



Year 2000 Cobol IBM- VisualAge Pacbase

Technical Info

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I. IBM Cobol

Cobol for OS/390 only is considered Y2K-compliant according to IBM. However, you can continue to run your VS COBOL II (also OS/VS COBOL) applications well beyond this year's end by using the Language Environment run-time library.

See documents in the IBM Software Web page: http://www.software.ibm.com/ad/cobol, in particular OS/VS COBOL and VS COBOL II programs and the year 2000 at: http://www.software.ibm.com/ad/cobol/news8f.htm and VS COBOL II: Ready or Not at: http://www.software.ibm.com/ad/cobol/news8f.htm and VS COBOL II: Ready or Not at: http://www.software.ibm.com/ad/cobol/news8f.htm and VS COBOL II: Ready or Not at: http://www.software.ibm.com/ad/cobol/news8f.htm and VS COBOL III: http://www.software.ibm.com/ad/cobol/news8f.htm and VS COBOL III: http://www.software.ibm.com/ad/cobol/news10c.htm.

Regarding IBM's position towards COBOL, these documents include valuable information such as:

- "You can get service support for OS/VS COBOL and VS COBOL II programs indefinitely by using the Language Environment run-time library with just a run-time migration.
- (...) an application with NO DATE RELATED LOGIC could be run in a supported environment beyond the turn of the century by a run time migration only, with no source changes or recompiles necessary."
- "If your OS/VS COBOL programs are running using the Language Environment run-time library, then your programs are supported by IBM service, and will be supported well into the 21st century."
- "(...) there are no year 2000 problems in the VS COBOL II compiler, nor in the VS COBOL II run-time library, so you can continue to run your VS COBOL II code fully supported by IBM until March 2001. If your VS COBOL II applications are running under the Language Environment run-time library rather than the VS COBOL II run-time library, then your VS COBOL II programs will be supported well beyond March 2001."
- "(...) year 2000 status of VS COBOL II (...) is a 'Year 2000 don't care' product in terms of will it run, and 'Not Year 2000 Ready after March 2001' in terms of will it be supported."

II. VisualAge Pacbase

VisualAge Pacbase is Y2K-compliant since Version 2.0, according to IBM's definition (topic addressed by the IBM Paris Lab in a mail entitled *VisualAge Pacbase and the Year 2000* to be found at http://www.software.ibm.com/ad/vapacbase/y2000readi.htm.)

Regarding generated applications, the IBM COBOL generated by VisualAge Pacbase (*generation variant* X) is entirely *COBOL for OS/390*—compatible (alias *Cobol for MVS & VM*), which is the IBM COBOL ready for year 2000. Also, this VA Pac—generated IBM COBOL remains fully *VS COBOL II*—compatible.

This compatibility involves all standard functions automatically generated by VisualAge Pacbase.

It is the client's responsibility to ensure such compatibility for *specific code* (–W and –P lines) inserted by developers in VisualAge Pacbase applications, in accordance with the requirements of the compiler in use.

NOTE: VisualAge Pacbase (like earlier PACBASE versions) does not include compiler-oriented syntax check facilities.

The only *COBOL for OS/390* specification implemented allows the retrieval of the System Date with century. This specification does not depend on the generation variant but on a **new option**:

Processing of the Century in System Date and Modification of the Windowing – at the Library level. (Change #17654).

Two fields have been added in the Library Definition:

CENTURY SYSTEM DATE:

This option enables you to make sure that the System Date indicates the century in the generated applications.

= 'N' USING COBOL II OR COBOL 85:

Default value at the creation of the Library.

If the year is greater than the value entered in the WINDOWING YEAR VALUE field, it is prefixed by 20.

If it is smaller, it is prefixed by 19.

= 'C' USING COBOL II OR COBOL 85 COMPATIBLE YEAR 2000:

Direct retrieval of the System Date including the century according to the COBOL capabilities.

= 'W' USING OTHER COBOLs:

A value is set for the century as with the 'N' value.

With COBOL for OS/390, it is therefore the 'C' value which ensures the System Date retrieval with century.

WINDOWING YEAR VALUE

Reference year (default=61) for calculation of century during a Date transformation containing only the year.

This calculation is done in the following cases:

. The System Date does not include the century.

The calculation is explained in the CENTURY / SYSTEM DATE field and is performed with the 'N' or 'W' value in this same field.

. Use of a date transformation operator

The calculation mode depends on the operator used.