

Mantendo um site com milhões de vistas com 100 Reais

Bruno Cabral

bruno@escavador.com

71-99276-0774

Quem sou eu ?



- Mestre em Sistemas de Recomendação
- Doutorando em Processamento de Linguagem Natural
- Programador OpenSource
- Fundador do Escavador
- Dados e ML na Antecipa





Soluções ▾ Preços

Pesquise por pessoas, empresas, processos...



Entrar

Monitore seu processo

Encontre e acompanhe informações relevantes para seu cliente

Pesquise por pessoas, instituições, processos jurídicos ou qualquer termo do seu interesse.

Pesquise por pessoas, instituições, processos...

Buscar

1 mi+ Page Loads/dia
10 TB dados (+ 10GB dia)

Por que estou aqui ?

- ~~Te vender alguma coisa~~
- ~~Guerra de linguagens~~
- Responder perguntas técnicas
- Ajudar o ecossistema
- Aprender

- Estou de saco cheio do meu chefe
- Quero trabalhar com o que quero
- Ficar fazendo site e app dos outros é muito chato, quero um desafio maior
- Quero ganhar mais
- Quero mudar o mundo

Quero empreender!

Como manter um projeto de site/app de forma econômica?



Buy Menu

Team Chat

1 PISTOLS

2 SHOTGUNS

3 RIFLES

5 MACHINE GUNS

6 PRIMARY AMMO

7 SECONDARY AMMO

8 EQUIPMENT

0 CARS

Sales & Marketing

CRM

Hosting

DNS, CDN, &
SSL

Git Repos

Email

Analytics

Customer
Support

Project/Task
Management

Nossa realidade é diferente



Nossa realidade é diferente

1 Dólar americano igual a

**5,46 Real
brasileiro**

16 de nov. 02:40 UTC · Fontes

1



Dólar americano



5 46



Real brasileiro



How much does a Software Engineer make in California?

Per year ▾

Average base salary ?

5.6k salaries reported, updated at Nov 13, 2020

\$131,007

per year

The average salary for a software engineer is \$131,007 per year in California and \$5,000 cash bonus per year.

 22% higher than national average

Additional compensation ?

Cash Bonus

\$5,000

per year

Most common benefits



Stock options



Visa sponsorship



Referral program



Commuter assistance



Food provided

[View more benefits](#)

R\$ 65 mil/mês

Nossa realidade é diferente

- Moeda desvalorizada
- Difícil conseguir investimento
- Nossa mão de obra é cara, mas a infra é mais cara ainda !



Local de Trabalho

- Parque Tecnologico (500 reais/mês)
- Colabore (0 reais)
- Trabalhar em Casa
- Hub Salvador
- Coworking (Rede+)



Registrando um domínio

www.ideal.com.br

- Seu domínio deve ser:
- Relacionado com a sua área
- Pequeno
- Memorável
- Fácil de falar

www.masnaverdadetodososnomesbonsjaforamtados.com.br

Registrando um domínio

.com.br só na registro.br !

40 Reais por ano

Ninguém é mais barato que eles



.com não use GoDaddy

10 dólares por ano

Tem redirecionamento, e-mails, DNS



Bruno, os e-mails da
aplicação estão indo para a
caixa de **SPAM**.

E eu também quero um e-mail
gabriel@escavador.com para
impressionar as paqueras



Email

- Você não vai querer se preocupar com isso
- Deliverability (DKIM, SPF, Blacklist, Reputação ...)



Aproveitar ofertas de Startups

<https://github.com/dakshshah96/awesome-startup-credits>



Institucional



10 usuários **GRATUITOS**
www.zoho.com/mail/

- Locaweb
- Gsuite (R\$ 25)

Ver outros em
<https://github.com/dakshshah96/awesome-startup-credits>

Transacional



12.000 mensagens/mês
www.sendgrid.com



65.000 mensagens/mês
aws.amazon.com/ses/

Mala direta



100 contatos
madmimi.com



12k para 2000 contatos
mailchimp.com

Gerência de Projetos

- Asana (Grátis >)
- Jira (\$10>)

The screenshot shows the Asana web interface for a project titled "Leis e Jurisprudê...". The top navigation bar includes icons for List, Timeline, Calendar, Progress, More..., Share, Search, + New, Help, and Upgrade. Below the header, a message indicates "Last task completed on Thursday". On the right, there are filters for Incomplete tasks, Filter, Sort, and Fields. A prominent blue "Add Task" button is located at the top left of the main task list area. The task list itself consists of six items, each with a checkmark, a description, and a due date. The tasks are:

- Mapa de matches na busca de jurisprudencia (due Friday)
- Envolvidos quebrando errado (due >)
- Bloquear acesso ao Vespa remoto (due Jul 19)
- Permitir a anotação de textos jurídicos (due Jul 10)
- Número com maior prioridade durante o ranking de documentos. (due Jul 12)
- jurisprudencia_relator está com vários registros repetidos (due Jun 14)

Chat

- Slack
- Discord
- Rocket.chat

The screenshot shows the Slack interface for the 'Potelo Softwares' workspace. The left sidebar lists various channels and threads. The '#geral' channel is currently selected and highlighted in blue. The right pane displays the messages in the '#geral' channel.

Potelo Softwares

- bruno [Profile]
- All Unreads
- Threads
- Channels
 - 4s-advogados
 - brataodev
 - # daily
 - # erros
 - # erros-ruy
 - # estao-falando
 - # geral
 - # instantly
 - # juridico
 - # leis-jurisprudencia
 - # marketing-vendas
 - # potefood
 - # resumo-diario
 - # socios
 - # teste-bruno
 - # vespa
 - # weekly
 - # block-bots
 - # potefy
- Direct Messages

#geral

☆ | 14 | 4 | Company-wide announcements and work-based matters

Friday, July 26th

Isadora 16:27 Gente, muitas comemorações

bruno 16:27 Vai ter arvore lá?

manuelamaci 16:27 KKKKKKKK

segunda irei beber

JP Rodrigues 16:28 Baba na segunda é produtividade zero a semana toda

Isadora 16:28 Junta tudo para um dia só

manuelamaci 16:28 quem quiser que me acompanhe

gabrielpeixoto 16:44 reuniao 17?

Message #geral

Gerência de código

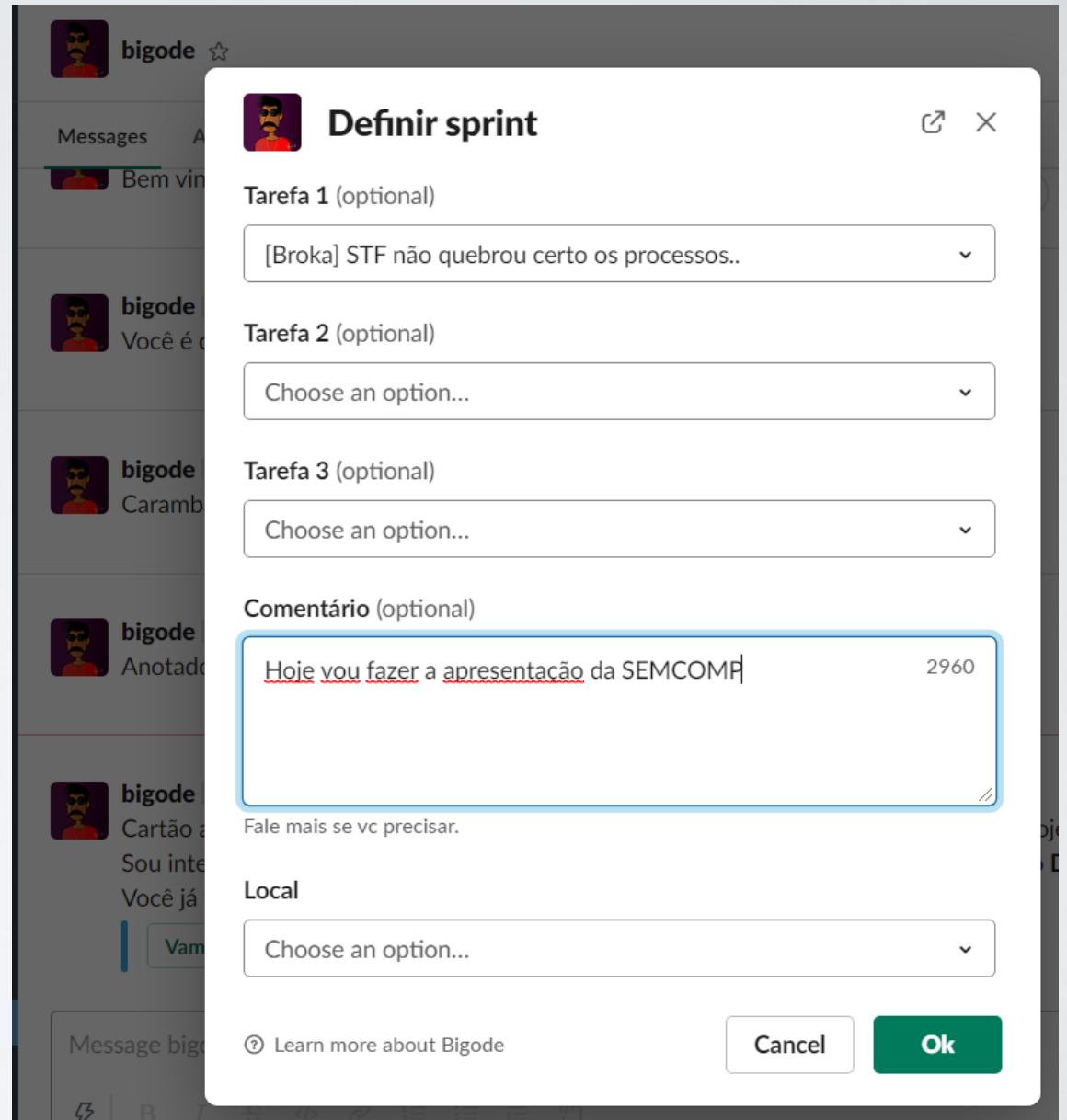
- Github
- Gitlab
- Bitbucket

The screenshot shows the GitLab interface for a project named 'web'. The left sidebar contains navigation links: Project, Details, Activity, Releases, Cycle Analytics, Repository, Issues (0), Merge Requests (6), CI / CD, Operations, Wiki, Snippets, and Settings. The main content area displays project statistics: 11,704 Commits, 20 Branches, 3 Tags, and 248.1 MB Files. It shows a commit titled 'Ajuste do Processo.vue' by Gabriel Peixoto from 1 hour ago. Below the commit are buttons for README, CI/CD configuration, Add CHANGELOG, Add CONTRIBUTING, and Auto DevOps enabled. A dashed box highlights the 'Add Kubernetes cluster' button. A table at the bottom lists repository contents: app, bootstrap, config, and database, along with their last commits and update times.

| Name | Last commit | Last update |
|-----------|--|-------------|
| app | Não criar async de processo, se ja existir outro em aberto | 3 days ago |
| bootstrap | gitkeep | 1 month ago |
| config | Ajuste do AMP | 1 week ago |
| database | desabilita botão submit dos autos | 3 days ago |

Sprints

- Organizar as tarefas do dia
- Para fazer o daily, usamos um bot



Sprints

- Quem tiver interesse em usar o Bigode, me manda um email. Vamos liberar o código

interesse p

#resumo-diario ☆

Add a topic

1 hora, 1 minuto, 32 segundos duras de trabalho Saturday, November 14th

Nov 14th

 **bigode** APP 23:17

Chegou a hora de Bruno Cabral ir para um merecido descanso. Olha só o que ele/ela fez:

-  :medina_irritado: Migrar bigode e confluence para o Rancher Sprint BACK-END
-  Pushed - Tela de processing Escavador/broka as 21:17
-  Pushed - Ajuste STF Escavador/broka as 21:21
-  Opened Merge request - Djac Escavador/broka as 21:50
-  Pushed - Merge branch 'master' into 'DJAC' Escavador/broka as 21:51
-  Accepted Merge request - Djac Escavador/broka as 21:51
-  Pushed - Merge branch 'DJAC' into 'master' Escavador/broka as 21:51
-  Pushed - Merge branch 'master' into TRF1 Escavador/broka as 21:52
-  Opened Merge request - Trf1 Escavador/broka as 21:53
-  Pushed - Merge branch 'TRF1' into 'master'



Vamos começar o projeto

- Vamos fazer o Brunão News
- Mais qual o stack eu devo utilizar?

<https://github.com;bratao/apresentacao-semcomp-2020>

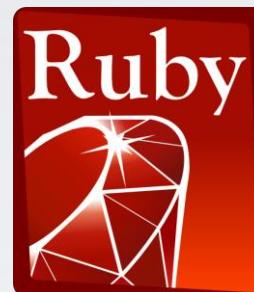
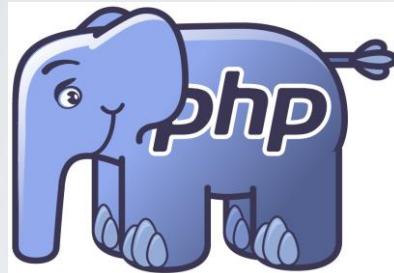
Escolha tecnologias Boring



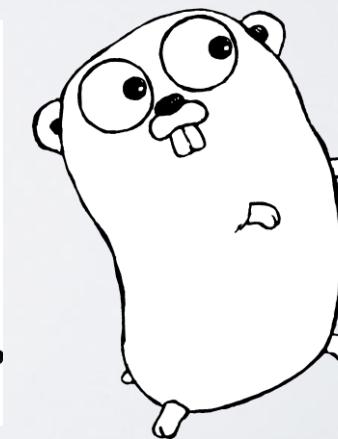
Escolha tecnologias Boring

- Maneiras de baixo risco para começar
- Use tecnologias testadas em batalha
- Use o que você sabe e tem experiência
- A verdadeira felicidade está em entregar o projeto

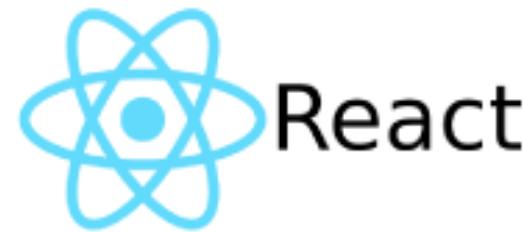
Escolha da Linguagem



ASP.NET



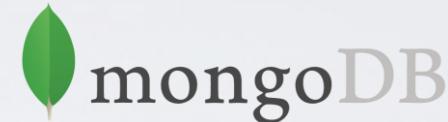
Escolha da Linguagem do Frontend

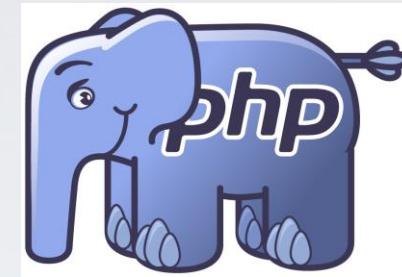


BACKBONE.JS

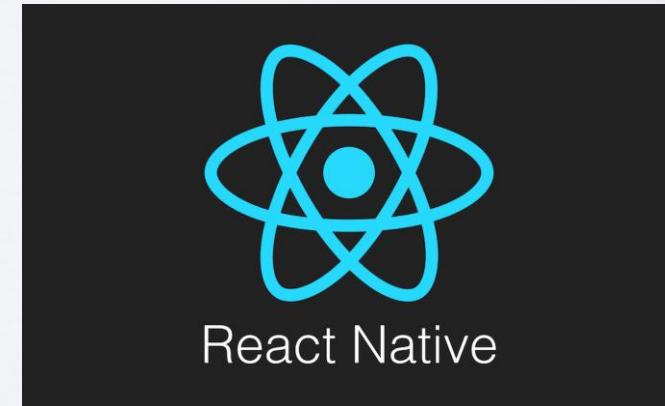


Escolha do Banco





**Quando ficar preocupado lembre
que o Facebook roda em PHP +
MySQL e o Instagram em Python**



Multiple queries

20-queries (bar)

Data table

Latency

Framework overhead

Responses per second at 20 queries per request, Dell R440 Xeon Gold + 10 GbE (431 tests)

| Rnk | Framework | Performance (higher is better) | Errors | Cls | Lng | Plt | FE | Aos | DB | Dos | Orm | IA |
|-----|--------------------------|--------------------------------|--------|-----|-----|-----|-----|-----|----|-----|-----|-----|
| 1 | drogon-core | 59,092 100.0% | 0 | Ful | C++ | Non | Non | Lin | Pg | Lin | Raw | Rea |
| 2 | drogon | 58,862 99.6% | 0 | Ful | C++ | Non | Non | Lin | Pg | Lin | Mcr | Rea |
| 3 | may-minihttp | 35,401 59.9% | 0 | Mcr | Rus | Rus | may | Lin | Pg | Lin | Raw | Rea |
| 4 | actix-core | 35,131 59.5% | 0 | Plt | Rus | Non | act | Lin | Pg | Lin | Raw | Rea |
| 5 | actix-pg | 35,116 59.4% | 0 | Mcr | Rus | Non | act | Lin | Pg | Lin | Raw | Rea |
| 6 | greenlightning | 33,580 56.8% | 0 | Mcr | Jav | Non | Non | Lin | Pg | Lin | Raw | Rea |
| 7 | vertx-web-scala | 32,730 55.4% | 0 | Mcr | Sca | ver | Non | Lin | Pg | Lin | Raw | Rea |
| 8 | ratpack-pgclient | 32,587 55.1% | 0 | Mcr | Jav | Nty | Non | Lin | Pg | Lin | Raw | Rea |
| 9 | jooby-pgclient | 32,462 54.9% | 0 | Ful | Jav | Utw | Non | Lin | Pg | Lin | Raw | Rea |
| 10 | es4x | 32,424 54.9% | 0 | Mcr | JS | ver | Non | Lin | Pg | Lin | Raw | Rea |
| 11 | vertx-postgres | 32,310 54.7% | 0 | Plt | Jav | ver | Non | Lin | Pg | Lin | Raw | Rea |
| 12 | wizzardo-http | 32,273 54.6% | 0 | Mcr | Jav | Non | Non | Lin | Pg | Lin | Raw | Rea |
| 13 | vertx-web-postgres | 30,741 52.0% | 0 | Mcr | Jav | ver | Non | Lin | Pg | Lin | Raw | Rea |
| 14 | spring-webflux-pgclient | 30,205 51.1% | 0 | Ful | Jav | Nty | Non | Lin | Pg | Lin | Mcr | Rea |
| 15 | micronaut | 24,085 40.8% | 0 | Mcr | Jav | Nty | Non | Lin | Pg | Lin | Raw | Rea |
| 16 | actix-diesel | 20,296 34.3% | 0 | Mcr | Rus | Non | act | Lin | Pg | Lin | Ful | Rea |
| 17 | http4k-undertow | 20,118 34.0% | 0 | Mcr | Kot | Utw | Non | Lin | Pg | Lin | Raw | Rea |
| 18 | php-ngx-pgsql | 20,053 33.9% | 0 | Plt | PHP | ngx | ngx | Lin | Pg | Lin | Raw | Rea |
| 19 | hexagon-jetty-postgresql | 20,035 33.9% | 0 | Mcr | Kot | Svt | Non | Lin | Pg | Lin | Raw | Rea |
| 20 | http4k | 20,016 33.9% | 0 | Mcr | Kot | Svt | Non | Lin | Pg | Lin | Raw | Rea |

```
class User(BaseModel):
    class Meta:
        table_name = "user"

        name = CharField(null=False)
        email = CharField(null=False)
```

```
]class Comment(BaseModel):
    class Meta:
        table_name = "comment"

        user = ForeignKeyField(User)

        news = ForeignKeyField(News)
        date_published = DateField()
        content = TextField()
```

```
class News(BaseModel):
    class Meta:
        table_name = "news"

        user = ForeignKeyField(User)
        title = CharField(null=False)
        date_published = DateField()

        content = TextField()
```

```
@property
def count_comments(self):
    return Comment.select().where(Comment.news == self).count()
```

```
@app.route('/')
def index():

    recent_news = db.News.select().order_by(
        db.News.date_published.desc()).limit(10)

    return render_template('index.html', noticias=recent_news)
```

```
user_autor = db.User.create(name="Bruno")

for _ in range(200):
    fake_news = db.News()
    fake_news.user = user_autor
    fake_news.title = fake.text(max_nb_chars=100)
    fake_news.content = fake.text(max_nb_chars=1000)
    fake_news.date_published = fake.date_this_decade()
    fake_news.save()

for _ in range(1000):
    fake_comment = db.Comment()
    fake_comment.user = user_autor
    fake_comment.date_published = fake_news.date_published = fake.date_this_decade()
    fake_comment.content = fake.text(max_nb_chars=100)
    fake_comment.news = fake_news
    fake_comment.save()
```

Home

Brunão News

Noticias

Criada por: Bruno

Condeudo: Loss stay something hard side. Theory management go finally loss over go. Employee six stay fast little fly age. Assume cultural with fine president. What operation question listen game pretty financial. Near before somebody from decide stage long. Imagine force mouth his despite. Economy raise debate. Half people technology bed south. Available down before age. Important thank doctor catch third operation. Fish practice partner road. Change night network science be surface. Pull final realize common. Approach some sell picture conference personal pattern seek. Near north we imagine defense understand. But loss president strong. Section you board write happen. Continue risk car drop only however value. Would arrive strategy win century politics. Cover knowledge blue several trouble. Short consumer field brother second wonder agent. Area truth dog southern suffer enter type name.

Comentarios: 1000

Criada por: Bruno

Condeudo: Go which series five city. Cut movement suddenly magazine. Step experience still however. Thought current collection hear. Sea him nearly mention professor bit society. Chair thought cover it road. Sense under anything those brother. Trial ahead discuss maintain public material hear thing. Special officer recognize. Several wonder environment direction too. These from point. Discover grow simple worker beyond nor grow. Nor happen there table through authority. New collection TV final. Generation simply tell production quite my. Side fight executive join include. Them hundred explain no. Number light most test southern former. Quality hope something. Always big church result yeah. Store hospital model south. Animal director she senior whom apply study. Century increase home head claim. Make lawyer eat with always find head. North between staff mean agree yard dark. Smile draw rise eye mention avoid phone third. Learn yes close growth. Third language history charge beautiful.

Comentarios: 1000

200 notícias – 200 mil comentários

Escolha do Tipo de Hospedagem





\$ 3.5 / mês
www.hostgator.com



€ 5 / mês (Atom, 1GB)
www.dreamhost.com



R\$15 / mês
www.locaweb.com.br



€ 5 / mês (Atom, 1GB)
www.kimsufi.com



€ 3 / mês (3 cores, 4GB)
www.hetzner.com



\$ 158 / mês (Xeon , 2GB)
www.softlayer.com



\$ 5 / mês ou de graça com o
GitHub Educational
www.digitalocean.com



\$ 10 / mês
www.linode.com



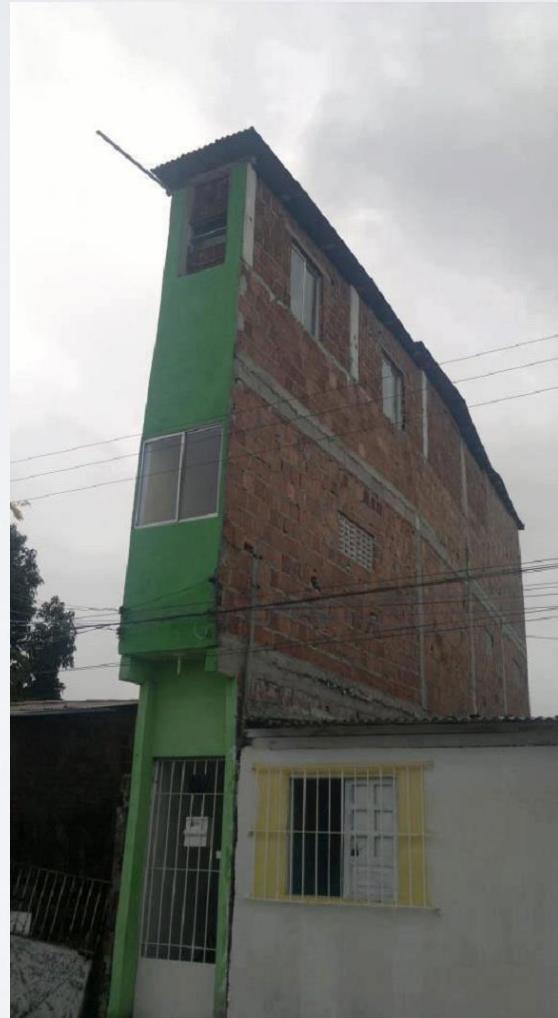
Todos tem planos gratuitos





**Bruno, Não vai rolar pegar
mais servidores !**

Level Hard



Versão Inicial do site

AWS

1 * t3.micro – 2
vCPU + 1GB

- API
- Client (Website)
- Database

Load test

- 1000 concurrent users
- 2 second delay
- <https://github.com/JoeDog/siege>

```
New configuration template added to /root/.siege
Run siege -C to view the current settings in that file
** SIEGE 4.0.4
** Preparing 25 concurrent users for battle.
The server is now under siege...^C
Lifting the server siege...
Transactions:          18437 hits
Availability:          100.00 %
Elapsed time:           79.89 secs
Data transferred:       766.88 MB
Response time:          0.07 secs
Transaction rate:      230.78 trans/sec
Throughput:             9.60 MB/sec
Concurrency:            17.09
Successful transactions: 18437
Failed transactions:    0
Longest transaction:   0.66
Shortest transaction:  0.04
```

Primeira versão

- Servidor nativo do Python
- Configuração Padrão do MySQL
- T3 é bem lento

0.7 reqs/sec



“Premature optimization is the root of all evil”

Donald Knuth

We *should* forget about small efficiencies, say about 97% of the time: **premature optimization is the root of all evil.** Yet we should not pass up our opportunities in that critical 3%."

Donald Knuth

Migrando Servidor

- Servidor de alta performance
- Arquitetura assíncrona
- Fácil de configurar
- Rápido
- Desativar logs, aumentar file cache, buffers, keep-alive, compression, workers, threads



0.7 -> 8 reqs/sec

Analise os gargalos

1 statements were executed

```
select * from `origem` where `db` = 'JURIDICO' order by `c`
```

1 SHOW FULL processlist

CPU Performance

Network Performance

Disk Performance

| Id | User | Host | db | Command | Time | State | Info |
|-----|------|-----------------|------|---------|------|--------------|--------------------------------|
| 255 | root | localhost:65529 | blog | Query | 0 | starting | SHOW FULL processlist |
| 266 | root | localhost:52961 | blog | Query | 0 | Sending data | SELECT COUNT(1) FROM (SELECT 1 |
| 267 | root | localhost:52963 | blog | Query | 0 | Sending data | SELECT COUNT(1) FROM (SELECT 1 |
| 268 | root | localhost:52965 | blog | Query | 0 | Sending data | SELECT COUNT(1) FROM (SELECT 1 |
| 269 | root | localhost:52967 | blog | Query | 1 | Sending data | SELECT COUNT(1) FROM (SELECT 1 |
| 270 | root | localhost:52969 | blog | Query | 1 | Sending data | SELECT COUNT(1) FROM (SELECT 1 |
| 271 | root | localhost:52971 | blog | Query | 1 | Sending data | SELECT COUNT(1) FROM (SELECT 1 |
| 272 | root | localhost:52973 | blog | Query | 0 | Sending data | SELECT COUNT(1) FROM (SELECT 1 |
| 273 | root | localhost:52975 | blog | Query | 0 | Sending data | SELECT COUNT(1) FROM (SELECT 1 |
| 274 | root | localhost:52977 | blog | Query | 0 | Sending data | SELECT COUNT(1) FROM (SELECT 1 |
| 275 | root | localhost:52979 | blog | Query | 0 | Sending data | SELECT COUNT(1) FROM (SELECT 1 |

Indexação do Banco

- Uma tabela é um conjunto de dicionários

```
create table foo (a  
int, b int, c int,  
primary key(a));
```

| a | b | c |
|-----|-----|-----|
| 100 | 5 | 45 |
| 101 | 92 | 2 |
| 156 | 56 | 45 |
| 165 | 6 | 2 |
| 198 | 202 | 56 |
| 206 | 23 | 252 |
| 256 | 56 | 2 |
| 412 | 43 | 45 |

Indexação do Banco

- Criando um índice:

| Primary | | | key (b) | |
|---------|-----|-----|---------|-----|
| a | b | c | b | a |
| 100 | 5 | 45 | 5 | 100 |
| 101 | 92 | 2 | 6 | 165 |
| 156 | 56 | 45 | 23 | 206 |
| 165 | 6 | 2 | 43 | 412 |
| 198 | 202 | 56 | 56 | 156 |
| 206 | 23 | 252 | 56 | 256 |
| 256 | 56 | 2 | 92 | 101 |
| 412 | 43 | 45 | 202 | 198 |

Indexação do Banco

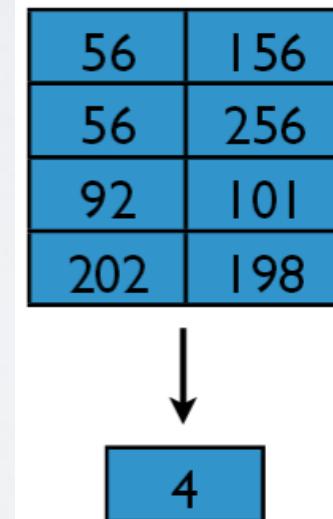
count(*) where b > 50;

| a | b | c |
|-----|-----|-----|
| 100 | 5 | 45 |
| 101 | 92 | 2 |
| 156 | 56 | 45 |
| 165 | 6 | 2 |
| 198 | 202 | 56 |
| 206 | 23 | 252 |
| 256 | 56 | 2 |
| 412 | 43 | 45 |

| b | a |
|-----|-----|
| 5 | 100 |
| 6 | 165 |
| 23 | 206 |
| 43 | 412 |
| 56 | 156 |
| 56 | 256 |
| 92 | 101 |
| 202 | 198 |

Sem índice: **FULL
TABLE SCAN**

Com índice:

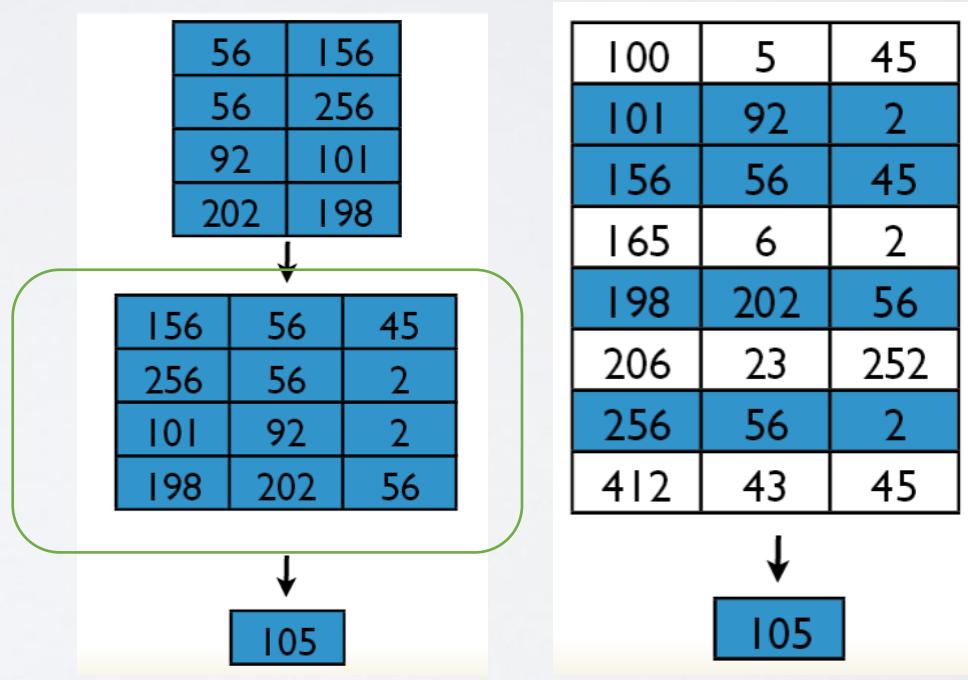


Indexação do Banco

Evite point queries
 $\text{sum}(c) \text{ where } b > 50;$

| a | b | c |
|-----|-----|-----|
| 100 | 5 | 45 |
| 101 | 92 | 2 |
| 156 | 56 | 45 |
| 165 | 6 | 2 |
| 198 | 202 | 56 |
| 206 | 23 | 252 |
| 256 | 56 | 2 |
| 412 | 43 | 45 |

| b | a |
|-----|-----|
| 5 | 100 |
| 6 | 165 |
| 23 | 206 |
| 43 | 412 |
| 56 | 156 |
| 56 | 256 |
| 92 | 101 |
| 202 | 198 |



- **SELECT COUNT(1) FROM comment AS c WHERE c.news_id = 200;**
- /* Registros afetados: 0 Registros encontrados: 1 Avisos: 0 Duração de 1 consulta: 0,188 seg. */

| comment (1r x 12c) | | | | | | | | | | | |
|--------------------|-------------|-------|------------|------|---------------|--------|---------|--------|---------|----------|-------------|
| id | select_type | table | partitions | type | possible_keys | key | key_len | ref | rows | filtered | Extra |
| 1 | SIMPLE | c | (NULL) | ALL | (NULL) | (NULL) | (NULL) | (NULL) | 229.015 | 10,00 | Using where |

```
ALTER TABLE `comment`
ADD INDEX `news_id` (`news_id`);
```

| comment (1r x 12c) | | | | | | | | | | | |
|--------------------|-------------|-------|------------|------|---------------|---------|---------|-------|-------|----------|-------------|
| id | select_type | table | partitions | type | possible_keys | key | key_len | ref | rows | filtered | Extra |
| 1 | SIMPLE | c | (NULL) | ref | news_id | news_id | 4 | const | 1.000 | 100,00 | Using index |

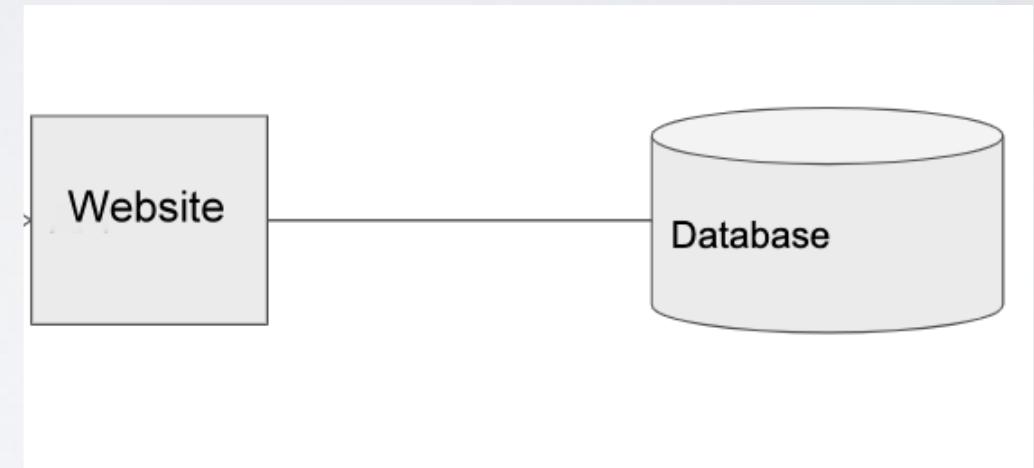
Indexação do Banco

- Solicite menos dados (SELECT *)
- Evite point queries
- Evite sorting (necessita de um pós processamento)
- Ative slow-query log
- EXPLAIN e ANALYZE TODAS as suas queries !

8 -> 183 reqs/sec

Versão 2 da arquitetura

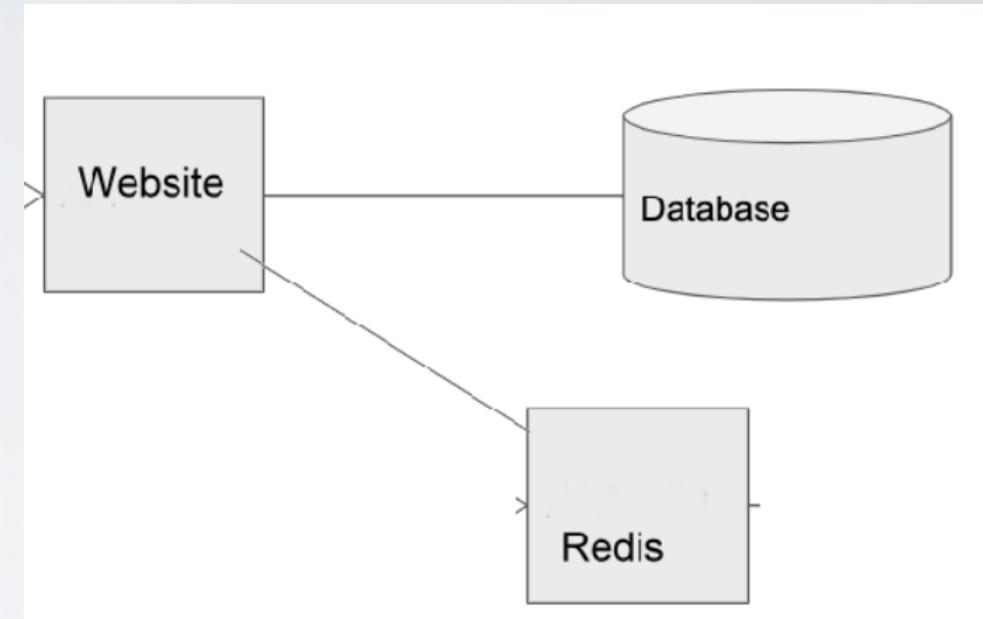
- Separar o site e o banco de dados
- 2 * t3.micro – 2 vCPU + 1GB



183 -> 241 reqs/sec

O que mais melhorar?

- Como sempre pega as ultimas noticias, seria bom um índice na coluna `date_published`
- Eu realmente preciso toda vez fazer um `count` para pegar o numero do comentários? Essa informação é tão importante assim?
- Que tal introduzir um cache nas ultimas noticias e na contagem dos usuários?



241 -> 549 reqs/sec

Amazon é muito Caro !

| | Amazon EC2 | OVH |
|---------------|---|--|
| Configuração | m5.2xlarge 8 vCPU Memoria: 32GB Disco: 1Tb 1TB de Transferência | Intel Xeon E3 1245v2 4/8 cores Memoria: 32 GB Disco: 1 TB NVME Transferência Ilimitada (500 Mbps) 16 IPs |
| Preço por mês | | |

**JUST A REMINDER:
THERE IS NO "CLOUD"**



JUST "SOMEBODY ELSE'S COMPUTER"

1 million is so 2011

Happy 2012 everyone!

A few months ago we published a blog post that talked about our servers doing 1 million tcp connections on a single box: <http://blog.whatsapp.com/?p=170>

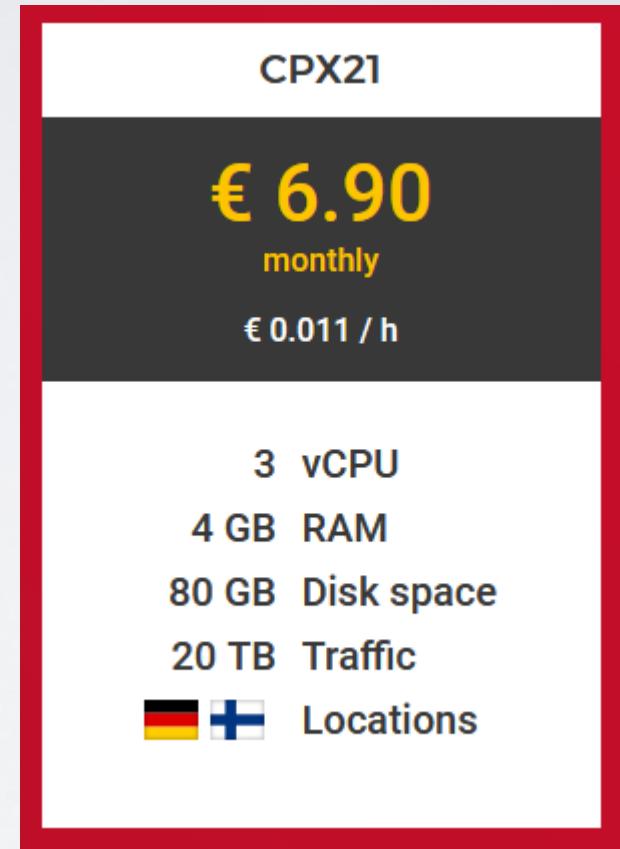
Today we have an update for those keeping score at home: we are now able to easily push our systems to over 2 million tcp connections!

Existem outras opções no mercado

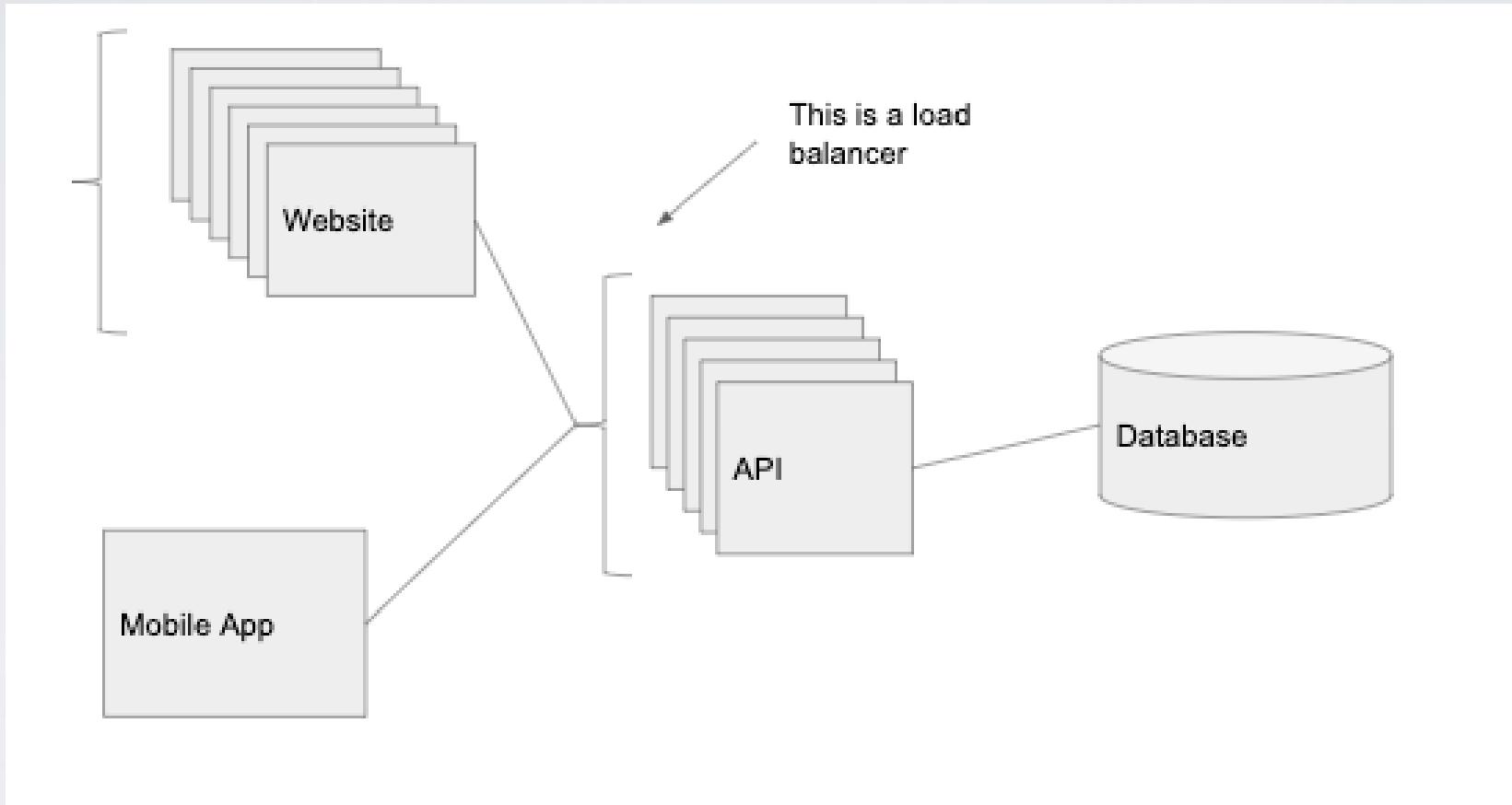
- Vamos para um Hetzner 2 * CPX21 – 14 Euros por mês
- AMD EPYC 2nd Gen - NVMe SSDs

<https://www.lowendtalk.com/>

549 -> 1342 reqs/sec



Versão Final



<https://alexpareto.com/scalability/systems/2020/02/03/scaling-100k.html>

Passar para o Kubernetes

The screenshot shows a Kubernetes dashboard interface. At the top, there's a navigation bar with a logo, a dropdown menu showing 'geral' and 'blog', and links for 'Resources', 'Apps', 'Namespaces', 'Members', 'Tools', 'Cluster Explorer', and a cluster icon. Below the navigation is a toolbar with buttons for 'Workloads' (selected), 'Load Balancing', 'Service Discovery', 'Volumes', and actions like 'Import YAML' and 'Deploy'. There are also buttons for 'Redeploy', 'Pause Orchestration', 'Download YAML', and 'Delete'. A search bar is on the right. The main area displays a table of workloads in the 'blog' namespace. The columns are 'State' (with a checkbox header), 'Name' (with a dropdown header), 'Image' (with a dropdown header), and 'Scale' (with a dropdown header). The table rows show two services: 'blog' (image: registry.potelo.com.br/escavador/blog/blog:latest) and 'dbblog' (image: mysql:8). Both services are active with one pod each, created a month ago, and zero restarts. Each service has a green progress bar indicating a scale of 1 and a three-dot menu icon.

| State | Name | Image | Scale |
|--------|--------|--|-------|
| Active | blog | registry.potelo.com.br/escavador/blog/blog:latest 1 Pod / Created a month ago / Pod Restarts: 0 | 1 |
| Active | dbblog | mysql:8 1 Pod / Created a month ago / Pod Restarts: 0 | 1 |

<https://itnext.io/state-of-persistent-storage-in-k8s-a-benchmark-77a96bb1ac29>



Łukasz
@lukaszkorecki

Follow



"My 3 month old startup is running on our own managed kubernetes"



3:45 AM - 1 Jul 2017

717 Retweets 1,310 Likes



Versão final

- Dockerizar a aplicação
- Utilizar o CloudFlare como CDN
- Passar para o Kubernetes
- Ter um loadbalancer (2 nós)
- Backup diário para o Backblaze

1342 -> 2113 reqs/sec

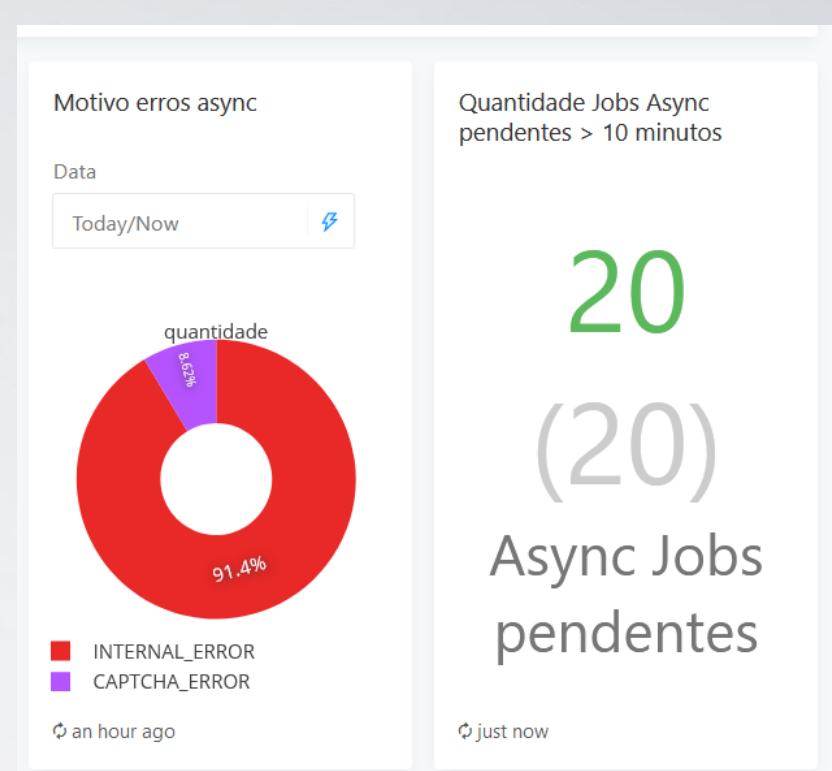
3* CPX21 (3 vcpu 4GB) – 21 Euros por mês
Backup 1\$ por mês

Futuro ?

- Melhores Máquinas – Usar maquinas dedicadas
- Crescer horizontalmente
- Mais cache
- Otimização no código
- Otimização Linux
- Outro domínio para conteúdo estático

Monitoring and BI

- Redash (Grátis)
- Grafana(Grátis)



Bruno Cabral
bruno@escavador.com
71-99276-0774