

P₁

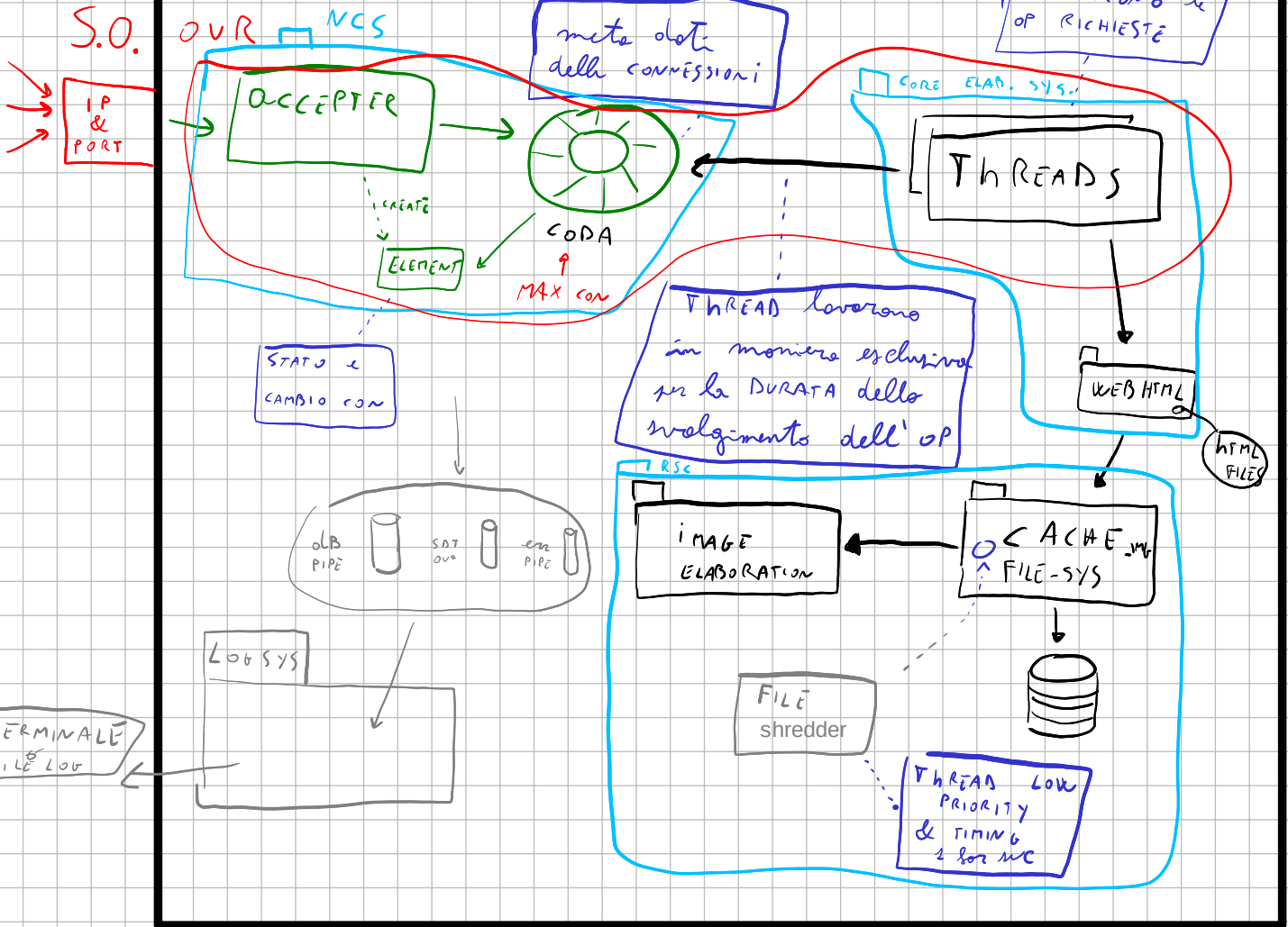
DAD

CREA 1 FIGLIO, e se esce con un errore
RIGENERA IL FIGLIO, altrimenti in caso
di corretta terminazione da parte di
un amministratore, termine

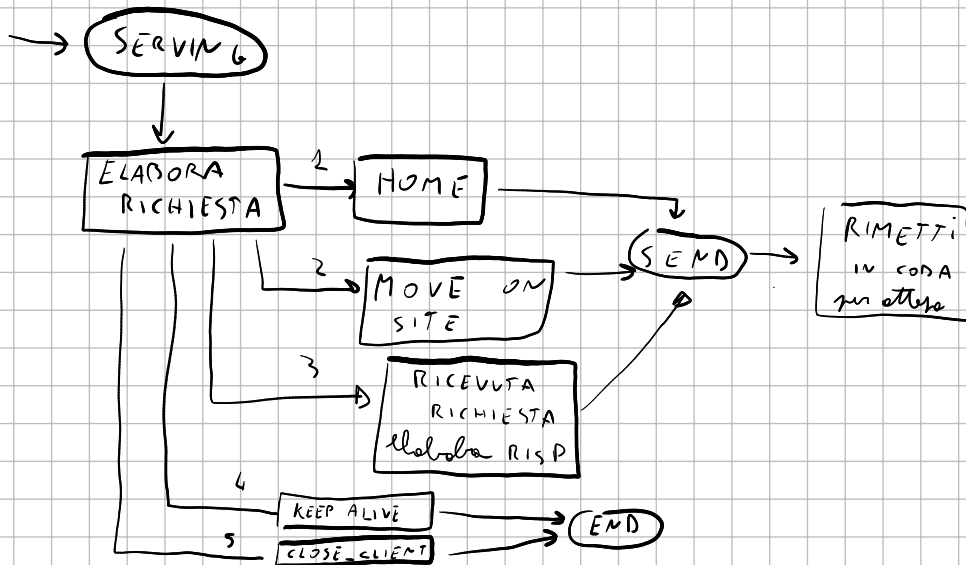
CREATE

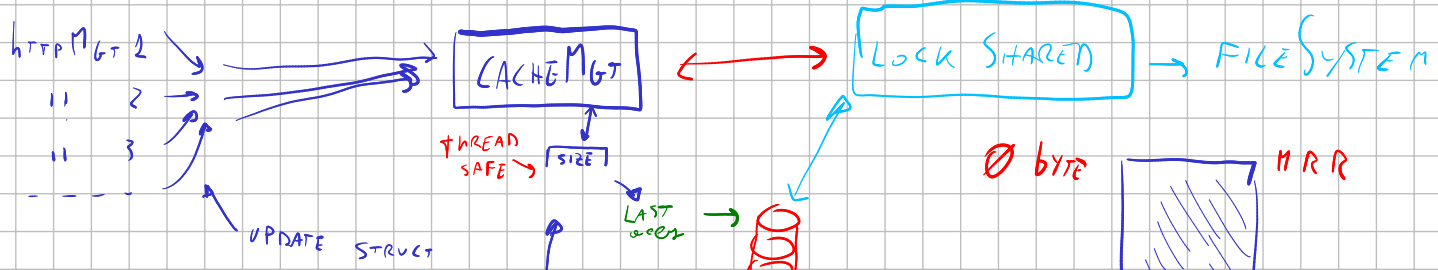
P₂

WEB SERVER



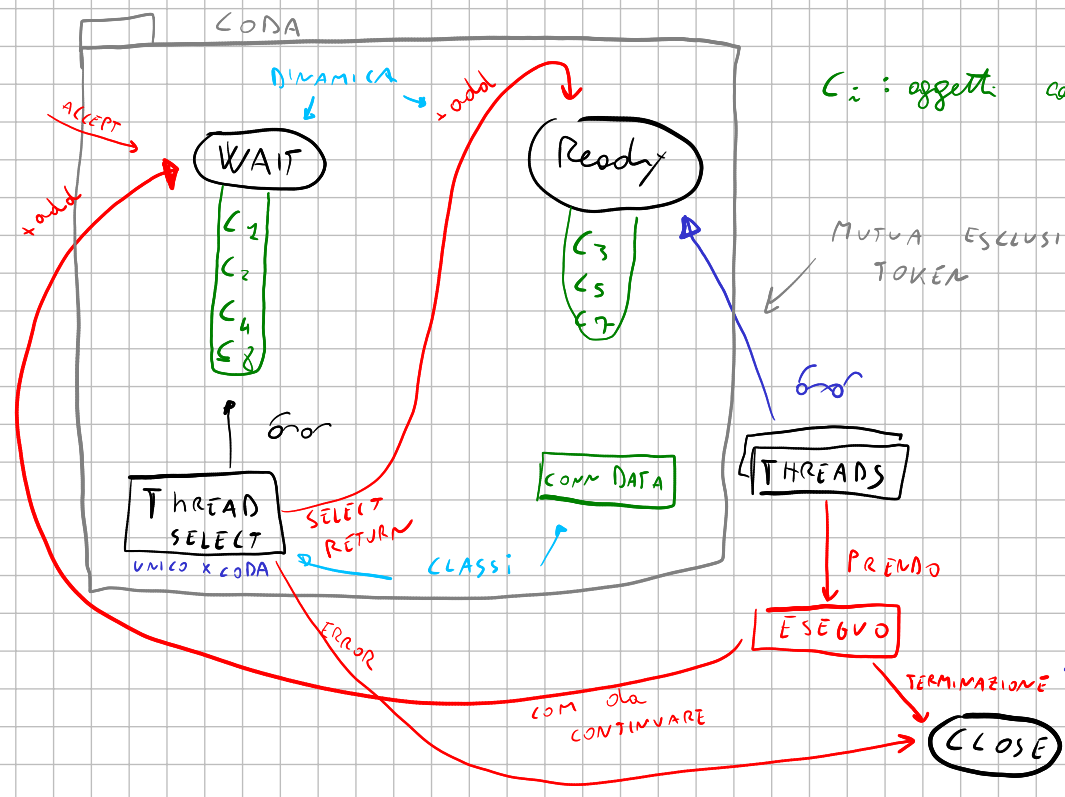
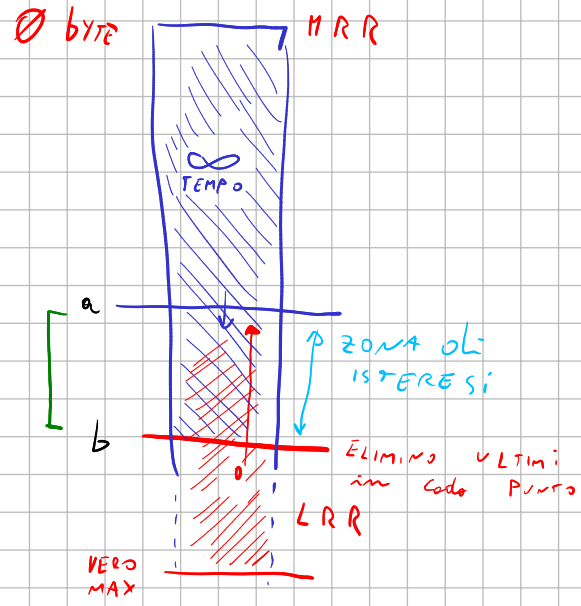
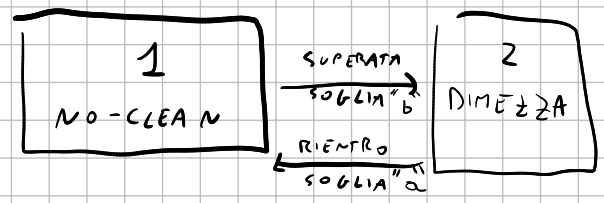
FLUSSO THREAD





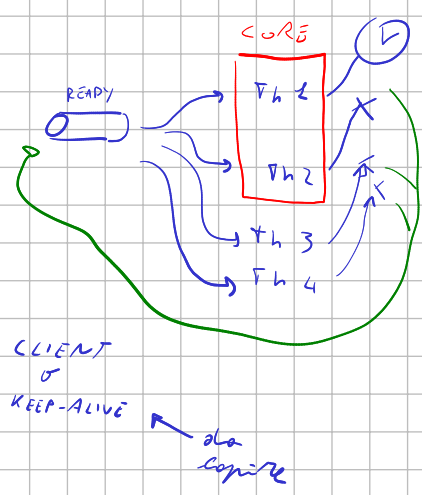
Se un FILE è LOCKED Read/WRITE è disabilitato e non è overwrit.

GESTIONE FILE SHREDDING MACCHINA A STATI



Ci: oggetti connessione, per tenere METADATI

MUTUA ESCLUSIONE MEDIANTE TOKEN



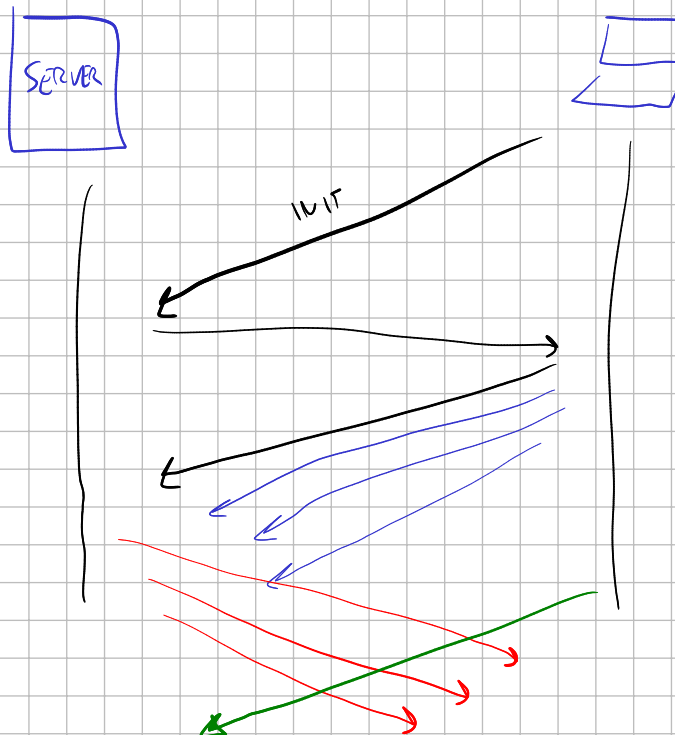
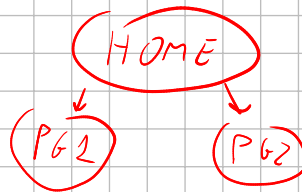
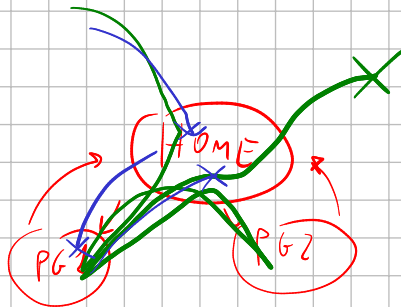
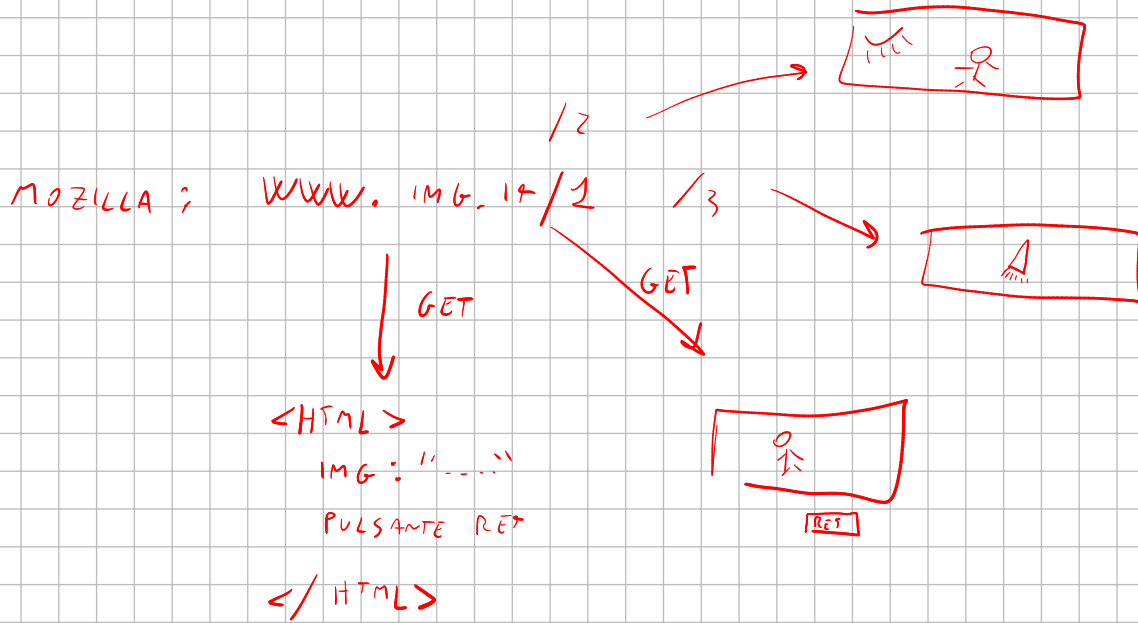
HOME

- LEONE

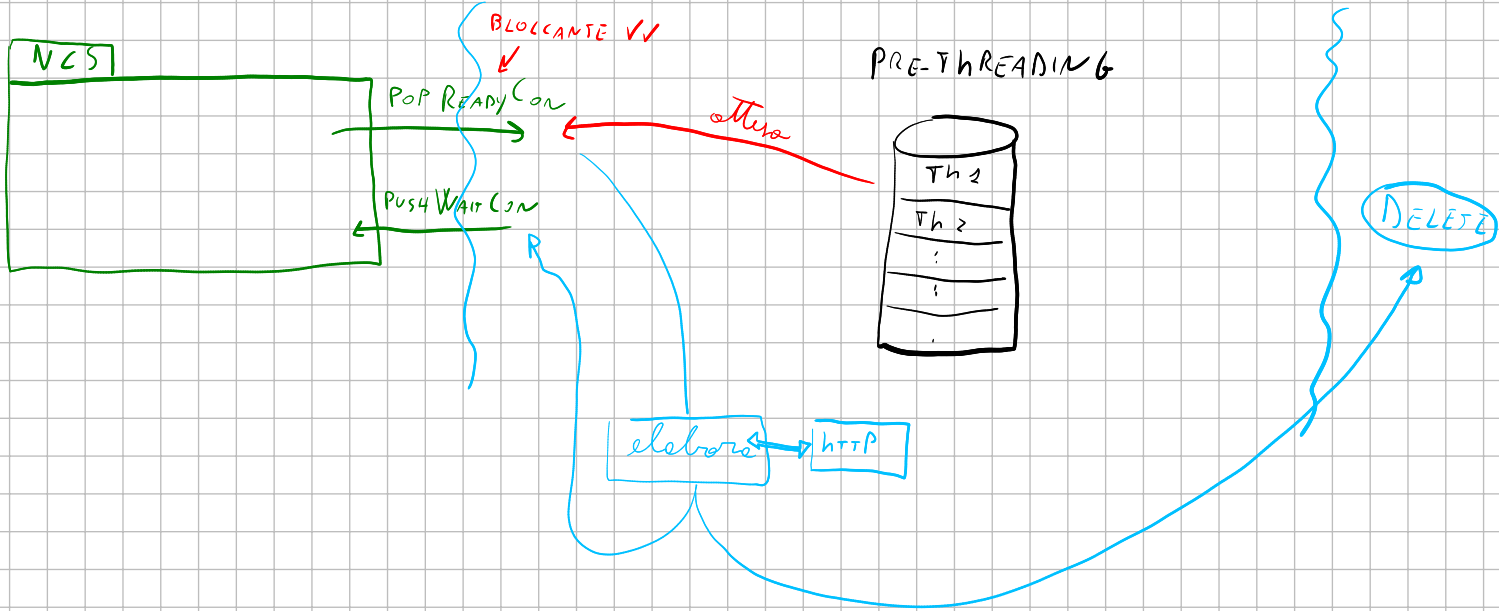
- NAVE

- AEREO

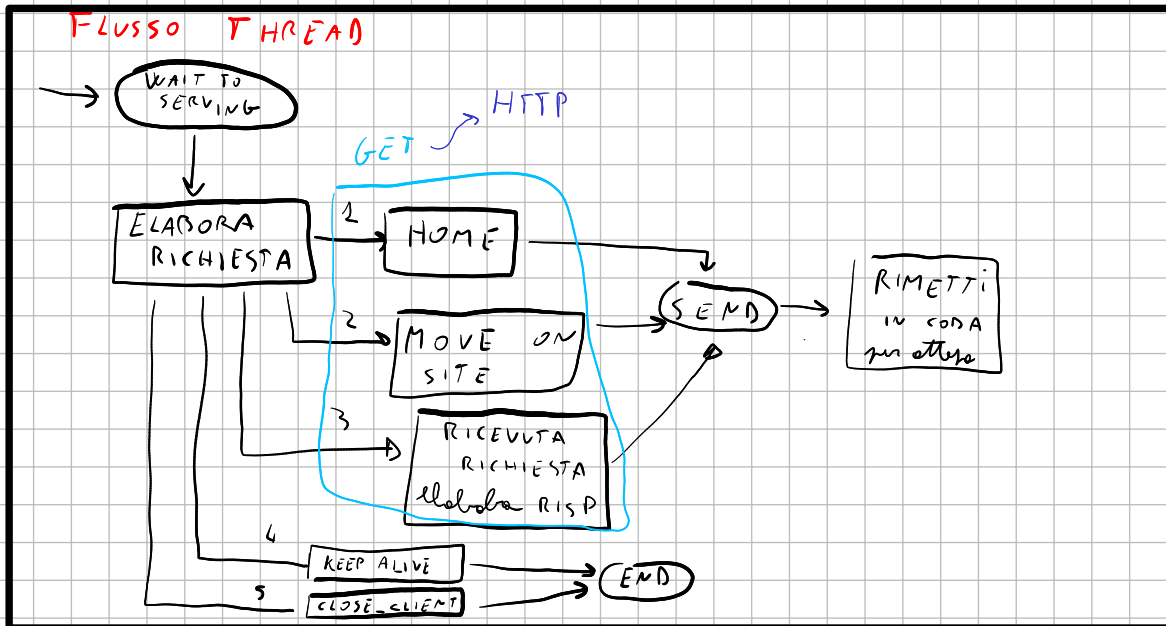
↑
href: "-----"



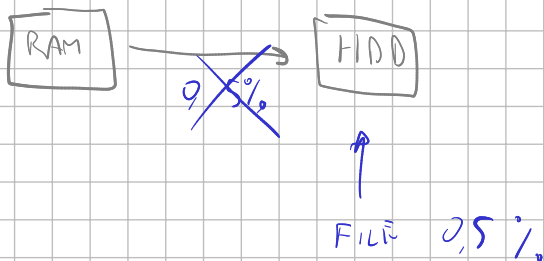
CORE ELABORATION SYSTEM



FLUSSO THREAD



RIFLETTERE se i THREAD devono sapere se c'è stato un broken-pipe sulla connessione in elaborazione e interrompere l'elaborazione in anticipo



ENGINE ELABORATION SYSTEM

ees

WORKING SERVE SYSTEM

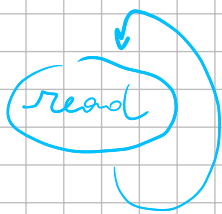
wss

ELABORATION SYSTEM

es

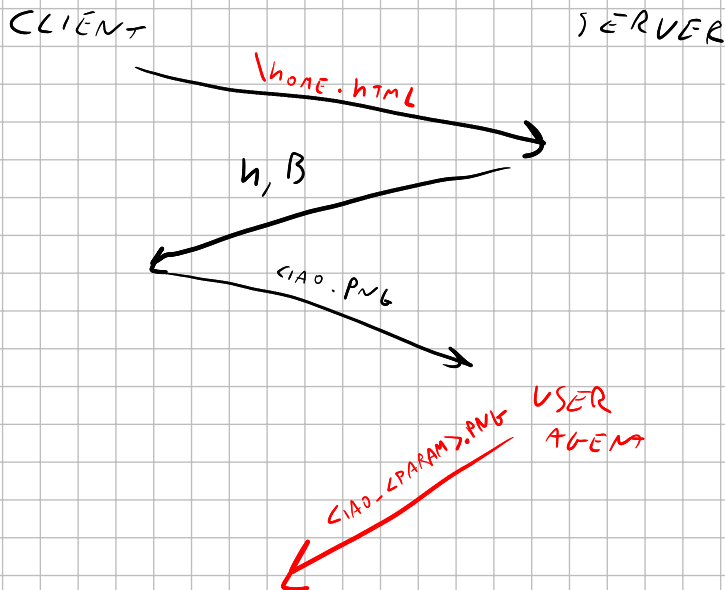
CORE ENGINE SYSTEM
CORE ELABORATION SYSTEM

ces ←



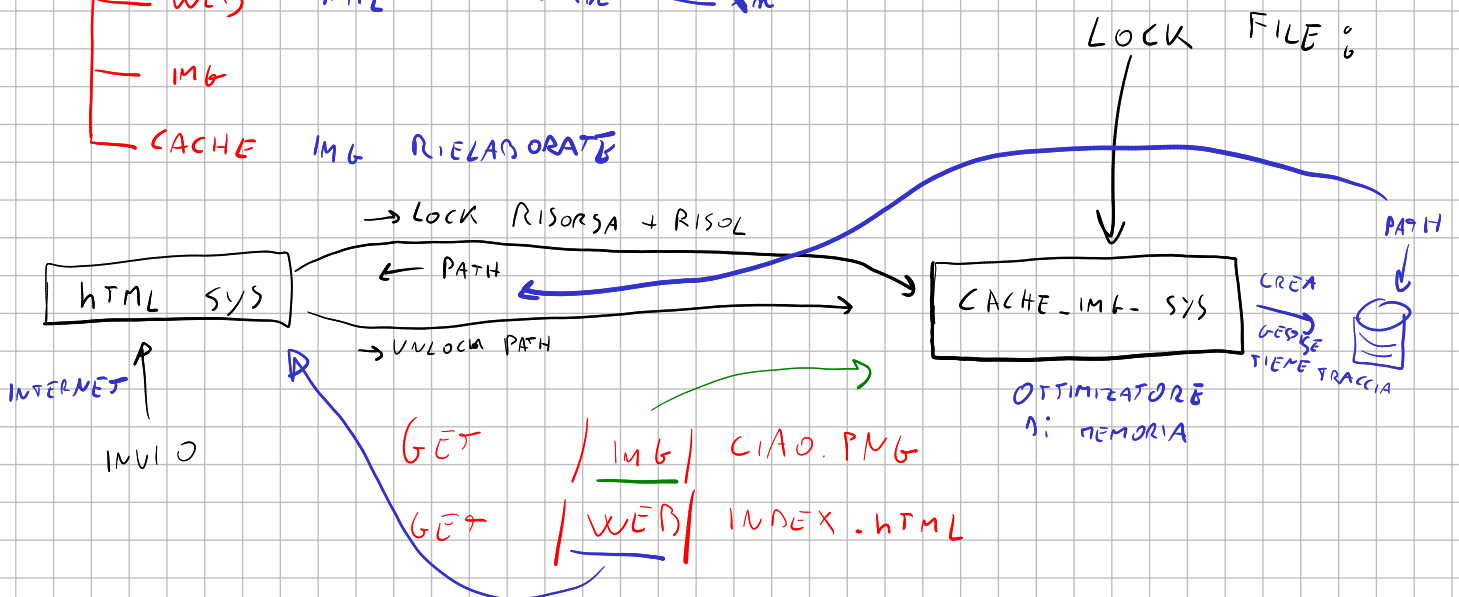
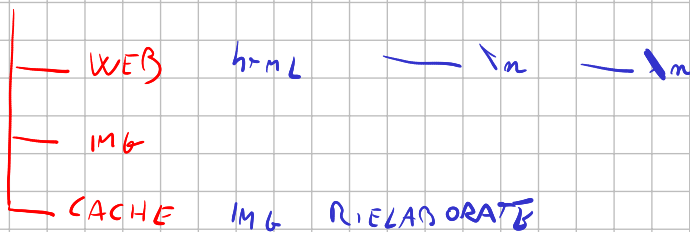
UNTIL FIND body / end

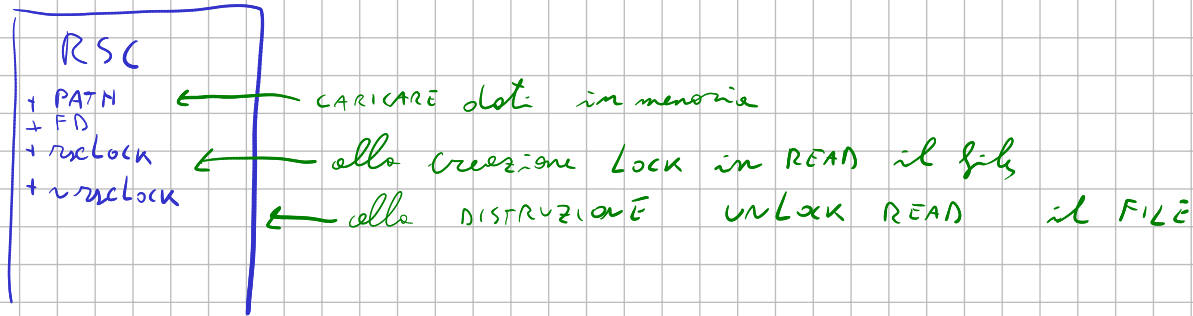
end: $\begin{cases} \text{GET body EMPTY} \\ \text{Post body to Read} \end{cases}$



SOTTO SIS HTML

Root SERVER





LOCK WRITE sul FILE lo fa il CACHE MGT in creazione fino alla fine dell'elaborazione, poi lo rilascia

ATOMICO

OPEN (FILENAME, O-EXCLUSIVE)

Si

DEVO SUBITO
fare la WRITE LOCK

Come farlo SUBITO?

elaborazione

UNLOCK

FAIL

⇒ read Lock

CHECK SIZE

70

W/IO

SUGGERIMENTO
LOCK-GUARD <MUTEX>

STESSO LOCK
X FILE SHADER

Se trova file read/write lock, vuol dire l'ultimo access è vecchio, significa che il SO non ha aggiornato la nuova richiesta, ma si deve andare avanti

LOCK (OPEN-MUTEX) ← FILE

OPEN (FILENAME, O-CREATE, O-EXCLUSIVE)

non

WRITE LOCK
SUL FILE

UNLOCK (OPEN-MUTEX) ← FILE

esiste

UNLOCK (OPEN-MUTEX) ← FILE

READ LOCK sul FILE

SEND ← HTML SYS

read UNLOCK FILE ← RSC OBJ

END

elaborazione

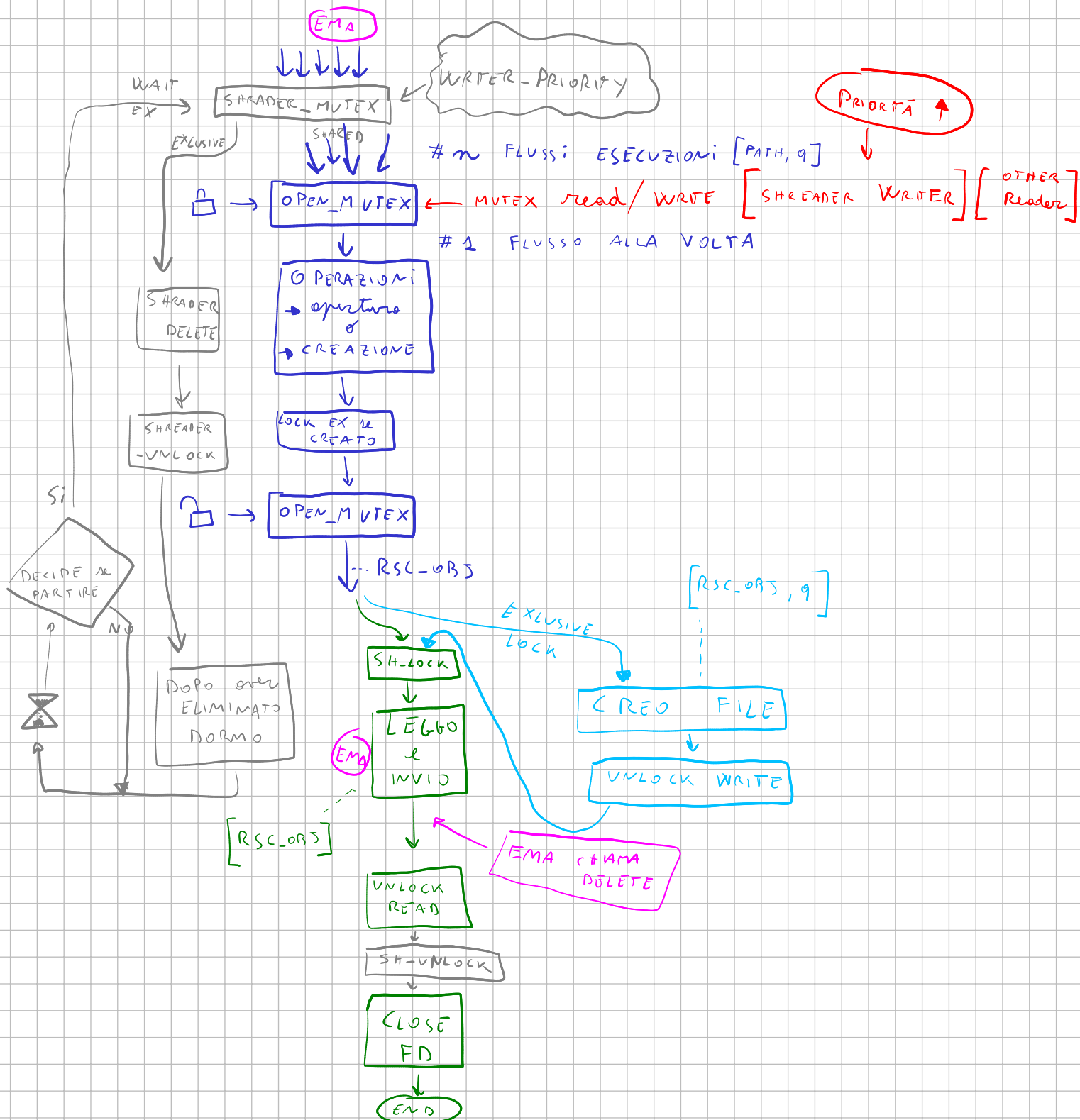
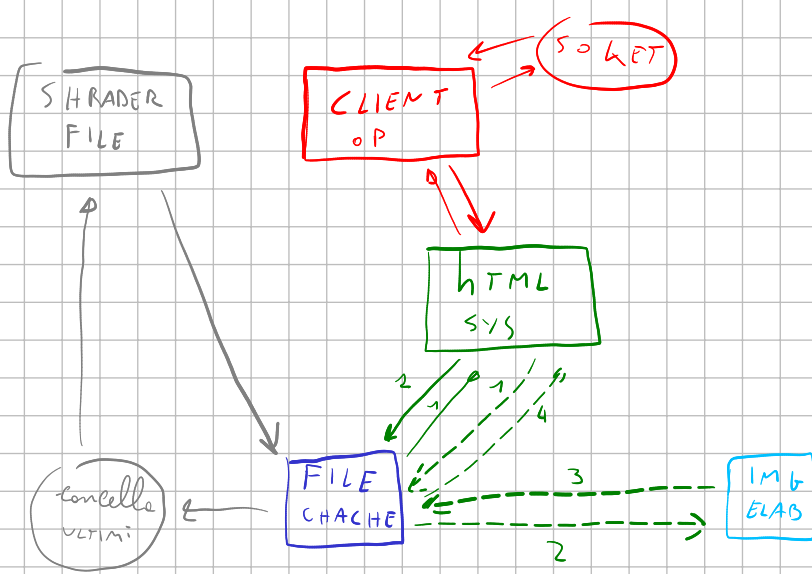
WRITE UNLOCK ← RS OBJ

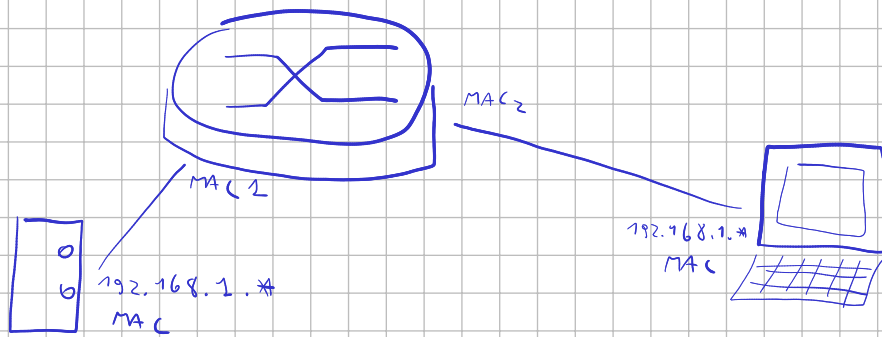
read LOCK ← RSC OBJ

SEND ← HTML SYS

mc → read UNLOCK FILE

END





PING dei sistemi da Server PRE-TEST
 IMAGE_REWORK disattivato !!

SCRIPT

SERVER CONDITION

MEMORY $\begin{cases} \text{HDD} \\ \text{SSD} \end{cases}$

RAM: 16 GB

ETHERNET

RIAVVIO MANUALE
 2 VOLTE (2 NOSTRO)
 1 APACHE

PAGE LOAD

1) TESTUALE: INDEX

2) IMAGE: $\begin{cases} \text{CAFFE} \\ \text{COMPUTER} \\ \text{SPACE SHIP} \\ \text{CAR} \end{cases}$

5 schede

BENCHMARK

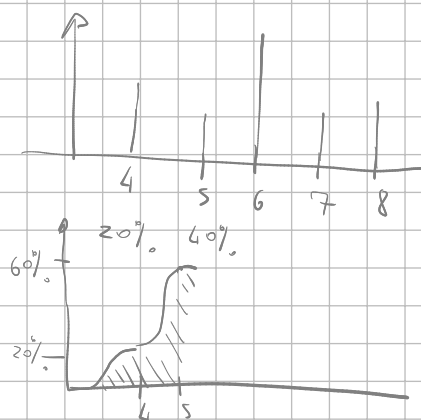
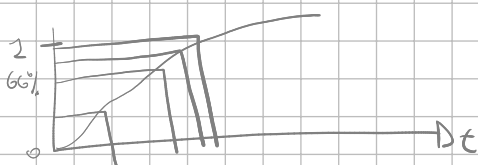
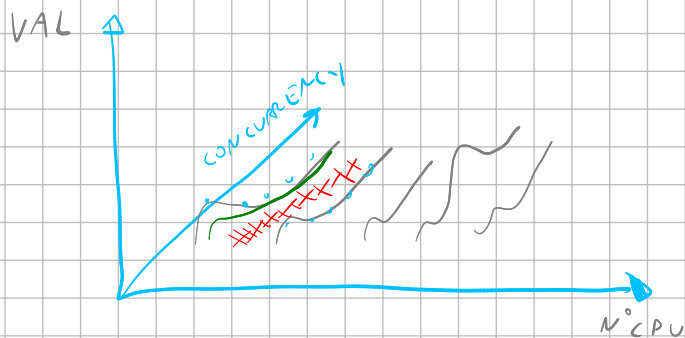
N° Req Tot: 100'000

N° Req PARALLELE: $\begin{cases} 100 \\ 200 \\ 400 \\ 800 \\ 1600 \end{cases}$

N° CPU: $\begin{cases} 2 \\ \vdots \\ n \text{ CPU} \end{cases}$

VAL TO read:

- HTML TRANSFER Rate
- TOTAL TIME



MATLAB XML

PYTHON : RUN & SAVE

XML / .DAT

→ MATLAB

$$2^n \left[\text{TEST 0} \right]$$
$$n+1 \quad \text{DATO} \quad \langle \text{sep} \rangle \quad \text{DATO} \quad \langle \text{sep} \rangle \quad \dots$$

CONFIGURAZIONE SERVER (SSD, HDD)

NOME DIR : L. NOSTRO

SCRIPT

No

L Y - M - G - H - m - S -

- $\langle \text{Resource} \rangle$ BENCH MARK.DAT

APACHE Z

POSSIBILI Z

 z

STRUTTURA

N° CPU

N° PARALLEL CONNECTION

TIME X Request
SINGOLO
[1]

TRANSFER
RATE
[KB/s]

$$\text{Request} \times \text{SECOND}$$

$$[\text{Req}/1]$$