```
      1 0.000000000    10.0.1.11             10.0.1.12             TCP      74     49908 → 21 [SYN] Seq=0 Win=29200 Len=0
MSS=1460 SACK_PERM=1 TSval=1186410 TSecr=0 WS=128
Frame 1: 74 bytes on wire (592 bits), 74 bytes captured (592 bits) on interface 0
    Interface id: 0 (eth0)
    Encapsulation type: Ethernet (1)
    Arrival Time: Mar  2, 2017 14:50:37.460281670 CET
    [Time shift for this packet: 0.000000000 seconds]
    Epoch Time: 1488462637.460281670 seconds
    [Time delta from previous captured frame: 0.000000000 seconds]
    [Time delta from previous displayed frame: 0.000000000 seconds]
    [Time since reference or first frame: 0.000000000 seconds]
    Frame Number: 1
    Frame Length: 74 bytes (592 bits)
    Capture Length: 74 bytes (592 bits)
    [Frame is marked: False]
    [Frame is ignored: False]
    [Protocols in frame: eth:ethertype:ip:tcp]
    [Coloring Rule Name: TCP SYN/FIN]
    [Coloring Rule String: tcp.flags & 0x02 || tcp.flags.fin == 1]
Ethernet II, Src: 68:05:ca:1a:7c:70, Dst: 68:05:ca:1a:7c:77
    Destination: 68:05:ca:1a:7c:77
        Address: 68:05:ca:1a:7c:77
        .... ..0. .... .... .... .... = LG bit: Globally unique address (factory default)
        .... ...0 .... .... .... .... = IG bit: Individual address (unicast)
    Source: 68:05:ca:1a:7c:70
        Address: 68:05:ca:1a:7c:70
        .... ..0. .... .... .... .... = LG bit: Globally unique address (factory default)
        .... ...0 .... .... .... .... = IG bit: Individual address (unicast)
    Type: IPv4 (0x0800)
Internet Protocol Version 4, Src: 10.0.1.11, Dst: 10.0.1.12
    0100 .... = Version: 4
    .... 0101 = Header Length: 20 bytes
    Differentiated Services Field: 0x00 (DSCP: CS0, ECN: Not-ECT)
        0000 00.. = Differentiated Services Codepoint: Default (0)
        .... ..00 = Explicit Congestion Notification: Not ECN-Capable Transport (0)
    Total Length: 60
    Identification: 0xc564 (50532)
    Flags: 0x02 (Don't Fragment)
        0... .... = Reserved bit: Not set
        .1.. .... = Don't fragment: Set
        ..0. .... = More fragments: Not set
    Fragment offset: 0
    Time to live: 64
    Protocol: TCP (6)
    Header checksum: 0x5f41 [validation disabled]
        [Good: False]
        [Bad: False]
    Source: 10.0.1.11
    Destination: 10.0.1.12
    [Source GeoIP: Unknown]
    [Destination GeoIP: Unknown]
Transmission Control Protocol, Src Port: 49908 (49908), Dst Port: 21 (21), Seq: 0, Len: 0
    Source Port: 49908
    Destination Port: 21
    [Stream index: 0]
    [TCP Segment Len: 0]
    Sequence number: 0    (relative sequence number)
    Acknowledgment number: 0
    Header Length: 40 bytes
    Flags: 0x002 (SYN)
        000. .... .... = Reserved: Not set
        ...0 .... .... = Nonce: Not set
        .... 0... .... = Congestion Window Reduced (CWR): Not set
        .... .0.. .... = ECN-Echo: Not set
        .... ..0. .... = Urgent: Not set
        .... ...0 .... = Acknowledgment: Not set
        .... .... 0... = Push: Not set
        .... .... .0.. = Reset: Not set
        .... .... ..1. = Syn: Set
            [Expert Info (Chat/Sequence): Connection establish request (SYN): server port 21]
                [Connection establish request (SYN): server port 21]
                [Severity level: Chat]
                [Group: Sequence]
        .... .... ...0 = Fin: Not set
        [TCP Flags: **********S*]
    Window size value: 29200
    [Calculated window size: 29200]
    Checksum: 0x1645 [validation disabled]
        [Good Checksum: False]
        [Bad Checksum: False]
    Urgent pointer: 0
    Options: (20 bytes), Maximum segment size, SACK permitted, Timestamps, No-Operation (NOP), Window scale
        Maximum segment size: 1460 bytes
            Kind: Maximum Segment Size (2)
            Length: 4
            MSS Value: 1460
        TCP SACK Permitted Option: True
            Kind: SACK Permitted (4)
            Length: 2
        Timestamps: TSval 1186410, TSecr 0
            Kind: Time Stamp Option (8)
            Length: 10
            Timestamp value: 1186410
            Timestamp echo reply: 0
        No-Operation (NOP)
            Type: 1
                0... .... = Copy on fragmentation: No
```

```
                .00. .... = Class: Control (0)
                ...0 0001 = Number: No-Operation (NOP) (1)
            Window scale: 7 (multiply by 128)
                Kind: Window Scale (3)
                Length: 3
                Shift count: 7
                [Multiplier: 128]
      2 0.000364093    10.0.1.12             10.0.1.11             TCP      74     21 → 49908 [SYN, ACK] Seq=0 Ack=1 Win=28960
Len=0 MSS=1460 SACK_PERM=1 TSval=1186730 TSecr=1186410 WS=128
Frame 2: 74 bytes on wire (592 bits), 74 bytes captured (592 bits) on interface 0
    Interface id: 0 (eth0)
    Encapsulation type: Ethernet (1)
    Arrival Time: Mar  2, 2017 14:50:37.460645763 CET
    [Time shift for this packet: 0.000000000 seconds]
    Epoch Time: 1488462637.460645763 seconds
    [Time delta from previous captured frame: 0.000364093 seconds]
    [Time delta from previous displayed frame: 0.000364093 seconds]
    [Time since reference or first frame: 0.000364093 seconds]
    Frame Number: 2
    Frame Length: 74 bytes (592 bits)
    Capture Length: 74 bytes (592 bits)
    [Frame is marked: False]
    [Frame is ignored: False]
    [Protocols in frame: eth:ethertype:ip:tcp]
    [Coloring Rule Name: TCP SYN/FIN]
    [Coloring Rule String: tcp.flags & 0x02 || tcp.flags.fin == 1]
Ethernet II, Src: 68:05:ca:1a:7c:77, Dst: 68:05:ca:1a:7c:70
    Destination: 68:05:ca:1a:7c:70
        Address: 68:05:ca:1a:7c:70
        .... ..0. .... .... .... .... = LG bit: Globally unique address (factory default)
        .... ...0 .... .... .... .... = IG bit: Individual address (unicast)
    Source: 68:05:ca:1a:7c:77
        Address: 68:05:ca:1a:7c:77
        .... ..0. .... .... .... .... = LG bit: Globally unique address (factory default)
        .... ...0 .... .... .... .... = IG bit: Individual address (unicast)
    Type: IPv4 (0x0800)
Internet Protocol Version 4, Src: 10.0.1.12, Dst: 10.0.1.11
    0100 .... = Version: 4
    .... 0101 = Header Length: 20 bytes
    Differentiated Services Field: 0x00 (DSCP: CS0, ECN: Not-ECT)
        0000 00.. = Differentiated Services Codepoint: Default (0)
        .... ..00 = Explicit Congestion Notification: Not ECN-Capable Transport (0)
    Total Length: 60
    Identification: 0x0000 (0)
    Flags: 0x02 (Don't Fragment)
        0... .... = Reserved bit: Not set
        .1.. .... = Don't fragment: Set
        ..0. .... = More fragments: Not set
    Fragment offset: 0
    Time to live: 64
    Protocol: TCP (6)
    Header checksum: 0x24a6 [validation disabled]
        [Good: False]
        [Bad: False]
    Source: 10.0.1.12
    Destination: 10.0.1.11
    [Source GeoIP: Unknown]
    [Destination GeoIP: Unknown]
Transmission Control Protocol, Src Port: 21 (21), Dst Port: 49908 (49908), Seq: 0, Ack: 1, Len: 0
    Source Port: 21
    Destination Port: 49908
    [Stream index: 0]
    [TCP Segment Len: 0]
    Sequence number: 0    (relative sequence number)
    Acknowledgment number: 1    (relative ack number)
    Header Length: 40 bytes
    Flags: 0x012 (SYN, ACK)
        000. .... .... = Reserved: Not set
        ...0 .... .... = Nonce: Not set
        .... 0... .... = Congestion Window Reduced (CWR): Not set
        .... .0.. .... = ECN-Echo: Not set
        .... ..0. .... = Urgent: Not set
        .... ...1 .... = Acknowledgment: Set
        .... .... 0... = Push: Not set
        .... .... .0.. = Reset: Not set
        .... .... ..1. = Syn: Set
            [Expert Info (Chat/Sequence): Connection establish acknowledge (SYN+ACK): server port 21]
                [Connection establish acknowledge (SYN+ACK): server port 21]
                [Severity level: Chat]
                [Group: Sequence]
        .... .... ...0 = Fin: Not set
        [TCP Flags: *******A**S*]
    Window size value: 28960
    [Calculated window size: 28960]
    Checksum: 0xec33 [validation disabled]
        [Good Checksum: False]
        [Bad Checksum: False]
    Urgent pointer: 0
    Options: (20 bytes), Maximum segment size, SACK permitted, Timestamps, No-Operation (NOP), Window scale
        Maximum segment size: 1460 bytes
            Kind: Maximum Segment Size (2)
            Length: 4
            MSS Value: 1460
        TCP SACK Permitted Option: True
            Kind: SACK Permitted (4)
            Length: 2
        Timestamps: TSval 1186730, TSecr 1186410
```

```
            Kind: Time Stamp Option (8)
            Length: 10
            Timestamp value: 1186730
            Timestamp echo reply: 1186410
        No-Operation (NOP)
            Type: 1
                0... .... = Copy on fragmentation: No
                .00. .... = Class: Control (0)
                ...0 0001 = Number: No-Operation (NOP) (1)
        Window scale: 7 (multiply by 128)
            Kind: Window Scale (3)
            Length: 3
            Shift count: 7
            [Multiplier: 128]
    [SEQ/ACK analysis]
        [This is an ACK to the segment in frame: 1]
        [The RTT to ACK the segment was: 0.000364093 seconds]
        [iRTT: 0.000398413 seconds]
      3 0.000398413    10.0.1.11            10.0.1.12             TCP      66     49908 → 21 [ACK] Seq=1 Ack=1 Win=29312 Len=0
TSval=1186410 TSecr=1186730
Frame 3: 66 bytes on wire (528 bits), 66 bytes captured (528 bits) on interface 0
    Interface id: 0 (eth0)
    Encapsulation type: Ethernet (1)
    Arrival Time: Mar  2, 2017 14:50:37.460680083 CET
    [Time shift for this packet: 0.000000000 seconds]
    Epoch Time: 1488462637.460680083 seconds
    [Time delta from previous captured frame: 0.000034320 seconds]
    [Time delta from previous displayed frame: 0.000034320 seconds]
    [Time since reference or first frame: 0.000398413 seconds]
    Frame Number: 3
    Frame Length: 66 bytes (528 bits)
    Capture Length: 66 bytes (528 bits)
    [Frame is marked: False]
    [Frame is ignored: False]
    [Protocols in frame: eth:ethertype:ip:tcp]
    [Coloring Rule Name: TCP]
    [Coloring Rule String: tcp]
Ethernet II, Src: 68:05:ca:1a:7c:70, Dst: 68:05:ca:1a:7c:77
    Destination: 68:05:ca:1a:7c:77
        Address: 68:05:ca:1a:7c:77
        .... ..0. .... .... .... .... = LG bit: Globally unique address (factory default)
        .... ...0 .... .... .... .... = IG bit: Individual address (unicast)
    Source: 68:05:ca:1a:7c:70
        Address: 68:05:ca:1a:7c:70
        .... ..0. .... .... .... .... = LG bit: Globally unique address (factory default)
        .... ...0 .... .... .... .... = IG bit: Individual address (unicast)
    Type: IPv4 (0x0800)
Internet Protocol Version 4, Src: 10.0.1.11, Dst: 10.0.1.12
    0100 .... = Version: 4
    .... 0101 = Header Length: 20 bytes
    Differentiated Services Field: 0x00 (DSCP: CS0, ECN: Not-ECT)
        0000 00.. = Differentiated Services Codepoint: Default (0)
        .... ..00 = Explicit Congestion Notification: Not ECN-Capable Transport (0)
    Total Length: 52
    Identification: 0xc565 (50533)
    Flags: 0x02 (Don't Fragment)
        0... .... = Reserved bit: Not set
        .1.. .... = Don't fragment: Set
        ..0. .... = More fragments: Not set
    Fragment offset: 0
    Time to live: 64
    Protocol: TCP (6)
    Header checksum: 0x5f48 [validation disabled]
        [Good: False]
        [Bad: False]
    Source: 10.0.1.11
    Destination: 10.0.1.12
    [Source GeoIP: Unknown]
    [Destination GeoIP: Unknown]
Transmission Control Protocol, Src Port: 49908 (49908), Dst Port: 21 (21), Seq: 1, Ack: 1, Len: 0
    Source Port: 49908
    Destination Port: 21
    [Stream index: 0]
    [TCP Segment Len: 0]
    Sequence number: 1    (relative sequence number)
    Acknowledgment number: 1    (relative ack number)
    Header Length: 32 bytes
    Flags: 0x010 (ACK)
        000. .... .... = Reserved: Not set
        ...0 .... .... = Nonce: Not set
        .... 0... .... = Congestion Window Reduced (CWR): Not set
        .... .0.. .... = ECN-Echo: Not set
        .... ..0. .... = Urgent: Not set
        .... ...1 .... = Acknowledgment: Set
        .... .... 0... = Push: Not set
        .... .... .0.. = Reset: Not set
        .... .... ..0. = Syn: Not set
        .... .... ...0 = Fin: Not set
        [TCP Flags: *******A****]
    Window size value: 229
    [Calculated window size: 29312]
    [Window size scaling factor: 128]
    Checksum: 0x163d [validation disabled]
        [Good Checksum: False]
        [Bad Checksum: False]
    Urgent pointer: 0
    Options: (12 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
```

```
        No-Operation (NOP)
            Type: 1
                0... .... = Copy on fragmentation: No
                .00. .... = Class: Control (0)
                ...0 0001 = Number: No-Operation (NOP) (1)
        No-Operation (NOP)
            Type: 1
                0... .... = Copy on fragmentation: No
                .00. .... = Class: Control (0)
                ...0 0001 = Number: No-Operation (NOP) (1)
        Timestamps: TSval 1186410, TSecr 1186730
            Kind: Time Stamp Option (8)
            Length: 10
            Timestamp value: 1186410
            Timestamp echo reply: 1186730
    [SEQ/ACK analysis]
        [This is an ACK to the segment in frame: 2]
        [The RTT to ACK the segment was: 0.000034320 seconds]
        [iRTT: 0.000398413 seconds]
      4 0.002965132    10.0.1.12            10.0.1.11            FTP      86     Response: 220 (vsFTPd 3.0.3)
Frame 4: 86 bytes on wire (688 bits), 86 bytes captured (688 bits) on interface 0
    Interface id: 0 (eth0)
    Encapsulation type: Ethernet (1)
    Arrival Time: Mar  2, 2017 14:50:37.463246802 CET
    [Time shift for this packet: 0.000000000 seconds]
    Epoch Time: 1488462637.463246802 seconds
    [Time delta from previous captured frame: 0.002566719 seconds]
    [Time delta from previous displayed frame: 0.002566719 seconds]
    [Time since reference or first frame: 0.002965132 seconds]
    Frame Number: 4
    Frame Length: 86 bytes (688 bits)
    Capture Length: 86 bytes (688 bits)
    [Frame is marked: False]
    [Frame is ignored: False]
    [Protocols in frame: eth:ethertype:ip:tcp:ftp]
    [Coloring Rule Name: TCP]
    [Coloring Rule String: tcp]
Ethernet II, Src: 68:05:ca:1a:7c:77, Dst: 68:05:ca:1a:7c:70
    Destination: 68:05:ca:1a:7c:70
        Address: 68:05:ca:1a:7c:70
        .... ..0. .... .... .... .... = LG bit: Globally unique address (factory default)
        .... ...0 .... .... .... .... = IG bit: Individual address (unicast)
    Source: 68:05:ca:1a:7c:77
        Address: 68:05:ca:1a:7c:77
        .... ..0. .... .... .... .... = LG bit: Globally unique address (factory default)
        .... ...0 .... .... .... .... = IG bit: Individual address (unicast)
    Type: IPv4 (0x0800)
Internet Protocol Version 4, Src: 10.0.1.12, Dst: 10.0.1.11
    0100 .... = Version: 4
    .... 0101 = Header Length: 20 bytes
    Differentiated Services Field: 0x00 (DSCP: CS0, ECN: Not-ECT)
        0000 00.. = Differentiated Services Codepoint: Default (0)
        .... ..00 = Explicit Congestion Notification: Not ECN-Capable Transport (0)
    Total Length: 72
    Identification: 0xa15f (41311)
    Flags: 0x02 (Don't Fragment)
        0... .... = Reserved bit: Not set
        .1.. .... = Don't fragment: Set
        ..0. .... = More fragments: Not set
    Fragment offset: 0
    Time to live: 64
    Protocol: TCP (6)
    Header checksum: 0x833a [validation disabled]
        [Good: False]
        [Bad: False]
    Source: 10.0.1.12
    Destination: 10.0.1.11
    [Source GeoIP: Unknown]
    [Destination GeoIP: Unknown]
Transmission Control Protocol, Src Port: 21 (21), Dst Port: 49908 (49908), Seq: 1, Ack: 1, Len: 20
    Source Port: 21
    Destination Port: 49908
    [Stream index: 0]
    [TCP Segment Len: 20]
    Sequence number: 1    (relative sequence number)
    [Next sequence number: 21    (relative sequence number)]
    Acknowledgment number: 1    (relative ack number)
    Header Length: 32 bytes
    Flags: 0x018 (PSH, ACK)
        000. .... .... = Reserved: Not set
        ...0 .... .... = Nonce: Not set
        .... 0... .... = Congestion Window Reduced (CWR): Not set
        .... .0.. .... = ECN-Echo: Not set
        .... ..0. .... = Urgent: Not set
        .... ...1 .... = Acknowledgment: Set
        .... .... 1... = Push: Set
        .... .... .0.. = Reset: Not set
        .... .... ..0. = Syn: Not set
        .... .... ...0 = Fin: Not set
        [TCP Flags: *******AP***]
    Window size value: 227
    [Calculated window size: 29056]
    [Window size scaling factor: 128]
    Checksum: 0x3112 [validation disabled]
        [Good Checksum: False]
        [Bad Checksum: False]
    Urgent pointer: 0
```

```
    Options: (12 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
        No-Operation (NOP)
            Type: 1
                0... .... = Copy on fragmentation: No
                .00. .... = Class: Control (0)
                ...0 0001 = Number: No-Operation (NOP) (1)
        No-Operation (NOP)
            Type: 1
                0... .... = Copy on fragmentation: No
                .00. .... = Class: Control (0)
                ...0 0001 = Number: No-Operation (NOP) (1)
        Timestamps: TSval 1186730, TSecr 1186410
            Kind: Time Stamp Option (8)
            Length: 10
            Timestamp value: 1186730
            Timestamp echo reply: 1186410
    [SEQ/ACK analysis]
        [iRTT: 0.000398413 seconds]
        [Bytes in flight: 20]
File Transfer Protocol (FTP)
    220 (vsFTPd 3.0.3)\r\n
        Response code: Service ready for new user (220)
        Response arg: (vsFTPd 3.0.3)
      5 0.003004348    10.0.1.11            10.0.1.12             TCP      66     49908 → 21 [ACK] Seq=1 Ack=21 Win=29312
Len=0 TSval=1186410 TSecr=1186730
Frame 5: 66 bytes on wire (528 bits), 66 bytes captured (528 bits) on interface 0
    Interface id: 0 (eth0)
    Encapsulation type: Ethernet (1)
    Arrival Time: Mar  2, 2017 14:50:37.463286018 CET
    [Time shift for this packet: 0.000000000 seconds]
    Epoch Time: 1488462637.463286018 seconds
    [Time delta from previous captured frame: 0.000039216 seconds]
    [Time delta from previous displayed frame: 0.000039216 seconds]
    [Time since reference or first frame: 0.003004348 seconds]
    Frame Number: 5
    Frame Length: 66 bytes (528 bits)
    Capture Length: 66 bytes (528 bits)
    [Frame is marked: False]
    [Frame is ignored: False]
    [Protocols in frame: eth:ethertype:ip:tcp]
    [Coloring Rule Name: TCP]
    [Coloring Rule String: tcp]
Ethernet II, Src: 68:05:ca:1a:7c:70, Dst: 68:05:ca:1a:7c:77
    Destination: 68:05:ca:1a:7c:77
        Address: 68:05:ca:1a:7c:77
        .... ..0. .... .... .... .... = LG bit: Globally unique address (factory default)
        .... ...0 .... .... .... .... = IG bit: Individual address (unicast)
    Source: 68:05:ca:1a:7c:70
        Address: 68:05:ca:1a:7c:70
        .... ..0. .... .... .... .... = LG bit: Globally unique address (factory default)
        .... ...0 .... .... .... .... = IG bit: Individual address (unicast)
    Type: IPv4 (0x0800)
Internet Protocol Version 4, Src: 10.0.1.11, Dst: 10.0.1.12
    0100 .... = Version: 4
    .... 0101 = Header Length: 20 bytes
    Differentiated Services Field: 0x10 (DSCP: Unknown, ECN: Not-ECT)
        0001 00.. = Differentiated Services Codepoint: Unknown (4)
        .... ..00 = Explicit Congestion Notification: Not ECN-Capable Transport (0)
    Total Length: 52
    Identification: 0xc566 (50534)
    Flags: 0x02 (Don't Fragment)
        0... .... = Reserved bit: Not set
        .1.. .... = Don't fragment: Set
        ..0. .... = More fragments: Not set
    Fragment offset: 0
    Time to live: 64
    Protocol: TCP (6)
    Header checksum: 0x5f37 [validation disabled]
        [Good: False]
        [Bad: False]
    Source: 10.0.1.11
    Destination: 10.0.1.12
    [Source GeoIP: Unknown]
    [Destination GeoIP: Unknown]
Transmission Control Protocol, Src Port: 49908 (49908), Dst Port: 21 (21), Seq: 1, Ack: 21, Len: 0
    Source Port: 49908
    Destination Port: 21
    [Stream index: 0]
    [TCP Segment Len: 0]
    Sequence number: 1    (relative sequence number)
    Acknowledgment number: 21    (relative ack number)
    Header Length: 32 bytes
    Flags: 0x010 (ACK)
        000. .... .... = Reserved: Not set
        ...0 .... .... = Nonce: Not set
        .... 0... .... = Congestion Window Reduced (CWR): Not set
        .... .0.. .... = ECN-Echo: Not set
        .... ..0. .... = Urgent: Not set
        .... ...1 .... = Acknowledgment: Set
        .... .... 0... = Push: Not set
        .... .... .0.. = Reset: Not set
        .... .... ..0. = Syn: Not set
        .... .... ...0 = Fin: Not set
        [TCP Flags: *******A****]
    Window size value: 229
    [Calculated window size: 29312]
    [Window size scaling factor: 128]
```

```
    Checksum: 0x163d [validation disabled]
        [Good Checksum: False]
        [Bad Checksum: False]
    Urgent pointer: 0
    Options: (12 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
        No-Operation (NOP)
            Type: 1
                0... .... = Copy on fragmentation: No
                .00. .... = Class: Control (0)
                ...0 0001 = Number: No-Operation (NOP) (1)
        No-Operation (NOP)
            Type: 1
                0... .... = Copy on fragmentation: No
                .00. .... = Class: Control (0)
                ...0 0001 = Number: No-Operation (NOP) (1)
        Timestamps: TSval 1186410, TSecr 1186730
            Kind: Time Stamp Option (8)
            Length: 10
            Timestamp value: 1186410
            Timestamp echo reply: 1186730
    [SEQ/ACK analysis]
        [This is an ACK to the segment in frame: 4]
        [The RTT to ACK the segment was: 0.000039216 seconds]
        [iRTT: 0.000398413 seconds]
      8 8.970984439    10.0.1.11            10.0.1.12             FTP      80     Request: USER student
Frame 8: 80 bytes on wire (640 bits), 80 bytes captured (640 bits) on interface 0
    Interface id: 0 (eth0)
    Encapsulation type: Ethernet (1)
    Arrival Time: Mar  2, 2017 14:50:46.431266109 CET
    [Time shift for this packet: 0.000000000 seconds]
    Epoch Time: 1488462646.431266109 seconds
    [Time delta from previous captured frame: 3.955057172 seconds]
    [Time delta from previous displayed frame: 8.967980091 seconds]
    [Time since reference or first frame: 8.970984439 seconds]
    Frame Number: 8
    Frame Length: 80 bytes (640 bits)
    Capture Length: 80 bytes (640 bits)
    [Frame is marked: False]
    [Frame is ignored: False]
    [Protocols in frame: eth:ethertype:ip:tcp:ftp]
    [Coloring Rule Name: TCP]
    [Coloring Rule String: tcp]
Ethernet II, Src: 68:05:ca:1a:7c:70, Dst: 68:05:ca:1a:7c:77
    Destination: 68:05:ca:1a:7c:77
        Address: 68:05:ca:1a:7c:77
        .... ..0. .... .... .... .... = LG bit: Globally unique address (factory default)
        .... ...0 .... .... .... .... = IG bit: Individual address (unicast)
    Source: 68:05:ca:1a:7c:70
        Address: 68:05:ca:1a:7c:70
        .... ..0. .... .... .... .... = LG bit: Globally unique address (factory default)
        .... ...0 .... .... .... .... = IG bit: Individual address (unicast)
    Type: IPv4 (0x0800)
Internet Protocol Version 4, Src: 10.0.1.11, Dst: 10.0.1.12
    0100 .... = Version: 4
    .... 0101 = Header Length: 20 bytes
    Differentiated Services Field: 0x10 (DSCP: Unknown, ECN: Not-ECT)
        0001 00.. = Differentiated Services Codepoint: Unknown (4)
        .... ..00 = Explicit Congestion Notification: Not ECN-Capable Transport (0)
    Total Length: 66
    Identification: 0xc567 (50535)
    Flags: 0x02 (Don't Fragment)
        0... .... = Reserved bit: Not set
        .1.. .... = Don't fragment: Set
        ..0. .... = More fragments: Not set
    Fragment offset: 0
    Time to live: 64
    Protocol: TCP (6)
    Header checksum: 0x5f28 [validation disabled]
        [Good: False]
        [Bad: False]
    Source: 10.0.1.11
    Destination: 10.0.1.12
    [Source GeoIP: Unknown]
    [Destination GeoIP: Unknown]
Transmission Control Protocol, Src Port: 49908 (49908), Dst Port: 21 (21), Seq: 1, Ack: 21, Len: 14
    Source Port: 49908
    Destination Port: 21
    [Stream index: 0]
    [TCP Segment Len: 14]
    Sequence number: 1    (relative sequence number)
    [Next sequence number: 15    (relative sequence number)]
    Acknowledgment number: 21    (relative ack number)
    Header Length: 32 bytes
    Flags: 0x018 (PSH, ACK)
        000. .... .... = Reserved: Not set
        ...0 .... .... = Nonce: Not set
        .... 0... .... = Congestion Window Reduced (CWR): Not set
        .... .0.. .... = ECN-Echo: Not set
        .... ..0. .... = Urgent: Not set
        .... ...1 .... = Acknowledgment: Set
        .... .... 1... = Push: Set
        .... .... .0.. = Reset: Not set
        .... .... ..0. = Syn: Not set
        .... .... ...0 = Fin: Not set
        [TCP Flags: *******AP***]
    Window size value: 229
    [Calculated window size: 29312]
```

```
    [Window size scaling factor: 128]
    Checksum: 0x164b [validation disabled]
        [Good Checksum: False]
        [Bad Checksum: False]
    Urgent pointer: 0
    Options: (12 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
        No-Operation (NOP)
            Type: 1
                0... .... = Copy on fragmentation: No
                .00. .... = Class: Control (0)
                ...0 0001 = Number: No-Operation (NOP) (1)
        No-Operation (NOP)
            Type: 1
                0... .... = Copy on fragmentation: No
                .00. .... = Class: Control (0)
                ...0 0001 = Number: No-Operation (NOP) (1)
        Timestamps: TSval 1188652, TSecr 1186730
            Kind: Time Stamp Option (8)
            Length: 10
            Timestamp value: 1188652
            Timestamp echo reply: 1186730
    [SEQ/ACK analysis]
        [iRTT: 0.000398413 seconds]
        [Bytes in flight: 14]
File Transfer Protocol (FTP)
    USER student\r\n
        Request command: USER
        Request arg: student
      9 8.971323201    10.0.1.12             10.0.1.11             TCP      66     21 → 49908 [ACK] Seq=21 Ack=15 Win=29056
Len=0 TSval=1188972 TSecr=1188652
Frame 9: 66 bytes on wire (528 bits), 66 bytes captured (528 bits) on interface 0
    Interface id: 0 (eth0)
    Encapsulation type: Ethernet (1)
    Arrival Time: Mar  2, 2017 14:50:46.431604871 CET
    [Time shift for this packet: 0.000000000 seconds]
    Epoch Time: 1488462646.431604871 seconds
    [Time delta from previous captured frame: 0.000338762 seconds]
    [Time delta from previous displayed frame: 0.000338762 seconds]
    [Time since reference or first frame: 8.971323201 seconds]
    Frame Number: 9
    Frame Length: 66 bytes (528 bits)
    Capture Length: 66 bytes (528 bits)
    [Frame is marked: False]
    [Frame is ignored: False]
    [Protocols in frame: eth:ethertype:ip:tcp]
    [Coloring Rule Name: TCP]
    [Coloring Rule String: tcp]
Ethernet II, Src: 68:05:ca:1a:7c:77, Dst: 68:05:ca:1a:7c:70
    Destination: 68:05:ca:1a:7c:70
        Address: 68:05:ca:1a:7c:70
        .... ..0. .... .... .... .... = LG bit: Globally unique address (factory default)
        .... ...0 .... .... .... .... = IG bit: Individual address (unicast)
    Source: 68:05:ca:1a:7c:77
        Address: 68:05:ca:1a:7c:77
        .... ..0. .... .... .... .... = LG bit: Globally unique address (factory default)
        .... ...0 .... .... .... .... = IG bit: Individual address (unicast)
    Type: IPv4 (0x0800)
Internet Protocol Version 4, Src: 10.0.1.12, Dst: 10.0.1.11
    0100 .... = Version: 4
    .... 0101 = Header Length: 20 bytes
    Differentiated Services Field: 0x00 (DSCP: CS0, ECN: Not-ECT)
        0000 00.. = Differentiated Services Codepoint: Default (0)
        .... ..00 = Explicit Congestion Notification: Not ECN-Capable Transport (0)
    Total Length: 52
    Identification: 0xa160 (41312)
    Flags: 0x02 (Don't Fragment)
        0... .... = Reserved bit: Not set
        .1.. .... = Don't fragment: Set
        ..0. .... = More fragments: Not set
    Fragment offset: 0
    Time to live: 64
    Protocol: TCP (6)
    Header checksum: 0x834d [validation disabled]
        [Good: False]
        [Bad: False]
    Source: 10.0.1.12
    Destination: 10.0.1.11
    [Source GeoIP: Unknown]
    [Destination GeoIP: Unknown]
Transmission Control Protocol, Src Port: 21 (21), Dst Port: 49908 (49908), Seq: 21, Ack: 15, Len: 0
    Source Port: 21
    Destination Port: 49908
    [Stream index: 0]
    [TCP Segment Len: 0]
    Sequence number: 21    (relative sequence number)
    Acknowledgment number: 15    (relative ack number)
    Header Length: 32 bytes
    Flags: 0x010 (ACK)
        000. .... .... = Reserved: Not set
        ...0 .... .... = Nonce: Not set
        .... 0... .... = Congestion Window Reduced (CWR): Not set
        .... .0.. .... = ECN-Echo: Not set
        .... ..0. .... = Urgent: Not set
        .... ...1 .... = Acknowledgment: Set
        .... .... 0... = Push: Not set
        .... .... .0.. = Reset: Not set
        .... .... ..0. = Syn: Not set
```

```
        .... .... ...0 = Fin: Not set
        [TCP Flags: *******A****]
    Window size value: 227
    [Calculated window size: 29056]
    [Window size scaling factor: 128]
    Checksum: 0x7997 [validation disabled]
        [Good Checksum: False]
        [Bad Checksum: False]
    Urgent pointer: 0
    Options: (12 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
        No-Operation (NOP)
            Type: 1
                0... .... = Copy on fragmentation: No
                .00. .... = Class: Control (0)
                ...0 0001 = Number: No-Operation (NOP) (1)
        No-Operation (NOP)
            Type: 1
                0... .... = Copy on fragmentation: No
                .00. .... = Class: Control (0)
                ...0 0001 = Number: No-Operation (NOP) (1)
        Timestamps: TSval 1188972, TSecr 1188652
            Kind: Time Stamp Option (8)
            Length: 10
            Timestamp value: 1188972
            Timestamp echo reply: 1188652
    [SEQ/ACK analysis]
        [This is an ACK to the segment in frame: 8]
        [The RTT to ACK the segment was: 0.000338762 seconds]
        [iRTT: 0.000398413 seconds]
     10 8.971571145    10.0.1.12             10.0.1.11             FTP      100    Response: 331 Please specify the password.
Frame 10: 100 bytes on wire (800 bits), 100 bytes captured (800 bits) on interface 0
    Interface id: 0 (eth0)
    Encapsulation type: Ethernet (1)
    Arrival Time: Mar  2, 2017 14:50:46.431852815 CET
    [Time shift for this packet: 0.000000000 seconds]
    Epoch Time: 1488462646.431852815 seconds
    [Time delta from previous captured frame: 0.000247944 seconds]
    [Time delta from previous displayed frame: 0.000247944 seconds]
    [Time since reference or first frame: 8.971571145 seconds]
    Frame Number: 10
    Frame Length: 100 bytes (800 bits)
    Capture Length: 100 bytes (800 bits)
    [Frame is marked: False]
    [Frame is ignored: False]
    [Protocols in frame: eth:ethertype:ip:tcp:ftp]
    [Coloring Rule Name: TCP]
    [Coloring Rule String: tcp]
Ethernet II, Src: 68:05:ca:1a:7c:77, Dst: 68:05:ca:1a:7c:70
    Destination: 68:05:ca:1a:7c:70
        Address: 68:05:ca:1a:7c:70
        .... ..0. .... .... .... .... = LG bit: Globally unique address (factory default)
        .... ...0 .... .... .... .... = IG bit: Individual address (unicast)
    Source: 68:05:ca:1a:7c:77
        Address: 68:05:ca:1a:7c:77
        .... ..0. .... .... .... .... = LG bit: Globally unique address (factory default)
        .... ...0 .... .... .... .... = IG bit: Individual address (unicast)
    Type: IPv4 (0x0800)
Internet Protocol Version 4, Src: 10.0.1.12, Dst: 10.0.1.11
    0100 .... = Version: 4
    .... 0101 = Header Length: 20 bytes
    Differentiated Services Field: 0x00 (DSCP: CS0, ECN: Not-ECT)
        0000 00.. = Differentiated Services Codepoint: Default (0)
        .... ..00 = Explicit Congestion Notification: Not ECN-Capable Transport (0)
    Total Length: 86
    Identification: 0xa161 (41313)
    Flags: 0x02 (Don't Fragment)
        0... .... = Reserved bit: Not set
        .1.. .... = Don't fragment: Set
        ..0. .... = More fragments: Not set
    Fragment offset: 0
    Time to live: 64
    Protocol: TCP (6)
    Header checksum: 0x832a [validation disabled]
        [Good: False]
        [Bad: False]
    Source: 10.0.1.12
    Destination: 10.0.1.11
    [Source GeoIP: Unknown]
    [Destination GeoIP: Unknown]
Transmission Control Protocol, Src Port: 21 (21), Dst Port: 49908 (49908), Seq: 21, Ack: 15, Len: 34
    Source Port: 21
    Destination Port: 49908
    [Stream index: 0]
    [TCP Segment Len: 34]
    Sequence number: 21    (relative sequence number)
    [Next sequence number: 55    (relative sequence number)]
    Acknowledgment number: 15    (relative ack number)
    Header Length: 32 bytes
    Flags: 0x018 (PSH, ACK)
        000. .... .... = Reserved: Not set
        ...0 .... .... = Nonce: Not set
        .... 0... .... = Congestion Window Reduced (CWR): Not set
        .... .0.. .... = ECN-Echo: Not set
        .... ..0. .... = Urgent: Not set
        .... ...1 .... = Acknowledgment: Set
        .... .... 1... = Push: Set
        .... .... .0.. = Reset: Not set
```

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        .... .... ..0. = Syn: Not set
        .... .... ...0 = Fin: Not set
        [TCP Flags: *******AP***]
    Window size value: 227
    [Calculated window size: 29056]
    [Window size scaling factor: 128]
    Checksum: 0x324c [validation disabled]
        [Good Checksum: False]
        [Bad Checksum: False]
    Urgent pointer: 0
    Options: (12 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
        No-Operation (NOP)
            Type: 1
                0... .... = Copy on fragmentation: No
                .00. .... = Class: Control (0)
                ...0 0001 = Number: No-Operation (NOP) (1)
        No-Operation (NOP)
            Type: 1
                0... .... = Copy on fragmentation: No
                .00. .... = Class: Control (0)
                ...0 0001 = Number: No-Operation (NOP) (1)
        Timestamps: TSval 1188972, TSecr 1188652
            Kind: Time Stamp Option (8)
            Length: 10
            Timestamp value: 1188972
            Timestamp echo reply: 1188652
    [SEQ/ACK analysis]
        [iRTT: 0.000398413 seconds]
        [Bytes in flight: 34]
File Transfer Protocol (FTP)
    331 Please specify the password.\r\n
        Response code: User name okay, need password (331)
        Response arg: Please specify the password.
     11 8.971596354    10.0.1.11            10.0.1.12            TCP      66     49908 → 21 [ACK] Seq=15 Ack=55 Win=29312
Len=0 TSval=1188653 TSecr=1188972
Frame 11: 66 bytes on wire (528 bits), 66 bytes captured (528 bits) on interface 0
    Interface id: 0 (eth0)
    Encapsulation type: Ethernet (1)
    Arrival Time: Mar  2, 2017 14:50:46.431878024 CET
    [Time shift for this packet: 0.000000000 seconds]
    Epoch Time: 1488462646.431878024 seconds
    [Time delta from previous captured frame: 0.000025209 seconds]
    [Time delta from previous displayed frame: 0.000025209 seconds]
    [Time since reference or first frame: 8.971596354 seconds]
    Frame Number: 11
    Frame Length: 66 bytes (528 bits)
    Capture Length: 66 bytes (528 bits)
    [Frame is marked: False]
    [Frame is ignored: False]
    [Protocols in frame: eth:ethertype:ip:tcp]
    [Coloring Rule Name: TCP]
    [Coloring Rule String: tcp]
Ethernet II, Src: 68:05:ca:1a:7c:70, Dst: 68:05:ca:1a:7c:77
    Destination: 68:05:ca:1a:7c:77
        Address: 68:05:ca:1a:7c:77
        .... ..0. .... .... .... .... = LG bit: Globally unique address (factory default)
        .... ...0 .... .... .... .... = IG bit: Individual address (unicast)
    Source: 68:05:ca:1a:7c:70
        Address: 68:05:ca:1a:7c:70
        .... ..0. .... .... .... .... = LG bit: Globally unique address (factory default)
        .... ...0 .... .... .... .... = IG bit: Individual address (unicast)
    Type: IPv4 (0x0800)
Internet Protocol Version 4, Src: 10.0.1.11, Dst: 10.0.1.12
    0100 .... = Version: 4
    .... 0101 = Header Length: 20 bytes
    Differentiated Services Field: 0x10 (DSCP: Unknown, ECN: Not-ECT)
        0001 00.. = Differentiated Services Codepoint: Unknown (4)
        .... ..00 = Explicit Congestion Notification: Not ECN-Capable Transport (0)
    Total Length: 52
    Identification: 0xc568 (50536)
    Flags: 0x02 (Don't Fragment)
        0... .... = Reserved bit: Not set
        .1.. .... = Don't fragment: Set
        ..0. .... = More fragments: Not set
    Fragment offset: 0
    Time to live: 64
    Protocol: TCP (6)
    Header checksum: 0x5f35 [validation disabled]
        [Good: False]
        [Bad: False]
    Source: 10.0.1.11
    Destination: 10.0.1.12
    [Source GeoIP: Unknown]
    [Destination GeoIP: Unknown]
Transmission Control Protocol, Src Port: 49908 (49908), Dst Port: 21 (21), Seq: 15, Ack: 55, Len: 0
    Source Port: 49908
    Destination Port: 21
    [Stream index: 0]
    [TCP Segment Len: 0]
    Sequence number: 15    (relative sequence number)
    Acknowledgment number: 55    (relative ack number)
    Header Length: 32 bytes
    Flags: 0x010 (ACK)
        000. .... .... = Reserved: Not set
        ...0 .... .... = Nonce: Not set
        .... 0... .... = Congestion Window Reduced (CWR): Not set
        .... .0.. .... = ECN-Echo: Not set
```

```
        .... ..0. .... = Urgent: Not set
        .... ...1 .... = Acknowledgment: Set
        .... .... 0... = Push: Not set
        .... .... .0.. = Reset: Not set
        .... .... ..0. = Syn: Not set
        .... .... ...0 = Fin: Not set
        [TCP Flags: *******A****]
    Window size value: 229
    [Calculated window size: 29312]
    [Window size scaling factor: 128]
    Checksum: 0x163d [validation disabled]
        [Good Checksum: False]
        [Bad Checksum: False]
    Urgent pointer: 0
    Options: (12 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
        No-Operation (NOP)
            Type: 1
                0... .... = Copy on fragmentation: No
                .00. .... = Class: Control (0)
                ...0 0001 = Number: No-Operation (NOP) (1)
        No-Operation (NOP)
            Type: 1
                0... .... = Copy on fragmentation: No
                .00. .... = Class: Control (0)
                ...0 0001 = Number: No-Operation (NOP) (1)
        Timestamps: TSval 1188653, TSecr 1188972
            Kind: Time Stamp Option (8)
            Length: 10
            Timestamp value: 1188653
            Timestamp echo reply: 1188972
    [SEQ/ACK analysis]
        [This is an ACK to the segment in frame: 10]
        [The RTT to ACK the segment was: 0.000025209 seconds]
        [iRTT: 0.000398413 seconds]
     14 19.643212797   10.0.1.11            10.0.1.12            FTP      80     Request: PASS mvkbj1n
Frame 14: 80 bytes on wire (640 bits), 80 bytes captured (640 bits) on interface 0
    Interface id: 0 (eth0)
    Encapsulation type: Ethernet (1)
    Arrival Time: Mar  2, 2017 14:50:57.103494467 CET
    [Time shift for this packet: 0.000000000 seconds]
    Epoch Time: 1488462657.103494467 seconds
    [Time delta from previous captured frame: 5.666893744 seconds]
    [Time delta from previous displayed frame: 10.671616443 seconds]
    [Time since reference or first frame: 19.643212797 seconds]
    Frame Number: 14
    Frame Length: 80 bytes (640 bits)
    Capture Length: 80 bytes (640 bits)
    [Frame is marked: False]
    [Frame is ignored: False]
    [Protocols in frame: eth:ethertype:ip:tcp:ftp]
    [Coloring Rule Name: TCP]
    [Coloring Rule String: tcp]
Ethernet II, Src: 68:05:ca:1a:7c:70, Dst: 68:05:ca:1a:7c:77
    Destination: 68:05:ca:1a:7c:77
        Address: 68:05:ca:1a:7c:77
        .... ..0. .... .... .... .... = LG bit: Globally unique address (factory default)
        .... ...0 .... .... .... .... = IG bit: Individual address (unicast)
    Source: 68:05:ca:1a:7c:70
        Address: 68:05:ca:1a:7c:70
        .... ..0. .... .... .... .... = LG bit: Globally unique address (factory default)
        .... ...0 .... .... .... .... = IG bit: Individual address (unicast)
    Type: IPv4 (0x0800)
Internet Protocol Version 4, Src: 10.0.1.11, Dst: 10.0.1.12
    0100 .... = Version: 4
    .... 0101 = Header Length: 20 bytes
    Differentiated Services Field: 0x10 (DSCP: Unknown, ECN: Not-ECT)
        0001 00.. = Differentiated Services Codepoint: Unknown (4)
        .... ..00 = Explicit Congestion Notification: Not ECN-Capable Transport (0)
    Total Length: 66
    Identification: 0xc569 (50537)
    Flags: 0x02 (Don't Fragment)
        0... .... = Reserved bit: Not set
        .1.. .... = Don't fragment: Set
        ..0. .... = More fragments: Not set
    Fragment offset: 0
    Time to live: 64
    Protocol: TCP (6)
    Header checksum: 0x5f26 [validation disabled]
        [Good: False]
        [Bad: False]
    Source: 10.0.1.11
    Destination: 10.0.1.12
    [Source GeoIP: Unknown]
    [Destination GeoIP: Unknown]
Transmission Control Protocol, Src Port: 49908 (49908), Dst Port: 21 (21), Seq: 15, Ack: 55, Len: 14
    Source Port: 49908
    Destination Port: 21
    [Stream index: 0]
    [TCP Segment Len: 14]
    Sequence number: 15    (relative sequence number)
    [Next sequence number: 29    (relative sequence number)]
    Acknowledgment number: 55    (relative ack number)
    Header Length: 32 bytes
    Flags: 0x018 (PSH, ACK)
        000. .... .... = Reserved: Not set
        ...0 .... .... = Nonce: Not set
        .... 0... .... = Congestion Window Reduced (CWR): Not set
```

```
        .... .0.. .... = ECN-Echo: Not set
        .... ..0. .... = Urgent: Not set
        .... ...1 .... = Acknowledgment: Set
        .... .... 1... = Push: Set
        .... .... .0.. = Reset: Not set
        .... .... ..0. = Syn: Not set
        .... .... ...0 = Fin: Not set
        [TCP Flags: *******AP***]
    Window size value: 229
    [Calculated window size: 29312]
    [Window size scaling factor: 128]
    Checksum: 0x164b [validation disabled]
        [Good Checksum: False]
        [Bad Checksum: False]
    Urgent pointer: 0
    Options: (12 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
        No-Operation (NOP)
            Type: 1
                0... .... = Copy on fragmentation: No
                .00. .... = Class: Control (0)
                ...0 0001 = Number: No-Operation (NOP) (1)
        No-Operation (NOP)
            Type: 1
                0... .... = Copy on fragmentation: No
                .00. .... = Class: Control (0)
                ...0 0001 = Number: No-Operation (NOP) (1)
        Timestamps: TSval 1191320, TSecr 1188972
            Kind: Time Stamp Option (8)
            Length: 10
            Timestamp value: 1191320
            Timestamp echo reply: 1188972
    [SEQ/ACK analysis]
        [iRTT: 0.000398413 seconds]
        [Bytes in flight: 14]
File Transfer Protocol (FTP)
    PASS mvkbj1n\r\n
        Request command: PASS
        Request arg: mvkbj1n
     15 19.680287169   10.0.1.12            10.0.1.11            TCP      66     21 → 49908 [ACK] Seq=55 Ack=29 Win=29056
Len=0 TSval=1191650 TSecr=1191320
Frame 15: 66 bytes on wire (528 bits), 66 bytes captured (528 bits) on interface 0
    Interface id: 0 (eth0)
    Encapsulation type: Ethernet (1)
    Arrival Time: Mar  2, 2017 14:50:57.140568839 CET
    [Time shift for this packet: 0.000000000 seconds]
    Epoch Time: 1488462657.140568839 seconds
    [Time delta from previous captured frame: 0.037074372 seconds]
    [Time delta from previous displayed frame: 0.037074372 seconds]
    [Time since reference or first frame: 19.680287169 seconds]
    Frame Number: 15
    Frame Length: 66 bytes (528 bits)
    Capture Length: 66 bytes (528 bits)
    [Frame is marked: False]
    [Frame is ignored: False]
    [Protocols in frame: eth:ethertype:ip:tcp]
    [Coloring Rule Name: TCP]
    [Coloring Rule String: tcp]
Ethernet II, Src: 68:05:ca:1a:7c:77, Dst: 68:05:ca:1a:7c:70
    Destination: 68:05:ca:1a:7c:70
        Address: 68:05:ca:1a:7c:70
        .... ..0. .... .... .... .... = LG bit: Globally unique address (factory default)
        .... ...0 .... .... .... .... = IG bit: Individual address (unicast)
    Source: 68:05:ca:1a:7c:77
        Address: 68:05:ca:1a:7c:77
        .... ..0. .... .... .... .... = LG bit: Globally unique address (factory default)
        .... ...0 .... .... .... .... = IG bit: Individual address (unicast)
    Type: IPv4 (0x0800)
Internet Protocol Version 4, Src: 10.0.1.12, Dst: 10.0.1.11
    0100 .... = Version: 4
    .... 0101 = Header Length: 20 bytes
    Differentiated Services Field: 0x00 (DSCP: CS0, ECN: Not-ECT)
        0000 00.. = Differentiated Services Codepoint: Default (0)
        .... ..00 = Explicit Congestion Notification: Not ECN-Capable Transport (0)
    Total Length: 52
    Identification: 0xa162 (41314)
    Flags: 0x02 (Don't Fragment)
        0... .... = Reserved bit: Not set
        .1.. .... = Don't fragment: Set
        ..0. .... = More fragments: Not set
    Fragment offset: 0
    Time to live: 64
    Protocol: TCP (6)
    Header checksum: 0x834b [validation disabled]
        [Good: False]
        [Bad: False]
    Source: 10.0.1.12
    Destination: 10.0.1.11
    [Source GeoIP: Unknown]
    [Destination GeoIP: Unknown]
Transmission Control Protocol, Src Port: 21 (21), Dst Port: 49908 (49908), Seq: 55, Ack: 29, Len: 0
    Source Port: 21
    Destination Port: 49908
    [Stream index: 0]
    [TCP Segment Len: 0]
    Sequence number: 55    (relative sequence number)
    Acknowledgment number: 29    (relative ack number)
    Header Length: 32 bytes
```

```
    Flags: 0x010 (ACK)
        000. .... .... = Reserved: Not set
        ...0 .... .... = Nonce: Not set
        .... 0... .... = Congestion Window Reduced (CWR): Not set
        .... .0.. .... = ECN-Echo: Not set
        .... ..0. .... = Urgent: Not set
        .... ...1 .... = Acknowledgment: Set
        .... .... 0... = Push: Not set
        .... .... .0.. = Reset: Not set
        .... .... ..0. = Syn: Not set
        .... .... ...0 = Fin: Not set
        [TCP Flags: *******A****]
    Window size value: 227
    [Calculated window size: 29056]
    [Window size scaling factor: 128]
    Checksum: 0x6485 [validation disabled]
        [Good Checksum: False]
        [Bad Checksum: False]
    Urgent pointer: 0
    Options: (12 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
        No-Operation (NOP)
            Type: 1
                0... .... = Copy on fragmentation: No
                .00. .... = Class: Control (0)
                ...0 0001 = Number: No-Operation (NOP) (1)
        No-Operation (NOP)
            Type: 1
                0... .... = Copy on fragmentation: No
                .00. .... = Class: Control (0)
                ...0 0001 = Number: No-Operation (NOP) (1)
        Timestamps: TSval 1191650, TSecr 1191320
            Kind: Time Stamp Option (8)
            Length: 10
            Timestamp value: 1191650
            Timestamp echo reply: 1191320
    [SEQ/ACK analysis]
        [This is an ACK to the segment in frame: 14]
        [The RTT to ACK the segment was: 0.037074372 seconds]
        [iRTT: 0.000398413 seconds]
 16 19.777732852   10.0.1.12            10.0.1.11            FTP      89     Response: 230 Login successful.
Frame 16: 89 bytes on wire (712 bits), 89 bytes captured (712 bits) on interface 0
    Interface id: 0 (eth0)
    Encapsulation type: Ethernet (1)
    Arrival Time: Mar  2, 2017 14:50:57.238014522 CET
    [Time shift for this packet: 0.000000000 seconds]
    Epoch Time: 1488462657.238014522 seconds
    [Time delta from previous captured frame: 0.097445683 seconds]
    [Time delta from previous displayed frame: 0.097445683 seconds]
    [Time since reference or first frame: 19.777732852 seconds]
    Frame Number: 16
    Frame Length: 89 bytes (712 bits)
    Capture Length: 89 bytes (712 bits)
    [Frame is marked: False]
    [Frame is ignored: False]
    [Protocols in frame: eth:ethertype:ip:tcp:ftp]
    [Coloring Rule Name: TCP]
    [Coloring Rule String: tcp]
Ethernet II, Src: 68:05:ca:1a:7c:77, Dst: 68:05:ca:1a:7c:70
    Destination: 68:05:ca:1a:7c:70
        Address: 68:05:ca:1a:7c:70
        .... ..0. .... .... .... .... = LG bit: Globally unique address (factory default)
        .... ...0 .... .... .... .... = IG bit: Individual address (unicast)
    Source: 68:05:ca:1a:7c:77
        Address: 68:05:ca:1a:7c:77
        .... ..0. .... .... .... .... = LG bit: Globally unique address (factory default)
        .... ...0 .... .... .... .... = IG bit: Individual address (unicast)
    Type: IPv4 (0x0800)
Internet Protocol Version 4, Src: 10.0.1.12, Dst: 10.0.1.11
    0100 .... = Version: 4
    .... 0101 = Header Length: 20 bytes
    Differentiated Services Field: 0x00 (DSCP: CS0, ECN: Not-ECT)
        0000 00.. = Differentiated Services Codepoint: Default (0)
        .... ..00 = Explicit Congestion Notification: Not ECN-Capable Transport (0)
    Total Length: 75
    Identification: 0xa163 (41315)
    Flags: 0x02 (Don't Fragment)
        0... .... = Reserved bit: Not set
        .1.. .... = Don't fragment: Set
        ..0. .... = More fragments: Not set
    Fragment offset: 0
    Time to live: 64
    Protocol: TCP (6)
    Header checksum: 0x8333 [validation disabled]
        [Good: False]
        [Bad: False]
    Source: 10.0.1.12
    Destination: 10.0.1.11
    [Source GeoIP: Unknown]
    [Destination GeoIP: Unknown]
Transmission Control Protocol, Src Port: 21 (21), Dst Port: 49908 (49908), Seq: 55, Ack: 29, Len: 23
    Source Port: 21
    Destination Port: 49908
    [Stream index: 0]
    [TCP Segment Len: 23]
    Sequence number: 55    (relative sequence number)
    [Next sequence number: 78    (relative sequence number)]
    Acknowledgment number: 29    (relative ack number)
```

```
    Header Length: 32 bytes
    Flags: 0x018 (PSH, ACK)
        000. .... .... = Reserved: Not set
        ...0 .... .... = Nonce: Not set
        .... 0... .... = Congestion Window Reduced (CWR): Not set
        .... .0.. .... = ECN-Echo: Not set
        .... ..0. .... = Urgent: Not set
        .... ...1 .... = Acknowledgment: Set
        .... .... 1... = Push: Set
        .... .... .0.. = Reset: Not set
        .... .... ..0. = Syn: Not set
        .... .... ...0 = Fin: Not set
        [TCP Flags: *******AP***]
    Window size value: 227
    [Calculated window size: 29056]
    [Window size scaling factor: 128]
    Checksum: 0x82d5 [validation disabled]
        [Good Checksum: False]
        [Bad Checksum: False]
    Urgent pointer: 0
    Options: (12 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
        No-Operation (NOP)
            Type: 1
                0... .... = Copy on fragmentation: No
                .00. .... = Class: Control (0)
                ...0 0001 = Number: No-Operation (NOP) (1)
        No-Operation (NOP)
            Type: 1
                0... .... = Copy on fragmentation: No
                .00. .... = Class: Control (0)
                ...0 0001 = Number: No-Operation (NOP) (1)
        Timestamps: TSval 1191674, TSecr 1191320
            Kind: Time Stamp Option (8)
            Length: 10
            Timestamp value: 1191674
            Timestamp echo reply: 1191320
    [SEQ/ACK analysis]
        [iRTT: 0.000398413 seconds]
        [Bytes in flight: 23]
File Transfer Protocol (FTP)
    230 Login successful.\r\n
        Response code: User logged in, proceed (230)
        Response arg: Login successful.
     17 19.777746878   10.0.1.11            10.0.1.12             TCP      66     49908 → 21 [ACK] Seq=29 Ack=78 Win=29312
Len=0 TSval=1191354 TSecr=1191674
Frame 17: 66 bytes on wire (528 bits), 66 bytes captured (528 bits) on interface 0
    Interface id: 0 (eth0)
    Encapsulation type: Ethernet (1)
    Arrival Time: Mar  2, 2017 14:50:57.238028548 CET
    [Time shift for this packet: 0.000000000 seconds]
    Epoch Time: 1488462657.238028548 seconds
    [Time delta from previous captured frame: 0.000014026 seconds]
    [Time delta from previous displayed frame: 0.000014026 seconds]
    [Time since reference or first frame: 19.777746878 seconds]
    Frame Number: 17
    Frame Length: 66 bytes (528 bits)
    Capture Length: 66 bytes (528 bits)
    [Frame is marked: False]
    [Frame is ignored: False]
    [Protocols in frame: eth:ethertype:ip:tcp]
    [Coloring Rule Name: TCP]
    [Coloring Rule String: tcp]
Ethernet II, Src: 68:05:ca:1a:7c:70, Dst: 68:05:ca:1a:7c:77
    Destination: 68:05:ca:1a:7c:77
        Address: 68:05:ca:1a:7c:77
        .... ..0. .... .... .... .... = LG bit: Globally unique address (factory default)
        .... ...0 .... .... .... .... = IG bit: Individual address (unicast)
    Source: 68:05:ca:1a:7c:70
        Address: 68:05:ca:1a:7c:70
        .... ..0. .... .... .... .... = LG bit: Globally unique address (factory default)
        .... ...0 .... .... .... .... = IG bit: Individual address (unicast)
    Type: IPv4 (0x0800)
Internet Protocol Version 4, Src: 10.0.1.11, Dst: 10.0.1.12
    0100 .... = Version: 4
    .... 0101 = Header Length: 20 bytes
    Differentiated Services Field: 0x10 (DSCP: Unknown, ECN: Not-ECT)
        0001 00.. = Differentiated Services Codepoint: Unknown (4)
        .... ..00 = Explicit Congestion Notification: Not ECN-Capable Transport (0)
    Total Length: 52
    Identification: 0xc56a (50538)
    Flags: 0x02 (Don't Fragment)
        0... .... = Reserved bit: Not set
        .1.. .... = Don't fragment: Set
        ..0. .... = More fragments: Not set
    Fragment offset: 0
    Time to live: 64
    Protocol: TCP (6)
    Header checksum: 0x5f33 [validation disabled]
        [Good: False]
        [Bad: False]
    Source: 10.0.1.11
    Destination: 10.0.1.12
    [Source GeoIP: Unknown]
    [Destination GeoIP: Unknown]
Transmission Control Protocol, Src Port: 49908 (49908), Dst Port: 21 (21), Seq: 29, Ack: 78, Len: 0
    Source Port: 49908
    Destination Port: 21
```

```
    [Stream index: 0]
    [TCP Segment Len: 0]
    Sequence number: 29    (relative sequence number)
    Acknowledgment number: 78    (relative ack number)
    Header Length: 32 bytes
    Flags: 0x010 (ACK)
        000. .... .... = Reserved: Not set
        ...0 .... .... = Nonce: Not set
        .... 0... .... = Congestion Window Reduced (CWR): Not set
        .... .0.. .... = ECN-Echo: Not set
        .... ..0. .... = Urgent: Not set
        .... ...1 .... = Acknowledgment: Set
        .... .... 0... = Push: Not set
        .... .... .0.. = Reset: Not set
        .... .... ..0. = Syn: Not set
        .... .... ...0 = Fin: Not set
        [TCP Flags: *******A****]
    Window size value: 229
    [Calculated window size: 29312]
    [Window size scaling factor: 128]
    Checksum: 0x163d [validation disabled]
        [Good Checksum: False]
        [Bad Checksum: False]
    Urgent pointer: 0
    Options: (12 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
        No-Operation (NOP)
            Type: 1
                0... .... = Copy on fragmentation: No
                .00. .... = Class: Control (0)
                ...0 0001 = Number: No-Operation (NOP) (1)
        No-Operation (NOP)
            Type: 1
                0... .... = Copy on fragmentation: No
                .00. .... = Class: Control (0)
                ...0 0001 = Number: No-Operation (NOP) (1)
        Timestamps: TSval 1191354, TSecr 1191674
            Kind: Time Stamp Option (8)
            Length: 10
            Timestamp value: 1191354
            Timestamp echo reply: 1191674
    [SEQ/ACK analysis]
        [This is an ACK to the segment in frame: 16]
        [The RTT to ACK the segment was: 0.000014026 seconds]
        [iRTT: 0.000398413 seconds]
 18 19.777761661   10.0.1.11            10.0.1.12            FTP      72     Request: SYST
Frame 18: 72 bytes on wire (576 bits), 72 bytes captured (576 bits) on interface 0
    Interface id: 0 (eth0)
    Encapsulation type: Ethernet (1)
    Arrival Time: Mar  2, 2017 14:50:57.238043331 CET
    [Time shift for this packet: 0.000000000 seconds]
    Epoch Time: 1488462657.238043331 seconds
    [Time delta from previous captured frame: 0.000014783 seconds]
    [Time delta from previous displayed frame: 0.000014783 seconds]
    [Time since reference or first frame: 19.777761661 seconds]
    Frame Number: 18
    Frame Length: 72 bytes (576 bits)
    Capture Length: 72 bytes (576 bits)
    [Frame is marked: False]
    [Frame is ignored: False]
    [Protocols in frame: eth:ethertype:ip:tcp:ftp]
    [Coloring Rule Name: TCP]
    [Coloring Rule String: tcp]
Ethernet II, Src: 68:05:ca:1a:7c:70, Dst: 68:05:ca:1a:7c:77
    Destination: 68:05:ca:1a:7c:77
        Address: 68:05:ca:1a:7c:77
        .... ..0. .... .... .... .... = LG bit: Globally unique address (factory default)
        .... ...0 .... .... .... .... = IG bit: Individual address (unicast)
    Source: 68:05:ca:1a:7c:70
        Address: 68:05:ca:1a:7c:70
        .... ..0. .... .... .... .... = LG bit: Globally unique address (factory default)
        .... ...0 .... .... .... .... = IG bit: Individual address (unicast)
    Type: IPv4 (0x0800)
Internet Protocol Version 4, Src: 10.0.1.11, Dst: 10.0.1.12
    0100 .... = Version: 4
    .... 0101 = Header Length: 20 bytes
    Differentiated Services Field: 0x10 (DSCP: Unknown, ECN: Not-ECT)
        0001 00.. = Differentiated Services Codepoint: Unknown (4)
        .... ..00 = Explicit Congestion Notification: Not ECN-Capable Transport (0)
    Total Length: 58
    Identification: 0xc56b (50539)
    Flags: 0x02 (Don't Fragment)
        0... .... = Reserved bit: Not set
        .1.. .... = Don't fragment: Set
        ..0. .... = More fragments: Not set
    Fragment offset: 0
    Time to live: 64
    Protocol: TCP (6)
    Header checksum: 0x5f2c [validation disabled]
        [Good: False]
        [Bad: False]
    Source: 10.0.1.11
    Destination: 10.0.1.12
    [Source GeoIP: Unknown]
    [Destination GeoIP: Unknown]
Transmission Control Protocol, Src Port: 49908 (49908), Dst Port: 21 (21), Seq: 29, Ack: 78, Len: 6
    Source Port: 49908
    Destination Port: 21
```

```
    [Stream index: 0]
    [TCP Segment Len: 6]
    Sequence number: 29    (relative sequence number)
    [Next sequence number: 35    (relative sequence number)]
    Acknowledgment number: 78    (relative ack number)
    Header Length: 32 bytes
    Flags: 0x018 (PSH, ACK)
        000. .... .... = Reserved: Not set
        ...0 .... .... = Nonce: Not set
        .... 0... .... = Congestion Window Reduced (CWR): Not set
        .... .0.. .... = ECN-Echo: Not set
        .... ..0. .... = Urgent: Not set
        .... ...1 .... = Acknowledgment: Set
        .... .... 1... = Push: Set
        .... .... .0.. = Reset: Not set
        .... .... ..0. = Syn: Not set
        .... .... ...0 = Fin: Not set
        [TCP Flags: *******AP***]
    Window size value: 229
    [Calculated window size: 29312]
    [Window size scaling factor: 128]
    Checksum: 0x1643 [validation disabled]
        [Good Checksum: False]
        [Bad Checksum: False]
    Urgent pointer: 0
    Options: (12 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
        No-Operation (NOP)
            Type: 1
                0... .... = Copy on fragmentation: No
                .00. .... = Class: Control (0)
                ...0 0001 = Number: No-Operation (NOP) (1)
        No-Operation (NOP)
            Type: 1
                0... .... = Copy on fragmentation: No
                .00. .... = Class: Control (0)
                ...0 0001 = Number: No-Operation (NOP) (1)
        Timestamps: TSval 1191354, TSecr 1191674
            Kind: Time Stamp Option (8)
            Length: 10
            Timestamp value: 1191354
            Timestamp echo reply: 1191674
    [SEQ/ACK analysis]
        [iRTT: 0.000398413 seconds]
        [Bytes in flight: 6]
File Transfer Protocol (FTP)
    SYST\r\n
        Request command: SYST
     19 19.778279554   10.0.1.12            10.0.1.11             TCP      66     21 → 49908 [ACK] Seq=78 Ack=35 Win=29056
Len=0 TSval=1191674 TSecr=1191354
Frame 19: 66 bytes on wire (528 bits), 66 bytes captured (528 bits) on interface 0
    Interface id: 0 (eth0)
    Encapsulation type: Ethernet (1)
    Arrival Time: Mar  2, 2017 14:50:57.238561224 CET
    [Time shift for this packet: 0.000000000 seconds]
    Epoch Time: 1488462657.238561224 seconds
    [Time delta from previous captured frame: 0.000517893 seconds]
    [Time delta from previous displayed frame: 0.000517893 seconds]
    [Time since reference or first frame: 19.778279554 seconds]
    Frame Number: 19
    Frame Length: 66 bytes (528 bits)
    Capture Length: 66 bytes (528 bits)
    [Frame is marked: False]
    [Frame is ignored: False]
    [Protocols in frame: eth:ethertype:ip:tcp]
    [Coloring Rule Name: TCP]
    [Coloring Rule String: tcp]
Ethernet II, Src: 68:05:ca:1a:7c:77, Dst: 68:05:ca:1a:7c:70
    Destination: 68:05:ca:1a:7c:70
        Address: 68:05:ca:1a:7c:70
        .... ..0. .... .... .... .... = LG bit: Globally unique address (factory default)
        .... ...0 .... .... .... .... = IG bit: Individual address (unicast)
    Source: 68:05:ca:1a:7c:77
        Address: 68:05:ca:1a:7c:77
        .... ..0. .... .... .... .... = LG bit: Globally unique address (factory default)
        .... ...0 .... .... .... .... = IG bit: Individual address (unicast)
    Type: IPv4 (0x0800)
Internet Protocol Version 4, Src: 10.0.1.12, Dst: 10.0.1.11
    0100 .... = Version: 4
    .... 0101 = Header Length: 20 bytes
    Differentiated Services Field: 0x00 (DSCP: CS0, ECN: Not-ECT)
        0000 00.. = Differentiated Services Codepoint: Default (0)
        .... ..00 = Explicit Congestion Notification: Not ECN-Capable Transport (0)
    Total Length: 52
    Identification: 0xa164 (41316)
    Flags: 0x02 (Don't Fragment)
        0... .... = Reserved bit: Not set
        .1.. .... = Don't fragment: Set
        ..0. .... = More fragments: Not set
    Fragment offset: 0
    Time to live: 64
    Protocol: TCP (6)
    Header checksum: 0x8349 [validation disabled]
        [Good: False]
        [Bad: False]
    Source: 10.0.1.12
    Destination: 10.0.1.11
    [Source GeoIP: Unknown]
```

```
    [Destination GeoIP: Unknown]
  Transmission Control Protocol, Src Port: 21 (21), Dst Port: 49908 (49908), Seq: 78, Ack: 35, Len: 0
    Source Port: 21
    Destination Port: 49908
    [Stream index: 0]
    [TCP Segment Len: 0]
    Sequence number: 78    (relative sequence number)
    Acknowledgment number: 35    (relative ack number)
    Header Length: 32 bytes
    Flags: 0x010 (ACK)
        000. .... .... = Reserved: Not set
        ...0 .... .... = Nonce: Not set
        .... 0... .... = Congestion Window Reduced (CWR): Not set
        .... .0.. .... = ECN-Echo: Not set
        .... ..0. .... = Urgent: Not set
        .... ...1 .... = Acknowledgment: Set
        .... .... 0... = Push: Not set
        .... .... .0.. = Reset: Not set
        .... .... ..0. = Syn: Not set
        .... .... ...0 = Fin: Not set
        [TCP Flags: *******A****]
    Window size value: 227
    [Calculated window size: 29056]
    [Window size scaling factor: 128]
    Checksum: 0x642e [validation disabled]
        [Good Checksum: False]
        [Bad Checksum: False]
    Urgent pointer: 0
    Options: (12 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
        No-Operation (NOP)
            Type: 1
                0... .... = Copy on fragmentation: No
                .00. .... = Class: Control (0)
                ...0 0001 = Number: No-Operation (NOP) (1)
        No-Operation (NOP)
            Type: 1
                0... .... = Copy on fragmentation: No
                .00. .... = Class: Control (0)
                ...0 0001 = Number: No-Operation (NOP) (1)
        Timestamps: TSval 1191674, TSecr 1191354
            Kind: Time Stamp Option (8)
            Length: 10
            Timestamp value: 1191674
            Timestamp echo reply: 1191354
    [SEQ/ACK analysis]
        [This is an ACK to the segment in frame: 18]
        [The RTT to ACK the segment was: 0.000517893 seconds]
        [iRTT: 0.000398413 seconds]
     20 19.778529668   10.0.1.12            10.0.1.11            FTP      85     Response: 215 UNIX Type: L8
  Frame 20: 85 bytes on wire (680 bits), 85 bytes captured (680 bits) on interface 0
    Interface id: 0 (eth0)
    Encapsulation type: Ethernet (1)
    Arrival Time: Mar  2, 2017 14:50:57.238811338 CET
    [Time shift for this packet: 0.000000000 seconds]
    Epoch Time: 1488462657.238811338 seconds
    [Time delta from previous captured frame: 0.000250114 seconds]
    [Time delta from previous displayed frame: 0.000250114 seconds]
    [Time since reference or first frame: 19.778529668 seconds]
    Frame Number: 20
    Frame Length: 85 bytes (680 bits)
    Capture Length: 85 bytes (680 bits)
    [Frame is marked: False]
    [Frame is ignored: False]
    [Protocols in frame: eth:ethertype:ip:tcp:ftp]
    [Coloring Rule Name: TCP]
    [Coloring Rule String: tcp]
  Ethernet II, Src: 68:05:ca:1a:7c:77, Dst: 68:05:ca:1a:7c:70
    Destination: 68:05:ca:1a:7c:70
        Address: 68:05:ca:1a:7c:70
        .... ..0. .... .... .... .... = LG bit: Globally unique address (factory default)
        .... ...0 .... .... .... .... = IG bit: Individual address (unicast)
    Source: 68:05:ca:1a:7c:77
        Address: 68:05:ca:1a:7c:77
        .... ..0. .... .... .... .... = LG bit: Globally unique address (factory default)
        .... ...0 .... .... .... .... = IG bit: Individual address (unicast)
    Type: IPv4 (0x0800)
  Internet Protocol Version 4, Src: 10.0.1.12, Dst: 10.0.1.11
    0100 .... = Version: 4
    .... 0101 = Header Length: 20 bytes
    Differentiated Services Field: 0x00 (DSCP: CS0, ECN: Not-ECT)
        0000 00.. = Differentiated Services Codepoint: Default (0)
        .... ..00 = Explicit Congestion Notification: Not ECN-Capable Transport (0)
    Total Length: 71
    Identification: 0xa165 (41317)
    Flags: 0x02 (Don't Fragment)
        0... .... = Reserved bit: Not set
        .1.. .... = Don't fragment: Set
        ..0. .... = More fragments: Not set
    Fragment offset: 0
    Time to live: 64
    Protocol: TCP (6)
    Header checksum: 0x8335 [validation disabled]
        [Good: False]
        [Bad: False]
    Source: 10.0.1.12
    Destination: 10.0.1.11
    [Source GeoIP: Unknown]
```

```
    [Destination GeoIP: Unknown]
  Transmission Control Protocol, Src Port: 21 (21), Dst Port: 49908 (49908), Seq: 78, Ack: 35, Len: 19
    Source Port: 21
    Destination Port: 49908
    [Stream index: 0]
    [TCP Segment Len: 19]
    Sequence number: 78    (relative sequence number)
    [Next sequence number: 97    (relative sequence number)]
    Acknowledgment number: 35    (relative ack number)
    Header Length: 32 bytes
    Flags: 0x018 (PSH, ACK)
        000. .... .... = Reserved: Not set
        ...0 .... .... = Nonce: Not set
        .... 0... .... = Congestion Window Reduced (CWR): Not set
        .... .0.. .... = ECN-Echo: Not set
        .... ..0. .... = Urgent: Not set
        .... ...1 .... = Acknowledgment: Set
        .... .... 1... = Push: Set
        .... .... .0.. = Reset: Not set
        .... .... ..0. = Syn: Not set
        .... .... ...0 = Fin: Not set
        [TCP Flags: *******AP***]
    Window size value: 227
    [Calculated window size: 29056]
    [Window size scaling factor: 128]
    Checksum: 0xfcc2 [validation disabled]
        [Good Checksum: False]
        [Bad Checksum: False]
    Urgent pointer: 0
    Options: (12 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
        No-Operation (NOP)
            Type: 1
                0... .... = Copy on fragmentation: No
                .00. .... = Class: Control (0)
                ...0 0001 = Number: No-Operation (NOP) (1)
        No-Operation (NOP)
            Type: 1
                0... .... = Copy on fragmentation: No
                .00. .... = Class: Control (0)
                ...0 0001 = Number: No-Operation (NOP) (1)
        Timestamps: TSval 1191674, TSecr 1191354
            Kind: Time Stamp Option (8)
            Length: 10
            Timestamp value: 1191674
            Timestamp echo reply: 1191354
    [SEQ/ACK analysis]
        [iRTT: 0.000398413 seconds]
        [Bytes in flight: 19]
  File Transfer Protocol (FTP)
    215 UNIX Type: L8\r\n
        Response code: NAME system type (215)
        Response arg: UNIX Type: L8
     21 19.815620112   10.0.1.11            10.0.1.12             TCP      66     49908 → 21 [ACK] Seq=35 Ack=97 Win=29312
  Len=0 TSval=1191364 TSecr=1191674
  Frame 21: 66 bytes on wire (528 bits), 66 bytes captured (528 bits) on interface 0
    Interface id: 0 (eth0)
    Encapsulation type: Ethernet (1)
    Arrival Time: Mar  2, 2017 14:50:57.275901782 CET
    [Time shift for this packet: 0.000000000 seconds]
    Epoch Time: 1488462657.275901782 seconds
    [Time delta from previous captured frame: 0.037090444 seconds]
    [Time delta from previous displayed frame: 0.037090444 seconds]
    [Time since reference or first frame: 19.815620112 seconds]
    Frame Number: 21
    Frame Length: 66 bytes (528 bits)
    Capture Length: 66 bytes (528 bits)
    [Frame is marked: False]
    [Frame is ignored: False]
    [Protocols in frame: eth:ethertype:ip:tcp]
    [Coloring Rule Name: TCP]
    [Coloring Rule String: tcp]
  Ethernet II, Src: 68:05:ca:1a:7c:70, Dst: 68:05:ca:1a:7c:77
    Destination: 68:05:ca:1a:7c:77
        Address: 68:05:ca:1a:7c:77
        .... ..0. .... .... .... .... = LG bit: Globally unique address (factory default)
        .... ...0 .... .... .... .... = IG bit: Individual address (unicast)
    Source: 68:05:ca:1a:7c:70
        Address: 68:05:ca:1a:7c:70
        .... ..0. .... .... .... .... = LG bit: Globally unique address (factory default)
        .... ...0 .... .... .... .... = IG bit: Individual address (unicast)
    Type: IPv4 (0x0800)
  Internet Protocol Version 4, Src: 10.0.1.11, Dst: 10.0.1.12
    0100 .... = Version: 4
    .... 0101 = Header Length: 20 bytes
    Differentiated Services Field: 0x10 (DSCP: Unknown, ECN: Not-ECT)
        0001 00.. = Differentiated Services Codepoint: Unknown (4)
        .... ..00 = Explicit Congestion Notification: Not ECN-Capable Transport (0)
    Total Length: 52
    Identification: 0xc56c (50540)
    Flags: 0x02 (Don't Fragment)
        0... .... = Reserved bit: Not set
        .1.. .... = Don't fragment: Set
        ..0. .... = More fragments: Not set
    Fragment offset: 0
    Time to live: 64
    Protocol: TCP (6)
    Header checksum: 0x5f31 [validation disabled]
```

```
        [Good: False]
        [Bad: False]
    Source: 10.0.1.11
    Destination: 10.0.1.12
    [Source GeoIP: Unknown]
    [Destination GeoIP: Unknown]
Transmission Control Protocol, Src Port: 49908 (49908), Dst Port: 21 (21), Seq: 35, Ack: 97, Len: 0
    Source Port: 49908
    Destination Port: 21
    [Stream index: 0]
    [TCP Segment Len: 0]
    Sequence number: 35    (relative sequence number)
    Acknowledgment number: 97    (relative ack number)
    Header Length: 32 bytes
    Flags: 0x010 (ACK)
        000. .... .... = Reserved: Not set
        ...0 .... .... = Nonce: Not set
        .... 0... .... = Congestion Window Reduced (CWR): Not set
        .... .0.. .... = ECN-Echo: Not set
        .... ..0. .... = Urgent: Not set
        .... ...1 .... = Acknowledgment: Set
        .... .... 0... = Push: Not set
        .... .... .0.. = Reset: Not set
        .... .... ..0. = Syn: Not set
        .... .... ...0 = Fin: Not set
        [TCP Flags: *******A****]
    Window size value: 229
    [Calculated window size: 29312]
    [Window size scaling factor: 128]
    Checksum: 0x163d [validation disabled]
        [Good Checksum: False]
        [Bad Checksum: False]
    Urgent pointer: 0
    Options: (12 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
        No-Operation (NOP)
            Type: 1
                0... .... = Copy on fragmentation: No
                .00. .... = Class: Control (0)
                ...0 0001 = Number: No-Operation (NOP) (1)
        No-Operation (NOP)
            Type: 1
                0... .... = Copy on fragmentation: No
                .00. .... = Class: Control (0)
                ...0 0001 = Number: No-Operation (NOP) (1)
        Timestamps: TSval 1191364, TSecr 1191674
            Kind: Time Stamp Option (8)
            Length: 10
            Timestamp value: 1191364
            Timestamp echo reply: 1191674
    [SEQ/ACK analysis]
        [This is an ACK to the segment in frame: 20]
        [The RTT to ACK the segment was: 0.037090444 seconds]
        [iRTT: 0.000398413 seconds]
```