

## GopherCon Brasil 2024

Go for everybody.

2024-05-09

## SERVIÇOS QUE FOFOCAM

desvendando a magia do Serf em Go

**GEOVANI DE SOUZA** 

DESENVOLVEDOR @ SERRABITS



## CONTEÚDO

PROBLEMA

SERF

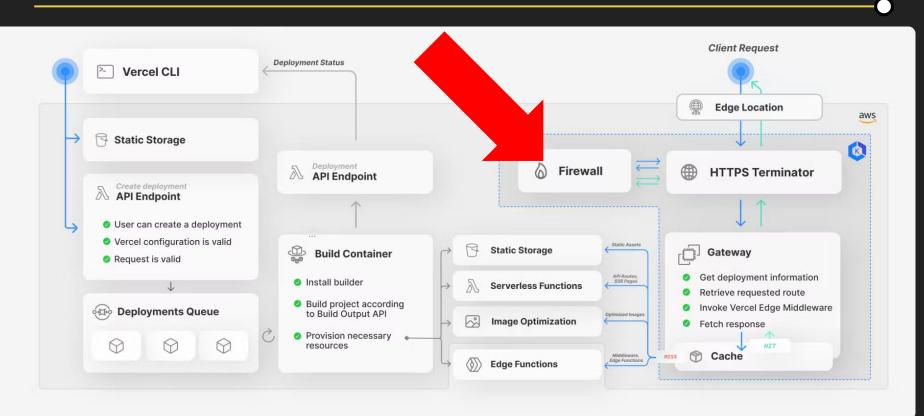
**IMPLEMENTAÇÃO** 

DEBATE

## ▲ Vercel SERRABITS



#### VERCEL EDGE NETWORK



#### VERCEL FIREWALL

#### Open System Interconnection (OSI) Model

The OSI model is a concept that outlines the different communication steps of a networking system. Different attack types can target different layers of the OSI model.

DDoS attacks often target the <u>network</u> (layer 3), <u>transport</u> (layer 4), and <u>application</u> (layer 7) layers of the OSI model. Vercel mitigates against these attacks, and protects the entire platform and all customers from attacks that would otherwise affect reliability.

#### Layer 3 DDoS

The goal of a layer 3 (L3) DDoS attack is to slow down and ultimately crash applications, servers, and entire networks. These attacks are often used to target specific IP addresses, but can also target entire networks.

#### Layer 4 DDoS

The goal of a layer 4 (L4) DDoS attack is to crash and slow down applications. They target the 3-way-handshake performed on TCP connections. This is often called a SYN flood. Layer 4 DDoS attacks are used to target specific ports, but can also target entire protocols.

#### Layer 7 DDoS



The goal of a Layer 7 (L7) DDoS attack is to crash and slow down software at the application layer by targeting protocols such as HTTP, GET, and POST requests. They are often silent and look to leverage vulnerabilities by sending many innocuous requests to a single page. Vercel provides sophisticated proprietary L7 mitigation and is constantly tuning and adjusting attack detection techniques.

```
id := lookup('gopherconbr.org')
config := configs[id]
```

```
id := lookup('gopherconbr.org')
config := configs[id]
```

## KV store elástico de baixa latência e sem replicação

## Serf

SERF



#### SERF



Lifecycle Management

Use infrastructure as code to build, deploy, and manage the infrastructure that underpins cloud applications.

Learn more →

#### **Terraform**

Infrastructure provisioning



Image management

Nomad

Workload orchestration

**W** Waypoint Developer platform

#### Security

Lifecycle Management

Use identity-based access controls to manage the security lifecycle of your secrets, users, and services.

Learn more →



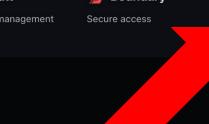
Secrets management



C Consul

Service networking





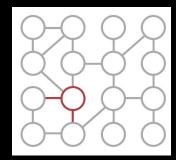
Filiação decentralizada, detecção de falhas e orquestração





#### Filiação por fofoca

Protocolo simples e eficiente em que mensagens são trocadas periodicamente



#### Detecção de falhas

Os membros trocam mensagens para detectar membros ausentes ou falhas



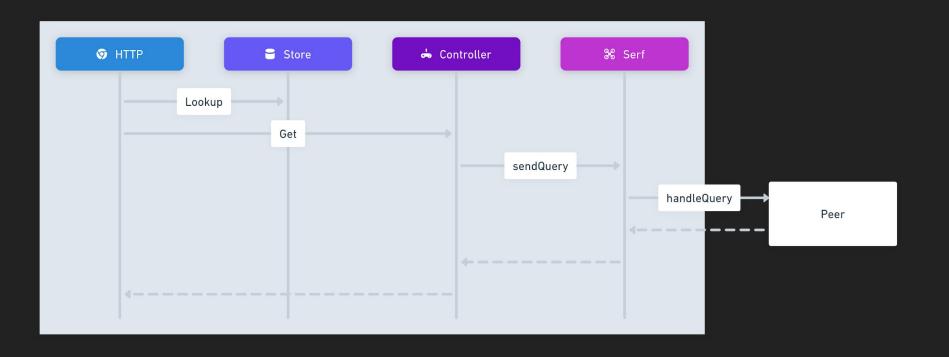
## Mensagens customizados

Permite disparar eventos e consultas além de filiação Criar um serviço que não exigisse configuração ou coordenação para colaboração e troca de dados

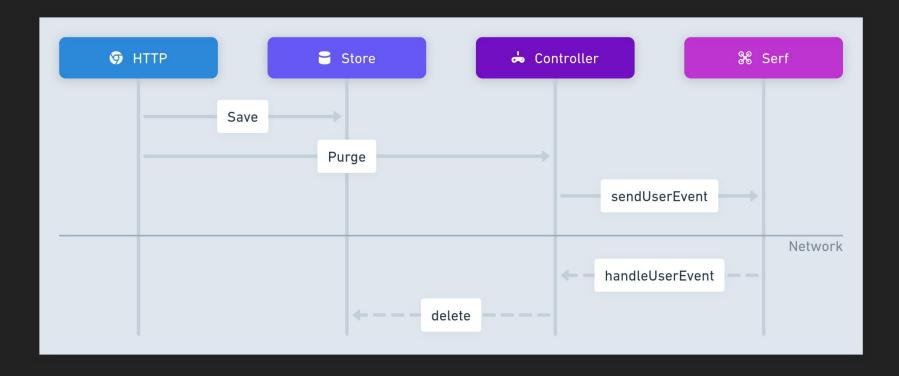




#### IMPLEMENTAÇÃO: GET /{KEY}

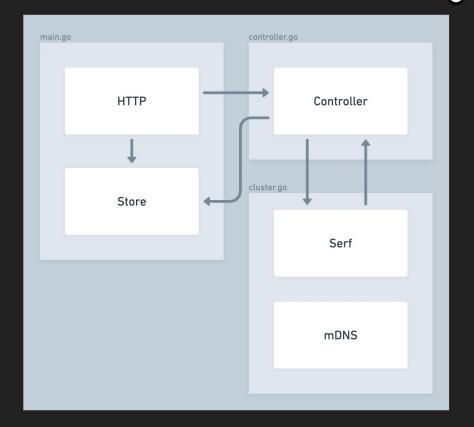


#### IMPLEMENTAÇÃO: POST /{KEY}



### Demo

https://github.com/geovani souza92/gopher-con-24-go ssip-services





## CUNTAIL

**CONECTE-SE COMIGO!** 

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### MOMENTO PARA

# DEBATE