

# Organising Loads of **Kubeconfigs** Without Going Crazy

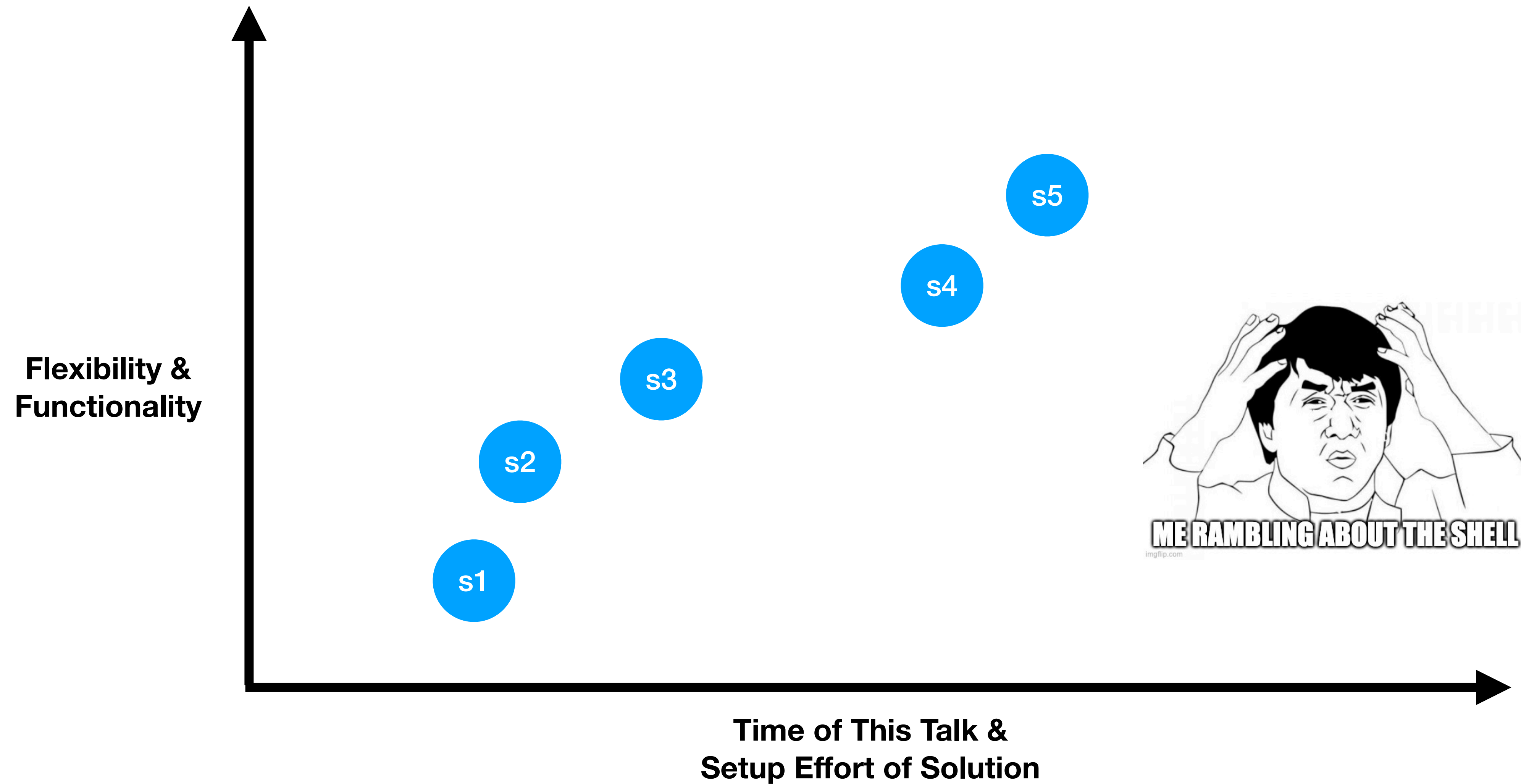
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**“Hi, I’m Simon and I might have  
too many kubeconfigs”**



# Structure of This Talk



**This is an opinionated talk**

```
alias kc='kubectl'
```

# Kubeconfig Basics - Structure

- Multiple clusters can be stored in the same kubeconfig file using contexts
- Context can be switched using  
`> kc config use-context abc`
- You cannot easily append new clusters, due to the structure of the file

```
# example kubeconfig
clusters:
  - cluster: ...
  - cluster: ...
users:
  - user: ...
  - user: ...
contexts:
  - context:
      cluster: ...
      context: ...
      namespace: ...
  - context: ...
current-context: abc
```

# Kubeconfig Basics - Order

kubectl evaluates kubeconfigs in the following order:

1. Value of `--kubeconfig` flag
2. Value of `$KUBECONFIG` environment variable
3. File located at `$HOME/.kube/config`

# s1 – Good Old Kubectl

- Multiple kubeconfigs can be switched via `$KUBECONFIG` or `--kubeconfig`
- You can merge multiple kubeconfig files into one

```
> KUBECONFIG=file1:file2 kc config view --flatten > merged
```

- Or split them

```
> kc config view --minify --flatten --context=context-1 > context-1
```





You are without a doubt the worst  
kubecfg tool I've ever heard of.

**kubectl**

But you have heard of me.

# s2 – Wojciech's Genius 3 liner

## Demo

# s2 – Wojciech's Genius 3 liner

```
# .bashrc/.zshrc
kcsw() {
    local searchdir=${1:-./kubeconfigs}
    kubeconf=$(find $searchdir -type f | fzf)
    export KUBECONFIG=kubeconf
}
```

# s3 – ahmetb/kubectx

★ 13.2k

## Demo

# s4 – sbstp/kubie

★ 1.2k

## Demo



s5 – simontheleg/konf-go

★ 150

Demo

**So how is it so fast?**

**Because we don't need to  
spawn a new shell**

# Why don't we need to spawn a new shell?

- A child process cannot make changes to its parent process
- So you cannot set `$KUBECONFIG` in shell with the binary itself...right?
- There is an exception: bash/zsh functions



# What exactly is konf?

konf-go

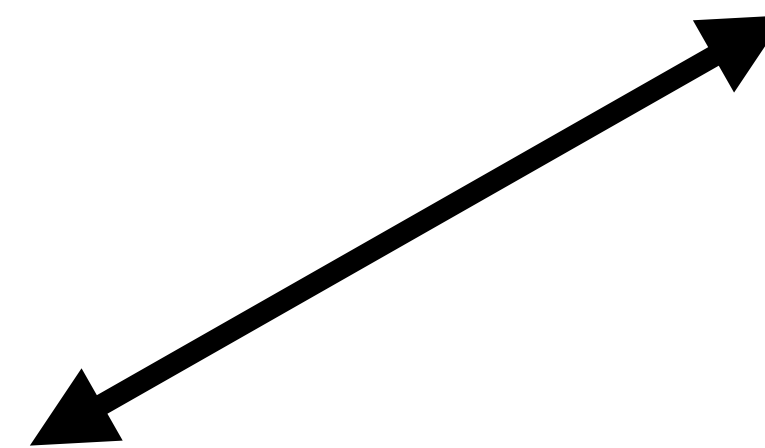
Go binary

Does the heavy lifting in the  
background

konf

Bash/zsh function

calls konf-go, takes its output  
and sets \$KUBECONFIG



```
> konf set simons-fun-cluster
```

Demo



# konf is now in beta @ SimonTheLeg/konf-go

