

We all hate waiting







#15 opened 28 days ago by LucasRoesler

Plan





How can we make this faster?





How can we make this faster?

- What I've learned
 - contributing to OpenFaaS
 - maintaining OpenFaaS
- What we/community are doing to make contributing easier & faster

Plan



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- What I've learned
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Lessons Learned





As a contributor:

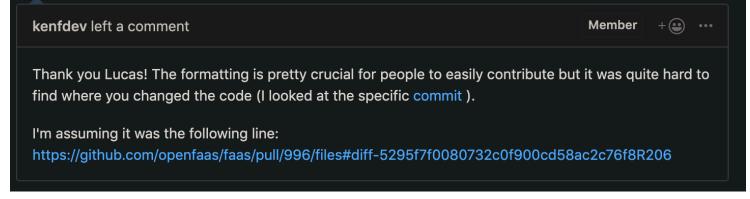
- Communicate with the team
 - work on known issues, say hi on slack/chat, remind people
- Make contributions approachable
 - small changes are better changes
 - better commit messages
 - write tests





- Make contributions approachable:
 - small changes are better changes



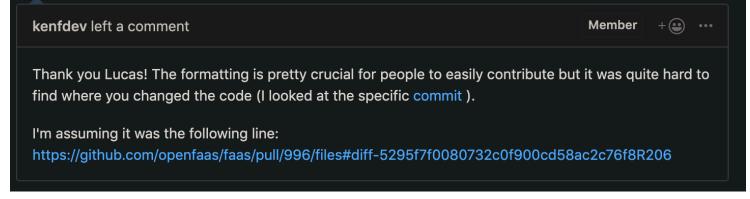






- Make contributions approachable:
 - small changes are better changes









- Make contributions approachable:
 - small changes are better changes
 - Your best friend(s):

and/or

Current Repository ofc-bootstrap			t Branch e-102-us e	e-non-root	Publish branch Publish this branch to the rem		
Changes 1	History	scripts/install-openfaas.sh					
1 changed file				@@ -18,4 +18,5 @	@ helm upgrade openfaas ——install	openfaas/openfaas \	
scripts/install-openfaas.sh		18	18				
		19	19	set queueWorker.replicas=2 \			
		20	20	set faasIdler.dryRun=true \			
			21	+set faasI	dler.setNonRootUser=true \		
		21	22	set faasn	etes.httpProbe=false		
				3331			





- Make contributions approachable:
 - small changes are better changes

```
git add -p
```





• Write better commit messages:





- Write better commit messages:
 - more context!



commit abc123

Author: Lucas Roesler <roesler.lucas@gmail

Date: Sat Apr 27 08:43:59 2019 +0200

Fix secret handling





- Write better commit messages:
 - more context!



commit abc123

Author: Lucas Roesler <roesler.lucas@gmail

Date: Sat Apr 27 08:43:59 2019 +0200

Fix secret handling





- Write better commit messages: more context!
- 1. Create a .gitmessage file in your home folder
- 2. Put this in it

```
Capitalized, short (50 chars or less) summary

**What**
-

**Why**
-

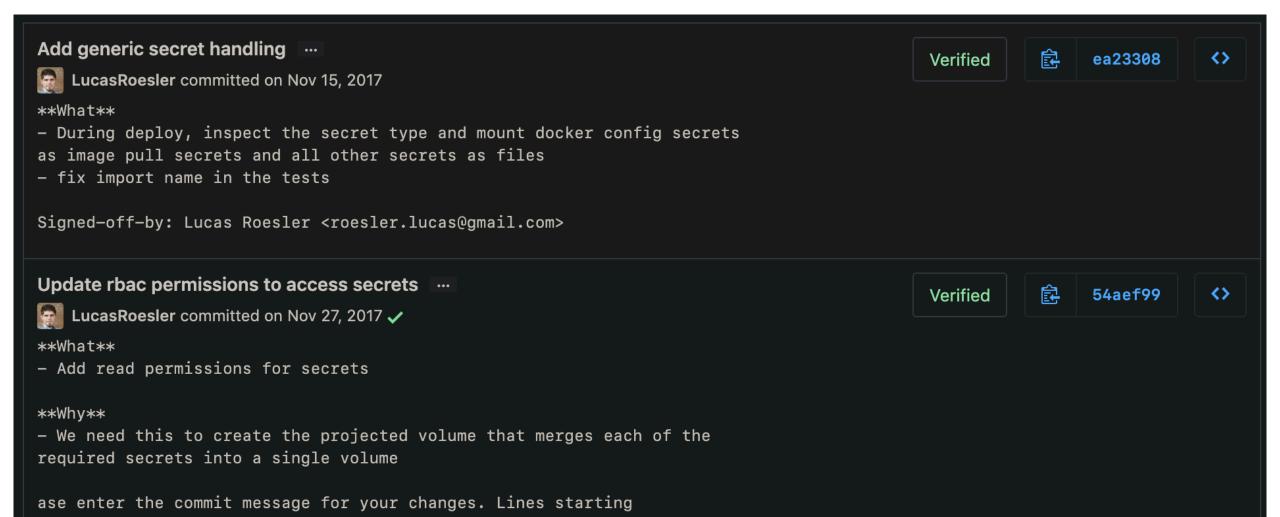
**Notes**
```





Europe 2019

Write better commit messages: more context!







• Write better commit messages: explain the impact!

commit abc123

Author: Lucas Roesler <roesler.lucas@gmail.com>

Date: Sat Apr 27 08:43:59 2019 +0200

Support image pull secrets for functions

What

- -The current secret implementation does not correctly support image pull secrets. This breaks the documented behavior.
- -When creating the function Deployment object, inspect the secret's Type to determine if it is a docker config. If it is, use it as an image pull secret. All other secrets are mounted as files for the function.
- Fix RBAC permissions to ensure that we can read the
- -Improve secrets documentation so that the support and behavior of image pull secrets are easier to find





Europe 2019

• Write tests:





- Write tests:
 - in Go use the kubernetes. Interface

func MakeSecretHandler(namespace string, kube
kubernetes.Interface) http.HandlerFunc {}





- Write tests:
 - in Go use the kubernetes. Interface

```
func Test SecretsHandler(t *testing.T)
    kube := testclient.NewSimpleClientset()
    secretsHandler := MakeSecretHandler("of-fnc", kube).ServeHTTP
    secretsHandler(w, req)
    actualSecret, := kube.CoreV1().
        Secrets ("of-fnc").
        Get("testsecret", metav1.GetOptions{})
    if actualSecret.Name != "testsecret" {
        t.Errorf("...", actualSecret.Name)
```





Europe 201

```
$ go test -count=1 github.com/openfaas/faas-netes/handlers -run
'^Test SecretsHandler$' -v
=== RUN Test SecretsHandler
         Test SecretsHandler/create managed secrets
=== RUN
         Test SecretsHandler/update managed secrets
=== RUN
         Test SecretsHandler/update non-existing secrets returns 404
=== RUN
         Test SecretsHandler/list managed secrets only
=== RUN
         Test SecretsHandler/delete managed secrets
=== RUN
          Test SecretsHandler/delete missing secret returns 404
=== RUN
--- PASS: Test SecretsHandler (0.00s)
    --- PASS: Test SecretsHandler/create managed secrets (0.00s)
    --- PASS: Test SecretsHandler/update managed secrets (0.00s
    --- PASS: Test SecretsHandler/update non-existing secrets returns 404
(0.00s)
    --- PASS: Test SecretsHandler/list managed secrets only (0.00s)
    --- PASS: Test SecretsHandler/delete managed secrets (0.00s)
    --- PASS: Test SecretsHandler/delete missing secret returns 404 (0.00s)
PASS
      github.com/openfaas/faas-netes/handlers 0.046s
ok
```

Lessons Learned





As a maintainer:

- Write contributor docs
- Make contributions approachable:
 - make setting up a dev environment easy
 - make testing easy

Lessons Learned





As a maintainer:

- Write contributor docs
- Make contributions approachable:
 - make setting up a dev environment easy
 - make testing easy
 - tell people how to use it
 - even better, automate it!





- docker-for-*
- kind / minikube / microk8s





- Easy dev and test
 - Non-example: https://github.com/openfaas/faas-netes/pull/340

How Has This Been Tested?

Manually tested by deploying into a cluster using the standard instructions found in the readme and then installing and invoking a the nodeinfo function from the store.

Not easy for anyone else to validate





- Easy dev and test
 - Want https://github.com/openfaas/faas-netes/pull/417

A new unit test has been added and I have started testing it manually with various functions.

I have pushed a public docker image so that others can also test it

- 1. I used https://gist.github.com/LucasRoesler/c029f7b7446f7c051522b8edb456b703 to create an OpenFaaS installation in KinD.
- 2. I then update the installation to use my dev image

```
export KUBECONFIG="$(kind get kubeconfig-path --name="devopenfaas")"
helm upgrade openfaas --install ./chart/openfaas \
    --namespace openfaas \
    --set basic_auth=true \
    --set openfaasImagePullPolicy=IfNotPresent \
    --set faasnetes.imagePullPolicy=IfNotPresent \
```





Use kind it makes manual testing / validation easier.

With 35 lines of bash we start a basic K8S OpenFaaS development environment on "any" laptop

https://gist.github.com/LucasRoesler/c029f7b7446f7c051522b8edb456b703





DEMO!





While we wait:

Standout commands

kind create cluster --name "\$DEVENV"
kubectl rollout status deploy coredns
kind load openfaas/faas-netes:latest





kind https://kind.sigs.k8s.io/

Has made it easier for people to contribute more automated tests

CI for Helm using KinD #382									
⊱ Merg	ed alexellis m	erged 9 commits into	openfaas:master	<pre>from zeerorg:helm_chart_ci</pre>					
Ç⊋ Con	versation 38	- O - Commits 9	₽ Checks 0	∄ Files changed 5					
	zeerorg commented on Mar 7								
	Signed-off-by: Rishabh Gupta								

Contributing





- Contributing to faas-netes
 - create feature branch
 - build locally & run in kind
 - verify feature or fix
 - write down steps used during verification
 - write a test or two
 - commit & push
 - create PR

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Get Involved





- 1. Join us on Slack https://docs.openfaas.com/community
- 2. Try it out https://github.com/openfaas/workshop
- 3. Help us continue improving the dev experience
- 4. Ping me @Lucas Roesler

