Visuality Systems
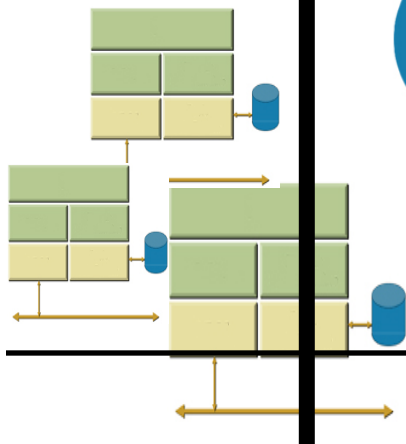
NQ CIFS Client/Server Middleware

NQ (Network Quick) CIFS Client and Server Middleware Adds Microsoft's File Sharing Standards to Embedded Operating Systems

Visuality Systems

Headquarters
2 Hatamar Street
Yokneam Ilit
Israel, 20692
Phone: +972 (4) 959-2155
Fax: +972 (4) 959-2173

United States Office
233-i East Red Oak Drive
Sunnyvale, CA 94086
Toll Free: 1-888-819-0114
Phone: 1-408-390-1895
Fax: 1-413-826-7027

World Wide
info@visualitynq.com
www.visualitynq.com

NQ CIFS Client/Server Middleware in Action
Example of two shared directories as seen on a PC Client connected to a network of windows servers and NQ enabled embedded devices

Valued Partner Relationships

Visuality Systems, with offices in Israel and the United States, is the leader in providing CIFS (also known as SMB) client/server protocol and support for embedded devices that need network file and printer sharing. Manufacturers can be more competitive in today's embedded market by integrating NQ's high-quality reusable file sharing software into their applications taking advantage of Microsoft Windows connectivity. Contact Visuality Systems now to learn how NQ Brand CIFS Client/Server middleware components are meeting industry leaders' file and device sharing needs in networking, consumer, industrial, aerospace and defense, and automotive markets.

FEATURES

- Windows native file-sharing protocol
- Portable POSIX/ANSI compliant
- Includes NetBIOS over TCP/IP protocol
- Small footprint suitable for embedded systems
- Advanced visual file management using Windows "My Network Places"
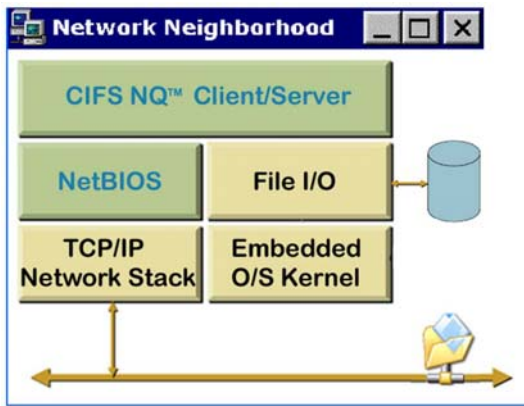
Visuality Systems' NQ Client provides embedded devices with connectivity to native CIFS Windows or Linux Samba for file and printer sharing.

While NQ Server enables embedded devices to share its local files with Windows or Unix computers on a network or over the Internet.

Some interesting uses for CIFS NQ Client/Server by our customers

- A Biomedical instrument company has added CIFS NQ Server to their scanning instrument, not for deployment, but for production. They have a board support package with CIFS NQ on the base instrument, then they load their application into flash memory just before shipping using a Windows box connected to their appliance using CIFS. A neat way to save on production costs while customizing their product on the production floor. Embedded device manufactures find this production technique opens new avenues to customer satisfaction.

- A consumer product company uses CIFS NQ as their home network protocol of choice to coordinate music files with detailed information about the music available via an Internet subscription service. Set-top and Music Manager companies find this Internet/Home Network file management method to be a very cost effective benefit to their customers while reducing engineering costs.

- Connecting a device to a small office network requires IT knowledge to set up the IP addresses and other network configuration details. This company is using CIFS NQ Client's browsing feature to connect the embedded appliance to the small office network automatically without any IT setup. The company feels this will reduce their sales support for new customers while improving customer satisfaction.

A short description and history of CIFS

The Common Internet File System protocol runs over TCP/IP and is an enhanced version of the open, cross-platform protocol for distributed file sharing called Server Message Block (SMB). The SMB protocol is the standard way that millions of PC users already share files across corporate intranets and is the native file-sharing protocol in all Microsoft Windows operating systems, MS-DOS, and OS/2.

The SMB protocol is an open technology widely available on UNIX, VMS™ and other platforms. It has been an Open Group (formerly X/Open) standard for PC and UNIX interoperability since 1992 (X/Open CAE Specification C209), and it is supported in products such as AT&T® Advanced Server for UNIX, Digital's PATH-WORKS™, HP® Advanced Server 9000, IBM Warp Connect, IBM LAN Server, Novell® Enterprise Toolkit, and 3Com® 3+Share®, among others. SMB is also the featured file and print sharing protocol of Samba, a popular freeware network file system available for LINUX and many UNIX platforms.

"Microsoft has also contributed materially by putting forward its definition of SMB and the Internet-savvy Common Internet File System (CIFS), as a public Request for Comments (RFC), a standards document. The CIFS protocol is Microsoft's renaming of future versions of the SMB protocol that will be used in Windows products—the two terms can be used interchangeably…" Quote taken from the book "Using Samba", By David Collier-Brown, Robert Eckstein, Peter Kelly, published by O'Reilly, 1999.

Visuality Systems
Bringing CIFS connectivity to the embedded market