Deploying Geoserver

Enabling geoserver will add these 3 extractors

- **ncsa.geotiff.preview**, "geotiff preview extractor takes .tif input file to communicate with GeoServer to retrieve WMS metadata"
- **ncsa.geotiff.metadata** "Extractor to perform Geotiff."
- **ncsa.geoshp.preview** "gepshp extractor takes .zip input file to communicate with geoserver to retrieve WMS metadata"

In order to do this, the docker-compose.yml file should be modified in the following way

docker-compose.yml - geoserver

```
# Geoserver application geoserver:
image: clowder/geoserver:${VERSION:-latest} networks:
      - clowder
    ports:
      - 8080:8080
    volumes:
- geoserver:/data_dir restart: unless-stopped
# deploy:
# # # # # # #
mode: replicated replicas: 1 placement:
constraints:
- node.role == manager
restart_policy: condition: any
```

The location of the actual geoserver volume on the server is specified in the docker-compose.override.yml file:

docker-compose.override.yml

```
geoserver: driver_opts:
type: none
o: bind
device: /clowder/data/geoserver
```

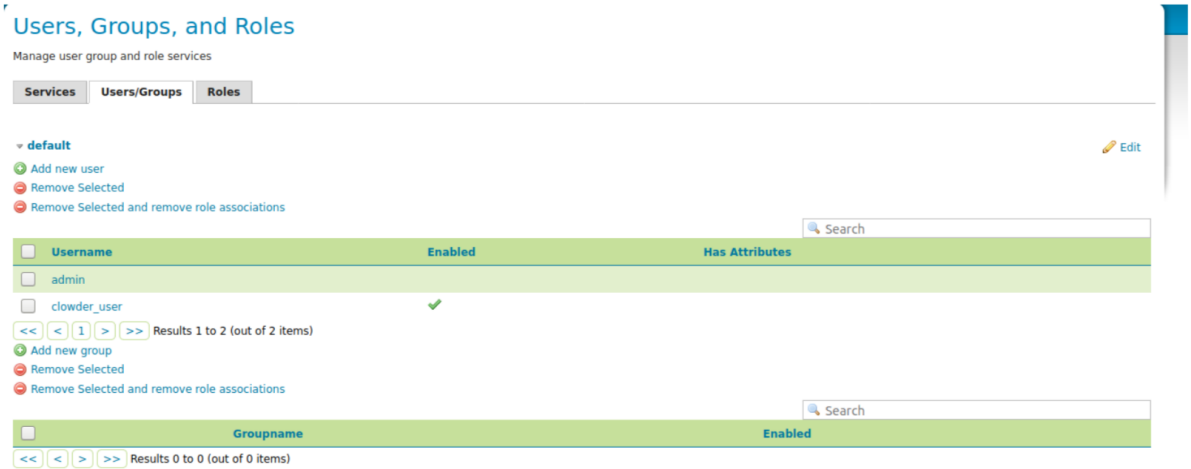
Geoserver service configuration

The geoserver extractor is in the docker-compose-extractors.yml file.

The default credentials for Geoserver isadmin/geoserver So, once the docker container starts, go to the geoserver service which is running on:http://hos tna me.dept.illinois.edu:8080/geoserver/web and create a new admin user, and reset the password for the default admin account, and then disable the default admin account.

This interface is running over http, not https, I havent figured out how to make it run over https yet, so dont login/change passwords very much to try to minimize how much the password is passed around in clear text.

Then clickthe Users/Groups tab, and from here you can create new users and add them to the admin group. Note: You do not need to add the GROUP_ADMIN Role, the default admin does not even have that.



Now you can configure the extractor with the user account and password to run as. In the above example I created a "clowder_user" and then I will put that account in the following envioronment options below:

- GEOSERVER_USERNAME=clowder_user
- GEOSERVER_PASSWORD=SETADIFFERENTPASSWORD! - GEOSERVER_USER=clowder_user

If you ever need to reset the admin password, you can bring down the docker stack, then rename the directory that the clowder/geoserver volume points to, then start the container and then the geoserver service will be set to all the defaults.

Initially I tried to get the extractor to work with a non-admin account, and I don't think it does, so renaming and adding a different password is a good idea.

Note: If the password includes a $ it will generate an error when you bring up the stack, so if the password has a $, you will need to escape the $ with an additional $. So in the below example the real password is actually SETADIFFERENT$PASSWORD!

docker-compose-extractors file geoshp

```
# Geoserver_shp extractor ncsa_geo_shp:
image: clowder/extractors-geoshp-preview:${VERSION:-latest} networks:
- clowder environment:
- RABBITMQ_URI=${RABBITMQ_URI:-amqp://guest:guest@rabbitmq/%2F} - RABBITMQ_EXCHANGE=${RABBITMQ_EXCHANGE:-
clowder}
- REGISTRATION_ENDPOINTS=${REGISTRATION_ENDPOINTS}
- PROXY_ON=true
- PROXY_HOST=https://loan-compute-03.engr.illinois.edu/
- PROXY_URL=https://loan-compute-03.engr.illinois.edu/api/proxy/ - GEOSERVER_USERNAME=clowder_user
# Remember to escape $ with a $
- GEOSERVER_PASSWORD=SETADIFFERENT$$PASSWORD!
- GEOSERVER_WORKSPACE=
- GEOSERVER_USER=clowder_user
- GEOSERVER_URL=http://geoserver:8080/geoserver/
    depends_on:
      - geoserver
restart: unless-stopped # deploy:
# # # # # # #
mode: replicated replicas: 1 placement:
constraints:
- node.role == worker
restart_policy: condition: any
```