

CIFS/SMB

Common Internet File System/Server Message Block

Features

- 100% portable ANSI-C
- RTOS independent
- Portable to any network stack
- Supports any file system
- Linux/BSDsockets support
- Win32/Winsock support
- Share or User level security with encrypted passwords
- Supports printing
- POSIX-style file printing

Applications

- Network Printers
- Network Storage
- Data Collection Devices
- Digital Cameras
- MP3 Players

EBS's RTSMB Client and Server protocols provide Server Message Block (Common Internet File System) protocol implementation developed specifically for embedded systems. The first of its kind, RTSMB Client/Server allows embedded devices to access and share files and printers over LAN and WAN. CIFS/SMB is the network protocol used by all variants of Microsoft Windows, all recent Macintosh operating systems, and all Unix/Linux variations to access and share files and printers over a network.

RTSMB Client provides an interface for accessing file and print shares on remote hosts that provide any brand of CIFS/SMB file sharing. The client can scan a network for CIFS/SMB servers, browse the shares on a server, and connect to multiple shares simultaneously. It can operate in synchronous (blocking) or asynchronous (polled) mode.

Embedding RTSMB Server in a system makes it available as a disk or printer resource to any Windows PC, Macintosh, or Unix/Linux variant running Samba. The RTSMB Client and Server protocols can run standalone or concurrently on the same device or system.

Designed from the bottom up for small real-time systems, EBS's RTSMB Client/Server is high performance, has a small footprint, and is robust and portable.

FUNCTIONALITY HIGHLIGHTS:

Feature Highlights:

- High performance:
- Handles simultaneous requests efficiently
- Runs single-threaded, multi-threaded, or polled mode
- Small memory footprint

Extreme Portability:

- Modular Porting layer
- Simple porting procedures
- Well-commented porting layer
- Comprehensive documentation

Configurable:

- Variable connections
- Variable buffer size
- Variable number of threads, users and open files
- Reducing connections, threads, users, open files, and buffer size reduces footprint size
- Increasing threads and buffer size increases speed performance

SERVER FOOTPRINT EXAMPLES:					
Average:					
Simultaneous Connections	Helper Threads	# Users	# Open Files	Buffer Size (default)	Footprint
5	4	1	10	2924	150Kb
Large:					
15	10	3	20	2924	347Kb
(Measurements are with no debugging information or optimization.)					