



Connected World Notes

RMI way за достъп до отдалечен „ресурс“

- `result = remote_object.method(arguments)`

В термините на „заявка-отговор“

- `request == arguments`
- `response == result`

OSI модела и термините които намесихме

- `host, port = socket()`
- `protocol`



Socket() API, Java

От страна на сървъра

- `ServerSocket s = new ServerSocket(1234);`
- `Socket cc = s.accept();`

От страна на клиента

- `Socket c = new Socket(host, port);`

Разполагайки със **Socket** обект **c**

- `c.getInputStream();`
- `c.getOutputStream();`

И имаме всичко необходимо за двупосочна комуникация между страните.



Protocol examples - HTTP

- Началната страница на rmi.yaht.net в plain ASCII
- HTTP protocol – RFC 2616 (<https://tools.ietf.org/>)

```
lisp@lisa ~/work/rmi/week-06 $ telnet rmi.yaht.net 80
```

```
Trying 109.104.192.238...
```

```
Connected to rmi.yaht.net.
```

```
Escape character is '^]'.
```

```
GET / HTTP/1.1
```

```
Host: rmi.yaht.net
```

```
HTTP/1.1 200 OK
```

```
Date: Thu, 29 Mar 2018 18:44:42 GMT
```

```
Server: Apache/2.2.22 (Debian)
```

```
Vary: Accept-Encoding
```

```
Transfer-Encoding: chunked
```

```
Content-Type: text/html; charset=UTF-8
```

```
62f
```



Protocol examples - SMTP

- Да изпратим поща
- SMTP protocol – RFC 821 (<https://tools.ietf.org/>)

```
lisp@lisa ~/work/rmi/week-06 $ telnet mail.lz0.org 25
```

```
Trying 185.24.220.34...
```

```
Connected to mail.lz0.org.
```

```
Escape character is '^]'.
```

```
220 r2d2.yaht.net ESMTP Postfix (Debian/GNU)
```

```
helo lisa.local
```

```
250 r2d2.yaht.net
```

```
mail from: me@lz0.org
```

```
250 2.1.0 Ok
```

```
rcpt to: id@yaht.net
```

```
250 2.1.5 Ok
```

```
data
```



Protocol examples – SMTP.2

354 End data with <CR><LF>.<CR><LF>

Subject: an example subject...

11

12

13

.

250 2.0.0 Ok: queued as E42CA28C80

quit

221 2.0.0 Bye

Connection closed by foreign host.



Protocol examples – POP3

- Да прочетем, вече получена поща
- POP3 protocol – RFC 1081 (<https://tools.ietf.org/>)

```
lisp@lisa ~/work/rmi/week-06 $ telnet mail.lz0.org 110
```

```
Trying 185.24.220.34...
```

```
Connected to mail.lz0.org.
```

```
Escape character is '^]'.
```

```
+OK Hello there.
```

```
user me@lz0.org
```

```
+OK Password required.
```

```
pass kolelo
```

```
+OK logged in.
```

```
stat
```

```
+OK 1 4632
```



Protocol examples – POP3.2

```
retr 1
```

```
+OK 4632 octets follow.
```

```
...
```

```
dele 1
```

```
+OK Deleted.
```

```
quit
```

```
+OK Bye-bye.
```

```
Connection closed by foreign host.
```

```
lisp@lisa ~/work/rmi/week-06 $
```