**Custom Mixer Adapter for Istio**

**Basic and overview**

<https://github.com/istio/istio/wiki/Mixer-Out-Of-Process-Adapter-Dev-Guide>

<https://github.com/istio/istio/wiki/Mixer-Out-Of-Process-Adapter-Dev-Guide#built-in-templates>

**Prerequisites**

1. Install Docker.
2. Install Go

<https://www.digitalocean.com/community/tutorials/how-to-install-go-on-ubuntu-18-04>

1. Install protocol buffers

<https://blog.jeffli.me/blog/2016/12/08/install-protocol-buffer-from-source-in-centos-7/>

make install

protocol buffer installed at /usr/local/bin

If \*.so file not found error execute ldconfig

1. Set environment Environmental variables for GO

export GOPATH=/home/test/work

export PATH=$PATH:/usr/local/go/bin:$GOPATH/bin

export MIXER\_REPO=$GOPATH/src/istio.io/istio/mixer

export ISTIO=$GOPATH/src/istio.io

**Local Build of the adapter and create a docker image**

Follow exactly in the same order as described in

1. <https://github.com/istio/istio/wiki/Mixer-Out-Of-Process-Adapter-Walkthrough>
2. <https://github.com/istio/istio/wiki/Mixer-Out-of-Tree-Adapter-Walkthrough>
3. <https://venilnoronha.io/set-sail-a-production-ready-istio-adapter>

**Trouble shooting**

1. Change the code given in the my mygrpcadapter.go. istio.io/istio/pkg/log -> istio.io/pkg/pool incase of a import error
2. /usr/bin/docker-current: Error response from daemon: invalid volume spec ":/protos/istio.io/gogo-genproto": invalid volume specification: ':/protos/istio.io/gogo-genproto'.  
   See '/usr/bin/docker-current run --help'.  
   mygrpcadapter.go:2: running "/my/workspace/path/mixer\_codegen.sh": exit status 125

Solution : export GO111MODULE=on

<https://github.com/istio/istio/issues/16504>

<https://circleci.com/blog/go-v1.11-modules-and-circleci/>

1. For the myootadapter error while building the go modules :

Execute unset GO111MODULE