

# secure ftp system IP and Protocol Diagram

SFTP im TCP/IP-Protokollstapel:

<b>Anwendung</b>	<b>SFTP</b>			
	SSH			
<i>Transport</i>	TCP			
<i>Internet</i>	IP (IPv4, IPv6)			
<i>Netzzugang</i>	Ethernet	Token Bus	Token Ring	FDDI

**SFTP** – SSH File Transfer Protocol – usually runs over TCP port 22

**FTP** – plain, old file transfer protocol – usually runs over TCP port 21 (+ opens separate ports for data transfer)

**FTP/SSL** – FTP over TSL/SSL channel.

**FTPS** – same as FTP/SSL

**Secure FTP** – either SFTP or FTPS

More info:

## **FTP** **FTP classic**

- Plain FTP
- Clear-text password sent over the network
- Typically runs over TCP port 21
- Defined by RFC 959 and 1123
- Implemented in FTP/SSL component

## **FTP/SSL** **FTP over TLS/SSL**

- Often called 'FTPS'
- Often called 'Secure FTP'
- Plain FTP over TLS/SSL channel
  - Password is encrypted
  - Transfer is encrypted
- Typically runs over TCP port 21 or 990
  - Defined by RFC 959, 1123, 4217 and 2228
  - Implemented in FTP/SSL component

## **SFTP** **SSH File Transfer Protocol**

- SSH File Transfer Protocol
  - Has nothing common with original FTP
  - Often called 'Secure FTP'
  - Password is encrypted
  - Transfer is encrypted
- Typically runs over TCP port 22
  - RFC not yet finished
  - Implemented in SFTP component