jBASE Product Release Notice

Product:	**jBASE 5.2**
Version:	**5.2.27**
Type:	**Patch Release**

Contents

Features and Components

jBASE 5 has been designed to allow non-stop running, increased resilience and lower maintenance. In addition, jBASE 5 is an exclusively 64-bit release

Features

Online Backup	Allows backups / restores to be carried out without logging users off
Resilient files	New type of file highly resilient to corruption
Resizing files	Resilient files grow / shrink with the data – no need to resize
Warmstart recovery	Correctly configured jBASE can autorecover from system crashes
jRFS	Allows for multiple application servers with a jBASE database
jDLS	Allows for distributed locking in a multi server environment
64-bit support	Engineered for 64-bit platforms
RHAS 5 Support	Provides Red Hat AS5 platform capability for applications.
Win64 Support	Provides 64-bit Windows platform capability for applications.
jRFS 3/4 Client support	Provides client support for existing jBASE 3.4/4.0/4.1 Releases
SQL engine	Provides read / write SQL capability

Components

.Net OBjEX	Provides VB/.Net interoperability.
jRemote .Net	Provides Native jBASE API for accessing jBC functions remotely

3rd Party Components

The jBASE 5.2 installation process includes installation of the following 3rd party components.

Java Runtime Engine

Built using the following Java versions :

HP-UX B.11.23 Itanium	Java(TM) 2 Runtime Environment, Standard Edition (build 1.5.0.04-_27_jul_2006_10_52)
AIX 5.3	Java(TM) 2 Runtime Environment, Standard Edition (build 1.5.0)
Solaris 10 SPARC	Java(TM) 2 Runtime Environment, Standard Edition (build 1.5.0_12-b04)
Linux RH-AS5	Java(TM) 2 Runtime Environment, Standard Edition (build 1.5.0_22-b03)
Windows 64-bit	Java(TM) 2 Runtime Environment, Standard Edition (build 1.5.0_12-b04)

Internationalization library

Required for Locale and Multi Byte character set support

- ICU 4.0.1

XML library

Required for XML function support.

- XERCES 2.7.0
- XALAN 1.10.0

ODBC support (32 bit)

This release contains an updated version of the ODBC installer.

NOTE: The files in the Install package all rely on MSVCRT80 version 6195 (or later).
This can be obtained here. You need to run/load this before Installing the ODBC installer.

http://www.microsoft.com/download/en/details.aspx?displaylang=en&id=26347

Supported Platforms

This specific Patch Release provides support for the following platforms:

AIX 5.3 (64-bit) *
HPUX Itanium 11.31 (64-bit)
Red Hat Enterprise Linux 5 (64-bit) *
Solaris 10 SPARC (64-bit) *
Windows (64-bit)

*This build is binary compatible with forward releases of the platform
(e.g. Aix 5.3. -> Aix 6.1 -> Alix 7.1)

Running on RedHat 6 required the ssl compatibility library to be installed; this can be done with the following command

```
yum install openssl098e
```

Caveats

- jDP / Attunity Connect is not available for the 64-bit jBASE 5.2 releases

Compilation

jBASE 5.2 is brought to you by the following compilers;

Platform	Compiler version
AIX 5.3	XL C/C++ Version 8.0.0.18
Windows 64-bit	Visual Studio 2005 SP1
RH Linux AS5	gcc (GCC) 4.1.2 20080704 (Red Hat 4.1.2-44)
HP Itanium3	cc: HP C/aC++ B3910B A.06.22 [Nov 14 2008]
Solaris 10 SPARC	Sun Studio 11

Patch Details

All patches from previous jBASE releases have been included where appropriate in jBASE 5.2. All Patch details for the jBASE 5.2 release are provided in a separate Patch Summary document.

jBASE 5.2.1 patch release includes Patches PN5_20000 through PN5_20051

jBASE 5.2.2 patch release includes Patches PN5_20052 through PN5_20067

jBASE 5.2.3 patch release includes Patches PN5_20068 through PN5_20089

jBASE 5.2.4 patch release includes Patches PN5_20090 through PN5_20099

jBASE 5.2.5 patch release includes Patches PN5_20100 through PN5_20110

jBASE 5.2.6 patch release includes Patches PN5_20111 through PN5_20117

jBASE 5.2.7 patch release includes patches PN5_20118 through PN5_20123

jBASE 5.2.8 patch release includes patches PN5_20124 through PN5_20143

jBASE 5.2.9 patch release includes patches PN5_20144 through PN5_20153

jBASE 5.2.10 patch release includes patches PN5_20154 through PN5_20163

jBASE 5.2.11 patch release includes patches PN5_20164 through PN5_20184

jBASE 5.2.12 patch release includes patches PN5_20185 through PN5_20195

jBASE 5.2.13 patch release includes patches PN5_20196 through PN5_20202

jBASE 5.2.14 patch release includes patches PN5_20203 through PN5_20208

jBASE 5.2.15 patch release includes patches PN5_20209 through PN5_20221

jBASE 5.2.16 patch release includes patches PN5_20222 through PN5_20234

jBASE 5.2.17 patch release includes patches PN5_20235 through PN5_20247

jBASE 5.2.18 patch release includes patches PN5_20248 through PN5_20257

jBASE 5.2.19 patch release includes patches PN5_20258 through PN5_20271

jBASE 5.2.20 patch release includes patches PN5_20272 through PN5_20284

jBASE 5.2.21 patch release includes patches PN5_20285 through PN5_20294

jBASE 5.2.22 patch release includes patches PN5_20295 through PN5_20307

jBASE 5.2.23 patch release includes patches PN5_20308 through PN5_20326

jBASE 5.2.24 patch release includes patches PN5_20327 through PN5_20333

jBASE 5.2.25 patch release includes patches PN5_20334 through PN5_20345

jBASE 5.2.26 patch release includes patches PN5_20346 through PN5_20356

jBASE 5.2.27 patch release includes patches PN5_20357 through PN5_20363

Installation instructions for jBASE 5.2

On UNIX systems

Set the ‘umask’ to enable the correct UNIX permissions for the files about to be installed.

```
umask 0
```

Create the directory into which you are installing jBASE 5.2, eg :

```
mkdir /home/jbc52
```

This directory path will subsequently be used as the ‘$JBCRELEASEDIR’ environment variable setting.

[ensure the volume in which you are installing jBASE 5.2 has sufficient free disk space, approximately 500MB is required, plus additional space for any temporary files]

```
df –k          [ will show the current disk usage within each UNIX volume ]
```

‘cd’ to the directory just created, eg :

```
cd /home/jbc52
```

Uncompress the appropriate ‘tar.gz’ file, eg for 64-bit Aix 5.3 :

```
gzip –d  64bit_jbase5227_aix.tar.gz
```

Install the jBASE release using :

```
tar –xvf   64bit_jbase5227_aix.tar
```

On Windows systems

Run the installer, e.g. ‘64bit_jbase5227_win.exe’ and follow the on screen instructions/prompts shown.

Note: The Installer has been modified slightly so that if it finds a "config" directory in the install directory it will assume that its doing an "Upgrade" and will stop the telnet and jDLS daemons and then rename the existing config directory to "config_pre{jBASE Install Version}". e.g. "config_pre5.2.8"

It will then pop up a message box displaying this information.

Incidents Addressed in jBASE 5.2.27 Patch Release

TR202277	fixed by patch 5_20357
RTC935329/TR202269	fixed by patch 5_20358
RTC966751/TR202282	fixed by patch 5_20359
RTC967137/TR202272	fixed by patch 5_20360
RTC869789/TR202258/TR20236	fixed by patch 5_20361
TR202278/RTC979397	fixed by Patch 5_20362
RTC897335/TR202264	fixed by patch 5_20363

Patches incorporated in jBASE 5.2.27_Patch Release

5_20357

Implement 'G' option to ACCOUNT-SAVE to save items greater than 32k (31,767 bytes)

To test:

'$JEDIFILENAME_SYSTEM' accname

001 D
002 /home/acc

'/home/acc' directory contains Hashfile with items

item1 containing 32kB of data
item2 containing 64kB of data

ie LIST /home/acc/file *A9999

displays :

item1 32774
item2 65542

jsh -> T-ATT FILE0 DEVICE=./tfile
jsh ->ACCOUNT-SAVE accname (G

Prior to this patch would display :

Item 'item2', in file 'file', > 32k, truncated to '31767'

5_20358

Prevent 'Segmentation Violation' (Unix) 'Memory Error' (Windows) accessing files within a directory

To test :

CREATE-FILE DICT directory_name 1,1

DICT directory_name Updatetime

001 A
002 0
003 Date Updated
004
005
006
007 D
008 A;NU
009 L
010 12

LIST <full_path_to>directory_name Updatetime

should list the update time of all files in directory 'directory_name'

Prior to this patch a 'Segmentation Violation' (Unix) 'Memory Error' (* Windows could occur

5_20359

Prevent Windows Memory Error using 'ICONV(invalid_time,'MT')'

To test:
[Basic program]

```
CRT SQUOTE(ICONV(9999999999999,'MT'))
```

should display

```
'0'
```

Prior to this patch a Windows Memory Error could occur

5_20360

[JODBC] Multivalues repeated for dependant columns

Using the extended dictionary will generate an association string that will use the PICK associations mechanism, (c;2;3;4, D;1 etc..), previously D-TYPE dictionarys would fail as they would be expecting the name of the PH entry in the files dictionary to pick up a list of columns from.

Also enabled existing QA test to check this functionality that was disabled as it had no entry in the QATestConfig file.

5_20361

[JODBC] UNION statement fails in 5.2.24

Try and support aggregates in the UNION statement. (Functions like using SUM() need to be applied globally)

Previously UNIONS would fail if aggregates where used.
e.g. SELECT ... FROM A WHERE ... GROUP BY ... UNION SELECT ... FROM B WHERE ... GROUP BY ...

by enabling subquerys we can now support this functionality by applying the aggregate to the top level statement and using a subquery to get at the data,

e.g. SELECT ... FROM (SELECT ... FROM A WHERE ... UNION SELECT ... FROM B WHERE ...) GROUP BY ...

Although most of the subquery code was already implemented to support functions like IN/EXISTS additional change to the aliasing mechanism where needed, for example..

e.g. SELECT xxx.a, yyy.b FROM (SELECT zzz AS a FROM kkk) xxx, ccc yyy WHERE xxx.a = hello

We can now pass alias between statements and assigning an alias to a subquery.

This change also updates the default output formatting for functions and aggregates; previously they were still being returned as strings, the new behaviour is to check any columns or expressions being used to see what the highest scale held in there metadata is.

The new default is scale 2, precision 14, this is currently only applied to the results from functions and expressions if the result is going to be some sort of number.

5_20362

'jlicensinginfo' / 'jproclic' show inconsistent information

Update this utility so that it shows the actual number of Free licenses by scanning the proc directory by default and showing the Actual Used/Free.

5_20363

Prevent 'Resource temporarily unavailable' error during T-READ

To test :

jsh -> T-ATT DAT0
jsh -> T-REW
jsh -> T-READ

Prior to this patch :

TAPE I/O: Resource temporarily unavailable

was displayed