

PowerBuilder Date Quiz

Are you prepared for Y2K?

Year 2000

Many companies incorrectly assume that their PowerBuilder applications are Year 2000 compliant because PowerBuilder 6.0+ is compliant. Unfortunately, using a compliant development tool just means that the tool won't be the cause of a Year 2000 date calculation failures. Coding techniques account for far more Year 2000 bugs than non-compliant tools!

Do your developers use Year 2000 compliant coding techniques? Unless they have studied the issue in depth they may be surprised to know that common coding techniques they use can result in date miscalculations. Only developers who have taken Year 2000 training can be assured that the coding techniques they use are compliant.

Does your migrated application still work or is it failing silently?

Migration

To complicate things, PowerBuilder handling of dates changed between version 5.0.02 and 5.0.03. If you wrote an application with 5.0.02 then migrated it to a later version it is likely that some of your date/datetime calculations and comparisons are failing silently. This could be corrupting your data and you don't even know it.

PFC

Do you know that PFC versions 5.0.03 through 6.5.1 all have Year 2000 and Migration bugs related to date handling?

Take this quiz and rate your knowledge

Take the following quiz to rate your knowledge of how PowerBuilder handles dates and date calculations. It is intended to show the complexity of coding date and datetime calculations in PowerBuilder. Please answer these questions without referencing any PowerBuilder materials, testing PowerBuilder itself, or asking a friend. This quiz will take just a few minutes and will help you determine whether you should consider attending a Y2K training course/seminar.

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PowerBuilder Date Quiz

1. After executing the following two lines of code, for which versions of PowerBuilder would ls_val = '01/01/1900'? Check all which apply.

```
String ls_val  
ls_val = string( date( '02/29/1999' ) )
```

- a. 5.0.00
 - b. 5.0.02
 - c. 5.0.03
 - d. 5.0.04
 - e. 6.0.00
 - f. None
2. Using PowerBuilder 6.5, which of the following are error free methods of determining if a datetime variable contains a valid datetime value? Check all which apply.
- a. Datetime ldt
 - b. If IsValid(ldt) THEN ...
 - c. IF Day((ldt)) > 0 THEN ...
 - d. IF Day(Date(ldt)) > 0 THEN ...
 - e. IF NOT IsNull(ldt) THEN ...
 - f. IF string(ldt) <> '01/01/00') THEN ...
 - g. IF string(ldt) <> '01/01/1900') THEN ...
 - h. IF string(ldt) <> '01/01/2000') THEN ...
 - i. IF ldt <> date ('01/00/99') THEN ...
 - j. IF ldt <> datetime(date('01/00/00'), time('00:00:00')) THEN ...
 - k. IF ldt <> CONSTANT.InvalidDate THEN...
 - l. n_cst_datetime Inv_dt; IF Inv_dt.of_IsValid(ldt) THEN ...
 - m. None of the above
3. Assume you have a DataWindow column with an edit mask in the format 'mm/dd/yy'. If that column has focus but contains NULL, what will be returned by GetText()?
- a. an datetime datatype containing NULL
 - b. a string datatype containing NULL
 - c. a string datatype containing empty string

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4. After executing the following two lines of code, does `ld1 = ld2`?
5. Which of the following date strings are used by at least one version of PowerBuilder to signify an invalid date? Check all which apply.
 - a. '01/01/00'
 - b. '01/01/1900'
 - c. '01/01/2000'
 - d. '02/29/2000'
 - e. None
6. Which of the following are true about the `UseFormat` property? Check all which apply.
 - a. For a DW column which does not have an edit mask edit style and the column has focus, the string defined for the format property is to be used to emulate an edit mask.
 - b. For a DW column which has an edit mask edit style and the column has focus, the string defined for the format property is to be used for the edit mask instead of the string defined for the edit mask.
 - c. For a DW column which has an edit mask edit style and the column does not have focus, the column will be displayed in the format specified by the format property rather than by the format specified in the edit mask.
 - d. `UseFormat` is not a property of any PowerBuilder objects.
7. Regarding the PFC service which provides date and datetime manipulation functions. Check all which are true.
 - a. It was introduced in PFC6
 - b. Is Y2K compliant in PFC6.0 but not in PFC5.0
 - c. Accurately calculates whether a year is a leap year.
 - d. Can be used even in non-PFC applications
 - e. Is named `n_cst_date`
8. Which of the following dates are not valid in PowerBuilder?
 - a. 2/29/2000
 - b. 2/29/1900
 - c. 2/29/1800
 - d. 2/29/1600
 - e. 9/10/1752
 - f. 1/1/3001
 - g. 1/1/1001

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9. Assume you have a datetime column in your database table. In your DW you put a time edit mask on that column in the format '00:00:00'. If the column contains NULL and the user enters '02:15:00' into the edit mask and tabs away, what value will be stored in the DATE portion of the datetime column?
- a. 01/01/2000
 - b. 01/01/1900
 - c. 00/00/0000
 - d. NULL
 - e. None of the above
10. string(today()) will always return a date string in which format?
- a. 'mm/dd/yy'
 - b. 'mm/dd/yyyy'
 - c. PB meta date format
 - d. [Long Date]
 - e. [Short Date]
11. Which is true? For an edit mask of the format 'mm/dd/yy' when the user enters the year value PowerBuilder will assume the century is:
- a. 19 if the value is 00-49; 20 if the value is 50-99
 - b. 19 if the value is 51-00; 20 if the value is 01-50
 - c. 19 if the value is 01-50; 20 if the value is 51-00
 - d. 19 if the value is 50-99; 20 if the value is 00-49
 - e. 19 if the value is 51-99; 20 if the value is 00-50
 - f. 19 if the value is 26-99, 20 if the value is 00-25
 - g. it varies because PowerBuilder supports a user defined sliding scale
12. The default date format for Adaptive Server Anywhere (formerly known as SQL Anywhere) is:
- a. 'mm-dd-yyyy'
 - b. 'dd-mm-yyyy'
 - c. 'yyyy-mm-dd'
 - d. 'yy-mm-dd'

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13. The default date format for Sybase Adaptive Server (SQL Server) is:

- a. 'mm/dd/yyyy'
- b. 'dd/mm/yyyy'
- c. 'yyyy/mm/dd'
- d. 'yy/mm/dd'

14. Y2K is not an issue in PowerBuilder programs because PowerBuilder and most contemporary databases are Y2K compliant.

TRUE or FALSE

For answers to these questions please send an email request to developower@bigfoot.com. Please include the following version number in your email along with your name, title, company, and address.

Y2K/Migration Quiz version 1.1

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