Client | Server

📁 **ftp_pas_get_minmax.pcapng**

🔗 TCP (SYN) — Frame 1 | 2019-03-25T23:05:17.768801Z

🔗 TCP (SYN, ACK) — Frame 2 | 2019-03-25T23:05:17.769752Z

🤝 FTP 220 Ready — 💡 Server is ready — announces software version and capabilities

🏷️ (vsFTPd 3.0.3)	

🤝 FTP FEAT — 💡 List server features and extensions

✅ FTP 211 — Frame 8 | 2019-03-25T23:05:17.773933Z

📋 Features:	
📂 CWD	

✅ FTP 211 — Frame 18 | 2019-03-25T23:05:17.774816Z

📋 End	
📂 CWD	

🔒 FTP AUTH — 💡 Upgrade to TLS/SSL encryption — all subsequent commands and data are protected

🔐 Method	TLS

🚫 FTP 530 Error — 💡 Server error — file not found, permission denied, or quota exceeded

📋 Please login with USER and PASS.	

👤 FTP USER — 💡 FTP login step 1: client identifies itself

👤 Username	ftpuser

🔐 FTP 331 Need Password — 💡 Username accepted — server now requires password to complete login

📋 Please specify the password.	

🔐 FTP PASS — 💡 FTP login step 2: password sent in cleartext (use FTPS for encryption)

✅ FTP 230 Logged In — 💡 Authentication successful — client can now issue file commands

📋 Login successful.	

📂 FTP PWD — 💡 Print current working directory on the server

✅ FTP 257 — Frame 27 | 2019-03-25T23:05:17.79201Z

📋 "/home/ftpuser/ftp" is the current directory	
📂 CWD	/home/ftpuser/ftp

🔧 FTP TYPE — 💡 Set transfer type: A=ASCII (text), I=Image/Binary

🔧 Mode	I

✅ FTP 200 — Frame 29 | 2019-03-25T23:05:17.794655Z

📋 Switching to Binary mode.	
📂 CWD	/home/ftpuser/ftp

📂 FTP SIZE — Frame 30 | 2019-03-25T23:05:17.795022Z

📋 R1.cfg	

✅ FTP 213 — Frame 31 | 2019-03-25T23:05:17.795856Z

📋 38	
📂 CWD	/home/ftpuser/ftp

📂 FTP MDTM — Frame 32 | 2019-03-25T23:05:17.796415Z

📋 R1.cfg	

✅ FTP 213 — Frame 33 | 2019-03-25T23:05:17.798093Z

📋 20190325101318	
📂 CWD	/home/ftpuser/ftp

🔗 FTP PASV — 💡 Passive mode: server provides IP:port for client to connect data channel

🔗 FTP 227 Passive Mode — 💡 Server provides IP:port for data connection — client connects to this address

🌐 Passive IP address	10.2.5.5

💻 Client	🖥️ Server	
	🔗 Passive port: 42566	
🔗 TCP (SYN) →		Frame 36 | 2019-03-25T23:05:17.799558Z
← 🔗 TCP (SYN, ACK)		Frame 37 | 2019-03-25T23:05:17.800406Z
📥 FTP RETR →		💡 Download file from server — data sent over separate data connection
	📄 File: R1.cfg	
← 📋 FTP 150 Data Connection		💡 Server opening data channel for file transfer or directory listing
	📋 Opening BINARY mode data connection for R1.cfg (38 bytes).	
← 🔗 TCP (FIN, ACK)		Frame 42 | 2019-03-25T23:05:17.802222Z
🔗 TCP (FIN, ACK) →		Frame 44 | 2019-03-25T23:05:17.802581Z
← ✅ FTP 226 Transfer Complete		💡 File transfer finished successfully — data connection closed
	📋 Transfer complete.	
🔧 FTP TYPE →		💡 Set transfer type: A=ASCII (text), I=Image/Binary
	🔧 Mode: A	
← ✅ FTP 200		Frame 49 | 2019-03-25T23:05:17.805345Z
	📋 Switching to ASCII mode.	
	📂 CWD: /home/ftpuser/ftp	
🔗 FTP PASV →		💡 Passive mode: server provides IP:port for client to connect data channel
← 🔗 FTP 227 Passive Mode		💡 Server provides IP:port for data connection — client connects to this address
	🌐 Passive IP address: 10.2.5.5	
	🔗 Passive port: 42592	
🔗 TCP (SYN) →		Frame 52 | 2019-03-25T23:05:17.80709Z
← 🔗 TCP (SYN, ACK)		Frame 53 | 2019-03-25T23:05:17.808027Z
📋 FTP LIST →		💡 Request directory listing — server opens data connection to send file list
← 📋 FTP 150 Data Connection		💡 Server opening data channel for file transfer or directory listing
	📋 Here comes the directory listing.	
← 🔗 TCP (FIN, ACK)		Frame 58 | 2019-03-25T23:05:17.809536Z
🔗 TCP (FIN, ACK) →		Frame 60 | 2019-03-25T23:05:17.809887Z
← ✅ FTP 226 Transfer Complete		💡 File transfer finished successfully — data connection closed
	📋 Directory send OK.	
🛑 FTP QUIT →		💡 Close FTP session — server responds 221 and drops connection
← 👋 FTP 221 Goodbye		💡 Server confirms session end — control connection closes
← 🔗 TCP (FIN, ACK)		Frame 66 | 2019-03-25T23:05:17.811912Z
🔗 TCP (FIN, ACK) →		Frame 67 | 2019-03-25T23:05:17.812252Z