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Are the Days of the Independent Developer Over?

Whil Hentzen

It started in 1993. Art Fuller, author of ArtfulLib, a popular third party Clipper library, stood up at the Toronto FoxPro Developer's Conference's closing session and asked the panel whether or not they thought the days of the independent developer were over. Besides myself, Menachem Bazian, Alan Griver, Les Pinter, and Lisa Slater were in front of the microphones. As we had all been expecting highly technical questions about optimization of queries and integrating Browsers with READs (all of which we were going to shunt off to Lisa), to a person, we were taken aback at the proposition.

At the time, three of us were independents; Alan and Menachem both worked at Flash Creative Management. The overwhelming answer was "No, not yet."

But it was a good question. At that point, FoxPro for Windows was on the horizon, and we were looking at some pretty serious learning challenges. (Please hold your smirks for a moment, willya?) It wasn't enough to just know about desnippetizing your screens, writing expressions that could be Rushmore Optimized, and knowing the tricks to get Fox to coexist with a half dozen TSRs anymore. There were several "CK's" that you could use to extend FoxPro – the Library Construction Kit for writing functions in C that you could access via Fox, the Connectivity Construction Kit for hooking into Client-Server databases like Oracle, and so on. And you also had to know about networking – NetWare and multiple flavors of Windows.

The operating system had started to splinter – you had various flavors of DOS as well as Windows to be comfortable with. Remember the thirty five INI files found on a typical Windows 3.1 hard disk? I still remember rescuing a customer the following year whose previous consultant had written an application for them, but wasn't sure if they wrote it in FoxPro for DOS or FoxPro for Windows – I swear I am not making that up! (It turns out they wrote the code in FoxPro for DOS at their own shop but were running the code in FoxPro for Windows at the client's site, with the accompanying hideous results.)

It was becoming obvious that an independent developer – the term meant a single person working on their own for one or more customers – was shortly going to be overwhelmed – a single programmer couldn't possibly become master of all this, could they?

The noose tightens

The writing on the wall became more and more evident over the next couple of years – Windows NT arrived, and introduced a level of complexity that was heretofore unheard of for the desktop. The Microsoft Solution Developer program changed their ground rules – an SP now had to have at least two certified developers on staff – they were, in effect, blowing off the independent developer, saying, "You don't figure in our plans anymore."

Then the Internet arrived, and the previous challenges became insignificant. I don't have to tell you how complex application development has become. Just inside of VFP, you've got 893 commands and functions, plus another 1000 PEMs. You've got local data access, local views, remote views and SPT to access back-end databases. You've got object-oriented programming, and a visual designer for the user interface. You've got access to the Windows API, and ActiveX controls, and the ability to control (or be controlled by) other applications through Automation.

You've got more than a half-dozen different operating systems, with the quirks attendant to each – Windows 3.1 (yes, it's still around), 95, 98, Me, NT 3.5, NT 4, 2000 – with the multitude of service packs, you're talking over two dozen varieties. Want to hear a scary statistic? There are 2221 DLLs on my local C drive. A computer couldn't keep track of the interactions involved between this many files!

There is also the complexity involved in getting a connection to the Internet established – and maintained – and optimized – and secured from outside threats – and still accessible by outsiders who should have access.

You also need to be comfortable with a back end like SQL Server or Oracle. And both get revved every couple of years – so the mastery you had in 1998 means little in 2000. There's more, of course – the current architectures are being changed as often as the tools – whether you go for Windows DNA or Sun's flavor of the day of Java – you've got a lot to learn and integrate. We're supposed to know how to design, develop, and implement two-tier, three-tier, n-tier, n+1-tier designs across networks, buildings, companies, and oceans.

Kind of makes you long for the good old days when dealing with a common code base for both DOS and Windows was the big challenge, eh?

I dare ya!

So, what do you think? Is it possible for a single person to develop applications in today's environment? Or should all of you independents sign up with a development shop or a regular company, and learn to work in teams? I'll gather responses, and in a couple of months, give you some feedback as well as propose an alternative – choosing neither the lady nor the tiger, as it were.