

White Paper

The 'Magic' of Bromcom's WinFolder

*Bromcom Computers Plc explains the significant difference between
WinFolder and other alternative attendance software*

WinFolder - super-efficient software

WinFolder is a super-efficient software solution developed by Bromcom, ideal for teachers wishing to use their own laptop/PC/hand-held device for registration purposes. The aim of the initial technology was to achieve scalability for many users accessing a shared database simultaneously. WinFolder achieved this efficiently altering the traditional registration concept into a quick, reliable and simple method.

How does WinFolder work?

WinFolder is a user-friendly program with familiar menus and toolbars to that of Microsoft Word, Outlook, Internet Explorer etc so minimal training is necessary. The teacher can take the register using a variety of input devices, such as a keyboard, mouse or even touch-screen (for schools with whiteboards). If a teacher wants to give a pupil a mark other than a present mark, a list of attendance codes is displayed and the teacher selects the appropriate one. Members of staff do not have to memorise all the various attendance codes.

Once the register has been completed, it is sent back to the school office instantly, via the school network, either wireless or hard wired. Making amendments on WinFolder is simple, the teacher only has to recall the chosen register, amend the mark and click on the send button. If a pupil arrives late, the teacher is prompted by WinFolder to specify exactly how many minutes late the pupil is.

One of WinFolder's unique features is the '*right-click functionality*'. When a teacher right-clicks the mouse button on a given student's name, a list of options appears. These options provide further student information instantly. For example, a teacher can see the pupil's timetable, or contact information, such as address and parent/guardian details. Schools find this a practical function as it saves time searching through other documents for the information. It is particularly useful if the information is needed in an event of an emergency.

What makes WinFolder so 'magical'?

The WinFolder technology achieved efficiency and scalability due to the minuscule volume of data traffic required to send information via the network. Whilst 'file sharing' systems (e.g. DOS, Clipper) required 4,000 Kbytes for each classroom's data transfer, and conventional systems with a 'client-server' architecture required 400 Kbytes, WinFolder architecture requires a mere 4 Kbytes.

The WinFolder architecture requires 0.4 Mbytes to transfer data within 3-5 minutes (for 100 classrooms) rather than 400 Mbytes as is the case for DOS Workstations and Clipper database applications.

More and more schools across the country are choosing WinFolder in order to improve their pupil attendance.

Comparison: Three systems

The diagrams and explanations below illustrate the basic elements and comparisons between the three main attendance-gathering infrastructures within a school. The diagrams also present the approximate volume of data traffic generated at the time of taking the 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.

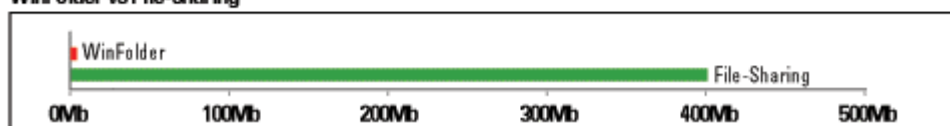
Data Traffic generated for each classroom (say 20 students) = **4,000 KByte (4 MByte)**

Schools-wide within 3-5 minutes (say 100 classrooms) = **400,000 KByte (400Mbyte)**



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WinFolder vs File-sharing

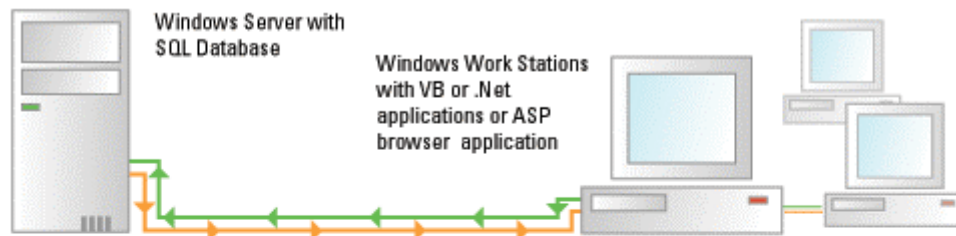


2. Conventional "Client-Server" Architecture:

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**

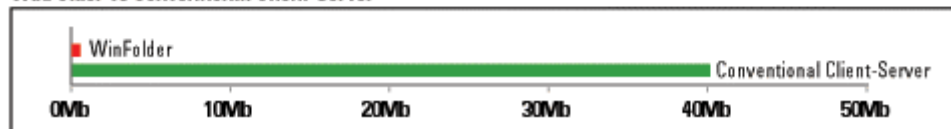
Schools-wide within 3-5 minutes (say 100 classrooms) = **40,000 KByte** (40MByte)



Data Traffic generated for each classroom (20 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 (20 students) = **4 KByte**

Schools-wide within 3-5 minutes (100 classrooms) = **400 KByte** (0.4 MByte)

Benefits of WinFolder

Implementing WinFolder has great benefits for all staff at the school.

Administrative Staff	Teachers	School
<ul style="list-style-type: none">- No paperwork, no fuss, process is automated enabling speed and accuracy- Reduced chance of human error- Easy for teachers to use so there is no excuse for them not taking registers.	<ul style="list-style-type: none">- Simple nature of the product means teachers can take the register swiftly and get on with teaching- Important student information at your fingertips. Right-click functionality allows instant access to pupil details.	<ul style="list-style-type: none">- Utilises school's existing infrastructure so no need for further investment in new servers etc.- Uses minimal space on the network.

More than a Register...

WinFolder has additional functions that aid internal communication. For example, the **Email** allows teachers to send messages to other teachers, a more reliable way of communicating information than leaving notes that could disappear or fail to be noticed.

WinFolder provides teachers with a **Fire Drill** facility where a familiar register is presented, with an extra column beside it called the 'rolling register'. The marks in this column are automatically updated to the most recent attendance marks through the course of the day. If there is a fire drill, the teacher is instantly provided with an up-to-date register.

For other emergencies, for example, medical or security-related, there is an **Alert** feature where the teacher is prompted to enter the location and the office is immediately alerted.

Bromcom's WinFolder is truly one of a kind. The patented technology provides schools with an extra fast system that is reliable and simple to use. WinFolder

provides all school users with significant benefits. This is why more than 700 schools nationwide have chosen the Bromcom system.

WinFolder's Extraordinary Features

Outstanding Features	Details
Super-efficient software with very low demand on the school network	<p>The WinFolder architecture requires 0.4 Mbytes to transfer data within 3-5 minutes (for 100 classrooms) rather than 400 Mbytes in SQL Client Server systems as is the case for Clipper /dBase type 'file sharing' systems.</p> <p>This means 100 to 1,000-fold higher performance against competitive products.</p>
High security against hacking due to a secure firewall for 2 LAN segments: Administration and Curriculum Networks.	<p>The only route into the Administration network from the curriculum network is via a specific port address protected by a 'router', which is used only by the WinFolder application and beyond access by other users.</p> <p>The administrator can only change router configuration, using a serial cable that is physically connected to the serial port of the device. In other words, this option is not available to other users or hackers.</p>
Built-in Fire Drill	The Fire Drill can operate offline as well as online. This means that the register can be called up without accessing the server (as required by Health and Safety regulations). This facility is essential to check students in the event of a real fire.
Flexibility of input devices	WinFolder can run on a range of machines, even low spec PCs, meaning that schools have the flexibility to choose the devices they wish to use and no further investment is necessary.
Ready access to MIS data as needed meaning low demands on network and no danger of MIS access being left 'logged on' in the classroom	Right-click functionality allows teachers to access data from the school's MIS system as and when needed. This includes student photographs, SEN, contact and timetable information. Access is via the WinFolder interface and reduces the chances of users leaving their PCs unattended and logged on to the school's MIS.

Bromcom customers have the support of a dedicated Helpdesk every working day, with qualified engineers to provide them with any assistance necessary. An Account Executive is assigned to every school, who oversees the use of the system through regular visits to the school and ensures that the school is using their system to its full capacity.