## Git / Go Setup Checklist to Resolve go get/build Private Repository Access Errors

If experiencing issues fetching from the remote repository while building, check the following.

- Ensure you have cloned the git repository as follows:
  - git clone codecommit://default@qsd-unity-next
- Clear your go cache. May be here C:\Users\<User>\go\pkg\mod\cache
- Install Go program from link: <a href="https://golang.org/dl/">https://golang.org/dl/</a> you might select stable version instead of the most recent version to void go build issues. (e.g., version 1.13.15)
- Ensure Git version 2.17.1 is installed.
  - If experiencing the display of the Git Credential Helper window, you are advised to uninstall and reinstall without the "Git Credential Manager" option.
  - o When running the installer deselect "Only show new options".
  - For Git Credential step(Enable Git Credentials Manager), it should be unchecked
     (Or select "None").
  - See "Git for Windows: I installed Git for Windows, but I am denied access to my repository (403)" in <a href="https://docs.aws.amazon.com/codecommit/latest/userguide/troubleshooting-ch.html">https://docs.aws.amazon.com/codecommit/latest/userguide/troubleshooting-ch.html</a>
- Ensure you have a .gitconfig file located in your user folder (Ex. C:\Users\<User>).
  - If the file doesn't exist, you can copy the linked file and update the name and email address in the contents. <u>Sample .gitconfig</u>
- Ensure the following is in the .gitconfig file:

```
[credential]
helper = !aws codecommit credential-helper $@
UseHttpPath = true
```

- Ensure you have the GOPRIVATE environment variable set. Verify by running **go env** on the command line. You can set it using the following command:
  - o go env -w GOPRIVATE=git-codecommit.us-west-2.amazonaws.com/v1/repos/\*
- Double-check that you have followed the steps in the CodeCommit Setup Document.

- Restart your machine after changes. It may not be necessary but may help ensure that services are using updated configuration changes.
- Ensure you have the versions of the following applications:
  - o Python 3.8.5
  - o Awscli 2.0.50

## Sample Go Environment Variables:

```
C:\usr\local\unity-next\src\qsd-unity-next>go env
set GO111MODULE=
set GOARCH=amd64
set GOBIN=C:\usr\local\unity-next\bin
set GOCACHE=C:\Users\<User>\AppData\Local\go-build
set GOENV=C:\Users\<User>\AppData\Roaming\go\env
set GOEXE=.exe
set GOFLAGS=
set GOHOSTARCH=amd64
set GOHOSTOS=windows
set GONOPROXY=git-codecommit.us-west-2.amazonaws.com/v1/repos/*
set GONOSUMDB=git-codecommit.us-west-2.amazonaws.com/v1/repos/biorad-gsd-shared.git,git-
codecommit.us-west-2.amazonaws.com/v1/repos/qsd-unity-next-shared.git,git-codecommit.us-west-
2.amazonaws.com/v1/repos/werner-test-shared.git
set GOOS=windows
set GOPATH=C:\usr\local\unity-next\
set GOPRIVATE=git-codecommit.us-west-2.amazonaws.com/v1/repos/*
set GOPROXY=https://proxy.golang.org,direct
set GOROOT=c:\go
set GOSUMDB=sum.golang.org
set GOTMPDIR=
set GOTOOLDIR=c:\go\pkg\tool\windows_amd64
set GCCGO=gccgo
set AR=ar
set CC=gcc
set CXX=g++
set CGO ENABLED=1
set GOMOD=
set CGO CFLAGS=-g -O2
set CGO CPPFLAGS=
set CGO_CXXFLAGS=-g -O2
set CGO FFLAGS=-g -O2
set CGO_LDFLAGS=-g -O2
set PKG_CONFIG=pkg-config
```

set GOGCCFLAGS=-m64 -mthreads -fno-caret-diagnostics -Qunused-arguments -fmessage-length=0 -fdebug-prefix-map=C:\Users\<User>\AppData\Local\Temp\go-build862315894=/tmp/go-build -gno-record-gcc-switches

## Set globally

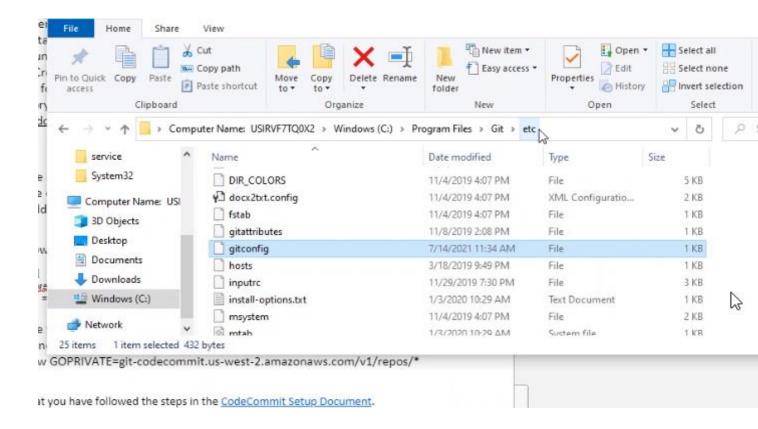
```
File Edit Selection View Go Run Terminal Help
                                                                                                              gitconfig - summarystats - \
   EXPLORER
                                                                           data.service_test.go M
                                                                                                     main.go 1, M
                                                                                                                        gitconfig
                                             C: > Program Files > Git > etc > 🧶 gitconfig
                                               1 ∨ [diff "astextplain"]
                                                        textconv = astextplain
      data.service_test.go service
                                       M
                                               3 v [filter "lfs"]
       so main.go
                                                        clean = git-lfs clean -- %f
    X @ gitconfig C:\Program Files\Git\etc
                                                        smudge = git-lfs smudge -- %f
       М
                                                        process = git-lfs filter-process
                                                        required = true

✓ SUMMARYSTATS

                                               8 v [http]
                                                        sslBackend = openssl
                                                        sslCAInfo = C:/Program Files/Git/mingw64/ssl/certs/ca-bundle.crt
                                              11 v [core]
                                                        autocrlf = true
                                                        fscache = true
                                                        symlinks = false
                                              15 ∨ [credential]
                                              11
                                                        helper = !aws codecommit credential-helper $@
    co pathstring.go
                                                        UseHttpPath = true

✓ service

    data.service_test.go
```



## NOTE:

If runs into the following error

go: downloading git-codecommit.us-west-2.amazonaws.com/v1/repos/biorad-qsd-shared.git/logger v1.0.5

..\..\shared\utility\common.go:21:2: reading git-codecommit.us-west-

2.amazonaws.com/v1/repos/biorad-qsd-shared.git/logger/logger/go.mod at revision logger/v1.0.5: git ls-remote -q origin in

C:\codecommit\src\pkg\mod\cache\vcs\6cb698a9f5f702c2deec177c9a694344b38ae3edc1ce3e5ccd2b1 0bd4c924fa9: exit status 128:

fatal: 'origin' does not appear to be a git repository

fatal: Could not read from remote repository.

Please make sure you have the correct access rights and the repository exists.

Step to resolve is to clear the cache

go clean -modcache