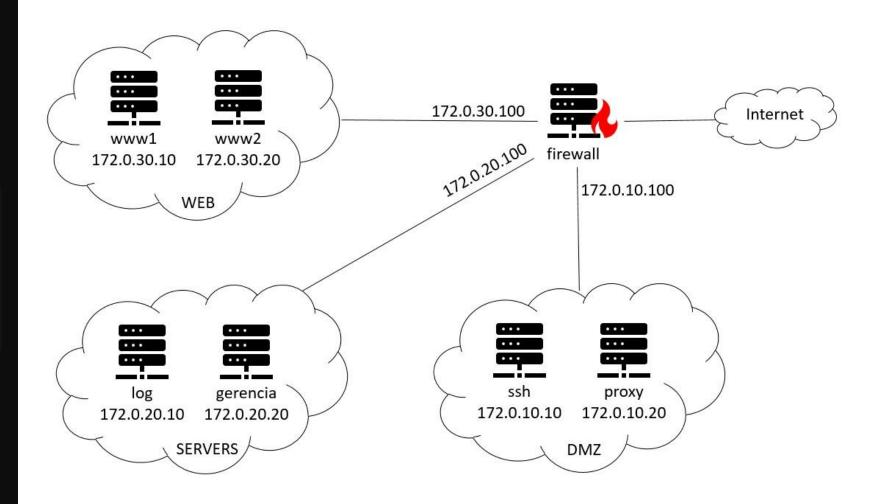
### UNICAMP PROJETO INF574

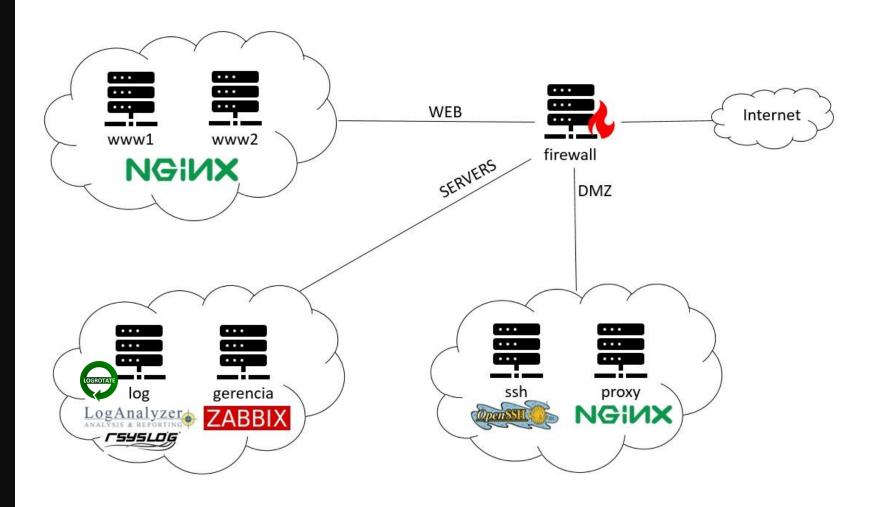
Gustavo Celani Sandra Carrillo



**TOPOLOGIA** 

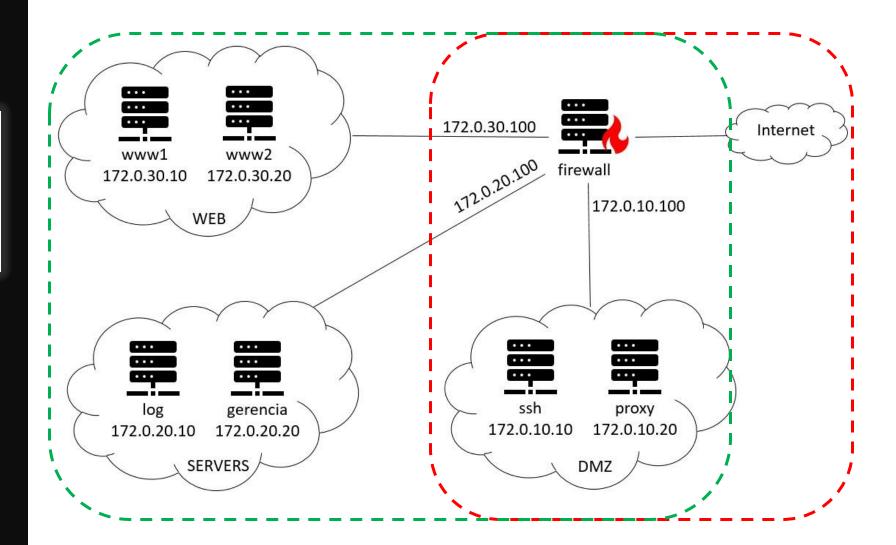


**TOPOLOGIA** 



Ação	Container	IP	Porta
Permitir	SSH	172.0.10.10	4578
Permitir	Proxy	172.0.10.20	443







SSH

- SSH Protocol 2
- Disabling root login
- Client sessions
  - Client Alive Interval: 300
  - Client Alive Count Max: 3



- Avoiding default port (22 -> 4578)
- Disabling X11 forwarding
- Only 'ssh\_user' allowed
- 3-Factor Authentication
  - Password
  - RSA Key
  - Challenge PAM with Google-Authenticator
- Fail2ban
  - Selected ban time: 10s (demonstration)
  - 3 Max retries
  - Alias to watch logs: \$ log-fail2ban
- Firewall rules

#### **PROXY**

- TLS over HTTP (HTTPS)
- Load Balancer for WWW1 and WWW2
- Reverse Proxy
- **DDoS Prevention**
- Firewall rules
- Load Balancer of web servers
  - https://172.0.10.20
  - https://172.0.10.20/www
- WWW1 Web Server
  - https://172.0.10.20/www1



- WWW2 Web Server
  - https://172.0.10.20/www2
- LogAnalyzer
  - https://172.0.10.20/log
- Zabbix
  - https://172.0.10.20/gerencia



- Avoiding Rsyslog default port (514 -> 5689)
- Allowed networks whitelist
- Log rotation weekly
- Firewall rules

LOG







**GERENCIA** 

- Avoiding default passwords (Admin/zabbix)
- Removing guest users
- Firewall rules

# ZABBIX

## 18476(1) 18437(1) 18594 ( 1) 18589 18590(2) 18588(1) 18585(2)

### **OBRIGADO!**

Projeto disponível em https://github.com/gustavocelani

