

Keys:

- [KERNEL] - kernel of Valentina, affects all products.
- [SQL] - SQL parser and executer, affects all products.
- [VSDK] - Valentina C++ SDK,
- [VCOM] - Valentina COM/ActiveX
- [V4RB] - Valentina for REALbasic.
- [V4MD] - Valentina for Macromedia Director.
- [V4WS] - Valentina for WebSiphon.
- [VXCMD] - Valentina XCMD.
- [GUI] - User Interface of Valentina application.
- [AS] - AppleScript dictionary of Valentina application.

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Latest documentation for beta products can be found at (if a link don't work then file don't exists now):

- [http://www.paradigmasoft.com/docs/ValentinaKernel\\_beta.pdf](http://www.paradigmasoft.com/docs/ValentinaKernel_beta.pdf)
- [http://www.paradigmasoft.com/docs/ValentinaSQL\\_beta.pdf](http://www.paradigmasoft.com/docs/ValentinaSQL_beta.pdf)
- [http://www.paradigmasoft.com/docs/V4RBReference\\_beta.pdf](http://www.paradigmasoft.com/docs/V4RBReference_beta.pdf)
- [http://www.paradigmasoft.com/docs/V4MDReference\\_beta.pdf](http://www.paradigmasoft.com/docs/V4MDReference_beta.pdf)
- [http://www.paradigmasoft.com/docs/V4WSReference\\_beta.pdf](http://www.paradigmasoft.com/docs/V4WSReference_beta.pdf)

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**Version 1.8.7 final** **// Jan 2, 2001**

////////// NEW \\\\\\\\\\\\\\\\\\\

- [VJDK] First release of "Valentina for Java" SDK.
- [VSDK] VDK\_AE classes updated for Carbon.
- [VAPP] Carbon ready
- [V4RB] Carbon ready
- [V4MD] Shockwave ready
- [V4MD] Authorware ready

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [KERNEL] Memory leak on sorting of Boolean field.
- [KERNEL] Sorted cursor build for several tables have had some internal parameters wrong.
- [VSDK] VDK\_AEVarChar class now is inherited from VDK\_VarChar.
- [V4MD] In Text field with Bind was written one more byte, Director 6 then display it as square.
- [V4MD] RemoveBaseObject(), ChangeTypeOfField() was broken.
- [V4WS] valRemoveBaseObject was broken.
- [VCOM] VField.GetString() now works.

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**Version 1.8.7 b1** // Jan 2, 2001

////////////////// NEW \\\

- [V4MD] Debug messages of V4MD now are sent to Message window of Director.  
ValentinaDebugLevel now has second parameter UseMsgWindow on default it is true.
- [V4MD] CreateDatabase() and OpenDatabase() now return true on success.
- [V4MD] Function IsOpen(), which return true if database is open.

## ////////////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\\\\\

- [V4MD] SetPassword() now can remove password.
- [V4MD] RemoveBaseObject() now works.
- [VCOM] VField.GetString() now works.

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**Version 1.8.6 final**      **no changes.**

**Version 1.8.6 b28**                      **// Dec 16, 2000**

//////////////////// CHANGES \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\

- [V4MD,V4WS, VXCMD] Field GetTarget() now return name of Target BaseObject instead its reference.

//////////////////// NEW \\\

- [VSDK,V4MD,V4RB,VXCMD] (Win)	Implemented ErrorStrings.
- [VAPP]	Error dialog
- [VAPP]	Can open db with ANY Creator/Type by drag and drop of db icon on VAPP.

////////////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\

- [KERNEL]	If db files are from other platform, adding of new records into indexed fields didn't work.
- [KERNEL]	Creation of new field in table with deleted records, was with bug.
- [All] (Win)	Open( dbPath ) now don't require extension ".vdb" This is required for cross-platform code.
- [V4MD]	if db Files are from other platform, GetMedia() crashes.
- [VXCMD]	Cursor_GetRecords() work for text field now.

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**Version 1.8.6 b27                      // Dec 7, 2000**

////////// CHANGES \\\\\\\\\\\\\\\\\\\

- [VSDK]                      Changed schema of protection. Instead of 2 Libs VDK + encrypted VDKx , now we have one LIB/DLL.
- [VSDK]                      Instead of init calls:  
                                VDK\_Database::InitStaticMembers();  
                                MakeDatabaseCache();  
must be used    ValentinaInit(ulong inCacheSize, char\* inMacSN, char\* inWinSN);  
To finish work with Valentina use ValentinaShutDown();

////////// NEW \\\\\\\\\\\\\\\\\\\

- [VSDK]                      Now we have for Windows LIBs for VC++ and CodeWarrior, and DLL, which can be used with ANY C++ compiler.

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [VAPP]                      "get deletion control of field ..."                      now works correctly.

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**Version 1.8.6 b24-b25                      // Nov 26-28, 2000**

////////// NEW \\\\\\\\\\\\\\\\\\\

- [VSDK]                      Added FBL\_Version.h file and FBL\_Version.r files and global constants in FBL\_Globals.cpp
- [VSDK]                      VSDK for MAC now includes FBL.rsrc and OBL.rsrc files
- [VXCMD]                      Kernel made as shared library to get high speed of call of XFCN functions.
- [V4WS]                      New functions:  
                                valGetDatabaseName( dbRef )  
                                vallsValidDatabaseRef( dbRef )  
                                valCursor\_ImportASCII( CursorRef, Path, [fldDelimiter], [recDelimiter]  
                                valCursor\_ExportASCII( CursorRef, Path, [fldDelimiter], [recDelimiter]

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [KERNEL]                      TEXT field always have to think that it delete value indexed by words. Now it checks flag.
- [KERNEL]                      CloseDatabase() now clean up internal pointers, so they can be reused.

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**Version 1.8.6 b23                      // Nov 16, 2000**

////////// NEW \\\\\\\\\\\\\\\\\\\

- [VXCMD]                      Version(), Database\_SetTimeOut(), Field\_SetValue(), Field\_GetValue().

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [VXCMD]                      Crash if you call VXCMD functions after ShutDown.

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**Version 1.8.6 b21** **// Nov 13, 2000**

////////// CHANGES \\\\\\\\\\\\\\\\\\\

- [V4WS] All functions which have use dbName now require dbRef, which must be received from valMakeNewDatabase() or valOpenDatabase().

////////// NEW \\\\\\\\\\\\\\\\\\\

- [V4WS] Debugging feature to log messages in Log window of WebSiphon or DCon window.

- [V4WS] valSetDebugLevel( Level, [useDCon] )  
valSetSchemaVersion( dbRef, Version )  
valGetSchemaVersion( dbRef )  
valSetDateFormat( dbRef, DTFormat, [DateSep], [TimeSep] )  
valGetDateFormat( dbRef )  
valGetDateSep( dbRef )  
valGetTimeSep( dbRef )  
valFieldIsNull( fldRef )  
valGetNameOfField( fldRef )

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [V4WS] Garbage at end of error string.

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**Version 1.8.6 b20** **// Nov 6-9, 2000**

////////// NEW \\\\\\\\\\\\\\\\\\\

- [VXCMD] Functions: Database\_SetSchemaVersion(), Database\_GetSchemaVersion,  
Database\_SetDateFormat(), Database\_GetDateFormat(), Database\_GetTimeSep().  
Cursor\_IsValid().

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [KERNEL] If to store in a VarChar field a string with length close to maximal length of field can be crash.  
- [KERNEL] 2 Bugs in the index ,on deletion or update in some cases we can get corruption of index.  
- [VXCMD] Memory leaks and crashes fixed.

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**Version 1.8.6 b19** **// Oct 29, 2000**

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [KERNEL] If a String field is indexed by words then search "NOT str" didn't works.  
New algorithm resolve this problem and is much faster .

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**Version 1.8.6 b16-b18 // Oct 26, 2000**

////////// NEW \\\\\\\\\\\\\\\\\\\

- [KERNEL] Added 4 error constants to handle in VXCMD, V4WS plugins bad dbRef, boRef and CursorRef.
- [VSDK] VDK\_BaseObject::Exists( VKDK\_BaseObject\* inBO)
- VDK\_Cursor::Exists( VDK\_Cursor\* inCursor)

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [KERNEL] BLOB field on assigment of zero data do store them allocating a segment.
- [KERNEL] Bug in function SubStr().
- [KERNEL] VDK\_Field::FindValue() sometimes do not correct search.
- Side effect in deletion of a record of One BaseObject related to Many BaseObject with RESTRICT type.
- [VSDK, V4RB] Order of creation of classes could cause wrong results.

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**Version 1.8.6b15**

////////// CHANGES \\\\\\\\\\\\\\\\\\\

- [KERNEL] Removed error constant 310. Now we have 2 constants:  
kFBL\_InvPageVarChar = 348 // inventory page of a VarChar field.  
kFBL\_InvPage = 372 // inventory page of an Index.

////////// NEW \\\\\\\\\\\\\\\\\\\

- [V4MD] VCursor.DropRecord function

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [KERNEL] Bug in VarChar field on deletion of page.
- [KERNEL] Bug in VarChar field on split of page.
- [KERNEL] Bug in String/VarChar and Text fields, can cause wrong index on REPLACE command.
- [KERNEL] On creation of new field in table with records, space for this field now is filled by zero.
- [KERNEL] DropRecord() now correctly works for cursor build as join.
- [V4WS] Removed conflict with WS resource.

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**Version 1.8.6b14**

////////// NEW \\\\\\\\\\\\\\\\\\\

- [KERNEL] Function to convert RDB-link into ObjectPtr link.
- [V4RB] VObjectPtr.ConvertFromRDB( inRDB\_KEY as VField, inRDB\_PTR as VField )
- [AS] command ConvertFromRDB

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [AS] 'format' command for BaseObject now consider parameters FROM and TO as optional.

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**Version 1.8.6b12**

////////// NEW \\\\\\\\\\\\\\\\\\\

- [KERNEL] Now VarChar indexing works in 10-30 times faster. For String also a little.

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Version 1.8.6b10

////////// NEW \\\\\\\\\\\\\\\\\\\

- [KERNEL] Error code: 310 Inventar page error.
- [KERNEL] Error code: 371 Fail to build index.
- [V4MD] New methods in VDatabase Xtra: GetSchemaVersion(), SetSchemaVersion()
- [AS] Now Picture field can be created via AS.
- [GUI] Now Picture field is enabled in the menu of field types.

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [KERNEL] Method which use other method now works in cursor.
- [AS] For VarChar field now works: 'get type' 'get length'
- [AS] Now 'get method' works.

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Version 1.8.6b9

////////// NEW \\\\\\\\\\\\\\\\\\\

- [KERNEL] Password for database (temporary solution).
- [V4MD] Password for database (temporary solution).

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [KERNEL] Text field with no IndexByWords, don't works correctly if string > 128.

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Version 1.8.6b8

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [KERNEL] Crash on Import of file > 256MB.
- [KERNEL] Flag IsDurdy of cursor fields was not cleared after Add().

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Version 1.8.6b7

////////// NEW \\\\\\\\\\\\\\\\\\\

- [VSDK] VDK\_Cursor.DropRecord() -- remove record from cursor, but don't delete it from original table.

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [KERNEL] After SQL query with Sorting, immidate next deletion of record not correctly update index.

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Version 1.8.6b6

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [MacOS] removed dependency on QuickTime on launch, so now if you don't use VPicture field, you can start app on MacOS without QT.

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Version 1.8.6b5

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

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**Version 1.8.6b4**

////////// CHANGES \\\\\\\\\\\\\\\\\\\

- [VSDK]        New file FBL\_Globals.cpp, must be included into your project
- [VSDK]        Now MoreFiles of Apple Computer is not included into VDK library, so you need include it into your project manually.  
                 Use folder "MoreFiles" if you work with Universal Headers < 3.3.1.  
                 Use folder "(MoreFiles\_Car)" if you work with Universal Headers 3.3.1 or newer.

////////// NEW \\\\\\\\\\\\\\\\\\\

- [VSDK]        New file FBL\_Globals.cpp contains some new global constants which allows you tune
  - Creator and File Types for MacOS.
  - extensions of db files for MacOS and Windows.
- [VSDK]        Class VDK\_Cursor now has set of methods to get field with required type, for example GetBooleanField().

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**Version 1.8.6b3**

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [KERNEL]      In page file (index and VarChar) on deletion of many records some cache blocks don't release what cause sometimes a crash.
- [KERNEL]      On deletion of many records VarChar field fail.
- [KERNEL]      On deletion of all records of table BLOB field become corrupted and start produce EOF error.
- [GUI]         If there are many (hundreds) fields in BaseObject then header buttons of table don't scroll.

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**Version 1.8.6b2**

////////// NEW \\\\\\\\\\\\\\\\\\\

- [GUI]        Open and Save dialogs now work with Navigation Service of MacOS

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [KERNEL]      Leak on deletion of thread
- [AS]         Leak in AS layer in commands Replace, Import.
- [AS]         'set field "ObjectPtr" to value' now works.

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**Version 1.8.6b1**

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [KERNEL]      Fixed bug in the index on deletion record
- [KERNEL]      Detected leak in parser of BaseObject Methods.
- [KERNEL]      Fixed bug in the function RIGHT
- [KERNEL]      Fixed bug in the function LOCATE
- [GUI]        on MacOS 8.6 popup menu "Type" in DefineFields dialog is not disabled now.

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Version 1.8.5b33

////////// NEW \\\\\\\\\\\\\\\\\\\

- [KERNEL]      Now works export of cursor built as join of several tables.

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [KERNEL]      Fixed bug which occur on 256, 512, ... MB
- [KERNEL]      if cursor is read only and no selected records there was error 'Can't update'
- [KERNEL]      Fixed bug in the REPLACE command
- [V4WS]        valGetLanguages() works as suggested by Remi Goux
- [V4WS]        Work error strings.
- [GUI]         in the Search layout limit on string length for edit field now 256

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Version 1.8.5b32

////////// NEW \\\\\\\\\\\\\\\\\\\

- [AS]          Now works command 'delete records of cursor'

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [KERNEL]      sorting for boolean field now works after update of a record.
- [KERNEL]      LLong and ULLong fields introduced in b31.
- [KERNEL]      Reading on MAC from Picture field of db made on PC.
- [AS]          flag unique in command 'make new field' now works.

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Version 1.8.5b31

////////// NEW \\\\\\\\\\\\\\\\\\\

- [KERNEL]      Added 17 Date/Time functions:
                  DAYOFWEEK,WEEKDAY,DAYOFMONTH,DAYOFYEAR,MONTH,YEAR
                  HOUR,MINUTE,SECOND,QUARTER,WEEK,
                  PERIOD_ADD, PERIOD_DIFF, TO_DAYS, FROM_DAYS, SEC_TO_TIME, TIME_TO_SEC

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [KERNEL]      Another bug on import of TEXT files with PC end-line
- [KERNEL]      LLong and ULLong fields on search did not accept long long numbers.
- [KERNEL]      Export of BaseObject Methods now works.
- [KERNEL]      BaseObject Methods now can work with type TEXT.

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Version 1.8.5b30

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [KERNEL]      import of TEXT files with PC end-line
- [KERNEL]      VarChar, after deletion of all records using "DELETE ALL MARKED" was impossible add new records.

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Version 1.8.5b29

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [KERNEL]      sometimes crash on indexing of string fields if language is not English.
- [GUI]         Crash on export, introduced in b27

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Version 1.8.5b28

////////// NEW \\\\\\\\\\\\\\\\\\\

- [V4RB] Support picture field on Windows.

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [KERNEL] now Valentina don't offer index VarChar and Stirng fields by words on default.
- [SQL] wrong error number if eror occuer inside of ( )
- [SQL] now String and VarChar fields can be compared in RDB-link
- [V4RB] resource of error strings now linked to compiled application.

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Version 1.8.5b27

////////// NEW \\\\\\\\\\\\\\\\\\\

- [KERNEL] Implemented 2 new functions:  
double ROUND( double X, [int Y] )  
double TRUNCATE( double X, [int Y] )
- [AS] new command 'do script'

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [KERNEL] bug in VarChar field on cross-platform moving of files.

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Version 1.8.5b26

////////// NEW \\\\\\\\\\\\\\\\\\\

- [GUI] Text field now is displayed in a scrollable view.

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [KERNEL] now Date and Time works in strings of BaseObject Methods.  
as result you can use syntax "date\_fld LIKE '../03/2000'
- [SQL] introduced in b25
- [V4RB] again works V4RB errors numbers broken in b25.
- [GUI] Don't crop text for Text, and long String/VarChar fields.

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Version 1.8.5b25

////////// NEW \\\\\\\\\\\\\\\\\\\

- [AS] now returns error strings for Valentina errors.
- [AS] command 'SQL select' now returns Valentina error, object of cursor in this case is not constructed.

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [KERNEL] improoved speed of VarChar fields and indexes
- [SQL] LIKE works with Methods of BaseObject

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**Version 1.8.5b22**

////////// NEW \\\\\\\\\\\\\\\\\\\

- [KERNEL] support in function if() comparison to NULL:  
if( a is NULL, b, c )  
if( a is not NULL, b , c )
- [KERNEL] new function ifnull( a, b )
- [V4MD] on MacOS now works error strings.

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**Version 1.8.5b21**

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [KERNEL] Fixed several bugs with work of operators plus and minus in Methods of BaseObject.

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**Version 1.8.5b20**

////////// CHANGES \\\\\\\\\\\\\\\\\\\

- [KERNEL] Changed VarChar filed, so now it don't take RAM at all.
- [KERNEL] Changed cache of Valentina so now must gone away old known bug.
- [KERNEL] BLOB and Text field now consider assignment of data with zero size as deletion of BLOB-record.

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [SQL] If you build join by several tables (more that 2) it works correctly always.

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**Version 1.8.5b14**

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [KERNEL] Crash on adding of many records at points 256, 512, ... MB of disk file.
- [AS] in the command 'sort' now works order specifcation.
- [AS] make new records with data { 0, ... } accept for ObjectPtr zero now and set it to zero value.

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**Version 1.8.5b5**

////////// NEW \\\\\\\\\\\\\\\\\\\

- [V4MD] New global Handler  
\*ValentinaErrorString
- [V4MD] New Handler of VDataBase Xtra  
IsNull object me, integer fldRef
- [V4RB] Class VDataBase now has property 'ErrString'

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [SQL] query "WHERE RecID = N" now works fine with any N.  
It also don't display deleted records.

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**Version 1.8.3      // May 28, 2000**

////////// CHANGES \\\\\\\\\\\\\\\\\\\

- [KERNEL]      Changed format of ".vdb" file to be able store text of Methods.

////////// NEW \\\\\\\\\\\\\\\\\\\

- [V4RB]      Class VField now has property 'BaseObject'
- [V4RB]      Class VObjectPtr now has method  
                    SetTarget(inBaseObject as VBaseObject, inDeletionControl as Integer)  
which allow you specify deferred assign of pointed BaseObject for creation of database structure  
with recursive relations between 2 or more tables.
- [V4RB]      Class VCursor now has a new group of methods to access fields with typecasting to make  
your code smaller, for example:  
                    BooleanField(index as integer) as VBoolean  
                    BooleanField(name as string) as VBoolean  
                    ByteField(index as integer) as VByte  
                    ByteField(name as string) as VByte

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [KERNEL]      Import of Coma-separated file which has RETURNS inside of comas, now works.
- [KERNEL]      VarChar field on update
- [KERNEL]      Indexing by words of Text or String field if all record of field are empty cause wrong index  
and as a result infinite loop of reindexing.
- [KERNEL]      Minor bug in BLOB field: if you try read just only written value of BLOB field before Add  
then internal flag "Dirty" is cleared and value is not added to the database.
- [SQL]      Object DISTINCT sometimes did not work.
- [V4MD]      Removed limit on size of SQL string in 1024 bytes.

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**Version 1.8.2      // May 17, 2000**

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [KERNEL]      If table contains deleted records Boolean field do not correct search.
- [KERNEL]      Deletion of many VarChar records cause problems.
- [KERNEL]      Much more stable work if very low cache size.
- [KERNEL]      Fixed bug in indexing by words algorithm.
- [SQL]      Again works object DISTINCT broken before.
- [GUI]      Introduced in 1.8.1 bug when progress dialog don't close after finish of operation.
- [GUI]      Open of database with saved SearchSet
- [GUI]      On switch of BaseObject SearchSet and SortSet menus are updated correctly.

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**Version 1.8.1      // May 09, 2000**

////////// CHANGES \\\\\\\\\\\\\\\\\\\

- [KERNEL]      Cursor now is ReadOnly only if it has at least one Many table in join.

////////// NEW \\\\\\\\\\\\\\\\\\\

- [V4RB]          classes VLLong and VULLong  
- [V4RB]          class VBaseObject now has the property 'DataBase'

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [KERNEL]      bug introduced in 1.8, cause modification of indexes on open.  
As a result -- reducing effectiveness of kernel and sometimes problems with locked db.

- [AS]            'make new record' now return correct reference on new record.  
- [AS]            After 'make new record' class Record point on new record.  
- [AS]            now correctly works errors handling, so you can use try ... on error number

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**Version 1.8          // May 01, 2000**

////////// NEW \\\\\\\\\\\\\\\\\\\

- [KERNEL]      support of VarChar field  
- [KERNEL]      support of LLong (long long) and ULLong (unsigned long long) types.  
- [KERNEL]      A DataBase now has properties:  
                  'DateFormat' - values are 0-"MM/DD/YYYY", 1-"DD/MM/YYYY", 2- "YYYY/MM/DD"  
                  'DateSep'    - e.g. "/"  
                  'TimeSep'    - e.g. ":"

- [KERNEL]      Works with databases located on locked volumes, e.g. CD-ROM  
- [KERNEL]      Implemented creation of temporary file in the system tmp folder  
if the database is in the ReadOnly mode.

- [KERNEL]      Picture field on the MAC now can work with JPGs stored as QT PICT,  
as well as with JFIF file (made for example by PhotoShop).

- [SQL] (!!!) Support of RDBMS relations:  
                  "WHERE Person.name = Car.OwnerName",  
i.e relation of tables not via ObjectPtr but via any type of fields.  
This works for self recursion also.

- [V4RB]          class VVarChar  
- [V4RB]          Class VCursor now has a constructor:  
                  VCursor( inDataBase as VDataBase, inSQLstr as string )  
This allow you to make subclasses of VCursor.

- [V4RB]          Now ValentinaDebugON accepts parameter DebugLevel  
                  ValentinaDebugON(inLevel as integer) as Integer  
                  1 - display dialog on error  
                  2 - monitor all V4RB function calls in "DCon" on MacOS

- [GUI]      Script menu  
- [GUI]      Display dialogs if you try to modify read-only database.  
- [GUI]      Related Browser now works with self-recursion table.

- [AS]            For Class 'database' add property 'date format', 'DateSep', 'TimeSep'  
- [AS]            For Class 'cursor' added property 'ReadOnly'.

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**Version 1.7.97**

////////// CHANGES \\\\\\\\\\\\\\\\\\\

- [V4RB] VCursor.Delete now returns Boolean.
- [V4RB] SetPicture( Pic as Picture, [inQuality as Integer] )
- [V4RB] Now ValentinaDebugON accepts parameter DebugLevel  
ValentinaDebugON(inLevel as integer) as Integer
  - 1 - display dialog on error
  - 2 - monitor all V4RB function calls in "DCon" on MacOS
- [V4RB] Updated ValentinaUtilities module.

////////// NEW \\\\\\\\\\\\\\\\\\\

- [V4RB] Class VCursor now has a constructor  
VCursor( inDataBase as VDataBase, inSQLstr as string )  
This allow you to make subclasses of VCursor.

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [V4RB] again works Error dialog

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**Version 1.7.96**

////////// CHANGES \\\\\\\\\\\\\\\\\\\

- [KERNEL] (!!!) Field of BaseObject "ID" now has name "RecID".

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [KERNEL] sometimes UPDATE do not update index.
- [V4WS] valSetFlag()
- [V4WS] Crash if field functions get NULL as fldRef
- [V4WS] Fixed Set/Get of ObjectPtr values.
- [AS] Now works 'get record N of Selection'
- [AS] Now works 'get records of Selection'
- [AS] Now works 'get records of Cursor'

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Version 1.7.92

////////// CHANGES \\\\\\\\\\\\\\\\\\\

- [ALL] New names for deletion control constants. New names better correspond to SQL standard.  
Do "Search/Replace" in your code.
- [AS] leave\_many => set\_null, delete\_many => cascade, cant\_if\_many => restrict
- [C++] VDK\_Leave => kFBL\_SET\_NULL  
VDK\_Delete => kFBL\_CASCADE  
VDK\_Cant => kFBL\_RESTRICT

- [ALL] changed name of Cursor property 'CanBeUpdated' on 'read only'.

////////// NEW \\\\\\\\\\\\\\\\\\\

- [AS] For Class 'database' add property 'date format', 'DateSep', 'TimeSep'
- [AS] For Class 'cursor' added property 'ReadOnly'.

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [KERNEL] If delete from table any field BEFORE a BLOB, TEXT, Picture or VarChar then database become corrupted.

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Version 1.7.91

////////// CHANGES \\\\\\\\\\\\\\\\\\\

- [V4RB] method GetBaseObjectRecID() removed, must be used "SELECT ID, ... " instead.

////////// NEW \\\\\\\\\\\\\\\\\\\

- [KERNEL] support of VarChar field
- [KERNEL] support of LLong (long long) and ULLong (unsigned long long) types.
- [V4RB] class VVarChar
- [GUI] Script menu

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [KERNEL] Work with locked database and/or with database on locked volume.
- [KERNEL] Date and Time fields now works on Windows.
- [SQL] inside of string constant single quote is supported by back slash 'man\'s child'
- [SQL] if the field start with "from..." then was error.

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Version 1.7.8

////////// CHANGES \\\\\\\\\\\\\\\\\\\

- [SDK] Global methods ::GetString() and ::SetString() renamed to  
::FBL\_GetString() and ::FBL\_SetString().

Class VDK\_Field now has methods GetString() and SetString(),  
which at first prepare gDTFormat variable and then call  
bottleneck methods ::FBL\_GetString() and ::FBL\_SetString().

You must not call in your C++ code ::FBL\_GetString() and ::FBL\_SetString().  
Call instead VDK\_Field::GetString() and VDK\_Field::SetString().

////////// NEW \\\\\\\\\\\\\\\\\\\

- [KERNEL] A DataBase now has properties:  
'DateFormat' - values are 0 "MM/DD/YYYY", 1 "DD/MM/YYYY", 2 "YYYY/MM/DD"  
'DateSep' - e.g. "/"  
'TimeSep' - e.g. ":"

Each opened database can have independent date format.  
Date format affects how date and time values will be converted to strings,  
including strings of SQL queries and import/Export to text files.

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [KERNEL] Table.PrevRecord() don't throw error if table is empty.
- [KERNEL] Deletion of last physical record in table works correctly.
- [KERNEL] Update of Nullable field now store new value correctly.
- [SQL] now works "... not( left(fld, n) = 'str' ) ..."
- [SQL] works broken in 1.7.6 "where fld NOT NULL"

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Version 1.7.7

////////// CHANGES \\\\\\\\\\\\\\\\\\\

- [V4MD]       Type "ObjectPointer" now has name "ObjectPtr"
- [V4WS]       Type "ObjectPointer" now has name "ObjectPtr"
  
- [KERNEL]     Type TEXT now allows set flag "Indexed by words" OFF.  
                This allows you do sorting on such TEXT fields.  
                If string in this TEXT field is longer of 255 chars then only  
                first 255 chars are used for indexing and sorting.

////////// NEW \\\\\\\\\\\\\\\\\\\

- [GUI]         Display dialogs if you try to modify read-only database.

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [KERNEL]     For read-only database sorting now also can use temporary  
                system file.
  
- [SQL]   RDB-links now works with String fields also
- [SQL]   Fixed another fresh bug of 1.7.6 in Cursors
- [SQL]   Work with square brackets [] fixed (introduced in 1.7.-

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Version 1.7.6

////////// NEW \\\\\\\\\\\\\\\\\\\

- [KERNEL]     Fixed a bug in OpenDataBase which prevent from opening of locked  
                database (i.e. ReadOnly mode).
- [KERNEL]     Implemented creation of temporary file in the system tmp folder  
                if the database is in the ReadOnly mode.
- [KERNEL]     Picture field on the MAC now can work as with JPGs stored as QT PICT,  
                so as JFIF file (made for example by PhotoShop).
  
- [SQL]   (!!!) Support now RDBMS relations:  
                "WHERE Person.name = Car.OwnerName",  
                i.e relation of tables not via ObjectPtr but via any type of fields.  
                This works for self recursion also.
  
- [GUI]         Related Browser now works with self-recursion table.

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [KERNEL]     RegEx search for TEXT field (was visible only on Windows ?!)
- [KERNEL]     Memory leaks on a BaseObject destruction (fields was not destroyed).
  
- [SQL]   Fixed bugs in join of more than 2 tables introduced in 1.7.5.



Version 1.7.5

////////// CHANGES \\\\\\\\\\\\\\\\\\\

- [V4RB] Properties 'FieldsCount' and 'RecordsCount' of classes VCursor and VBaseObject now has names 'FieldCount' and 'RecordCount'.
- [V4RB] Methods of VBaseObject FirstRecord and LastRecord now return Boolean.
- [V4RB] Property VCursor.CurrentRecord now has name CurrentPosition.
- [V4RB] VBLOB.DeleteData() now don't returns nothing.

////////// NEW \\\\\\\\\\\\\\\\\\\

- [KERNEL] Method SetPicture of field Picture has the parameter "quality" for jpeg compression.
- [SQL] Support aliases for Table names:  
"SELECT a.\* FROM Person a WHERE...."
- [SQL] Support queries with self-recursion  
"SELECT \* from Person a, Person b WHERE a.ID = b.PTR"
- [AS] BaseObject and Cursor on command 'make new record with data {list}' perform SetBlank if a list presents.
- [AS] Cursor now understand command 'update'
- [AS] Cursor now understand command 'blank'
- [GUI] Related Browser now works with 2 tables which have more than one link between them.
- [GUI] Popup menu in a Browser now shows items as [LinkName]ObjectName

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [KERNEL] Import of text file with FileMaker's chr(1- correctly.
- [KERNEL] Cursor.AddRecord now set up value for "ID" field to the RecID of new record, so field "ID" can be used.
- [KERNEL] String and Text fields now correctly translate high part of ASCII table for Roman languages on transferring db files between platforms.
- [KERNEL] For Windows version CreateDataBase works correctly with ".vdb" extension in any string case.
- [KERNEL] Fixed bug introduced in 1.6.x on conversion from a String field to the Text field.
- [KERNEL] Conversion from field of any type to ObjectPtr fill values of all records for this field by zero.
- [KERNEL] If in the empty database a field is marked as indexed then on adding of first record we get corrupted index what cause reindexing on the next open of database.
- [KERNEL] Memory leak (40-60 bytes) on SQL search in the case if a result is empty.
- [KERNEL] Method Cursor.IsNull() returns correct value.
- [KERNEL] (Windows), now consider extension ".vdb" as case insensitive.
- [SQL] "SELECT \*, ID" works
- [SQL] Query which compares a BLOB field to NULL or NOT NULL now don't crash.
- [AS] Property 'position' of the class cursor now works correctly.
- [GUI] Hidden floating windows are not automatically shown.

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Version 1.7.3

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [KERNEL] fixed another bug on 256 MB file overflow for very long BLOBs.
- [KERNEL] fixed crash when result of join is empty table.
- [GUI] in the input layout NULL values of numeric fields now are displayed as empty field instead zero.
- [GUI] in the input layout strings with more than 255 chars now display all chars (before only first 25-).

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Version 1.7.1

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [KERNEL] fixed bug on 256 MB file overflow.

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Version 1.7

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [KERNEL] Cursor.PrevRecord now don't change current record if we are at first record
- [KERNEL] Cursor.DeleteRecord works correctly
- [KERNEL] ULong fields, issue of numbers > 2.4 billions
- [KERNEL] String and Text fields indexed by words, adding of a new record with empty value for this field cause not correct modification of index, result => reindexing on the next open.
- [AS] bug introduced in 1.6  
get count of fields -- did return one more field

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Version 1.6.3

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [KERNEL] Corruption of header of BLOB file if was deleted last record in table.
- [GUI] Displaying of double values now has high precision.
- [GUI] Not correct sometimes highlight of header button of field when it is sorted.
- [GUI] fixed bug introduced in 1.6.2 which have break RegEx search.

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Version 1.6.2

////////// NEW \\\\\\\\\\\\\\\\\\\

- [KERNEL] Now there is a new field of type Picture, which store PICT files with JPG compression.
- [SQL] now you can select empty TEXT field:  
"WHERE text\_fld = " "
- [AS] added events Import / Export for Cursor.

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [KERNEL] "SELECT \* from Table"  
minor bug, which cause calling MacsBug of latest version if one of the field is TEXT

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Version 1.6.1

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [KERNEL] 2 bugs in the indexes.
- [SQL] now works correctly a statement "where str >= a and str <= b"
- [GUI] Search Layout bug: on research condition go to the next field.

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Version 1.6

////////// CHANGES \\\\\\\\\\\\\\\\\\\

- [KERNEL] Cursors now are independent, i.e. each has its own memory buffer.
- [KERNEL] Cursors now have more effective implementation.
- [SQL] Now you can SELECT ID fields in the SQL queries.  
where \*, ID  
from Person  
where ...
- [SQL] Now you can SORT by fields which are not selected:  
select byte\_fld  
from Person  
order by short\_fld

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [GUI] sort dialog sometimes give crash
- [GUI] when 2 or more open databases, "Define Fields" dialog always is opened for the same BaseObject.
- [GUI] now Valentina doesn't allow user create a field with name "ID".

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Version 1.5.9

////////// CHANGES \\\\\\\\\\\\\\\\\\\

- [KERNEL] Now MacOS version consider .vdb extension as optional for description file of database. So if you keep a database in one file then you don't have extension at all (true MAC way :-)

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [KERNEL] on deletion of a field "F" of the table
  - IF a next field "Fn" has index and was used for sort
  - and IF you open database and have not use this field "Fn" during this seance then database becomes corrupted.
- [KERNEL] "ID" fields issues
  - crash on attempt to sort by "ID" field
  - crash on using "ID" field in a complex query where ID = 1 and str\_fld = 'ggg'
- [KERNEL] not correct result of COMPLEX search (AND/OR) in case if one expression has empty result set was returned empty result.
- [KERNEL] update of BLOB and TEXT fields. was not correct if BLOB field is updated with a smaller context.

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Version 1.5.8

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [KERNEL] issues on coma and quotes inside quoted string for import/export of Coma-Separated text file.
- [KERNEL] bug in the database cache. Crash, which occur, on import to the table with many fields (100-260).
- [KERNEL] IndexedByWords now correctly skip punctuation characters
- [KERNEL] Delete all records in the table bug fixed.
- [SQL] "ORDER BY" several fields ignores last field
- [AS] Command 'format' now ignores trail fields of cursor, which are not specified by '%' in the format string.
- [AS] added type coercion for parameter 'hide GUI' of command 'open'.
- [GUI] if in the Developer Environment delete BaseObject which before was selected in the User Environment to be displayed in a Browser, then on switch to the User Environment crash fixed.

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Version 1.5.7

////////// CHANGES \\\\\\\\\\\\\\\\\\\

- [KERNEL] Import now can import text file with various number of fields per line.
- [KERNEL] Import of Coma-Separated file now removes quotes.  
Export to Coma-Separated file adds quotes.

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [SQL] bug with syntax: "WHERE fld like 'sss' and not fld LIKE 'sss'"
- [SQL] bug on search of empty strings "WHERE string\_fld = " "
- [KERNEL] visible in AppleScript: if store in a string field string longer than field then there is no end-zero.

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Version 1.5.6

////////// NEW \\\\\\\\\\\\\\\\\\\

- [KERNEL] SegmentSize of BLOB field now can be as small as 128 bytes.

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [KERNEL] corruption of database on changing of type of field  
from String to the TEXT when database is stored in the one disk file.
- [KERNEL] ignoring case in the RegEx for single-byte languages, which use top part of ASCII table,  
(for example, Russian).

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Version 1.5.5

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [KERNEL] bug on dynamic changing of an index with very high repetition of a value

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Version 1.5.4

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [KERNEL] a few bugs related with big Strings > 256 bytes.  
(indexing, displaying, updating )

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Version 1.5.2

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- [GUI ] double click on the database file opens database document
- [GUI ] button Create is disabled on open of DefineFields dialog
- [GUI ] fixed crash on deletion of base object

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Version 1.5

////////// NEW \\\\\\\\\\\\\\\\\\\

- [KERNEL]     Support of importing to the Text field.
- [SQL]   Beginning with Valentina ver 1.5, you can use SQL to query a database from AppleScript.  
          This new feature significantly simplify scripts and increase performance.  
          By single command you can: select fields, define their order, specify search conditions and  
          sort order for found records.
- [SQL]   New class 'cursor' -- result of SQL query.
- [SQL]   RegEx search is now faster and can be case insensitive.  
          "==.(?i)55\\Z"
- [GUI]    a powerful visual browser to quickly create object oriented relational databases.

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Version 1.3

In this version significantly expanded TEXT features of Valentina:

- String field can be up to 65535 bytes (recommended up to 1000 bytes).
- new type of field - TEXT, which is a special BLOB with text context. Text field can be indexed  
and, as a result, searched. Text field also supports international features exactly as String field.
- Powerful regular expression search as for String so and for TEXT fields with syntax  
similar to Frontier or Perl. The regular expression condition must start with "==", for example "==.55\\Z"
- String field (optionally) and TEXT fields (always) can be indexed by words, like FileMaker.
- command 'format' now has the flag 'text to html' which force Valentina to convert context of TEXT field  
to HTML form. This means that it will add paragraph tags <p> ... <p> and <BR>.
- new record now can be made by one AppleEvent: make new record with data { a, b, c } at end

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- bug of memory cache fixed.
- bug in the 'format' command
- bug on search of string field if the searched string contains "or", "and" substrings

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Version 1.2.3 (June 22, 1999)

- the return type of the command 'format' now is 'text' instead international text.  
It still can work with international text but works more correctly.

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**Version 1.2.2 (June 16, 1999)**

////////// NEW \\\\\\\\\\\\\\\\\\\

- [AS]            a new command 'format' which allows you to format selected records.  
                 Very useful for WEB masters.

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- significantly optimized performance of exporting of several fields of the table;
- exception on creation of Nullable field;
- importing of empty value for field with type date;
- correct import/export of Nullable fields;
- unhandled exceptions which cause in switch to MacsBug;
- crash on database open with more than 51 internal files;

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**Version 1.2.1 (May 12, 1999)**

!!! IMPORTANT !!!:

If you have a database from an earlier version of Valentina,  
do these steps before you open it with Valentina 1.2.1:

- make a backup copy of your database;
  - rename the files of your database by hand as follows:  
                              DBName                        -> DBName.vdb  
                              DBName.data    -> DBName.dat  
                              DBName.blob    -> DBName.blb  
                              DBName.ind     -> DBName.ind
  - change your scripts to add the extension ".vdb" wherever you refer the database file.
- This is required to be compatible with Windows.

////////// NEW \\\\\\\\\\\\\\\\\\\

- ability to get group of found records via single AppleEvent;
- support of NULLs (empty value of the fields);
- deletion control of related records now has 3 options:
- leave related many records;
- delete related many records;
- can't delete if related many;
- more sophisticated search;
- language for the tString fields can be specified as string, like "German" or "Japanese";
- new internal format of BLOB;

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\

- crash on open of database with indexed international String field.

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Version 1.2:

- international support;
  - multiple open databases;
  - fast access to the values of the fields and fast update of values of the fields;
  - reduced memory requirements for sorting at least 30%;
  - reduced memory requirements per open database from 100Kb to almost zero.
- 
- command: 'delete records' (delete all records in the Table);
  - command: 'delete' (delete current record of Table);
  - command: 'flush' (database or table)

////////// FIXED BUGS \\\\\\\\\\\\\\\\\\\\\\\

- sort of empty selection didn't return any result, now it returns empty selection;