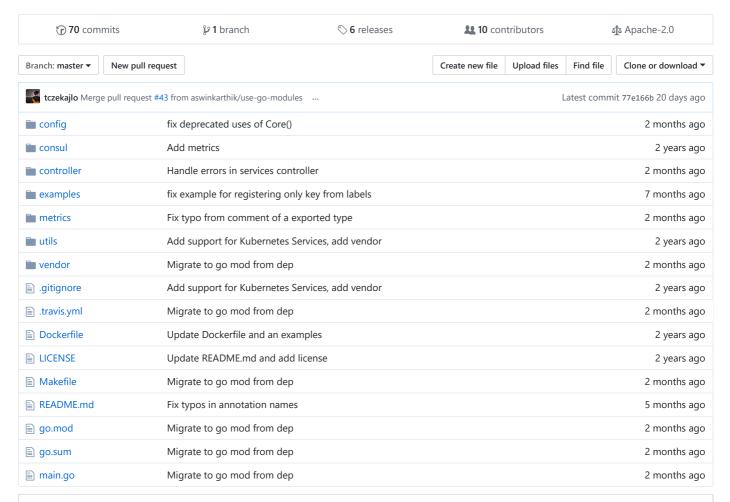
La tczekajlo / kube-consul-register

a tool to register Kubernetes PODs as Consul Services

#kube-consul-register #registered-services



E README.md

Kubernetes Consul Register Duild Passing

The kube-consul-register is a tool to register Kubernetes PODs as Consul Services.

kube-consul-register watches Kubernetes events and converts information about PODs to Consul Agent.

Usage

```
-alsologtostderr
```

log to standard error as well as files

-clean-interval duration

time in seconds, what period of time will be done cleaning of inactive services (default 30m0s)

-configmap string

name of the ConfigMap that containes the custom configuration to use (default "default/kube-consulregister-config")

-in-cluster

use in-cluster config. Use always in case when controller is running on Kubernetes cluster (default true)

-kubeconfig string

absolute path to the kubeconfig file (default "./kubeconfig")

-log_backtrace_at value

when logging hits line file:N, emit a stack trace

-log_dir string

If non-empty, write log files in this directory

-logtostderr

log to standard error instead of files

-stderrthreshold value

```
logs at or above this threshold go to stderr
-sync-interval duration
    time in seconds, what period of time will be done synchronization (default 2m0s)
-v value
    log level for V logs
-version
    print version end exit
-vmodule value
    comma-separated list of pattern=N settings for file-filtered logging
-watch-namespace string
    namespace to watch for Pods. Default is to watch all namespaces
```

Configuration

To store configuration is used ConfigMap. You can find example of configuration with default values in examples directory. In order to use ConfigMap configuration you've to use configmap flag. Value of this flag has format namespace/configmap_name, e.g. -configmap="default/kube-consul-register-config".

Option name	Default value	Description
consul_address	localhost	The address of Consul Agent. This option is taken into account only in case where register_mode is set to single
consul_port	8500	The port number of Consul Agent
consul_scheme	http	Connection scheme. Available options: http, https, consul-unix
consul_ca_file		Path to a CA certificate file
consul_cert_file		Path to an SSL client certificate to use to authenticate to the Consul server
consul_key_file		Path to an SSL client certificate key to use to authenticate to the Consul server
consul_insecure_skip_verify	false	Skip verifying certificates when connecting via SSL
consul_token		The Consul ACL token. Token is used to provide a per-request ACL token which overrides the agent's default token
consul_timeout	2s	Time limit for requests made by the Consul HTTP client. A Timeout of zero means no timeout
consul_container_name	consul	The name of container in POD with Consul Agent. The container with given name will be skip and not registered in Consul. This options is taken into account only if <pre>register_mode</pre> is set to <pre>pod</pre>
consul_node_selector	consul=enabled	Node label which is used to select nodes with Consul agent. This option is taken into account only if <pre>register_mode</pre> is equal to <pre>node</pre>
pod_label_selector		Pay heed only to PODs with the given label
k8s_tag	kubernetes	The name of tag which is added to every Consul Service. This tag identifies all Consul Services which has been registered by kubeconsul-register
register_mode	single	The mode of register. Available options: single, pod, node
register_source	pod	Source name which is watching in order to add services to Consul. Available options: pod , service , endpoint

Register mode

The register_mode option determine to which Consul Agent a services should be registered.

- single registers all services in one agent. The address of agent is taken from consul_address option.
- pod registers service in agent which is running as container is the same pod, as Consul Agent address is taken a IP address of pod.

• node - register service in agent which is running on the same node where service, as Consul Agent address is taken a name of node.

Register source

kube-consul-register as default watches PODs and converts information about them into Consul Services, as alternative you can use Kubernetes Services or Endpoints.

In order to use Kubernetes Endpoints as source of information you have to set value of register_source option on endpoints , additionally you have to add annotation into specific endpoint.

create service
kubectl expose deployment my-nginx --port=80 --type=LoadBalancer
add annotation
kubectl annotate endpoints my-nginx consul.register/enabled=true

If you want to use Kubernetes Services you have to set value of register_source on service, only service with type NodePort is take into account.

Annotations

There are available annotations which can be used as pod's annotations.

Name	Value	Description
consul.register/enabled	true false	Determine if pod should be registered in Consul. This annotation is require in order to register pod as Consul service
consul.register/service.name	service_name	Determine name of service in Consul. If not given then is used the name of resource which created the POD. Only available if register_source is set on pod
consul.register/pod.container.name	container_name	Container name or list of names (next name should be separated by comma) which will be taken into account. If omitted, all containers in POD will be registered

The example of how to use annotation you can see here.

Examples of usage

Run out-of-cluster

\$ kube-consul-register -logtostderr=true -kubeconfig=/my/kubeconfig -configmap="default/kube-consul-register" -incluster=false

Run in-cluster

Example of usage in-cluster you can find here. kube-consul-register is run as ReplicaSet.

Metrics

Prometheus metrics are available by /metrics endpoint on :8080 address.