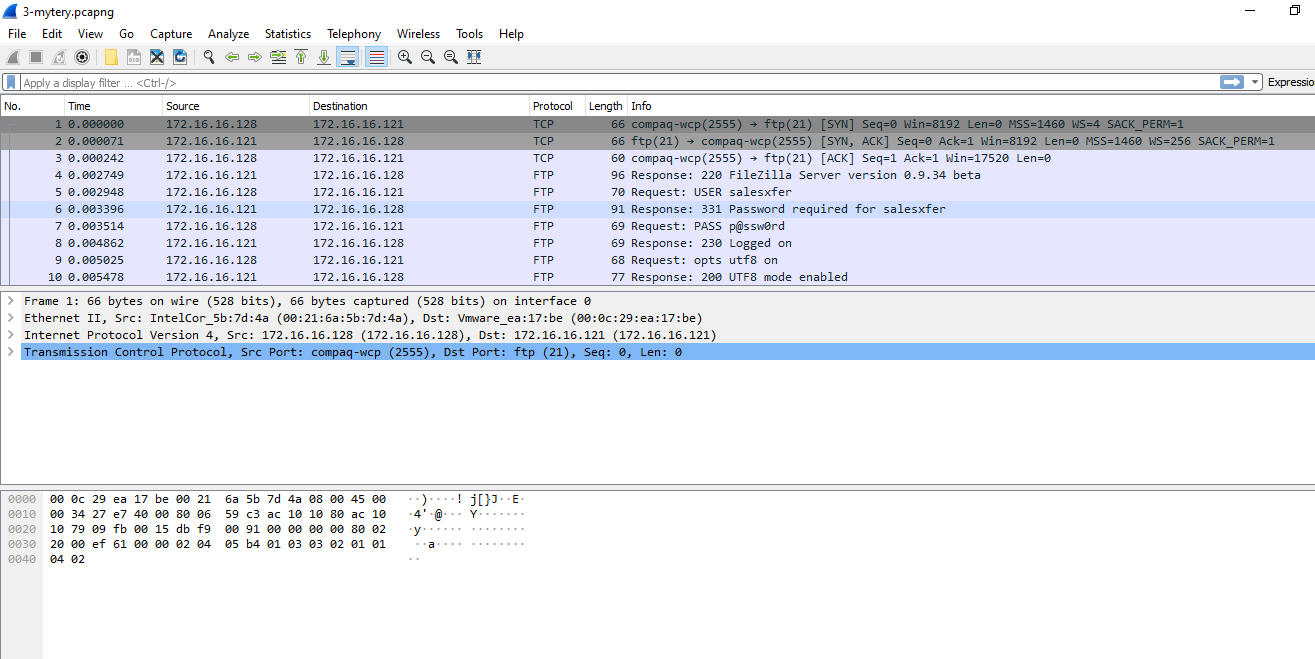
**Mystery 3**



**File Transfer Protocol (FTP)**

File Transfer Protocol (FTP) is an application layer protocol and is a client-server protocol that may be used to transfer files between computers on the internet. The client asks for the files and the server provides them.



**What is control connection?**  
For sending control information like user identification, password, commands to change the remote directory, commands to retrieve and store files, etc., FTP makes use of control connection. The control connection is initiated on port number 21.

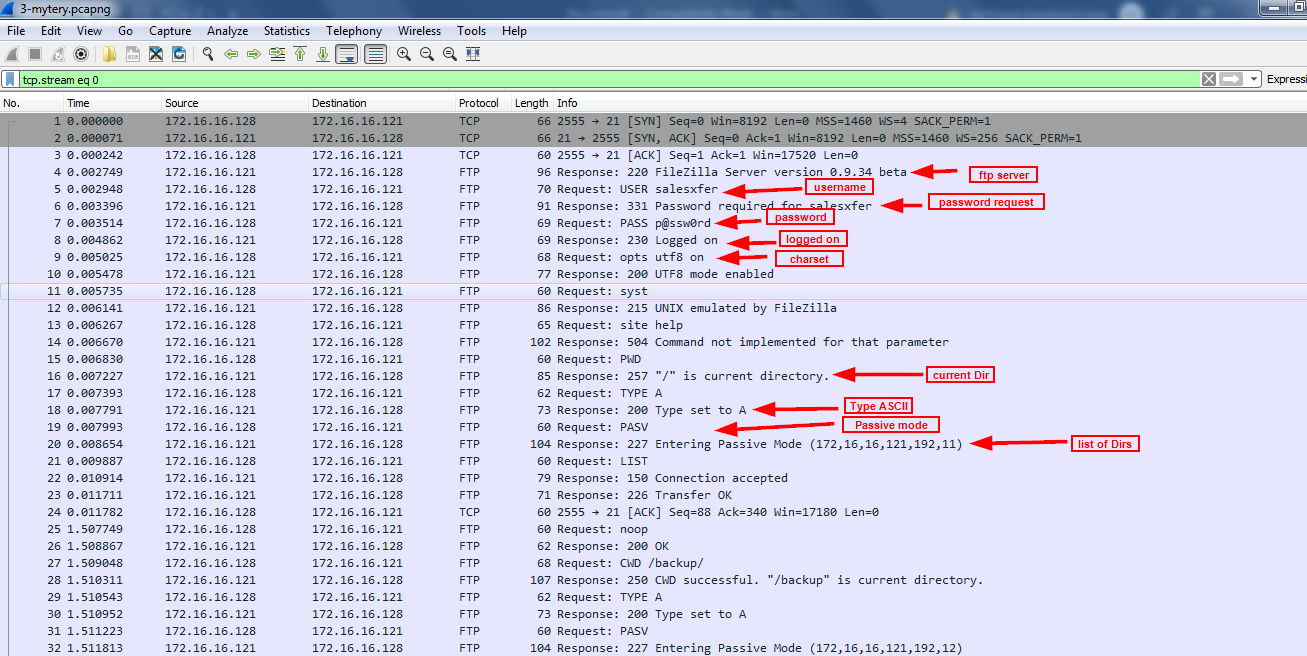
**What is data connection?**  
For sending the actual file, FTP makes use of data connection. A data connection is initiated on port number 20..

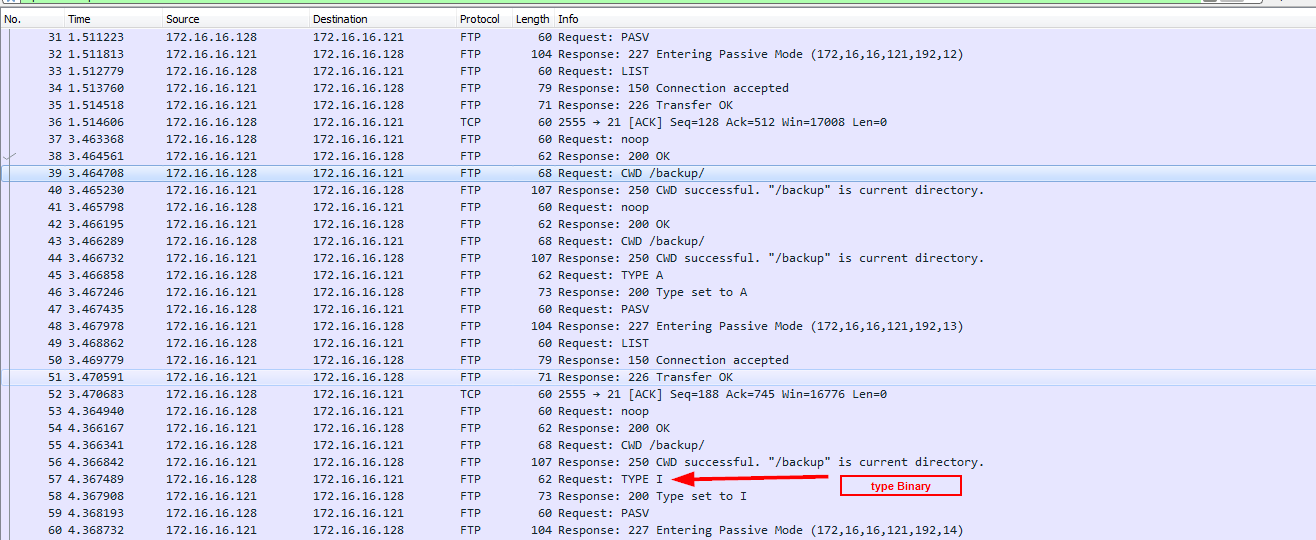
**FTP Session :**  
When a FTP session is started between a client and a server, the client initiates a control TCP connection with the server side. The client sends control information over this. When the server receives this, it initiates a data connection to the client side. Only one file can be sent over one data connection. But the control connection remains active throughout the user session. FTP needs to maintain a state about its user throughout the session.

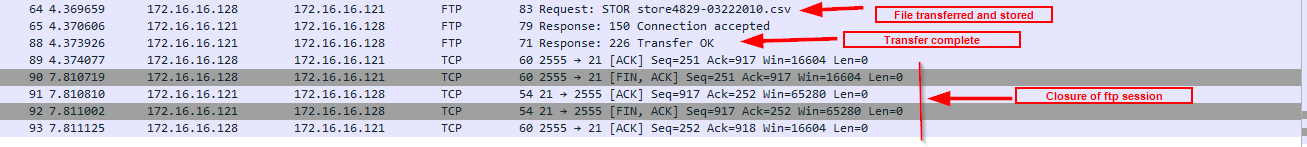
**Data Structures :** FTP allows three types of data structures :

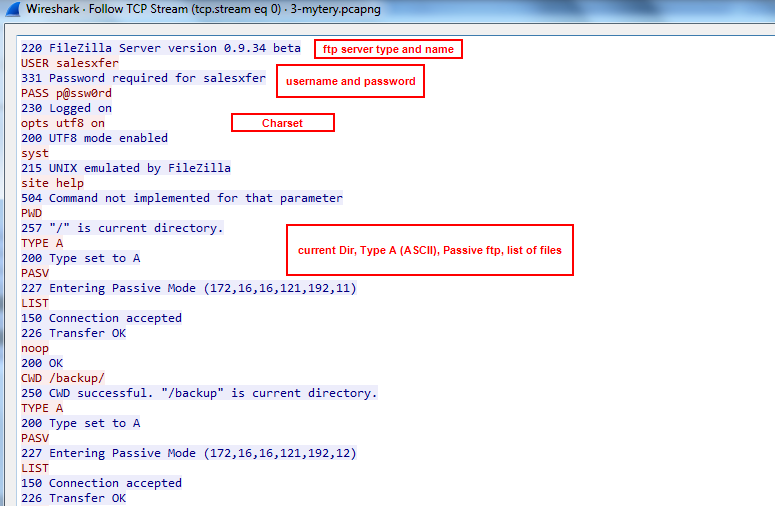
1. **File Structure –** In file-structure there is no internal structure and the file is considered to be a continuous sequence of data bytes.
2. **Record Structure –** In record-structure the file is made up of sequential records.
3. **Page Structure –** In page-structure the file is made up of independent indexed pages.

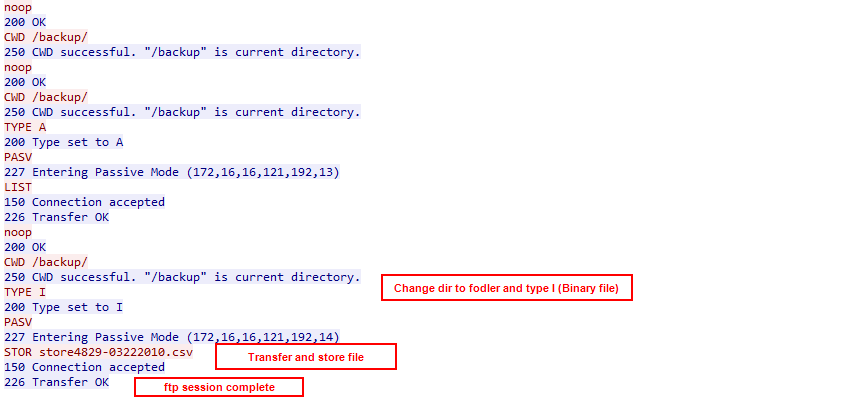
**Analysis of the 3-mystery.pcapng capture and TCP stream dump**











Source IP: 172.16.16.128 Port: 2555 Destination IP: 172.16.16.121 Port: 21

ftp server : Filezilla server version 0.9.34.beta

user : salesxfer password : p@ssw0rd Charset : utf8

Size of file transferred : 19832 Name of file transferred and stored : store4829-03222010.csv

Path of this file : /backup/