

Port_20 Interfaces (FTP Session Sequence Diagram)

Internet			FTP Client PC				EventHelix.com/EventStudio 2.5	
DNS	FTP Server		FTP Client			Console		
Port 53	Port 20	Port 21	1030	1175	5001	5002	User	

This sequence diagram was generated with EventStudio 2.5 (<http://www.EventHelix.com/EventStudio>).

Here we explore the sequence of interactions in a typical FTP (File Transfer Protocol) session. The example here illustrates the use of multiple TCP connections by FTP. We will cover how FTP establishes a telnet TCP connection (TCP Port 21) to control the overall flow of the FTP transfer. Then we examine the use of TCP Port 21 for establishing TCP connections for directory transfer and file retrieval.

The complete sequence diagram can be divided into the following steps:

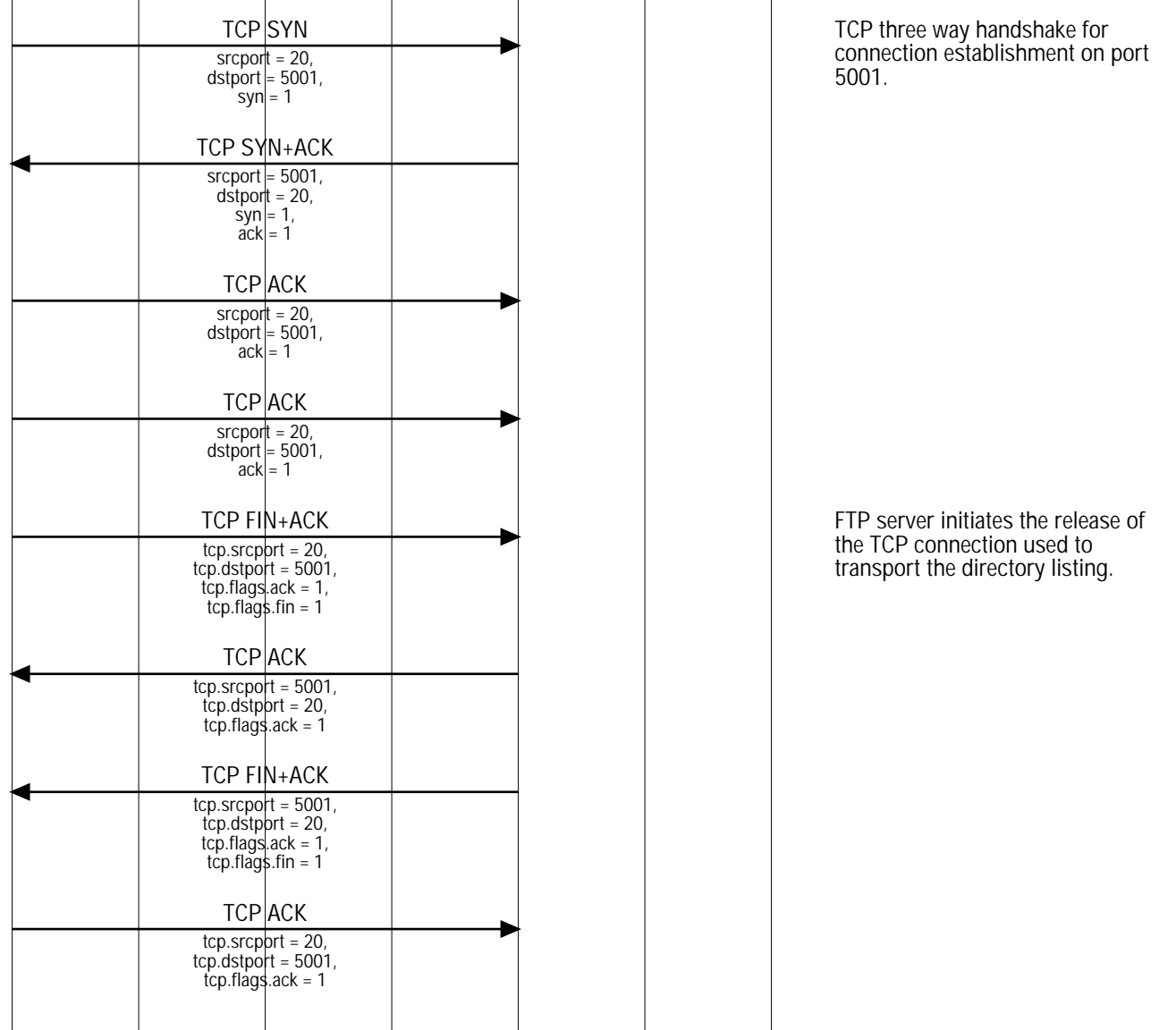
- DNS Query to obtain the IP address for the FTP Server
- FTP Telnet connection setup and login. (USER and PASS commands)
- Obtaining a directory listing (PORT and LIST command)
- Changing directory (CWD command)
- Downloading a file using FTP get (PORT and RETR command)

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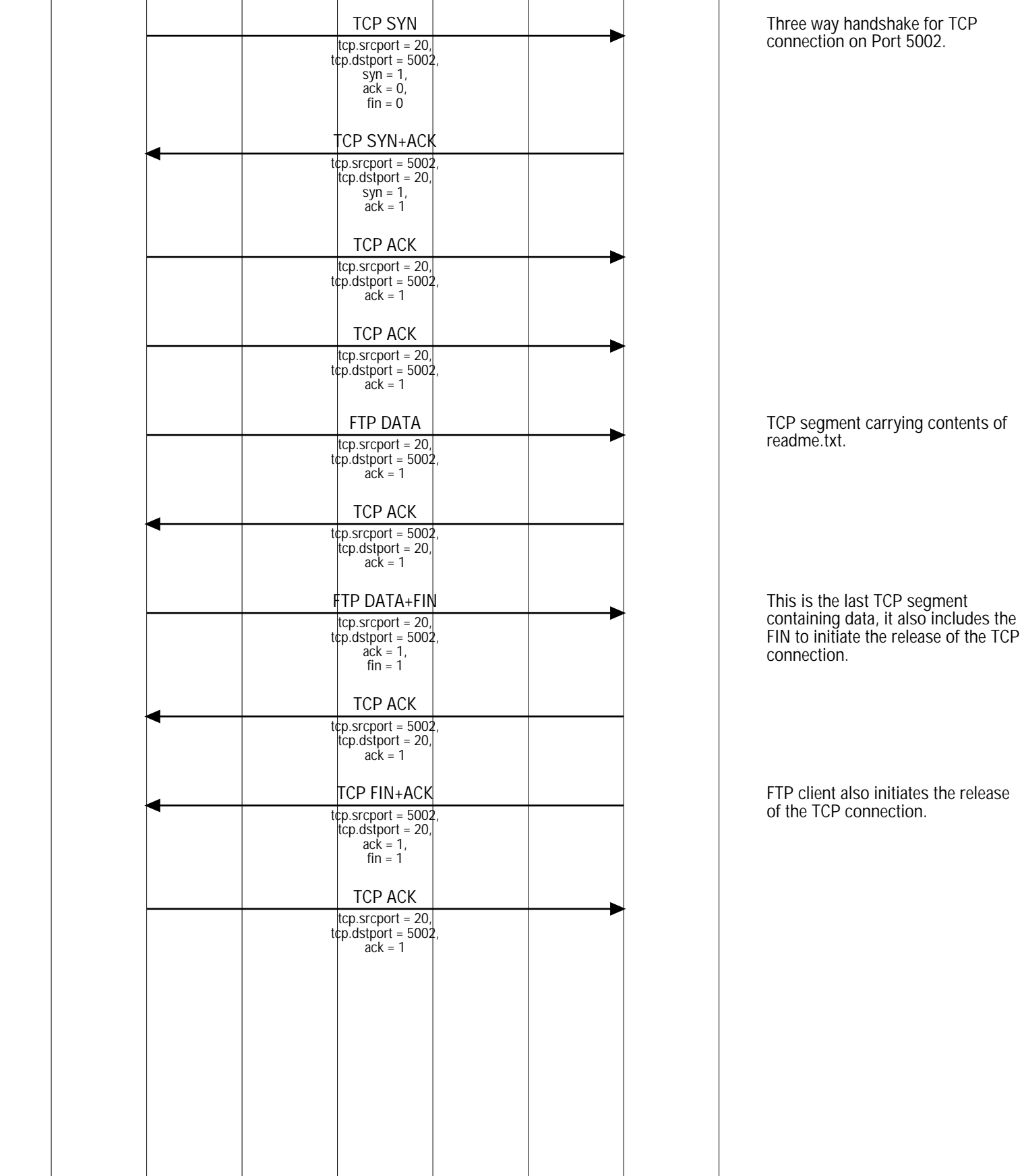


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Changing directory (CWD command).

Downloading a file using FTP get (PORT and RETR command).



Three way handshake for TCP connection on Port 5002.

TCP segment carrying contents of readme.txt.

This is the last TCP segment containing data, it also includes the FIN to initiate the release of the TCP connection.

FTP client also initiates the release of the TCP connection.