

Fusion Embedded™ FTP

File Transfer Protocol (FTP) is an application that allows the efficient sharing of files, programs or data between diverse host systems. FTP also provides a secure way to allow (or deny) access to specific files or directories. FTP, a standard protocol, is the simplest way to exchange files between computers on the Internet.

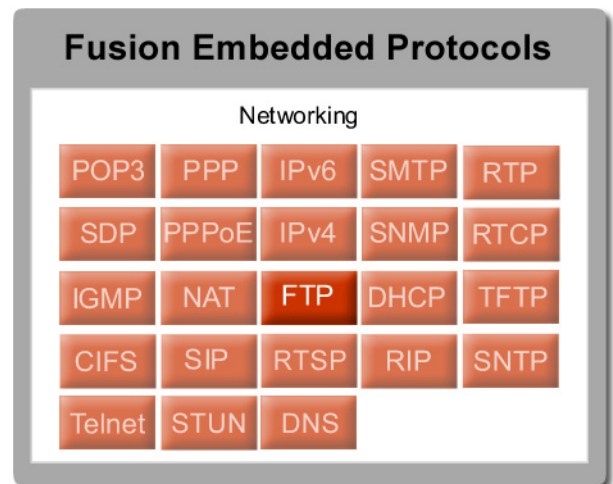
Like the Hypertext Transfer Protocol (HTTP), which transfers displayable Web pages and related files, and the Simple Mail Transfer Protocol (SMTP), which transfers email, FTP is an application protocol that uses the Internet's TCP/IP protocols. FTP is commonly used to transfer Web page files from their creator to the computer that acts as their server for everyone on the Internet. It is also commonly used to download programs and other files to a computer from other servers.

The Fusion Embedded FTP package contains both client and server implementations. Both are designed to be small and easy to implement with a robust feature set comparable to PC-based FTP implementations. Both client and server source code examples are provided. The developer may use these as a foundation or can create their own code. Full directory and file management and navigation are provided. Support for SSL is available as part of the Fusion Embedded Security product line.

The Application Programmers Interface (API) has been designed with the application developer in mind. Many of the intrinsic FTP commands are grouped in logical combinations for convenience. For example a login API call is provided which combines the USER and PASS commands. Fusion Embedded FTP does not require an underlying file system. One is available from Unicoi System if the developer prefers to use one. With the release of V7.1 of Fusion, FTP porting has been greatly simplified. All required parameters are contained in a single file. All porting functions have skeleton implementations for Unix/BSD compatible protocol stacks and need not be modified for platforms that have Unix/BSD support.

FTP Features

- Efficient file sharing
- Data communications between diverse host systems
- Security to deny access to specific files or directories
- RFC 959 compliant
- Client and server support
- Mature code deployed in a wide range of applications and backed by many years of embedded networking experience
- DSP, RISC and microprocessor support (8-bit to 64-bit)
- Socket libraries for standard BSD Socket API
- Operates with any RTOS
- Supports ASCII, Image and Byte 8 data types
- Connection establishment and management
- Error recovery and restart
- Stream mode
- Non-print option
- Full standard FTP command set



Access Control Commands

- user user
- pass password
- acct account
- cwd change working directory
- cdup change to parent directory
- smnt structure mount
- rein reinitialize
- logout quit

Transfer Parameter Commands

- por data port
- pasv passive
- type representation type
- stru file structure
- mode transfer mode

Service Commands

- retr retrieve
- stor store
- stou s tore unique
- appe append
- alloc allocate
- rest restart
- rnfr rename from
- rn to rename to
- abor abort
- dele delete
- rmd remove directory
- mkd make directory
- pwd print working directory
- list list
- nlist name list
- site site parameters
- syst system
- stat status
- help help
- noop server reply

Fusion Embedded™ Fully Integrated Protocols

Voice & Video Protocols

- RTP
- SRTP
- SIP
- SIPS
- STUN

Networking Protocols

- TCP/IPv4/IPv6
- FTP
- DHCP
- HTTP
- NAT
- DNS Resolver
- RIP
- Telnet Server
- PPP
- PPPoE
- SNMP
- SNTP

Security Protocols

- HTTPS
- IPsec
- SSL/TLS
- IKE
- SIPS
- SRTP