

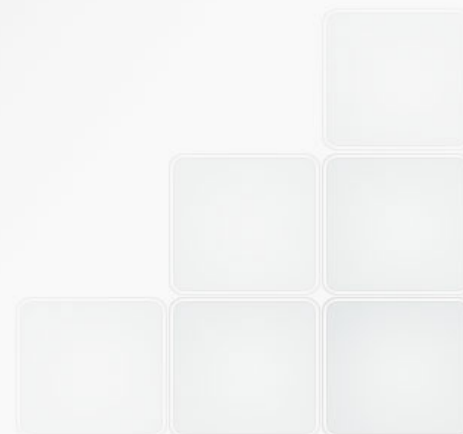


Sezione 2

Monitoring di CRESCO

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Andrea Petricca - ENEA

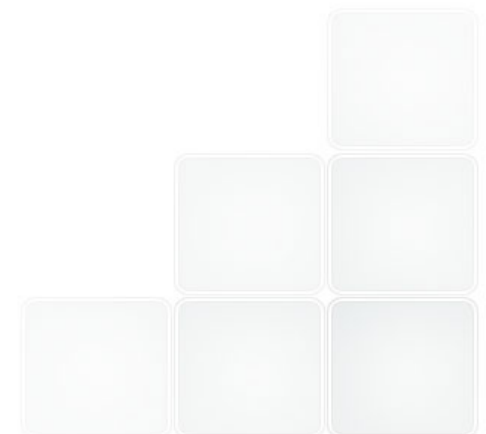
Garr10 – Politecnico di Torino
Torino 27 Ottobre 2010



CRESCO



- 600+ hosts
- 2000+ servizi
- Multi layer network: Ethernet, InfiniBand
- Infrastrutture software: AFS, GPFS, LSF
- Infrastrutture hardware: bmc/rsa, chiller, storage, sensori
- Sicurezza
- Performances



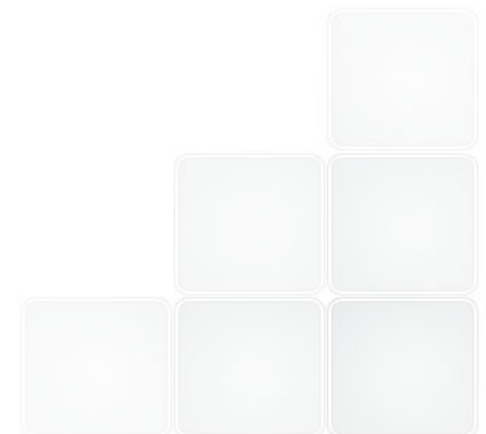
Dimensioni



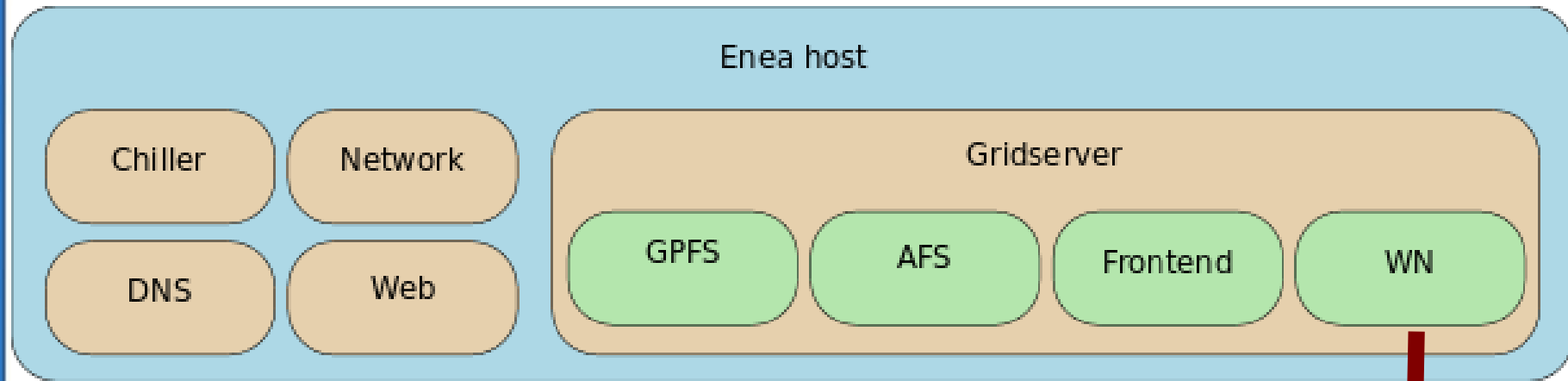
- 600+ hosts
- 2000+ servizi

“Divide et impera”

- detto latino



- Utilizzo dei template

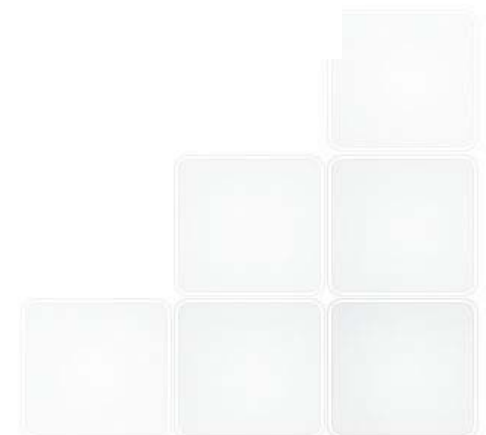


| | | | | |
|--------------------------|-------------|---------|--------------------------------|---|
| <input type="checkbox"/> | Information | Enabled | Availability | {CRESCO - Worker Node:system.users.num.last(0)}>0{{CRESCO - W |
| <input type="checkbox"/> | High | Enabled | ENEA Host:Availability | {CRESCO - Worker Node:icmpingsec[.1].last(0)}=0 |
| <input type="checkbox"/> | High | Enabled | Bmc | {CRESCO - Worker Node:check_bmc[HOSTNAME].str(Critical)}=1 |
| <input type="checkbox"/> | Warning | Enabled | Bmc | {CRESCO - Worker Node:check_bmc[HOSTNAME].str(Warning)}=1 |
| <input type="checkbox"/> | Warning | Enabled | Gridserver - Zabbix Agent:Disk | {CRESCO - Worker Node:vfs.fs.size[/.pfree].last(0)}<15 |
| <input type="checkbox"/> | High | Enabled | Gridserver - Zabbix Agent:Disk | {CRESCO - Worker Node:vfs.fs.size[/.pfree].last(0)}<5 |
| <input type="checkbox"/> | High | Enabled | Gpfs | {CRESCO - Worker Node:check_gpfs[HOSTNAME].str(active)}=0 |
| <input type="checkbox"/> | High | Enabled | Ib | {CRESCO - Worker Node:check_ib[HOSTNAME].last(0)}=0 |



- Interrogare i server anzichè i client

```
cresco-fpga1.portici.enea.it ok
cresco-fpga2.portici.enea.it ok
cresco-fpga3.portici.enea.it ok
cresco-fpga4.portici.enea.it closed_Full
cresco-fpga5.portici.enea.it ok
crescol-f4.portici.enea.it ok
crescolx001.portici.enea.it closed_Full "[aprea 18-08-2010] Test dmtcp conclusi"
crescolx002.portici.enea.it closed_Full
crescolx003.portici.enea.it closed_Full
crescolx004.portici.enea.it ok
crescolx005.portici.enea.it closed_Full
crescolx006.portici.enea.it ok
crescolx007.portici.enea.it ok
crescolx008.portici.enea.it closed_Full
crescolx009.portici.enea.it closed_Full
crescolx010.portici.enea.it closed_Full
```

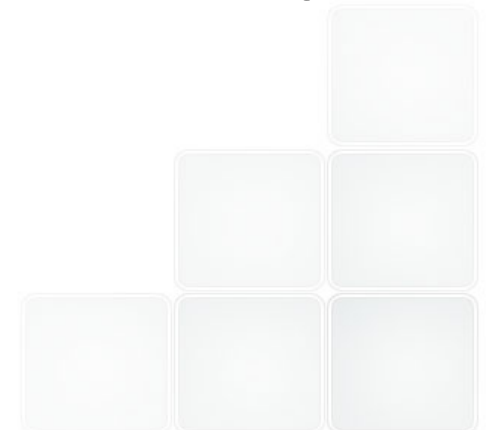


Multi layer network

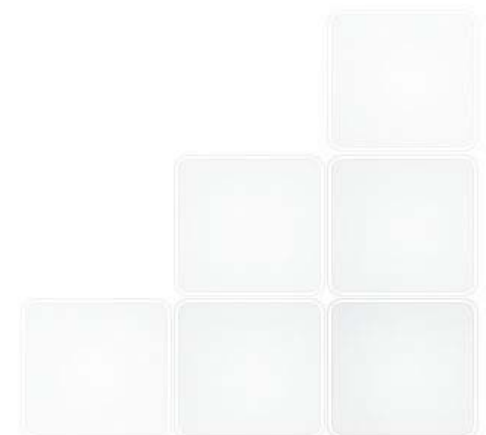
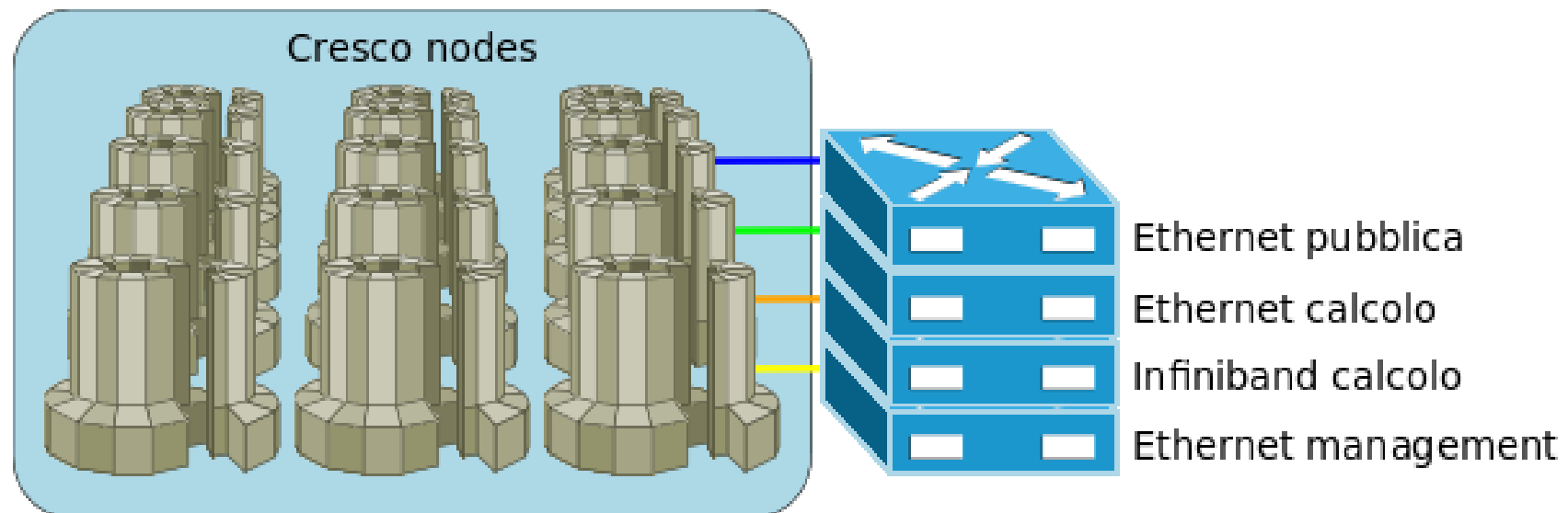


“There is no dark side of the moon”

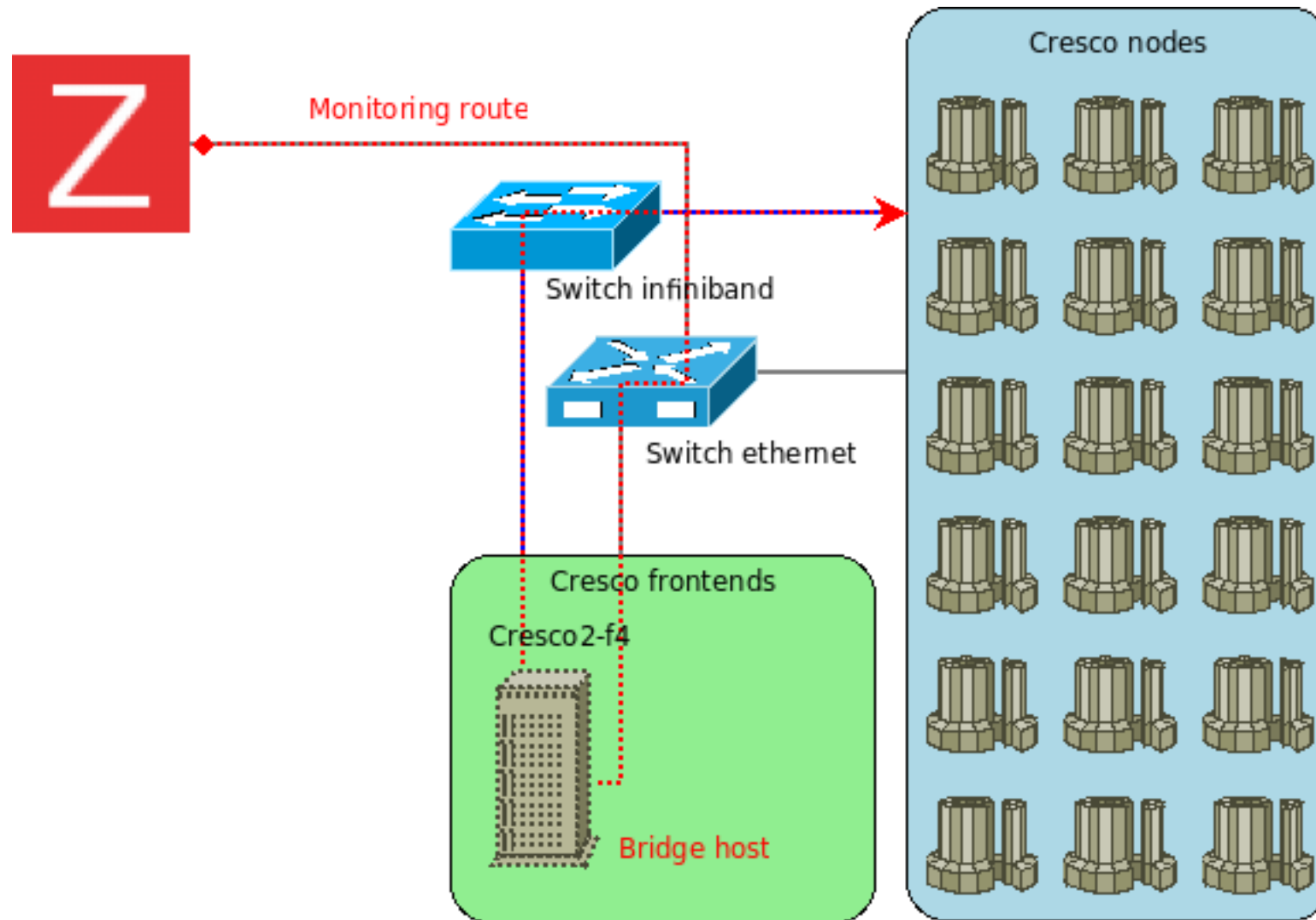
- Pink Floyd



- Diverse reti isolate tra loro



- utilizzare un host Proxy:



Eterogeneità



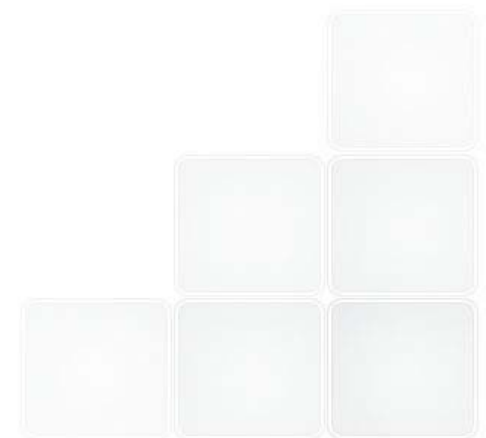
- Infrastrutture software: AFS, GPFS, LSF
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*“I limiti del mio linguaggio
significano i limiti del mio
mondo.”*

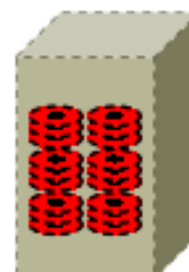
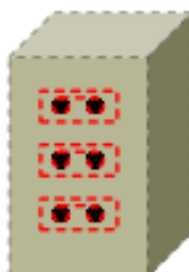
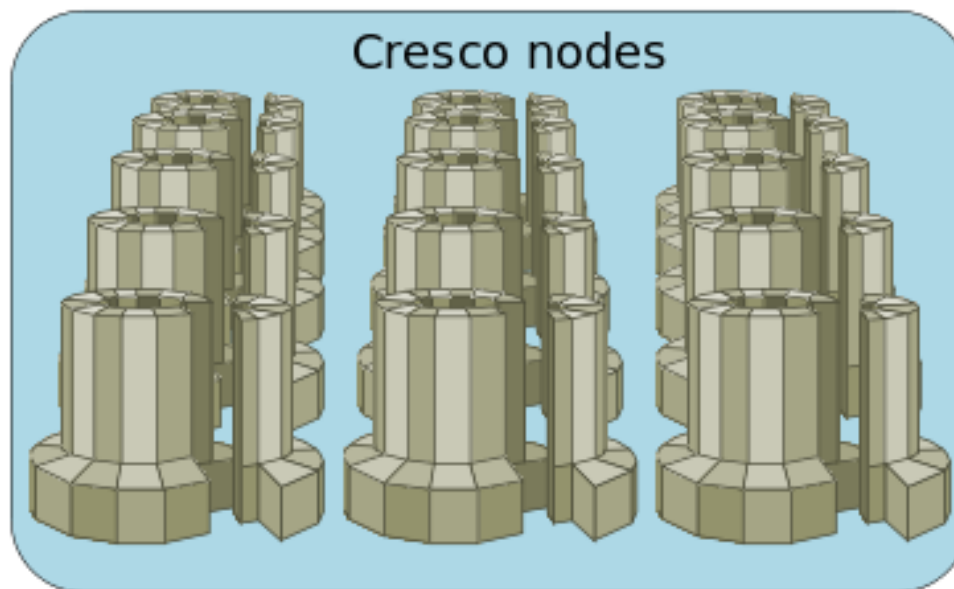
- Ludwig Wittgenstein



- Script di interfaccia/acknowledgement per AFS GPFS LSF



- bmc/rsa, chiller, storage, sensori

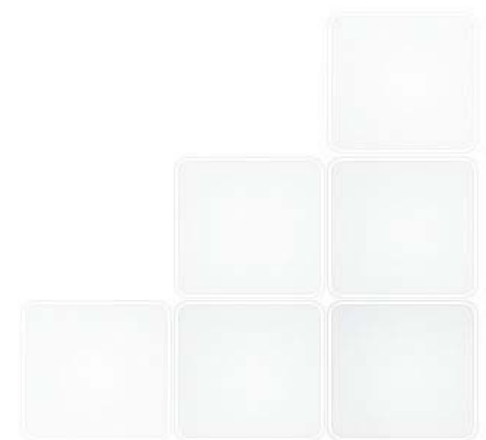


*“Consigliati sul dafarsi con molti,
conferisci di ciò che farai con
pochi”*

- Niccolò Macchiavelli



- Accettare richieste da un unico indirizzo
- Aprire un solo canale di comunicazione
- Sfruttare le policies esistenti



Performances



- Ottimizzare il database
- Minimizzare i dati

“Quello che non c'è non si rompe”

- Henry Ford

