator Guide” for details.
sjis_dict.ord		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	This file is used to rule the sort order., If set in dmconfig.ini, the “sort order” will conform to the SHIFT-JIS stroke sequence. A user can use another sort order or totally ignore this when using the default alphanumeric order. Please reference the <i>Database Administrator Guide</i> for details.
\shared\codepage\directory				
Note: This directory contains fifteen mapping files for different kinds of language, which is necessary both for Server and Client. For instance, Latin Lower case and Upper case conversion map. It suggests that user had better not modify the directory name and structure, in that DBMaster will link the needed files following the original directory structure. The directory does not exist before the DBMaster 4.0 bundle version.				
dmB5LToU.map	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
dmB5UToL.map	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
dmCyrillicLToU.map	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
dmCyrillicUToL.map	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
dmGBKLTToU.map	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
dmGBKUTToL.map	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
dmGreekLToU.map	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

dmGreekUToL.map	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
dmivfucode.map	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
dmJISLToU.map	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
dmJISUToL.map	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
dmLatin1LToU.map	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
dmLatin1UToL.map	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
dmLatin2LToU.map	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
dmLatin2UToL.map	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
dmEucjpLToU.map	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
dmEucjpUToL.map	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
dmGB18030LToU.map	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
dmGB18030UToL.map	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
\shared\locale\en directory				
dmisql.tab		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	Localization message when using dmSQL Tool. This is English localization.
dmsvr.tab		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	Localization message when using dmserver Tool. This is English localization.
dmerr54.tab	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	This file stores the localized error message. This is English localization.
dmJdbc.properties		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	Localization message when using dmjdbc20.jar, dmjdbc30.jar, dmjdbc20xa.jar. This is English localization.
dmxtm.properties		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	Localization message when using dmxtm.jar, xtm.jar. This is English localization.
dmp Perr.tab	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	This file stores the dmpcc.exe (ESQL/C pre-processor) error message. This is English localization.

dmsperr.tab	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	This file stores the dmppspc.exe (SQL SP pre-processor) error message. This is English localization.
dmuterr.tab	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	This file stores the rollover and upgrade utility tool error message. This is English localization.
\shared\locale\ja directory				
dmisql.tab		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	Localization message when using dmSQL Tool. This is Japanese localization.
dmsvr.tab		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	Localization message when using dmserver Tool. This is Japanese localization.
dmerr54.tab	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	This file stores the localized error message. This is Japanese localization.
dmJdbc.properties		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	Localization message when using dmjdbc20.jar, dmjdbc30.jar, dmjdbc20xa.jar. This is Japanese localization.
dmxtm.properties		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	Localization message when using dmxtm.jar,,xtm.jar. This is Japanese localization.
dmpperr.tab	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	This file stores the dmppcc.exe (ESQL/C pre-processor) error message. This is Japanese localization.
dmsperr.tab	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	This file stores the dmppspc.exe (SQL SP pre-processor) error message. This is Japanese localization.
dmuterr.tab	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	This file stores the rollover and upgrade utility tool error message. This is Japanese localization.
\shared\locale\ja.EUCJP directory				
dmisql.tab		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	Localization message when using dmSQL Tool. This is Japanese localization.
dmsvr.tab		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	Localization message when using dmserver Tool. This is Japanese localization.
dmerr54.tab	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	This file stores the localized error message. This is Japanese localization.

dmJdbc.properties		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	Localization message when using dmjdbc20.jar, dmjdbc30.jar, dmjdbc20xa.jar. This is Japanese localization.
dmxtm.properties		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	Localization message when using dmjdbc20.jar, dmjdbc30.jar, dmjdbc20xa.jar. This is Japanese localization.
dmperr.tab	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	This file stores the dmpcc.exe (ESQL/C pre-processor) error message. This is Japanese localization.
dmsperr.tab	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	This file stores the dmppspc.exe (SQL SP pre-processor) error message. This is Japanese localization.
dmuterr.tab	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	This file stores the rollover and upgrade utility tool error message. This is Japanese localization.
\shared\locale\zh_CN directory				
dmisql.tab		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	Localization message when using dmSQL Tool. This is Simplified Chinese localization.
dmsvr.tab		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	Localization message when using dmserver Tool. This is Simplified Chinese localization.
dmerr54.tab	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	This file stores the localized error message. This is Simplified Chinese localization.
dmJdbc.properties		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	Localization message when using dmjdbc20.jar, dmjdbc30.jar, dmjdbc20xa.jar. This is Simplified Chinese localization.
dmxtm.properties		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	Localization message when using dmjdbc20.jar, dmjdbc30.jar, dmjdbc20xa.jar. This is Simplified Chinese localization.
dmperr.tab	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	This file stores the dmpcc.exe (ESQL/C pre-processor) error message. This is Simplified Chinese localization.
dmsperr.tab	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	This file stores the dmppspc.exe (SQL SP pre-processor) error message. This is Simplified Chinese localization.

dmutterr.tab	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	This file stores the rollover and upgrade utility tool error message. This is Simplified Chinese localization.
\shared\locale\zh_TW directory				
dmisql.tab		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	Localization message when using dmSQL Tool. This is Traditional Chinese localization.
dmsvr.tab		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	Localization message when using dmserver Tool. This is Traditional Chinese localization.
dmerr54.tab	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	This file stores the localized error message. This is Traditional Chinese localization.
dmJdbc.properties		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	Localization message when using dmjdbc20.jar, dmjdbc30.jar, dmjdbc20xa.jar. This is Traditional Chinese localization.
dmxtm.properties		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	Localization message when using dmxtm.jar, xtm.jar. This is Traditional Chinese localization.
dmperr.tab	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	This file stores the dmppcc.exe (ESQL/C pre-processor) error message. This is Traditional Chinese localization.
dmsperr.tab	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	This file stores the dmppspc.exe (SQL SP pre-processor) error message. This is Traditional Chinese localization.
dmutterr.tab	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	This file stores the rollover and upgrade utility tool error message. This is Traditional Chinese localization.
\shared\lua\directory				
init.lua		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	Lua UDF user defined initial script file.
\shared\lua\clibs\directory				
cjson.so		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	Lua UDF extend module for JSON dynamic link lib program.
msgpack.so		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	Lua UDF extend module for MsgPack dynamic link lib program.
\shared\lua\libs\directory				
LuaDate.lua		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	Lua UDF extend module for Date handle.
\shared\sp\ directory				
Note: If you need not use the function of stored procedure, you can drop the directory.				

AppendBlob.sql		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	Register Stored Procedure APPENDBLOB and APPENGBLOBBYOID by running this script
CLEAN_TEMPSPSYSTEM.sp		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	CLEAR TEMPSP SYSTEM Shared Stored Procedure
DMSYSTEMSPSYSTEM.so		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	SYSTEM Shared Object Stored Procedure dynamic link lib Program.
DMXMLSPSYSTEM.so		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	XML-related Stored Procedure dynamic link lib Program.
DMCOPYTBSPSYSTEM.so		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Copy table stored procedure dynamic link lib Program.
DMXTMSPSYSTEM.so		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	XTM-related Stored Procedure dynamic link lib Program
DMXTTSPSYSTEM.so		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	XTT-related Stored Procedure dynamic link lib Program
\shared\stopword\ directory				
en.tab		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	User Defined Stop Word template for English.
cn.tab		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	User Defined Stop Word template for Simplified Chinese.
tw.tab		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	User Defined Stop Word template for Traditional Chinese.
\shared\udf\ directory				
Note: if you need not use the function of UDF, you can drop the directory.				
datetostr.so		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Date To String Function dynamic link lib Program. This function is deprecated in DBMaster 4.0. We retain these functions for purposes of backward compatibility, If this function is not used in your case, it should be removed from the installing files package.
datetostr.sql		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	ADD DATETIME TO String function by running this script.
dt.lua		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	LUA UDF DATETIME function Lua script file.
dt.sql		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	ADD LUA UDF DATETIME function by running this script.
jsoncol.lua		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	LUA UDF JSONCOLS function Lua script file.

libmedia.so		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	These functions are multimedia related and used internally.
libblob.so		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	BLOB-related Function dynamic link lib Program.
libtext.so		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	HTML-related Function dynamic link lib Program.
strtoint.so		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	String To Integer Function dynamic link lib Program.
to_date.sql		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Support Oracle's "to_date()" function by running this script.
to_date.so		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	TO_DATE Function dynamic link lib Program.
UTFConvert.sql		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Support U8TOU16 function by running this script.
UTFConvert.so		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	U8ToU16 UDF dynamic linking library Program.
libcrypt.sql		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	Support AES encrypt and decrypts function by running this script.
libcrypt.so		<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	AES encrypt and decrypts UDF dynamic linking library program.
\endorsed\directory				
Note: If you need not use the function of JTools, you can drop the directory.				
jai_codec.jar	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	The jar file for Java tool display image.
jai_core.jar	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	The jar file for Java tool display image.
jbcl.jar	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	The jar file for specified layout implementation.
jh.jar	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	The jar file for java tool help reference.
mlibwrapper_jai.jar	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	The jar file for Java tool display image.
xalan.jar	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	It's an XSLT processor for transforming XML documents into HTML, text or other XML document types.
xercesImpl.jar	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	The java parser support XML 1.0 recommendation and contains advanced parser functionality.
xml-apis.jar	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	The jar file for JAXP APIs.
xslt.jar	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	<input checked="" type="checkbox"/> (Op)	The jar file for XSL processor.
\include\directory				

eqmacro.h	◆	◆	◆	The C header for writing ESQL/C or Stored Procedure.
eqspincl.h	◆	◆	◆	The C header for writing ESQL/C or Stored Procedure.
esqlda.h	◆	◆	◆	The C header for writing ESQL/C or Stored Procedure.
esqlincl.h	◆	◆	◆	The C header for writing ESQL/C or Stored Procedure.
esqlprot.h	◆	◆	◆	The C header for writing ESQL/C or Stored Procedure.
esqltype.h	◆	◆	◆	The C header for writing ESQL/C or Stored Procedure.
libudf.h	◆	◆	◆	The C header for writing user defined function.
odbc.h	◆	◆	◆	The C header for writing ODBC program.
sql.h	◆	◆	◆	The C header for writing ESQL/C, Stored procedure or ODBC program.
sqlca.h	◆	◆	◆	The C header for writing ESQL/C or Stored Procedure.
sqlext.h	◆	◆	◆	The C header for writing ESQL/C, Stored procedure or ODBC program.
sqlopt.h	◆	◆	◆	The C header for writing ODBC program.
sqltypes.h	◆	◆	◆	The C header for writing ESQL/C, Stored procedure or ODBC program.
sqlucode.h	◆	◆	◆	The C header for writing ESQL/C, Stored procedure or ODBC program.
sqlunix.h	◆	◆	◆	The C header for writing ESQL/C, Stored Procedure or ODBC program on Unix/Linux.
\include\lua\directory				
luaolib.h	◆	◆	◆	The C header for writing Lua C module function.
lua.h	◆	◆	◆	
luaolib.h	◆	◆	◆	
\ templates\directory				
sp.mak	◆	◆	◆	Templates for C to create stored procedure.
\locale\en_US directory				
COPYRIGHT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	DBMaster copyright.

\locale\ja_JP directory similar
\locale\ja_JP.EUC directory similar
\locale\zh_CN directory similar
\locale\zh_TW directory similar

NOTE:

If the version used does not include jtools, then the related jtools files will not be included in the DBMaster bundle.

Marks '◆' are for program development phase; Vendor doesn't need to publish those files.

About the location of the dmconfig.ini file in DBMaster bundle version; this configuration file should exist in bundle version directory with all executable files, dynamic linking library files (*.so). It is suggested that user had better not modify the original directory structure, in that DBMaster will link the needed files following the original directory structure. But DBMaster standard version will only search for the dmconfig.ini file in the installed directory.

Please be noticed that for HP-UX Platform, the extension file name for dynamic linking library is '*.sl' instead of '*.so'. As to the pervious example is the description for Linux platform.

3.2 Packages for DBMaster bundle version in different language environments

DBMaster 5.4 bundle version can support four language environments: English, Traditional Chinese, Simplified Chinese and Japanese. There are four packages in the folder **bundle/locale/**, they response to four different languages:

Package	Language
en_US	English
ja_JP	Japanese
ja_JP.EUC	Japanese
zh_CN	Simplified Chinese
zh_TW	Traditional Chinese

The default language used is Japanese. If user wants to change it to other language, take Simplified Chinese for example, user should copy following files to the special location:

1. Copy all the files under the **locale\zh_CN** folder to the **bundle** directory.
2. Edit file **dbmaster.lic** and set **Language=3** or **9**.
3. When copying files under **zh_CN** to the Bundle directory, DBMaster supposes the OS is Simplified Chinese version OS then dmserver and dmsql32 will be displayed in Simplified Chinese interface. If the user's OS is not Simplified Chinese, dmserver and dmsql32 will be displayed in English interface.

If the 5.0 or previous version is used, user should copy all files under **locale\zh_CN\shared\errtab** to **shared\errtab** to change the error message information to Simplified Chinese. If the 5.1 or later version is used, it will not need this step, because DBMaster will detect the OS language. Once the OS is Simplified Chinese, the error message information will be Simplified Chinese.

3.3 Customize the bundle size after developing

DBMaster 5.4 bundle provides more features such as the SQL Stored Procedure and JTools functions. So the bundle kit will be much bigger than previous version. However, AP vendor can remove some packages or files that won't need any longer after developing.

Files or folders can be removed if it will not be needed:

Files can be removed	Used in which Function
/shared/sp	Stored procedure or ESQ/C procedure or native api programming
\Locale\	Localization for different languages, choice suitable language, copy corresponding files to Bundle\ folder and the other can removed
\templates	Templates for VC to create stored procedure

The following jtools files can be removed if will not be needed:

Jtools tool	Files can be removed
XTT tool	xjt xtt.jar dmxtt.jar DMXTTSPSYSTEM.so libdmjdbaut.so
XTM tool	dmxtm.jar xtm.jar xtm DMXTMSPSYSTEM.so libdmjdbaut.so
JSQL tool	jsql.jar jsql libdmjdbaut.so
JDBA tool	jtools.jar jdba libdmjdbaut.so libdmdttut.so libdmjsvut.so
JServer Manager	jsvrmgr libdmjsvut.so libdmjdbaut.so
JDatatransfer tool	jdatatransfer DMXMLSPSYSTEM.so libdmdttut.so libdmjdbaut.so
JMonitor	jmonitor libdmjdbaut.so
JDBC TYPE 3	dmjdbct3s.war dmjdbct3c.jar

*Note: If user deletes all the above jtools function files, then the **startup.jar** file and the **\Endorsed** folder located in DBMaster bundle installation directory can also be removed.*

DBMaster's other related files used to implement the specified function are listed as follows. When the function is unneeded, users can remove the related files.

Function	Files can be removed
ESQ/C	dmppcc

SQL SP	dmppspc
Restore DB	rollover
Differential Backup	\shared\3rd\xdelta\ directory
Sort order: Big5 stroke sequence	big5_stroke.ord
Sort order: shift-jis stroke sequence	sjis_dict.ord
Media type: not use pdf1.7	\shared\3rd\xpdf\ directory

3.4 3rd party of DBMaster

In DBMaster 5.4 bundle version, there are three third party tools located in **\shared\3rd**. The three third party tools are xdelta, xpdf and described separately in the following chapters.

3.4.1 PDFTOTEXT

pdftotext - The tool is used to convert Portable Document Format (PDF) files to text. Pdftotext is used when users insert files whose type is PDFTYPE, PDFFILETYPE, or call the UDF PDFTOTXT

Pdftotext converts Portable Document Format (PDF) files into plain text and the command is

pdftotext PDF-file text-file. If the parameter *text-file* is not specified, name of the text is same with name of the PDF file; If the parameter *text-file* is '-', the text is sent to screen.

3.4.2 XDELTA

xdelta.exe – The file is used when users do a differential backup.

4. Features

4.1 Using Stored Procedure

DBMaster 5.4 bundle version provides the Stored Procedure function in ESQL/C, SQL and Java. If you want to use the ESQL/C stored procedure in bundle version, please make sure there is cc or gcc compiler in your machine.

When create Stored Procedure in bundle version, For unloading DB, DBMaster provides SET UNLOAD PROCDEF ON function to unload the procedure definition, and then load DB, user needs to copy the .dll or .so files of the Stored Procedure to the **Shared/sp** directory or the specified **DB_SPDIR**, if no **DB_SPDIR** specified, copy these files to **DB_DBDIR** directory.

SQL stored procedure is a logic implementation only can be done by SQL statement. So if you want to use the SQL stored procedure in bundle version, you needn't install the VC compiler in your computer.

DBMaster bundle version also provides the Java Stored Procedure function. For using Java SP, the JRE is required. Please copy **JRE** folder to the **Bundle** directory to make sure the Java SP can run successfully.

4.2 Using JTools

DBMaster 5.4 bundle also provides the user-friendly graphical user interface (GUI) to manage the database easily. These JTools hide the complexity of the DBMS and query language and provides an easy way to understand and to use interface.

NOTE: JTools are based on the Java Runtime Environment. The Java Development Kit (JDK) or a Java Runtime Environment (JRE) is required for using JTools. And now JRE 1.5 is recommended. Please install it before using JTools.

DBMaster provides following JTools, user can open the Jtools directly:

JDBA Tool (jdba): managing the database objects such as creating table, viewing the statistic value...etc.

JConfiguration Tool (dmeditor): configuring and customizing DBMaster databases instead of editing the dmconfig.ini.

JServer Manager Tool (jsvrmgr): managing the database such as creating\deleting\restoring database and so on.

JDataTransfer Tool (jdatatransfer): transferring data in and out of the database.

JMonitor Tool (jmonitor): providing a graphical representation of various aspects of the database over time.

JSQL Tool (jsql): executing the SQL command and run the batch file...etc.

XML Transfer Mapping Tool (xtm): passing XML data to a database using XSL transformations.

XML Transfer Template Tool (xtt): providing a customizable bridge between database data and XML documents.

4.3 Not included features

The following features are not included in bundle version:

Features	In Bundle Version
Call XTM, XTT SP	No
OLEDB Driver	No
dmrestoretb	No
dbname	No
Use XML TYPE's utility	No

5. License Key

5.1 DBMaster.Lic content

According to the agreement, which has been acquired from DBMaster, the DBMaster.Lic content is as follows:

```
[DBMaster 5.4]
Bundle //DBMaster Product Edition
Language=2 //Database Language Code Setting
// 0:ASCII, 1:BIG5, 2:JIS, 3:GB
// 4:Latin (ISO-8859-1), 5:Latin (ISO-8859-2)
// 6:Cyrillic (ISO_8859-5), 7:Greek (ISO-8859-7)
// 8:EUC-JP, 9: GB18030, 10 UTF-8
Name=DBMaster //User Name
Company=DBMaster //Company Name
```

5.2 How to Upgrade License Key

If you want to upgrade your bundle version, please contact to the CASEMaker support for the new serial number and the corresponding **activation.dat**.

As you learned from the previous section, the License Key is only one line in the DBMaster.Lic. Therefore, you could use any Editor to “upgrade” the license key.

Additional, there should be a file named **activation.dat** correspond to the unique serial number under the bundle home directory. Please replace it with the new **activation.dat**.

Then your bundle version will be upgraded successfully.

Of course, if you still worry about the upgrading, you can buy the license key which supports more functions directly, Such as DBMaster 5.x, 5.1.x, 5.2.x, 5.3.x, 5.4.x... Although, DBMaster Support team will give you proper suggestion according to your needs.

5.3 Activation File Content

User Information: DBMJ

Product Name: DBMaster

Version: 05.40.00
Edition: Bundle
Upgradable: Patch Upgrade
Locale Language: All
Serial ID: 103
Platform: Linux
License Start Date: Unlimited
License Expiration Date: Unlimited
Free Trial Period: Off
Max Connection: 5
Host Connection: 5
Max Database Size: Unlimited
Max Page Size: 32K
Max Journal File Size: 8G
Distributed Database: On
Database Replication: On
Backup Server: On
IO Server: On
Access Control List: On
Network Compression: On
FullText Indexing: On
Database Cobol Interface: On

Activation-Lines: 4

XX
XX
XX
XX
XXXXXXXXXXXX

Signature-Lines: 3

YY
YY
YY
YY
YY
YYYYYYYYYYYYYYYYYY

6. Client Setting - UnixODBC Registry

In this chapter, we will introduce how to register the UnixODBC under the Linux in the following, and we take the unixODBC-2.2.8 tar.gz for example;

6.1 Registering an ODBC Driver

In the UnixODBC, user must register the driver oneself, i.e. add the information of DBMaster driver to odbcinst.ini, as following describe:

```
[root@support RPMS]# more /etc/odbcinst.ini
# Example driver definitions
#
#
# Included in the unixODBC package
[DBMaster 5.4B Driver] //ODBC driver name
Description = ODBC for DBMaster 5.4B
Driver = /home/dbmaster/bundle/libdmapic.so
FileUsage = 0
```

6.2 Registering UnixODBC Data Source Name (DSN)

In the UnixODBC, it uses different files to store the System DSN and User DSN. In our environment, System DSN is stored in odbc.ini and User DSN is stored in User's directory/.odbc.ini.

We should set the System DSN to link the DBMaster by PHP of Web. Following is ours setting:

```
[dbsample5]
Description = Database for dbsample5
Driver = DBMaster 5.4B Driver
Database = dbsample5 //database name
Host = localhost
Port = 2450
User = SYSADM
Password =
```

6.2.1 VERIFY THE DSN SETTING

If the procedures are followed properly, you should be able to connect `dbsample5` by using command 'isql' and to see whether register successfully. For example, use can use follows command to connect database (`dbsample5`):

```
[root@support RPMS]# isql dbsample5 sysadm
```

6.3 Setting Environment Variable

For Read-Only Database is stored on CD-ROM, it's difficult for user to specify the path in `dmconfig.ini` file. It will be easier for user if DBMaster can support the default environment variable `$APP_HOME` and `$APP_DRIVE`.

- **\$APP_HOME**: DBMaster bundle installed directory. It always gets the path where the executable program. Such as the `dmServer.exe` which is installed in the `G:\db\` directory, DBMaster will automatically replace `$APP_HOME` with "G:\db" when reading the `dmconfig.ini` file.
- **\$APP_DRIVE**: This variable returns an empty string on the Linux operating system.

DBMaster bundle version also supports the system environment variables, such as `$TEMP = "C:\TEMP"` which defined in the operating system environment variables. DBMaster will automatically replace the `$TEMP` with "`C:\TEMP`" when reading the `dmconfig.ini` file.

If the default environment variable `$APP_HOME` or `$APP_DRIVE` is defined in the system environment variables, DBMaster will not find the defined value of the system environment variables when reading the `dmconfig.ini` file, but priority using the default environment variable value.

If user has a CD-ROM, user can put the DBMaster bundle software and database on the CD-ROM with the following setting:

```
dmconfig.ini
[DBSAMPLE5]
DB DBDIR=$APP_DRIVE\database
DB FODIR=$APP_DRIVE\database\fo
DB TPFIL=$TEMP\DBSAMPLE5.tmp
DB_SMODE=6
```


7. Backup/Restore about DBMaster Bundle

There are 2 ways for backup/restore DBMaster bundle database, one is using off-line backup, the other is using jtools – JServer Manager Tool to help you implement on-line full backup, differential backup and incremental backup, but it should install bundle with jtools version to do.

You can perform a backup to a database that is not yet started. Perform an off-line backup involves specifying a location for the backup files. You should choose a backup directory location on a separate disk to reduce the risk of loss of data through media failure.

When performing an offline backup, you should copy all related database files (.DB, .BB, .JNL, .SDB, .SBB), user specified tablespace data files, file objects (optional) and dmconfig.ini file of the source database to the specific directory of the target database.

The database administrator may find it necessary to restore all data from backup files if an unrecoverable error has occurred in the database. You can perform a database restoration from disk. Restore a database from disk can restore the database to the time of the last backup. DBMaster bundle version has not supplied the API for Backup/Restore, so user has to perform the backup/restore only through this method.

Adopt JServer Manager GUI tool to help executing backup/restore, it's a GUI interface, you can backup/restore bundle database by GUI direction. For more introductions about how to backup/restore by JServer Manager, please refer to the JServer Manager Guide.

8. Sample Programs

This chapter gives some detailed samples for using JDBC. And give you these steps for running them in the DBMaster.

8.1 How to build and run ODBC sample

- Build ODBC sample
 - copy ex1.* from samples/ODBC to current
 - copy include files to current
 - \$ cc -o ex1 ex1.c -Iinclude -L/opt/bundle -ldmapic

Note:

Linking library depend on your platform, please check your ODBC/Makefile

- Run ODBC sample
 - \$ LD_LIBRARY_PATH=/opt/bundle ./ex1
 - or set environment
 - \$ export LD_LIBRARY_PATH=/opt/bundle:\$LD_LIBRARY_PATH
 - \$./ex1

Note:

If ex1.c and bundle's binary file at same directory, customer needn't to set any environment variable, otherwise, user needs to set LD_LIBRARY_PATH

8.2 How to test JDBC

The follow examples only test on jdbc 1.5.0

Copy *.java from samples/JDBC to current

```
$ javac *.java
$ java -cp /home/DBMaster/bundle/dmjdbc20.jar:. ex_ExecuteParam
$ java -cp /home/DBMaster/bundle/dmjdbc20.jar:. ex_Resultset
You are also use CLASSPATH
$ export CLASSPATH=/home/DBMaster/bundle/dmjdbc20.jar:.
$ java ex_Resultset_update
```

Note:

If java application and bundle's binary file at same directory, user needn't to set any environment variable, otherwise, user needs to set LD_LIBRARY_PATH or add -Djava.library.path=....when launching Java VM.

9. Frequently Asked Questions

Note: The follow example untar bundle package into /opt/bundle, and shell environment use bash, csh user please STFW.

Q1: How to setup bundle version?

A1: Just untar and go

Q2: Where is dmconfig.ini?

A2: Only in your bundle directory

Q3: How to create database?

A3: \$ /opt/bundle/dmsqls
dmSQL> create db dbsample5;
dmSQL> quit;
or
JServer Manager – Create Database menuitem

Q4: How to Set server address and port number ?

A4: \$ vi /opt/bundle/dmconfig.ini
DB_SVADR = localhost
DB_PTNUM = 2453

Q5: How to Start db?

A5: \$ /opt/bundle/dmserver dbsample5
or set environment
\$ export PATH=/opt/bundle:\$PATH
\$ dmserver dbsample5
or
JServer Manager – Start database menuitem

Q6: How to remove Japanese message?

A6: \$ rm -fr /opt/bundle/shared/errtab

Q7: How to change your license?

A7: Please contact to support.

Q8: Can I use EC?

A8: Yes.

Q9: How to use java.library.path on JDBC test

A9: \$ echo \$LD_LIBRARY_PATH
/opt/bundle
\$ unset \$LD_LIBRARY_PATH
\$ java ex_Resultset_update
Exception in thread "main" java.lang.UnsatisfiedLinkError: no dmjdbc54 in java.library.path
at java.lang.ClassLoader.loadLibrary(ClassLoader.java:1403)

```
...  
$ java -Djava.library.path=/opt/bundle ex_Resultset_update
```