HDF Server Setup

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1 Introduction

HDF Server is a Python-based web service that can be used to send and receive HDF5 data using an HTTP-based REST interface.

2 Setup the HDF server

1.Local Installation:

Python packages required: * NumPy 1.10.4 or later * h5py 2.5 or later * tornado 4.0.2 or later * watchdog 0.8.3 or later * requests 2.3 or later (for client tests)

a.) Install Anaconda

```
conda create -n h5serv python=2.7 h5py tornado requests pytz
pip install watchdog
source activate h5serv
```

b.) Clone the hdf5-json project:

```
git clone https://github.com/HDFGroup/hdf5-json.git
cd hdf5-json/
python setup.py install
```

c.) Clone the h5serv project:

```
git clone https://github.com/HDFGroup/h5serv.git
cd h5serv/server/
python app.py
```

The server would start running. This would be indicated by the output - Starting event loop on port: 5000

2. AWS Instance

a.) Launch an AWS Instance

b.) Perform the above mentioned steps to install the HDF server in the instance.

c.) Run the server

```
cd h5serv/server
python app.py
```

The server would start running. This would be indicated by the output - Starting event loop on port: 5000

3 Verification

To verify that the h5serv was installed correctly:

1. Open a new terminal/ Launch the AWS instance again
2. Run Anaconda command prompt

```
source activate h5serv
cd h5serv/test
python testall.py
```

This would run a number of tests to verify the installation.