



THE  
DEVELOPER'S  
CONFERENCE

## Trilha – Golang

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Estag @ Globo.com



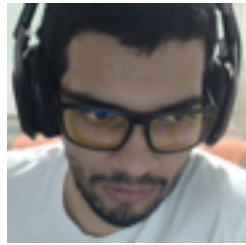


# THE DEVELOPER'S CONFERENCE

Processando milhares de arquivos em segundos para ajudar comunidades de traduções usando Go



@arxdsilva



➤ Computer Engineering Student @ UVA

➤ Intern @ [globo.com](http://globo.com)

➤ Tsuru PaaS ([tsuru.io](http://tsuru.io))

➤ XML-Comp ([github.com/xml-comp](https://github.com/xml-comp))



# Always mind your surroundings



XML-Comp / XML-Comp

Unwatch 2 Star 5 Fork 5

Code Issues 2 Pull requests 0 Projects 1 Wiki Pulse Graphs Settings

Helps you compare ANY markup documents

xml rimworld xml-comparer translation go golang compare file Manage topics

102 commits 1 branch 12 releases 8 contributors MIT

Branch: master New pull request Create new file Upload files Find file Clone or download

AnxdSilva docs: add how to use comparer package Latest commit 12f18a2 on Mar 19

comparer	fix test	2 months ago
.ghignore	comparer: add test coverage, fix bug	3 months ago
.travis.yml	update travis	3 months ago
LICENSE	LICENSE & README.md update	7 months ago
README.md	docs: add how to use comparer package	2 months ago
main.go	comparer: fix consider whole markup as tag	2 months ago

README.md

license MIT go report A+ codebeat A godoc reference coverage 60% build passing DOI 10.5281/zenodo.572981

Globalcode

# Always mind your surroundings



tsuru / tsuru

Watch

204

Unstar

2,319

Fork

304

Code

Issues174

Pull requests5

Projects0

Pulse

Graphs

Settings

Open source, extensible and Docker-based Platform as a Service (PaaS). <https://tsuru.io>

Edit

paas

go

docker

containers

devops

swarm

kubernetes

Manage topics

12,787 commits

2 branches

113 releases

81 contributors

BSD-3-Clause

Branch: master

New pull request

Create new file

Upload files

Find file

Clone or download

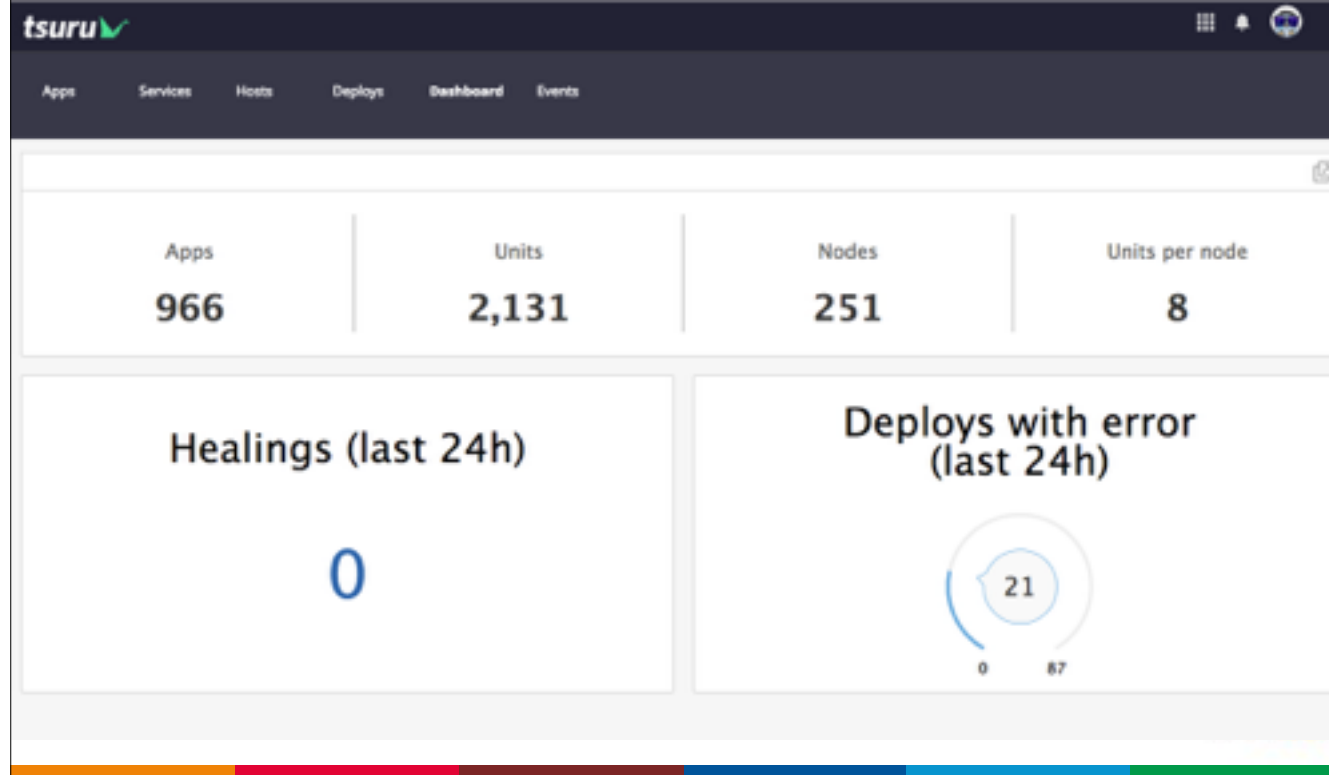
ggarnier integration: update deprecated client commands

Latest commit 0447756 4 days ago

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Rimworld - simulador de colônia de sci-fi dirigido por IA

# Traduções





**Ludeon Studios**  
An independent game studio.  
Montreal <http://ludeon.com>

Repositories

People 444


Teams 1

Projects 0


Type: All ▾

Language: All ▾

**RimWorld-ru**  
Russian Localization for RimWorld  
★ 31    👤 44    Updated 5 hours ago



**RimWorld-ChineseSimplified**  
★ 69    👤 32    Updated 13 hours ago

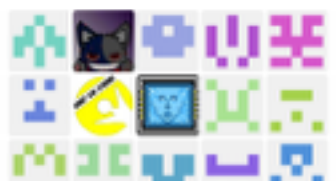


**RimWorld-Korean**

Top languages

● C#

People 444 >



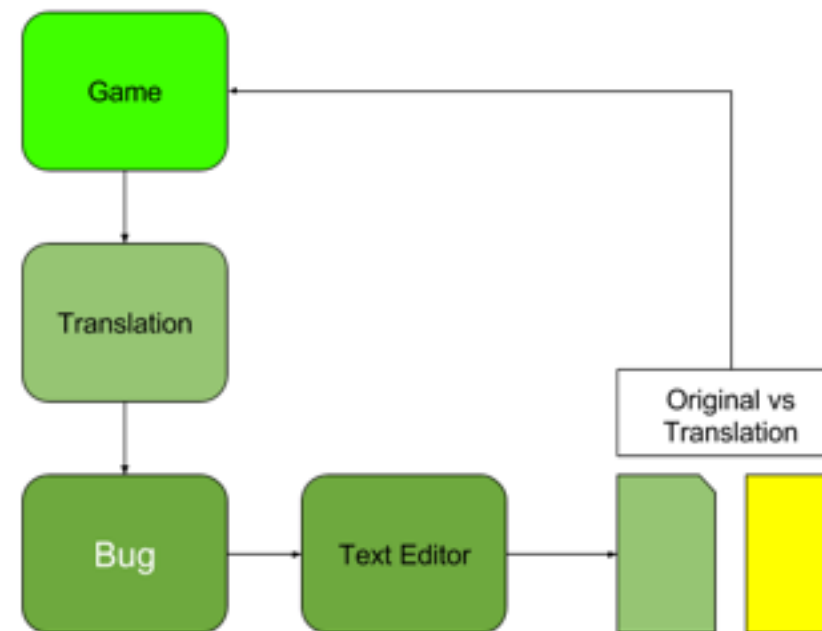


## Contexto

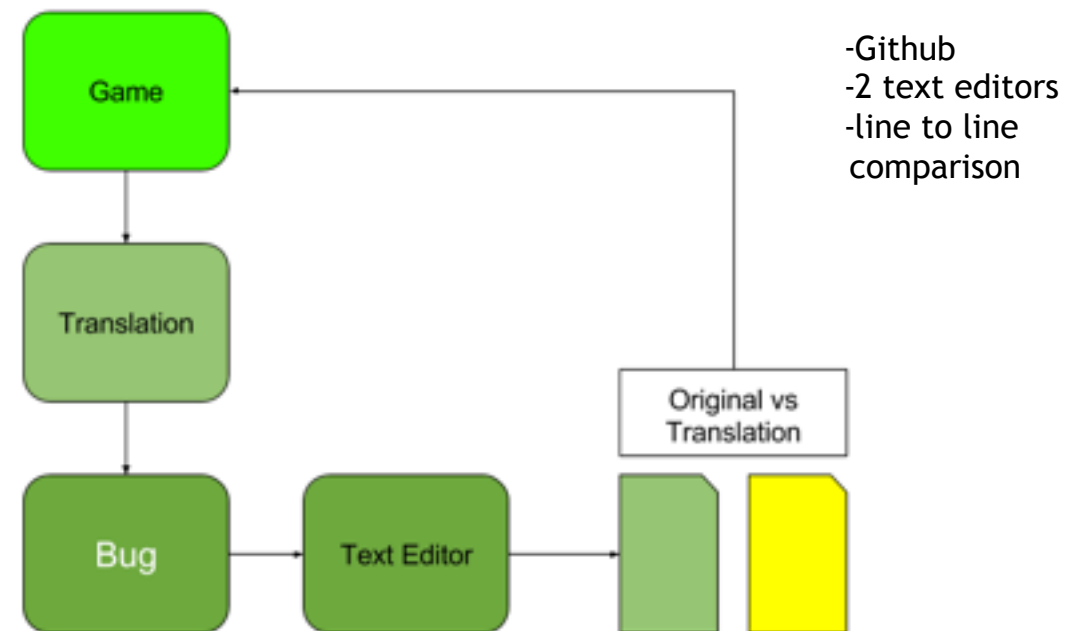


- Pré-alpha
- 440+ tradutores
- Mudanças constantes
- Alto tempo para tradução
- Dependente de comparação linha a linha
- Baixo conhecimento tecnológico dos tradutores

# Processo de tradução



# Processo de tradução



# Ferramenta



- Baixo conhecimento necessário
- Alta eficiência
- Rápido
- Confiável
- .xml

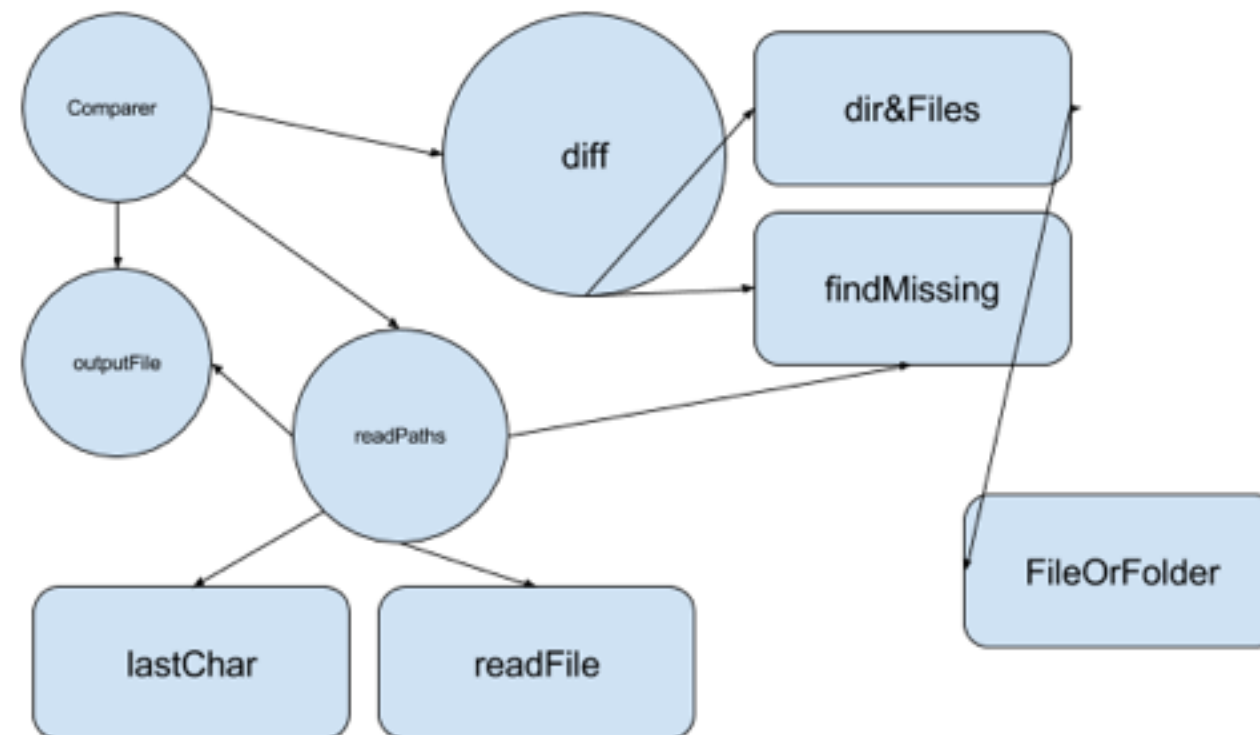
## A ferramenta



- Inputs: pasta Origem (EN) e Tradução (~)
- Entrar na pasta
- Abrir arquivos
- Guardar tag de cada linha
- Comparar tags Origem-Tradução
- Gerar diff's



# Problema?



# Problema

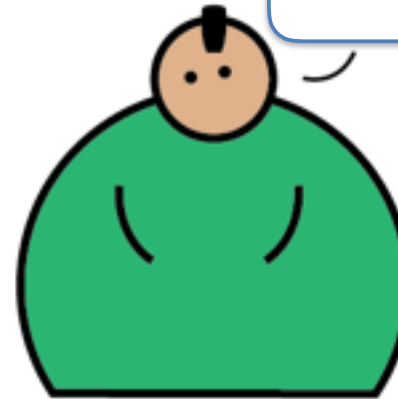


## Rimworld Logic

João me dá uma ajuda?



Não sou um transportador



somente era permitida comparação pasta-a-pasta, criado processo repetitivo para projetos grandes (como o rimworld), MAS funcionava.


# Escalando



[Code](#) [Issues 174](#) [Pull requests 4](#) [Projects 0](#) [Pulse](#) [Graphs](#) [Settings](#)

## tsuru-client: add support to ignore files in app-deploy #1512

**Closed** ggarnier opened this issue on Dec 8, 2016 · 4 comments



ggarnier commented on Dec 8, 2016

Owner + 👤 ✎

If you run `tsuru app-deploy .`, it tries to deploy the whole directory, including `.git`, which may be huge and probably unwanted.

It would be nice if `tsuru app-deploy` command supported a `.gitignore`-style file (maybe `.tsuruignore`?). Besides `.git`, it could list test files, documentation and local environment setup files, making the app image smaller.

👍 3

🔒 ggarnier added the `client` label on Dec 8, 2016

🔒 andrewsmedina added `help-wanted` `brainstorm` and removed `help-wanted` labels on Dec 8, 2016

Assignees

No one—assignees

Labels

`brainstorm`


`client`

Projects

None yet

Milestone

1.3



.tsuruignore  
Ignorar arquivos/pastas  
Menor tamanho de imagem da app

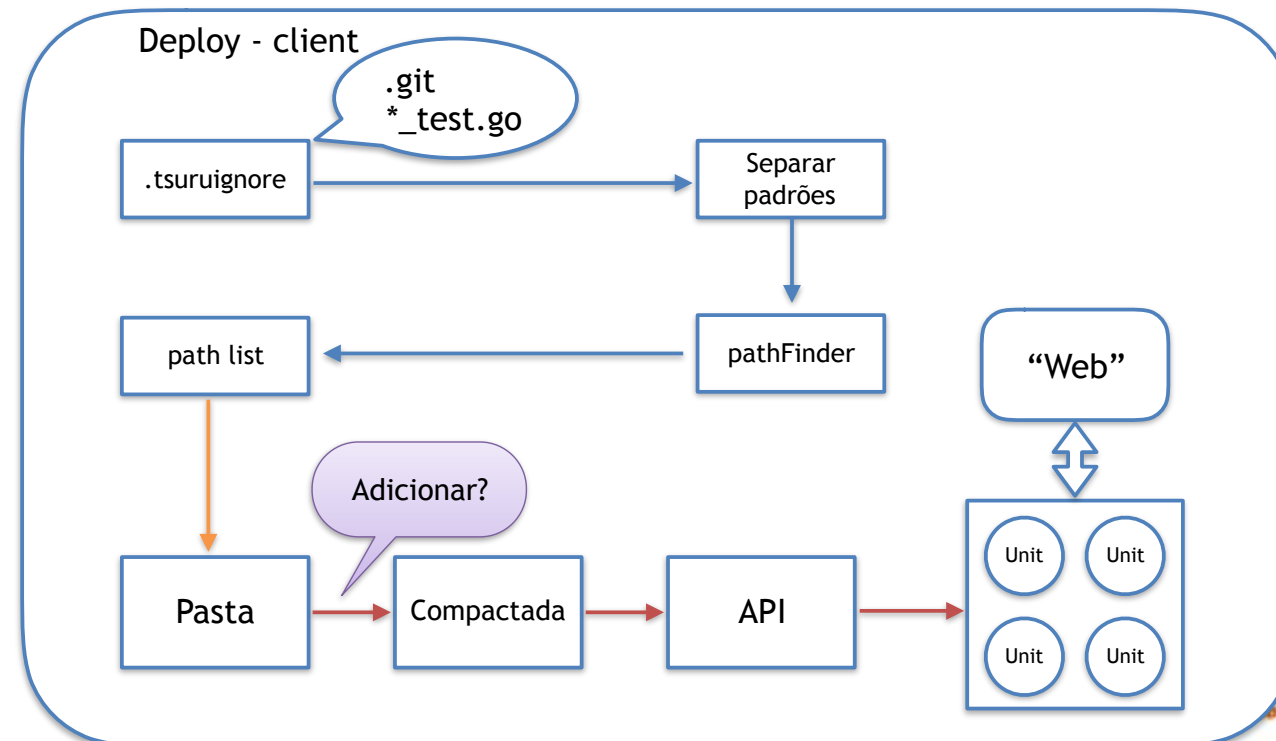


# .tsuruignore



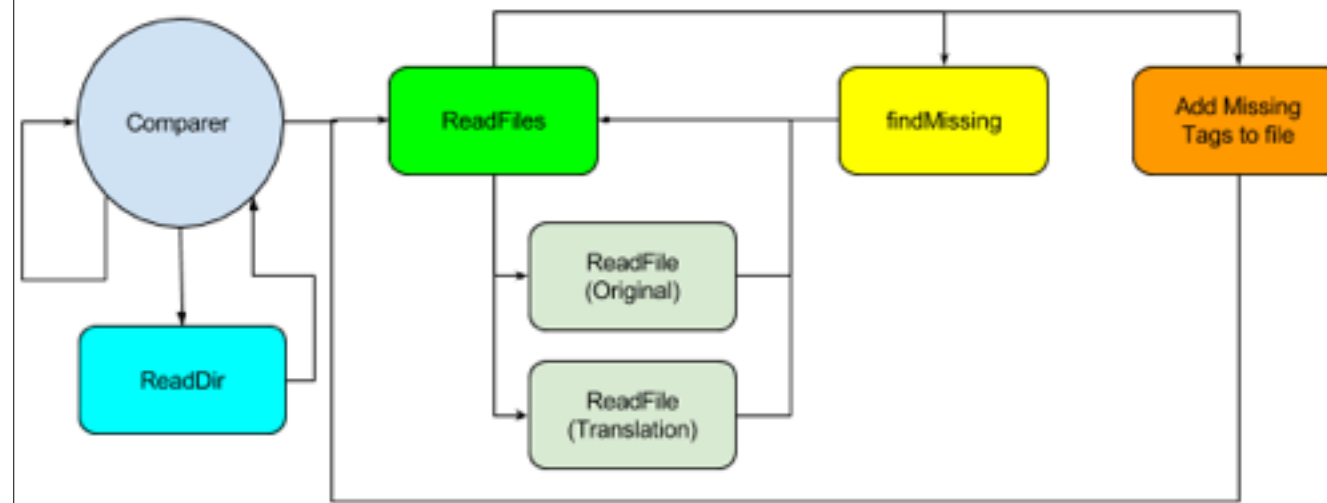
- Ler padrões
- Guardar padrões
- Leitura do repositório
- Guardar localização dos padrões
- Deploy + inteligente

# .tsuruignore

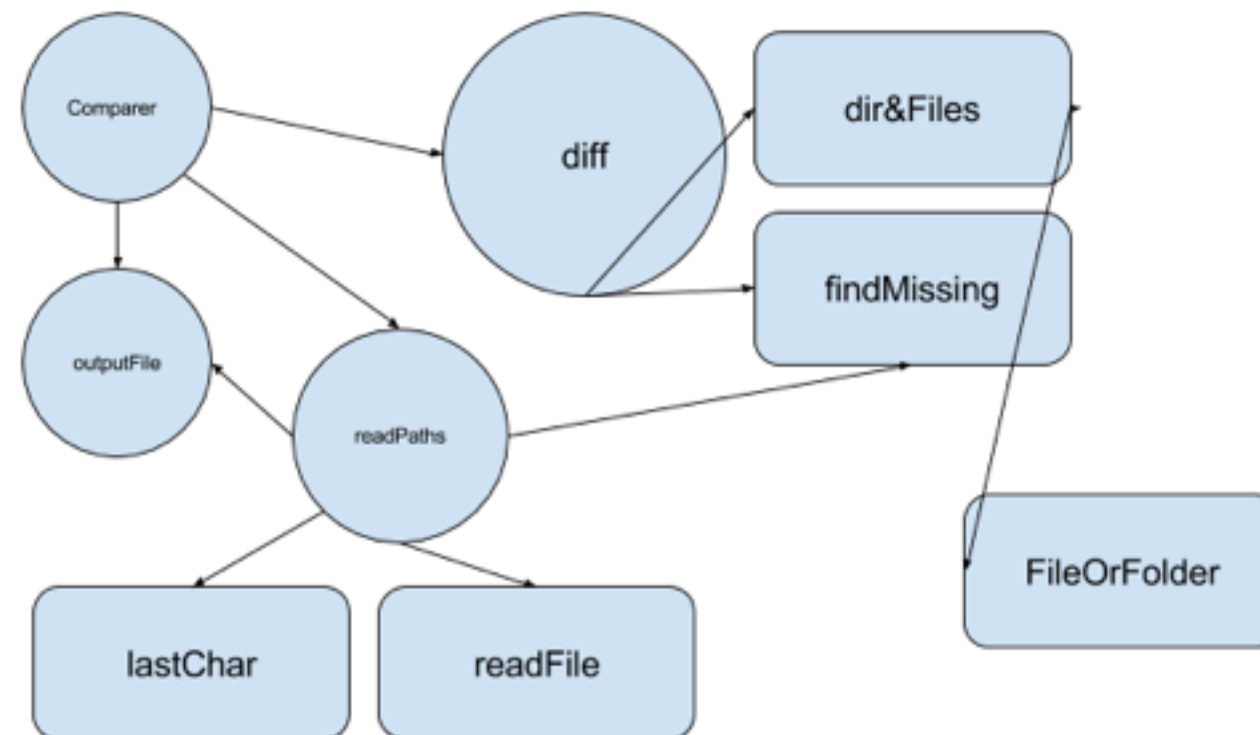


Antes de ler a pasta o processo de deploy (cliente) procura pelo arquivo `.tsuruignore`, armazena os padrões e os procura  
pathfinder: de forma recursiva encontra arquivos que sejam dos padrões especificados  
EXATAMENTO OQ QUERIA: olhar todas as pastas / arquivos

# Escalando



# Problema?



# Coding



```
func Compare(original, translation string) error {
    missFiles, missFolders, err := diff(original, translation)
    if err != nil {
        return err
    }
    if missFolders != nil {
        if err := createOutputFile(translation, "", "missingFolders.txt", missFolders); err != nil {
            return err
        }
    }
    if (missFiles != nil) && (len(missFiles) > 0) {
        if err := createOutputFile(translation, "", "missingFiles.txt", missFiles); err != nil {
            return err
        }
    }
    if err := readFiles(original, translation); err != nil {
        return err
    }
    return nil
}
```



`if err != nil` == `catch` no java

gerava 2 diffs: pastas que faltam / arquivos que faltam,  
diffs de tags armazenadas na traducao

# Coding



```
func Compare(original, translation string) error {
    originalDir, err := readDir(original)
    if err != nil {
        return err
    }
    for _, f := range originalDir {
        if f.IsDir() {
            errDirExists := checkTransDirExists(f.Name(), translation)
            if errDirExists != nil {
                return errDirExists
            }
            errCompare := Compare(filepath.Join(original, f.Name()), filepath.Join(translation, f.Name()))
            if errCompare != nil {
                return errCompare
            }
        } else {
            Docs += 2
            errRead := readFiles(filepath.Join(original, f.Name()), filepath.Join(translation, f.Name()))
            if errRead != nil {
                return errRead
            }
        }
    }
    return nil
}
```

com base no diretório original: checa tudo que ha dentro, diretório > existe na trad?, ok compara | arquivo: compara

Projeto pode escalar em tamanho

## ➤ Slice vs Maps

```
func findMissing(fileFolderA, fileFolderB []string) []string {
    sort.Strings(fileFolderA)
    sort.Strings(fileFolderB)
    if reflect.DeepEqual(fileFolderA, fileFolderB) {
        return nil
    }
    for i := len(fileFolderA) - 1; i >= 0; i-- {
        for _, vD := range fileFolderB {
            if fileFolderA[i] == vD {
                fileFolderA = append(fileFolderA[:i], fileFolderA[i+1:]...)
                break
            }
        }
    }
    return fileFolderA
}
```



Encontrar elementos no Mapa é bem mais rápido que em slice | operações em slices em Go são 'feias'  
Mais complexa: ordenar 2 slices > checar equidade > iterar em 2 slices alterando 1 deles > retornar alterado

## ➤ Slice vs Maps

```
func findMissing(original, translation map[string]string) map[string]string {  
    missing := make(map[string]string)  
    if reflect.DeepEqual(original, translation) {  
        return nil  
    }  
    for k, v := range original {  
        if _, ok := translation[k]; !ok {  
            missing[k] = v  
        }  
    }  
    return missing  
}
```





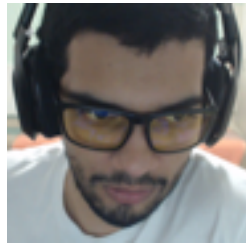
# Conclusão



- Rápido
- Fácil
- Performático
  - Tsuru 4kk logs/dia
  - API cartola 200k req/s
  
- Futuro
  - Suporte total ao Windows
  - Aviso de tags deprecadas



# Obrigado!



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- > [arthur.silva@corp.globo.com](mailto:arthur.silva@corp.globo.com)



# Perguntas?

