



Project 3: Remote Batch System

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12/01 18:20

Project 3 Deadline

Demo: 12/03 Thu.

Remote Batch System



- Requirements
 - A simple HTTP server
 - A CGI program
- Part 1: Run in **NP Linux Workstation**
- Part 2: Run in **Windows 10**

Project 3: Demo



- 12/01 Thu. 10:00 ~ 18:30
- We will announce demo slots 2 ~ 3 days before
- Tasks:
 - Pass test cases
 - Answer questions
 - Implement 1 extra function within a limited time

Execution Flow

Run HTTP Server

client



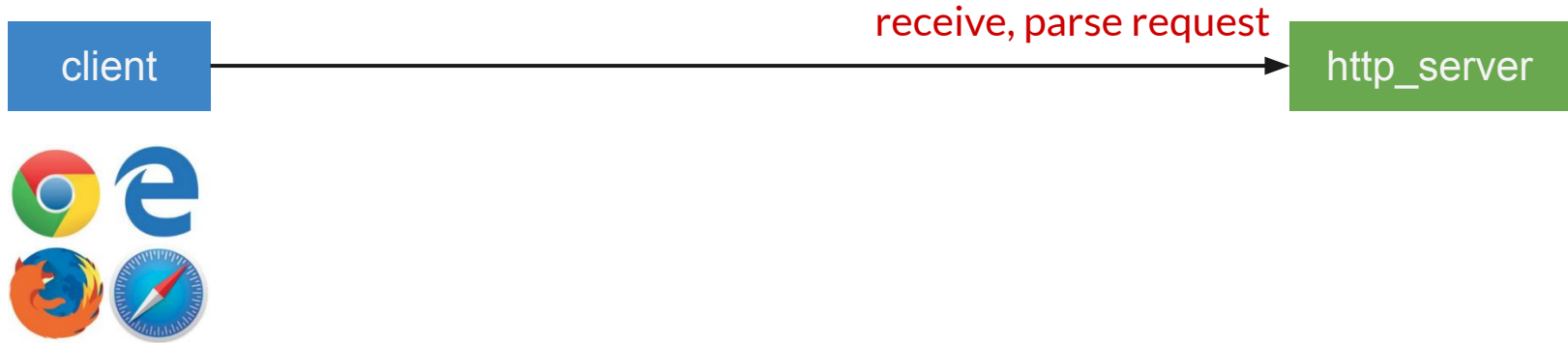
http_server

nplinux1
port: 8080

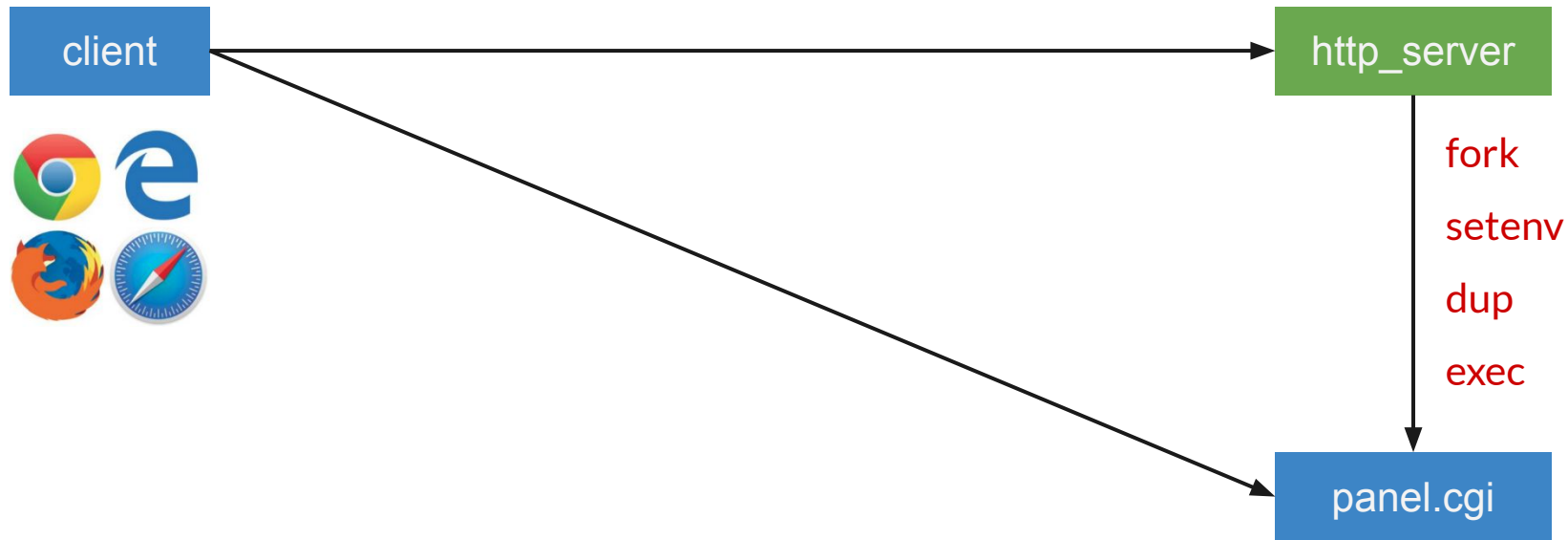
Request 1 - Send



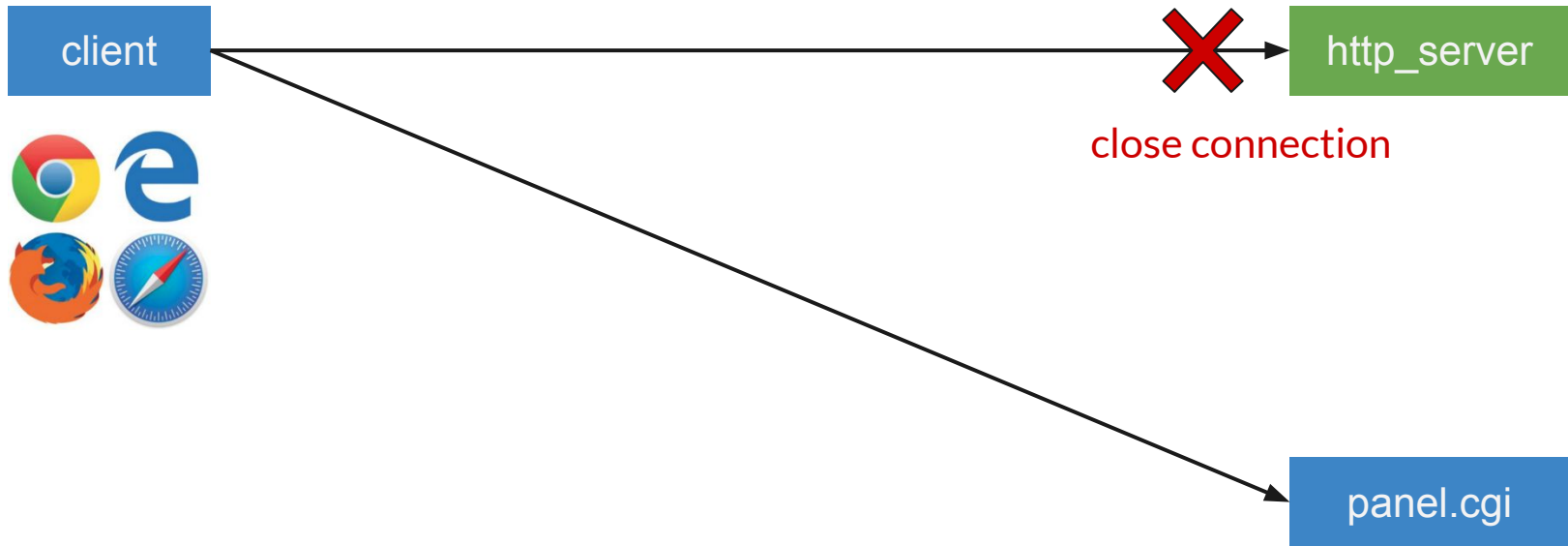
Request 1 - Receive



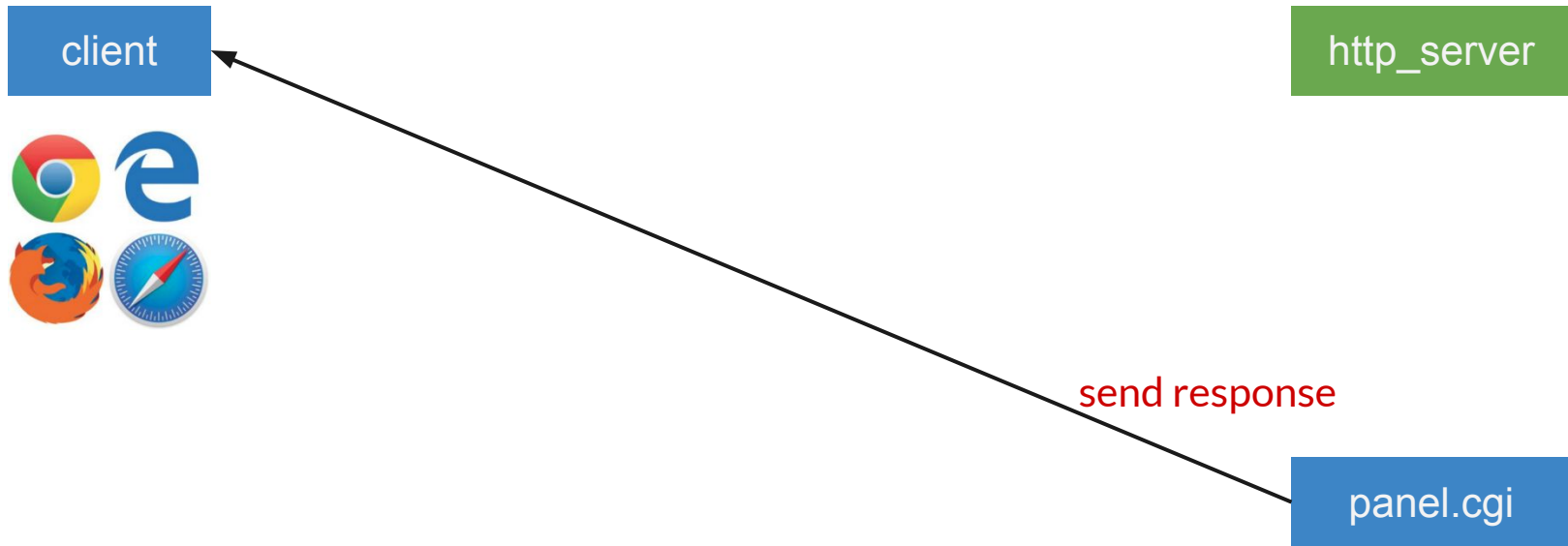
Request 1 - Execute CGI Program



Request 1 - Close Connection



Request 1 - Response



Request 1 - Terminate

client



http_server

child exit

panel.cgi

Page Generated by panel.cgi

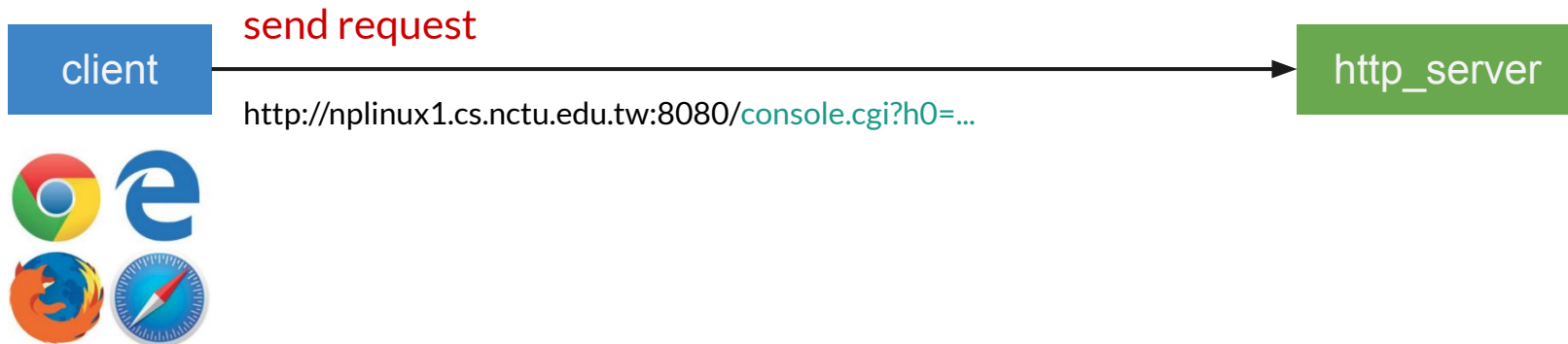
NP Project 3 Panel

nplinux1.cs.nctu.edu.tw:8080/panel.cgi

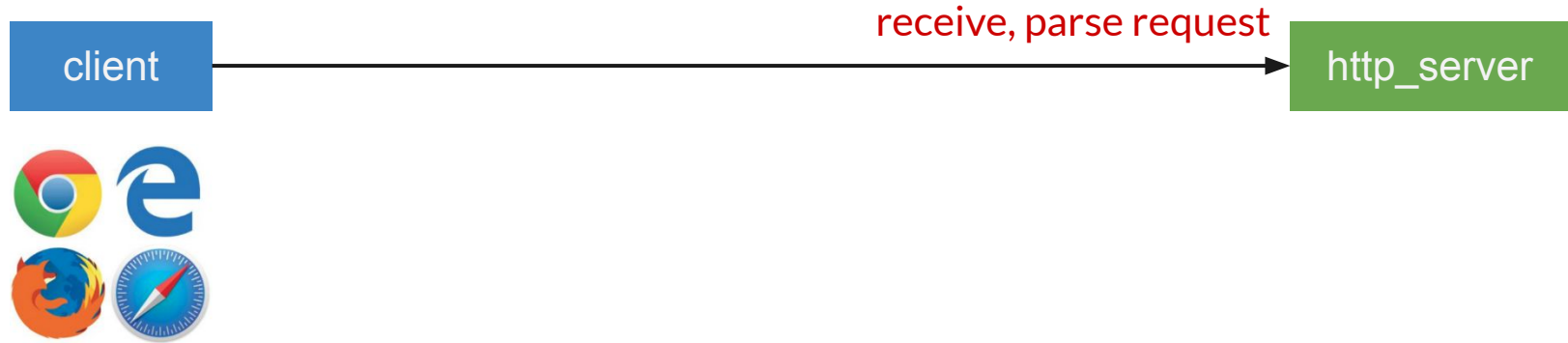
#	Host	Port	Input File
Session 1	nplinux1 ▾ .cs.nctu.edu.tw	1234	t1.txt ▾
Session 2	nplinux2 ▾ .cs.nctu.edu.tw	5678	t2.txt ▾
Session 3	▾ .cs.nctu.edu.tw		▾
Session 4	▾ .cs.nctu.edu.tw		▾
Session 5	▾ .cs.nctu.edu.tw		▾

Run

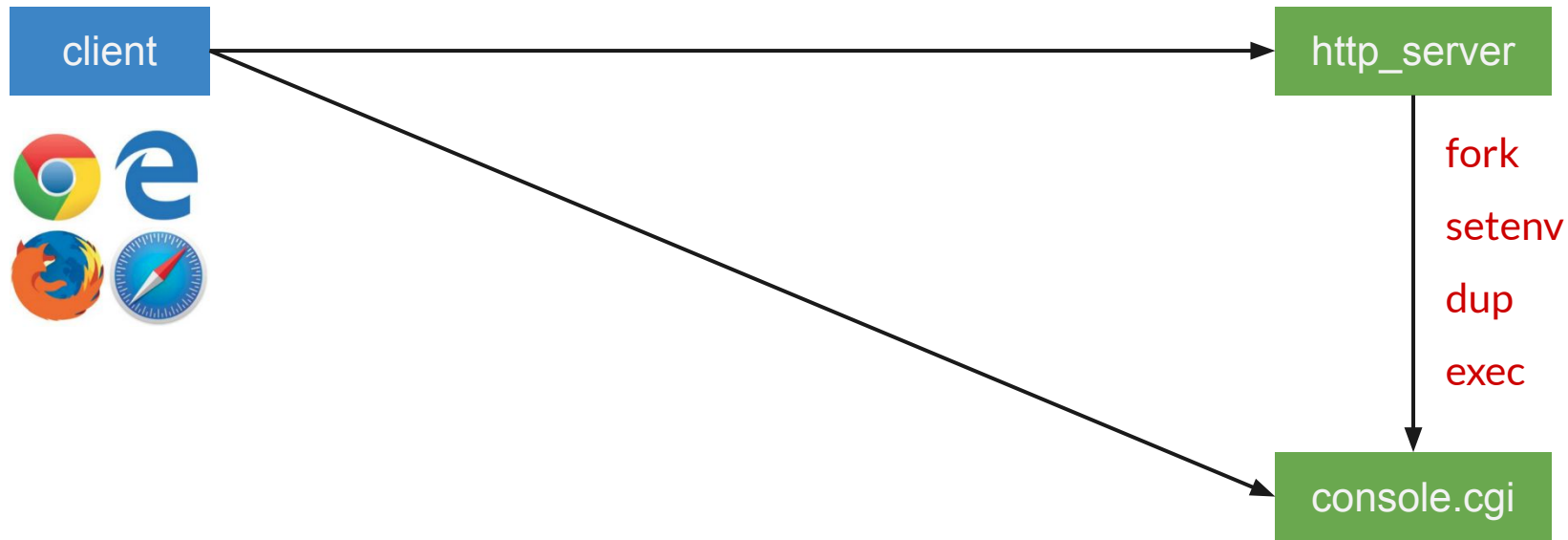
Request 2 - Send



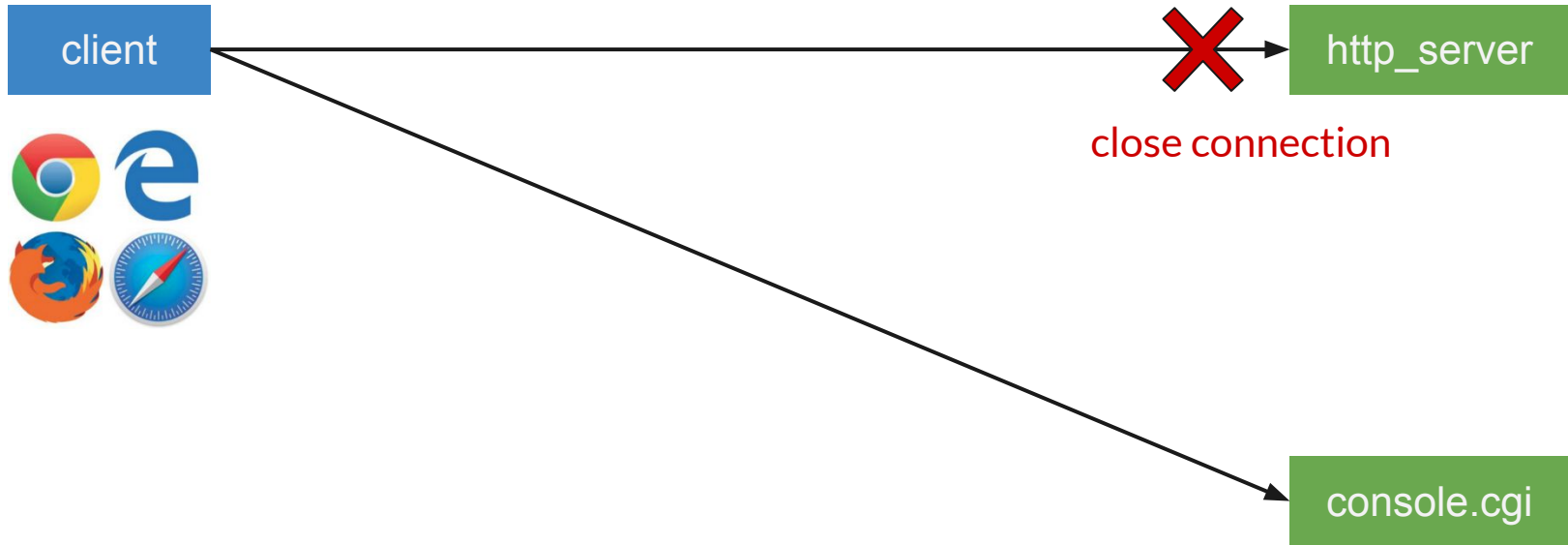
Request 2 - Receive



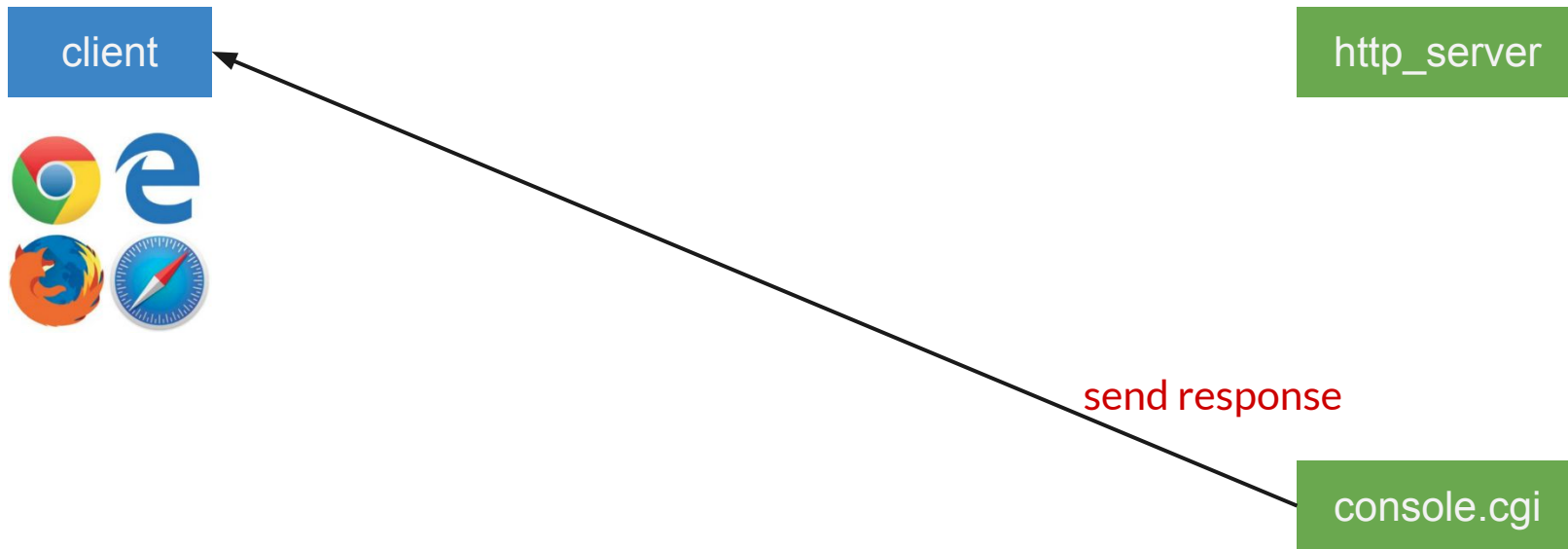
Request 2 - Execute CGI Program



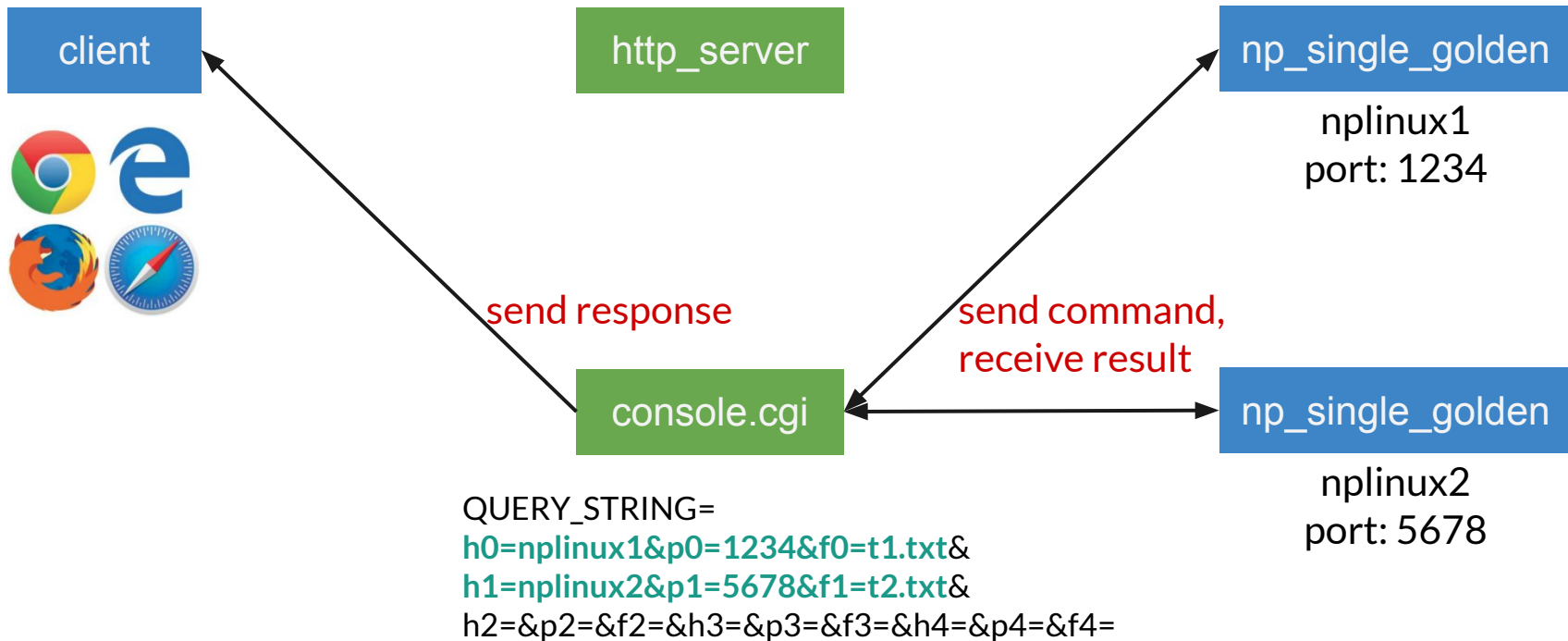
Request 2 - Close Connection



Request 2 - Response



Request 2 - Connect Servers



Page Generated by console.cgi

- Display hostname and port of the remote server in each session
- Make sure the commands are displayed in the right order, at the right time, and can be easily distinguished from the outputs

```
NP Project 3 Sample Con X +
nplinux1.cs.nctu.edu.tw:8080/console.cgi?h0=nplinux1&p0=1234&f0=t1.txt&h1=nplinux2&p1=5678&f1=t2.txt&h2=&p2=&f2=&h3=&p3=&f3=&h4=&p4=&f4=
160%

nplinux1.cs.nctu.edu.tw:1234
*****
** Welcome to the information server. **
*****
*** User '(no name)' entered from 140.113.235.234:59894. ***
% ls
bin
test.html
% exit

nplinux2.cs.nctu.edu.tw:5678
*****
** Welcome to the information server. **
*****
*** User '(no name)' entered from 140.113.235.234:59895. ***
% ls |l
% number
1 bin
2 test.html
% exit
```