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Advisor Answers

Default CENTURY and ROLLOVER

Visual FoxPro 6.0

Q: VFP 6's Help says that, with no SET CENTURY command, it defaults to the current century, and sets a rollover 50 years away from the current year. Does this mean that, in 2001, the default setting will be SET CENTURY TO 20 ROLLOVER 51? If so, will entering a date of 9/28/47 mean September 28, 2147?

-Tamar

A: This question came up in my work and I played with it until I understood what was going on. It turns out that the way VFP works is smarter than the Help entry that describes it. The default ROLLOVER wouldn't be of much use if, the minute it becomes 2000, every date gets pushed into the range 2050-2149. Fortunately, that's not what happens.

In fact, the default values for SET CENTURY are more complex than that. Essentially, VFP figures out the rollover value first, then sets the century. The code here is my best guess at what happens internally when VFP sets the default CENTURY settings. Of course, the real code inside the product uses C, not VFP, to do this:

```
* Grab the system date
dCurrentDate = DATE()
* Go back 50 years
dRolloverDate = GOMONTH(dCurrentDate, -12*50)
* Get the year portion
nRolloverYear = YEAR(dRolloverDate)
* Rollover is the last two digits; Century is the first two
nRolloverValue = MOD(nRolloverYear, 100)
nCenturyValue = INT(nRolloverYear/100)
```

Then, SET CENTURY uses nCenturyValue for the century portion of the setting and nRolloverValue for the rollover portion.

So, in 2001, the default setting for SET CENTURY will be SET CENTURY TO 19 ROLLOVER 51. If our VFP 6 apps are still running in 2060, the default will be SET CENTURY TO 20 ROLLOVER 11.

Very elegant—my kudos to the folks who designed it. Explaining it is harder however, which is no doubt why Help gets it wrong.

There's also one consequence to watch out for in your code. Don't count on SET("CENTURY",1) to tell you anything about what century it is today. All it tells you is the current setting. Use INT(YEAR(DATE())/100) for the current century.

-Tamar