



1. HTTP 개념 이해

Penta Institute | 2024

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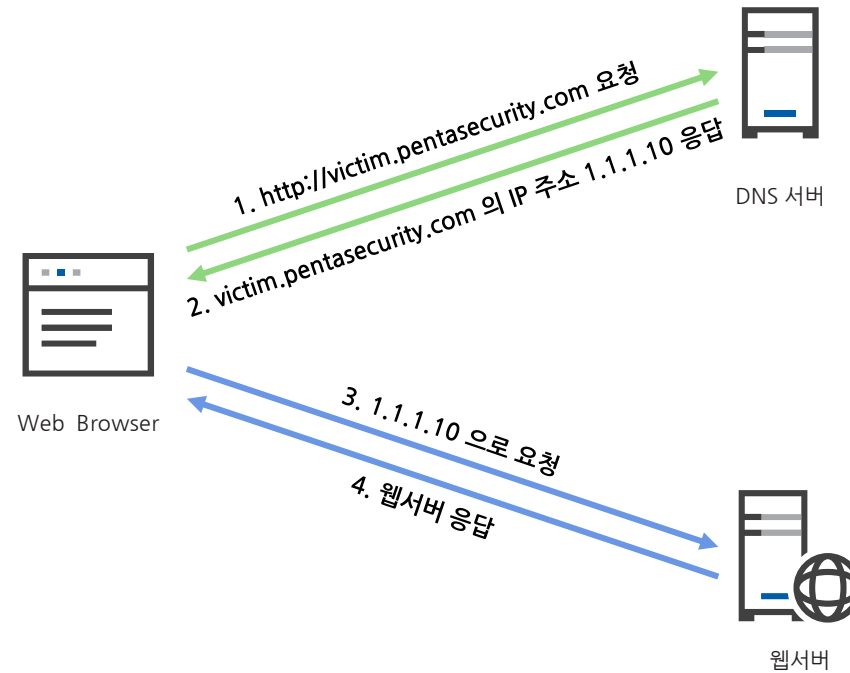
I. HTTP 란?

1. HTTP (Hyper Text Transfer Protocol)

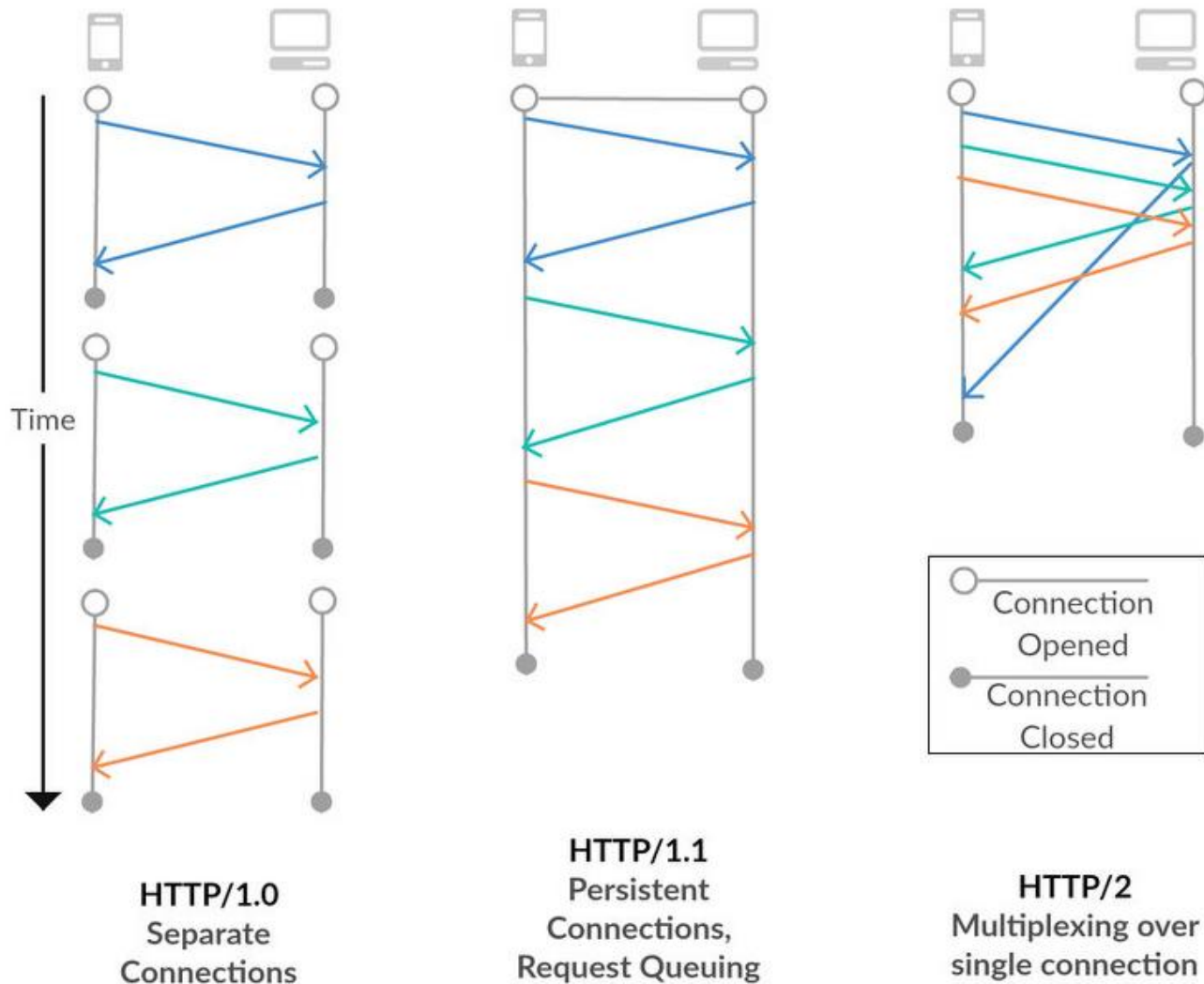
- Application Level Protocol
- Request / Response Standard
- Used with Reliable Transport Protocol
 - TCP
 - 신뢰성 있는 연결을 보장할 수 있는 기타 Protocol
- Version 정보
 - 0.9 (정식 사양서 아님)
 - 1.0 (RFC 1945)
 - 1.1 (RFC 2616) - 약 70% 정도의 점유율을 가짐
 - 2.0 (RFC 7540) - 점차 늘고있는 추세이며, 약 30% 정도의 점유율을 가짐
- 확장성
 - HTTP 등장 당시에 주로 텍스트를 전송하기 위한 프로토콜
 - Web 이라는 틀을 넘어서 다양하게 사용되는 프로토콜

II. HTTP 통신

1. HTTP Connection



2. HTTP/1.0 vs HTTP/1.1 vs HTTP/2



III. HTTP 전송 Message

1. HTTP Request Messages

- **Request Line**

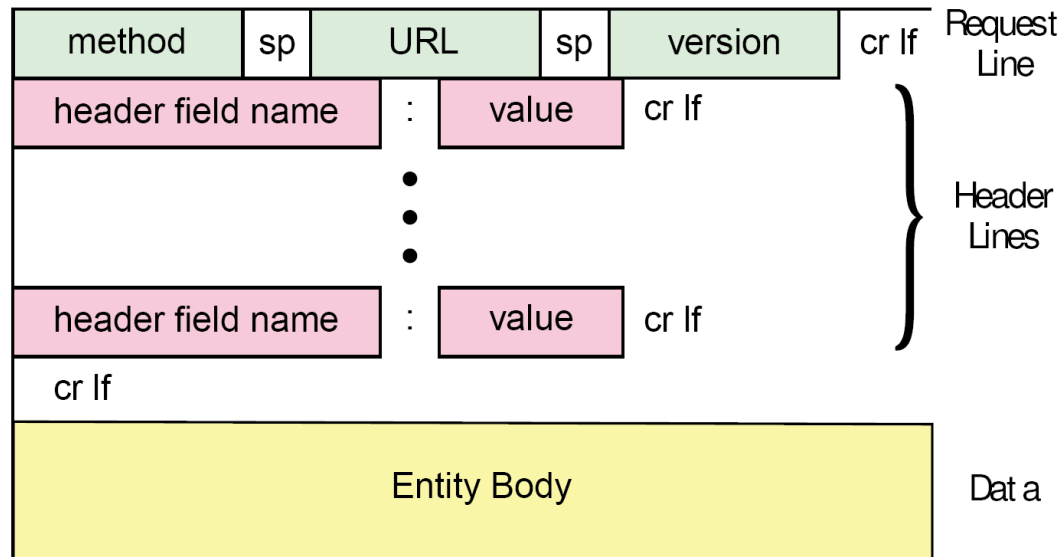
- GET /images/logo.gif HTTP/1.1
- resource called /images/logo.gif from server

- **Headers**

- Host: www.pentasecurity.com

- **An empty line**

- **An optional message body**



1. HTTP Request Messages

Request Line

GET / HTTP/1.1 <CR><LF>

Header Lines

Host: pentasecurity.com <CR><LF>

Accept: image/gif, image/x-xbitmap, image/jpeg, image/pjpeg,
application/x-shockwave-flash, application/vnd.ms-excel,
application/vnd.ms-powerpoint, application/msword, */* <CR><LF>

Accept-Language: ko <CR><LF>

Accept-Encoding: gzip, deflate <CR><LF>

User-Agent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.2; SV1;
.NET CLR 1.1.4322) <CR><LF>

Connection: Keep-Alive <CR><LF>

<CR><LF>

Body

1. HTTP Request Messages

Request Line

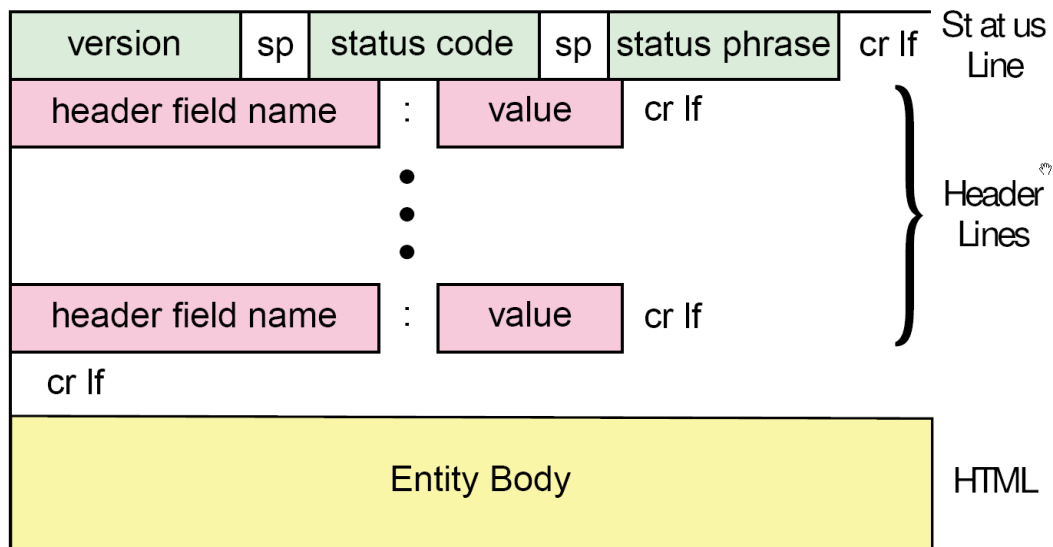
Header Lines

Body

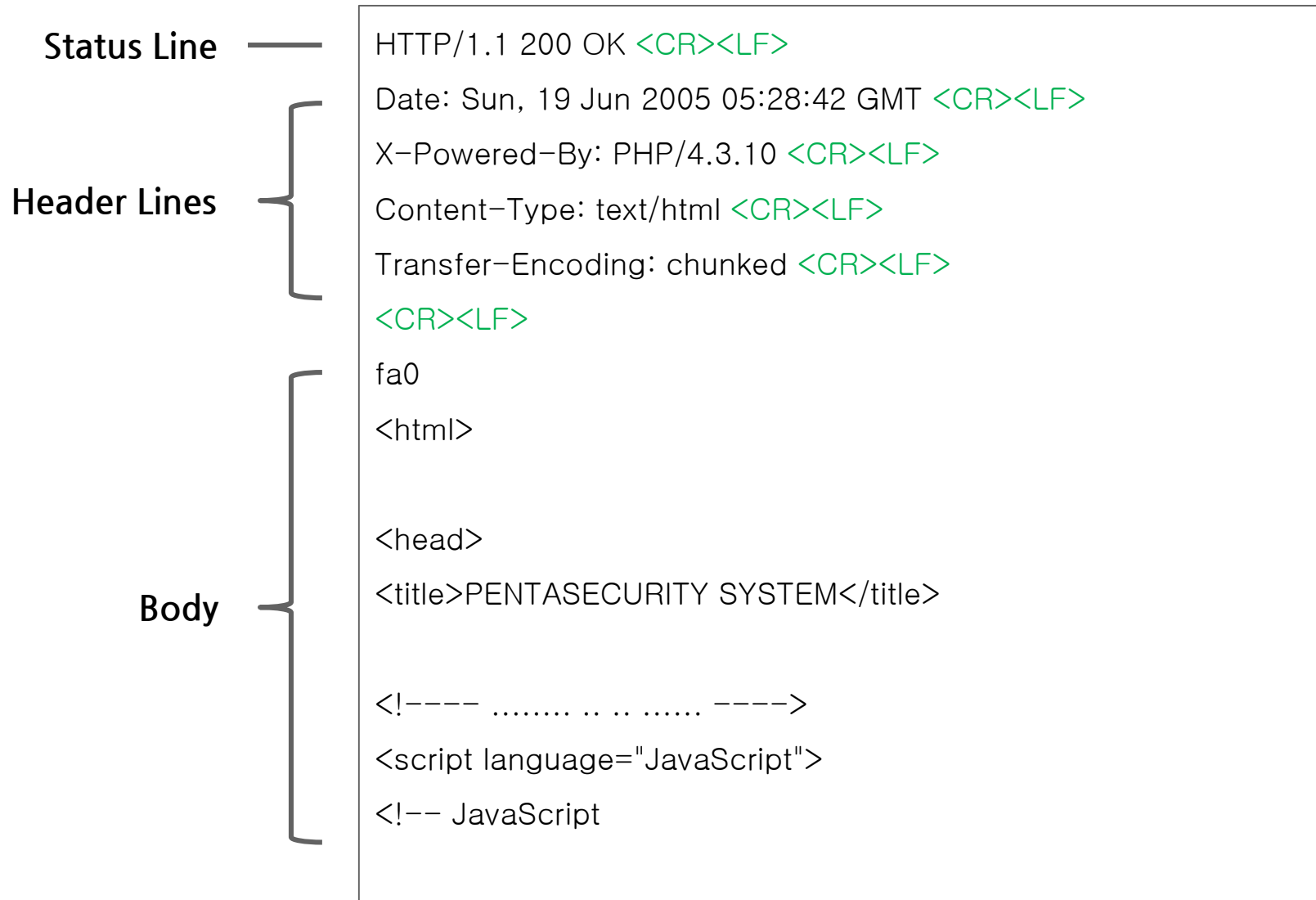
```
POST /board HTTP/1.1 <CR><LF>
Host: pentasecurity.com <CR><LF>
Accept: */* <CR><LF>
Accept-Language: ko-KR,ko;q=0.8,en-US;q=0.6,en;q=0.4,ja;q=0.2 <CR><LF>
Accept-Encoding: gzip, deflate <CR><LF>
User-Agent: Mozilla/5.0 (Windows NT 6.1; WOW64) <CR><LF>
Content-Type: multipart/form-data; boundary=-----WebKitFormBoundaryhldc8UvKwBh <CR><LF>
Content-Length: 201185 <CR><LF>
Referer: http://demo.com/MultiFileSelection.aspx <CR><LF>
<CR><LF>
-----WebKitFormBoundaryhldc8UvKwBh <CR><LF>
Content-Disposition: form-data; name="FileSize" <CR><LF>
<CR><LF>
879394 <CR><LF>
-----WebKitFormBoundaryhldc8UvKwBh <CR><LF>
Content-Disposition: form-data; name="FileName" <CR><LF>
<CR><LF>
Chrysanthemum.jpg <CR><LF>
-----WebKitFormBoundaryhldc8UvKwBh <CR><LF>
Content-Type: application/octet-stream <CR><LF>
<CR><LF>
.....JFIF.....` `.....Adobe.d.....]Exif..MM.*.....2.....b.;.....vGF.....Gl.....?.....i
                                     }
..z._WM...Uy
.4.. <CR><LF>
-----WebKitFormBoundaryhldc8UvKwBh-- <CR><LF>
```

2. HTTP Response Messages

- **Status Line**
 - HTTP/1.1 200 OK
- **Headers**
 - Content-Type: text/html
- **An empty line**
- **An optional message body**



2. HTTP Response Messages





KOREA www.pentasecurity.co.kr

GLOBAL www.pentasecurity.com

JAPAN www.pentasecurity.co.jp

CHINA www.panqi.tech



Web Application Security



Cyber Security Awards
Application Security 2020



IoT-based Smart Security
Innovation Award 2020



TU-Automotive Awards
Best Auto Cybersecurity



Cybersecurity
Excellence Awards



Hot Company in
Web Application
Security for 2016



SC Magazine Europe
Best SME Solution



Recognized on the
Gartner WAF
Magic Quadrant



ICSA Labs
Certified WAF



The First and Only
CCEAL4 Certified
WAF



PCI-DSS
Compliance