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**SEC-260-02**  
**STR2026**

## **Deliverable 1 - DNS Query:**

### **Request:**

|  | 12 10.329482085 | 10.0.17.37 | 10.0.17.2 | DNS | 86 Standard query 0x3a60 A httpforever.com OPT |
|--|-----------------|------------|-----------|-----|--|
| ▼ Domain Name System (query)<br>Transaction ID: 0x3a60<br>▶ Flags: 0x0100 Standard query<br>Questions: 1<br>Answer RRs: 0<br>Authority RRs: 0<br>Additional RRs: 1<br>▼ Queries<br>▶ httpforever.com: type A, class IN |                 |            |           |     |  |

### **Response:**

|  | 13 10.349525161 | 10.0.17.2 | 10.0.17.37 | DNS | 102 Standard query response 0x3a60 A httpforever.com A 146.190.62.39 |
|--|-----------------|-----------|------------|-----|--|
| ▼ Domain Name System (response)<br>Transaction ID: 0x3a60<br>▶ Flags: 0x8180 Standard query response, No error<br>Questions: 1<br>Answer RRs: 1<br>Authority RRs: 0<br>Additional RRs: 1<br>▼ Queries<br>▶ httpforever.com: type A, class IN<br>▼ Answers<br>▶ httpforever.com: type A, class IN, addr 146.190.62.39<br>Name: httpforever.com<br>Type: A (1) (Host Address)<br>Class: IN (0x0001)<br>Time to live: 299 (4 minutes, 59 seconds)<br>Data length: 4<br>Address: 146.190.62.39 |                 |           |            |     |  |

## **Deliverable 2 - TCP Handshake:**

|                 |               |               |     |   |
|-----------------|---------------|---------------|-----|---|
| 15 10.356904912 | 10.0.17.37    | 146.190.62.39 | TCP | 74 55120 → 443 [SYN] Seq=0 Win=64240 Len=0 MSS=1460 SACK_PER            |
| 16 10.429376916 | 146.190.62.39 | 10.0.17.37    | TCP | 74 443 → 55120 [SYN, ACK] Seq=0 Ack=1 Win=65160 Len=0 MSS=1460 SACK_PER |
| 17 10.429534506 | 10.0.17.37    | 146.190.62.39 | TCP | 66 55120 → 443 [ACK] Seq=1 Ack=1 Win=64256 Len=0 TSval=32647            |

### **SYN:**

|                 |            |               |     |  |
|-----------------|------------|---------------|-----|--|
| 15 10.356904912 | 10.0.17.37 | 146.190.62.39 | TCP | 74 55120 → 443 [SYN] Seq=0 Win=64240 Len=0 MSS=1460 SACK_PER |
|-----------------|------------|---------------|-----|--|

### **SYN-ACK:**

|                 |               |            |     |   |
|-----------------|---------------|------------|-----|---|
| 16 10.429376916 | 146.190.62.39 | 10.0.17.37 | TCP | 74 443 → 55120 [SYN, ACK] Seq=0 Ack=1 Win=65160 Len=0 MSS=1460 SACK_PER |
|-----------------|---------------|------------|-----|---|

### **ACK:**

```
|| 17 10.429534506 10.0.17.37 146.190.62.39 TCP 66 55120 → 443 [ACK] Seq=1 Ack=1 Win=64256 Len=0 TSval=32641
```

## Deliverable 3 - HTTP Response:

```
65 10.860681588 146.190.62.39 10.0.17.37 HTTP 1374 HTTP/1.1 200 OK (text/html)

↳ Hypertext Transfer Protocol, has 2 chunks (including last chunk)
↳ Line-based text data: text/html (100 lines)
  <!DOCTYPE HTML>\r\n
  <html>\r\n
    <head>\r\n
      <title>HTTP Forever</title>\r\n
      <meta http-equiv="content-type" content="text/html; charset=UTF-8">
      <meta name="description" content="A site that will always be online.">
      <meta name="keywords" content="HTTP WiFi Captive Portal" />
    <!--[if lte IE 8]><script src="css/ie/html5shiv.js"></script>
    <script src="https://cdnjs.cloudflare.com/ajax/libs/jquery/3.6.0/jquery.min.js"></script>
```