WWW

Arne Breitsprecher

WWW
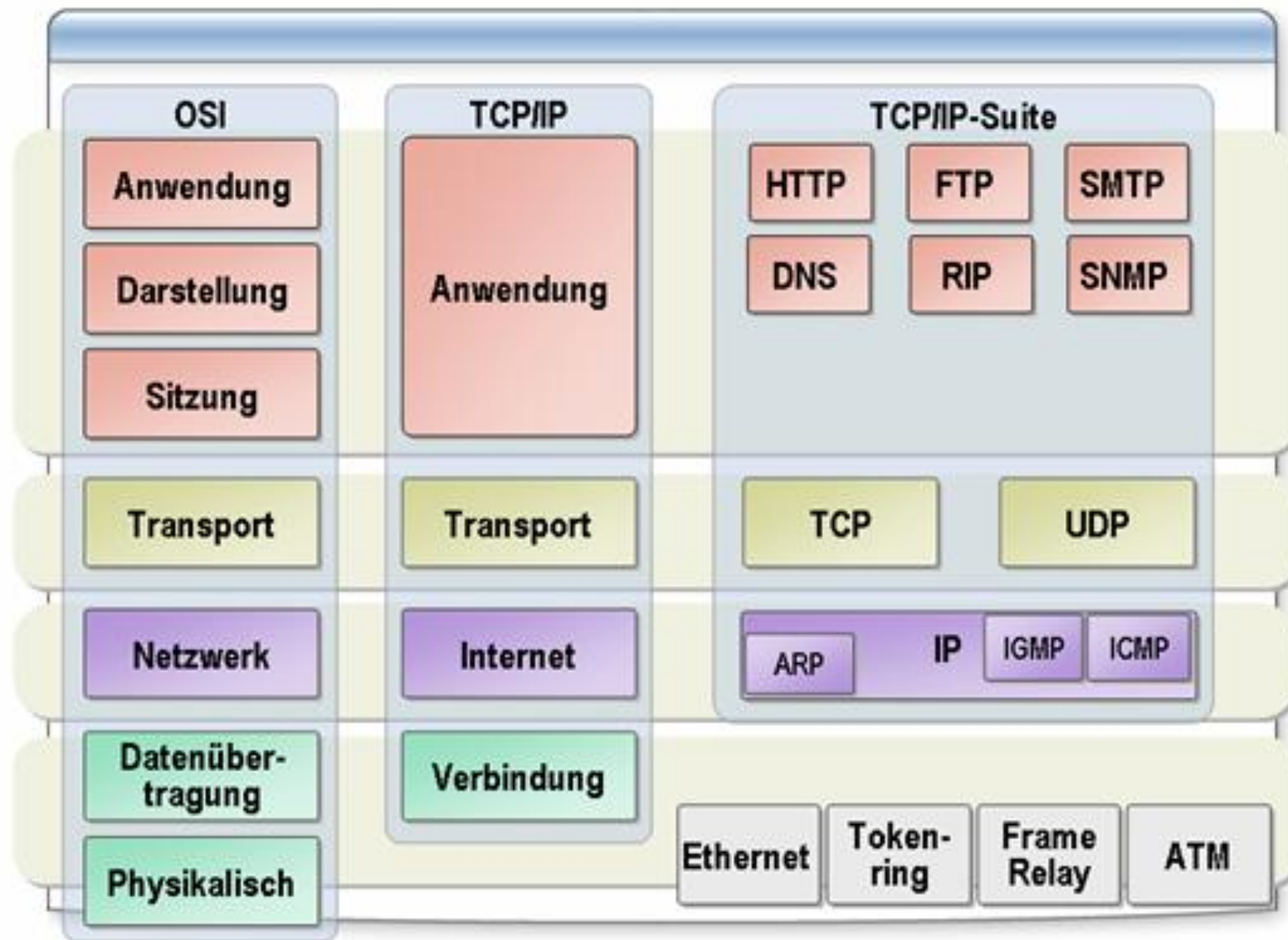
- URL
- HTTP
- HTML

OSI-Schitenmodell

Uniform **R**esource **L**ocator

<scheme>:<scheme-specific-part>

Uniform Resource Locator

```
        scheme-specific-part →                    →

http://hans:geheim@example.org:80/demo/file.php?land=de&stadt=aa#abc
|       |          |          |           |  |                    |
|       |          |          host        |  url-path
|       |          password
|
scheme (hier gleich Netzwerkprotokoll)
```

Hyper**T**ext **T**ransfer **P**rotocol

HTTP-Request

User — Request — Server

- GET
- POST
- HEAD
- PUT
- DELETE

HTTP-Response

HTTP/1.1 200 OK
Server: Apache/1.3.29 (Unix) PHP/4.3.4
Content-Length: (Größe von index
Content-Language: de (nach RFC 3282 sowie RFC 1766)
Connection: close
Content-Type: text/html

(Inhalt von index

HTTP-Response

1xx	Informationen
2xx	Erfolgreiche Operation
3xx	Umleitung
4xx	Client Fehler
5xx	Server Fehler

HTTP-Beispiel

```
Cupcake:~ arne$ telnet uni-bremen.de 80
Trying 134.102.20.146...
Connected to uni-bremen.de.
Escape character is '^]'.
GET / HTTP/1.1
Host: www.uni-bremen.de

HTTP/1.1 200 OK
Date: Thu, 01 May 2014 12:57:29 GMT
Server: Apache/2.2.22 (Ubuntu)
Vary: Accept-Encoding
Content-Length: 533
Content-Type: text/html;charset=UTF-8

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 3.2 Final//EN">
<html>
 <head>
  <title>Index of /</title>
 </head>
 <body>
<h1>Index of /</h1>
<table><tr><th><img src="/icons/blank.gif" alt="[ICO]"></th><th><a href="?C=N;O=D">Name</a></th><th><a href=
"?C=M;O=A">Last modified</a></th><th><a href="?C=S;O=A">Size</a></th><th><a href="?C=D;O=A">Description</a><
/th></tr><tr><th colspan="5"><hr></th></tr>
<tr><th colspan="5"><hr></th></tr>
</table>
<address>Apache/2.2.22 (Ubuntu) Server at www.uni-bremen.de Port 80</address>
</body></html>
Connection closed by foreign host.
Cupcake:~ arne$ ▮
```

🍪 Cookie

HTTP/1.0 200 OK
 Set-Cookie2: letzteSuche="cookie aufbau";
        Max-Age=2592000;
        Path=/cgi/suche.py;
        Version="1";
        Port = 101;
        CommentURL = "_____
letzteSuche