

Hypertext Transfer Protocol HTTP

- wersja 0.9
- wersja 1.0 – RFC 1945 (de facto standard)
- wersja 1.1 – RFC 2068 (proposed standard)

1

Zapytanie

```
GET /Pl-iso/index.html HTTP/1.0
Connection: Keep-Alive
User-Agent: Mozilla/3.01Gold (X11; I; SunOS 5.5 sun4m)
Host: www.ia.pw.edu.pl
Accept: image/gif, image/x-xbitmap, image/jpeg, image/pjpeg, */*
Cookie: charset=Pl-iso
```

3

Zapytanie i odpowiedź

Request = Request-Line	Response = Status-Line
*(general-header	*(general-header
request-header	response-header
entity-header)	entity-header)
CRLF	CRLF
[message-body]	[message-body]

Request-Line = Method SP Request-URI SP HTTP-Version CRLF
Status-Line = HTTP-Version SP Status-Code SP Reason-Phrase CRLF

2

Odpowiedź serwera (1)

```
HTTP/1.0 200 OK
Date: Tue, 25 Mar 1997 19:55:41 GMT
Server: Apache/1.0.3
Content-type: text/html
Last-modified: Sat, 04 Jan 1997 16:05:13 GMT

<html>
<head>
<title>Instytut Automatyki i Informatyki Stosowanej</title>
</head>
<body bgcolor="white">
.
.
.
</body>
</html>
```

4

Request Methods

- GET
- HEAD
- POST
- PUT
- DELETE
- OPTIONS
- TRACE

5

Request Header Fields

- Accept
- Accept-Charset
- Accept-Encoding
- Accept-Language
- Authorization
- From
- Host
- If-Modified-Since
- If-Match
- If-None-Match
- If-Range
- If-Unmodified-Since
- Max-Forwards
- Proxy-Authorization
- Range
- Referer
- User-Agent

7

General Header Fields

- Cache-Control
- Connection
- Date
- Pragma
- Transfer-Encoding
- Upgrade
- Via

6

Response Header Fields

- Age
- Location
- Proxy-Authenticate
- Public
- Retry-After
- Server
- Vary
- Warning
- WWW-Authenticate

8

Entity Header Fields

- Allow
- Content-Base
- Content-Encoding
- Content-Language
- Content-Length
- Content-Location
- Content-MD5
- Content-Range
- Content-Type
- ETag
- Expires
- Last-Modified

9

Powtórne zapytanie (w3cache)

```
GET http://www.ia.pw.edu.pl/P1-iso/index.html HTTP/1.0
If-Modified-Since: Saturday, 04-Jan-97 16:05:13 GMT; length=4721
Proxy-Connection: Keep-Alive
User-Agent: Mozilla/3.01Gold (X11; I; SunOS 5.5 sun4m)
Pragma: no-cache
Host: www.ia.pw.edu.pl
Accept: image/gif, image/x-xbitmap, image/jpeg, image/pjpeg, */*
Cookie: charset=P1-iso
```

11

Kody stanu

- **1xx:** Informational
- **2xx:** Success
- **3xx:** Redirection
- **4xx:** Client Error
- **5xx:** Server Error

10

Odpowiedź serwera (2)

```
HTTP/1.0 304 Not Modified
Date: Tue, 25 Mar 1997 20:21:09 GMT
Server: Apache/1.0.3
```

12