Install Stored Procedures on Greenplum

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Installing Alpine Stored Procedures on Greenplum (GPDB)

Follow the steps below to install Alpine Chorus stored procedures within GPDB (on the server-side).

> Note: These setup instructions assume that GPDB is already installed and running.

1. Verify the master node can communicate with the Alpine Chorus server.
   a. Modify the `/etc/hosts` file on the Alpine Chorus server to include the GPDB master node IP address and hostname.
   b. Modify the `/etc/hosts` file on the GPDB master node to include the Alpine Chorus server IP address and hostname.
2. On the GPDB master host, create a folder called `/home/gpadmin/database_setup`.
3. Use SCP to transfer `$CHORUS_HOME/alpine-current/database_setup.zip` from the Alpine Chorus server to the GPDB master node. Place it in the folder we just created, `/home/gpadmin/database_setup`.
4. Unzip the `database_setup.zip` file. This will generate several folders.

```
unzip /home/gpadmin/database_setup/database_setup.zip
```

   a. The Greenplum database administrator must possess the ownership of the `database_setup` directory and all the content in it.
   b. Issue the `chown` command to reassign the ownership if necessary.

```
# chown -R gpadmin:gpadmin /home/gpadmin/database_setup/
```

5. Log in to the system as the GPDB administrator [e.g. `gpadmin`] on the Greenplum master host.

```
# su - gpadmin
```

6. Set the search path to include the public schema.
7. Navigate to the `database_setup/Greenplum` directory

```
$ cd /home/gpadmin/database_setup/Greenplum
```

8. Run the Alpine installer (the `.bin` file)

```
$ sh alpine_miner_installer_Greenplum.bin
```

   a. Read and accept the license agreement.
   b. Specify the Greenplum installation path. The setup will place the required shared library in the `$GPDBHOME/lib/postgres/` directory.
   c. Specify if the installer should copy the shared library to the segment hosts. Enter 'y' for multi-node clusters.
   d. If yes, enter the full path to the file containing the segment host names.

      You can create your own hostfile; for instance, create a file `/tmp/hostfile` and add all the segment host hostnames or IP addresses one after the other in the file similar to this:

```
segmenthost1
segmenthost2
segmenthost3
```

      `/path/to/hostfile_gpinitsystem`

      (or `/tmp/hostfile`)
   e. Specify the default database to install the Alpine functions.
   f. Specify the port on which the Greenplum database is running.
   g. Specify if you would like to create the Alpine Miner demo database.
   h. Verify the shared library exists on each segment node.
9. Modify the `/var/lib/pgsql/data/pg_hba.conf` file to allow users access to the appropriate databases. Using the `miner_demo` database as an example, add the following lines to the end of `pg_hba.conf`:

```
local miner_demo miner_demo trust
host miner_demo miner_demo 192.168.1.0/24 password
```

10. Reload the Greenplum database to activate the changes made in the configuration file.

```
$ gpstop -u
```