## Overview

This document guide you through the deployment process of gopher. This document assumes gofs deployment is completed. (See gofs documentation for gofs deployment instructions). Artifacts marked with \* are coming from the GoFS deployment.

# **Steps**

### Environment setup.

Assume \*GOFFISH HOME environment variable is set up in the GoFS deployment step.

- 1. Copy gopher-server-2.0-bin.zip to GOFFISH\_HOME of each data node
- 2. Extract gopher-server-2.0-bin.zip
- 3. Copy gopher-client-2.0-bin.zip to the machine which you are planning to execute the client (client machine).
- 4. Copy \*gofs.config file which was used in GoFS deployment to the client machine.
- 5. Extract gopher-client-2.0-bin.zip

## **Install Application**

- 1. Use CopyArtifacts.sh in gopher-client-2.0 directory to install the new application in gopher.
- Command: CopyArtifacts.sh <JarFilePath> <jar\_name> <user> <host1> <host2> ...
  Example: \$./CopyArtifacts.sh 
   ~/projects/USC/goffish/gopher/samples/vertex-count/target/vert-count-2.0.jar 
   vert-count-2.0.jar charith localhost

#### **Start Servers**

- 1. Use ListDataNodes.sh to get the path of the GoFS slices for each deployment.
- Command: ListDataNodes.sh <gofs.config file path of gofs > Example \$
  /ListDataNodes.sh ~/projects/USC/goffish-test/gofs-2.0/conf/gofs.config
- 3. This will give list of paths of data in each data node. (ex : file://localhost/home/charith/projects/USC/goffish-test/gofs-2.0/data/partition/gofs)
- 4. Command StartServers.sh user managerHost coordinatorHost graphId dataURI1 dataURI2 ... Example: \$ ./StartServers.sh charith localhost localhost 1 file://localhost/home/charith/projects/USC/goffish-test/gofs-2.0/data/partition-1/gofs

## **Deploy Gopher**

- 1. Use DeployGopher.sh to deploy gopher
- 2. Command : DeployGopher.sh <GoFSConfig file path> <ManagerHost> <CoordinatorHost>

Example ./DeployGopher.sh ~/projects/USC/goffish-test/gofs-2.0/conf/gofs.config localhost localhost

#### **Execute Client**

- 1. You can use GopherClient.sh to execute the application.
- 2. Command: GopherClient.sh <gopherConfig> <gofsConfig> <graphId> <jarFile> <clzz> <data> [(optional)iteration]

Example from vertex count sample: \$ ./GopherClient.sh ~/projects/USC/goffish-test/GoFFish/gopher-client-2.0/gopher-config.xml ~/projects/USC/goffish-test/gofs-2.0/conf/gofs.config 1 vert-count-2.0.jar edu.usc.pgroup.goffish.gopher.sample.VertCounter NILL

(If you do not need to send data, use NILL as the parameter for data)