

WinFolder – The magic!

The magic of WinFolder is in its patented technology (European patent: EP 0664 061, USA: 5956696, Canada: 2146116, UK: 0664061 –and other countries –please see the Frontline Technology Ltd Web site <http://www.frontline-technology.com/> for further information.)

Problem to be solved: Scalability

WinFolder is based on technology developed in 1992 to achieve scalability by a number of users accessing a shared database in a short space of time (3-5 minutes). This was necessary for taking class attendance in a school environment. At the time, PC networks could only offer 'file sharing' architecture for accessing data across the network, which was hopelessly inadequate for scalability. The ingenious and innovative WinFolder design allowed a 'breakthrough' to achieve remarkable scalability. Even against today's conventional client-server database technology, WinFolder scalability and efficiency is 100-fold superior.

Breakthrough: Miniscule data traffic

The 'breakthrough' in scalability and efficiency was achieved through the minuscule data traffic generated by the WinFolder technology to send the required information over the network. The volume of data traffic is significantly low (100 to 1,000 fold –see below) in comparison to other methods. The WinFolder technology is truly one of its kind, with nothing remotely similar to it in the market place.

Comparison: Three systems

The outline explanation of the three systems (please see below) illustrates the basic elements and provides a simple comparison between the three. The diagrams below also present the approximate volume of data traffic generated at the time of taking attendance roll in a school (which usually takes place within the first 3-5 minutes of a teaching period.). The reader should keep in mind the huge demand this volume of data represents as a load on the central server and the congestion that the data traffic will cause on the school network.

1. "File Sharing" Architecture:

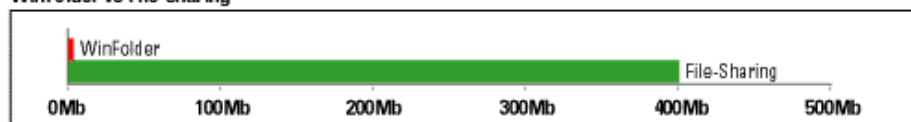
Typical system components: Novell File-Server, DOS Work Stations, Clipper/DB4 Database application.

Data Traffic generated for each classroom (say 20 students) = **4,000 KByte** (4 MByte)
Schools-wide within 3-5 minutes (say 100 classrooms) = **400,000 KByte** (400Mbyte)



Data Traffic generated for each classroom (30 students) = **4,000 KByte** (4 MByte)
Schools-wide within 3-5 minutes (100 classrooms) = **400,000 KByte** (400 Mbyte)

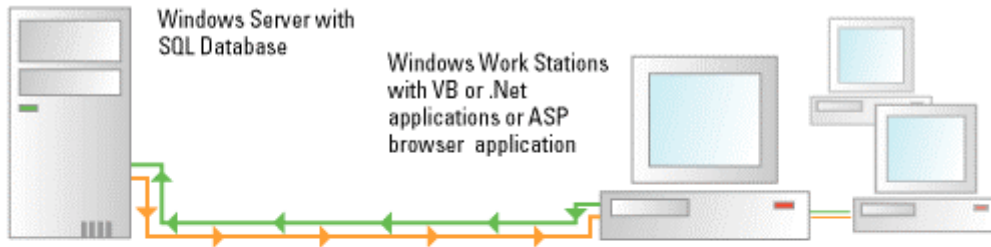
WinFolder vs File-sharing



2. Conventional "Client-Server" Architecture:

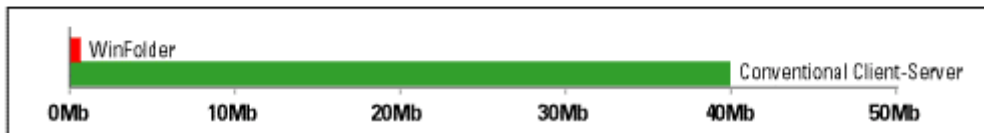
Typical system components: Windows Server, Windows Work Stations, SQL Database and VB or .Net applications or browser ASP application.

Data Traffic generated for each classroom (say 20 students) = **400 KByte**
Schools-wide within 3-5 minutes (say 100 classrooms) = **40,000 KByte** (40MByte)



Data Traffic generated for each classroom (30 students) = **400 KByte**
Schools-wide within 3-5 minutes (100 classrooms) = **40,000 KByte** (40 Mbyte)

WinFolder vs Conventional Client-Server



3. WinFolder Architecture:

Typical system components: Windows Server, Windows Work Stations, SQL Database and WinFolder application.

Data Traffic generated for each classroom (say 20 students) = **4 KByte**
Schools-wide within 3-5 minutes (say 100 classrooms) = **400 KByte** (0.4MByte)



Data Traffic generated for each classroom (30 students) = **4 KByte**
Schools-wide within 3-5 minutes (100 classrooms) = **400 KByte** (0.4 MByte)