

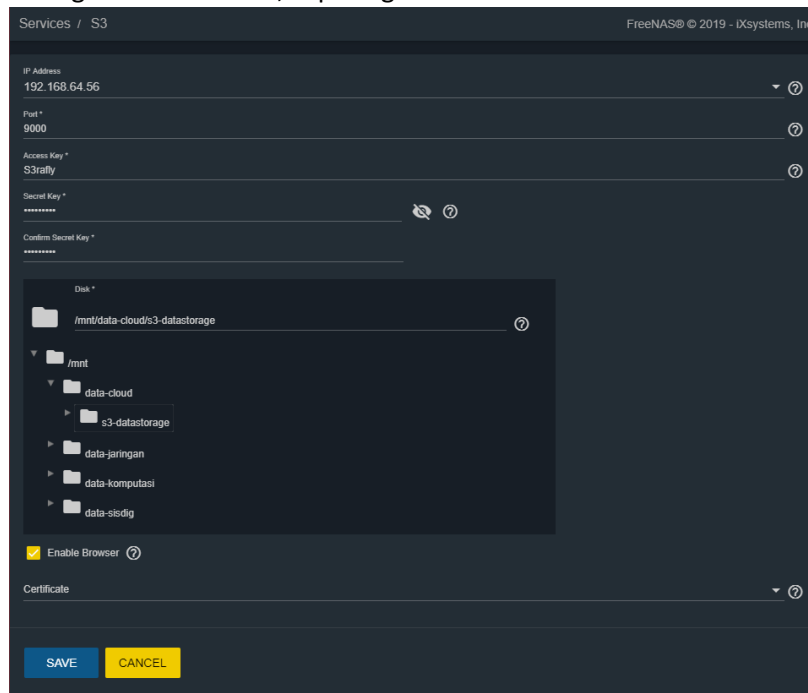
Layanan pada FreeNAS

A. S3 Bucket Service

S3 merupakan protokol penyimpanan berbasis objek yang telah digunakan banyak vendor cloud computing, contohnya AWS. Karena S3 merupakan standar utama penyimpanan berbasis objek dan harganya lumayan mahal ketika menggunakan AWS, maka kita akan mengkalinya dengan membuat layanan serupa menggunakan FreeNAS.

Tahapan :

1. Login Dashboard FreeNAS
2. Masuk menuju storage pool, pada data-cloud buka menu options (titik 3) dan pilih Add Dataset
3. Buat dataset baru dengan nama s3-datastorage, kemudian save
4. Masuk ke menu services, cari dengan nama s3 dan klik ikon pensil (configure)
5. Konfigurasi s3 services, seperti gambar dibawah ini :



Services / S3 FreeNAS® © 2019 - Ixsystems, Inc.

IP Address
192.168.64.56

Port *
9000

Access Key *
S3rally

Secret Key *

Confirm Secret Key *

Disk *

/mnt/data-cloud/s3-datastorage

▼ /mnt

▼ data-cloud

▶ s3-datastorage

▶ data-jaringan

▶ data-komputasi

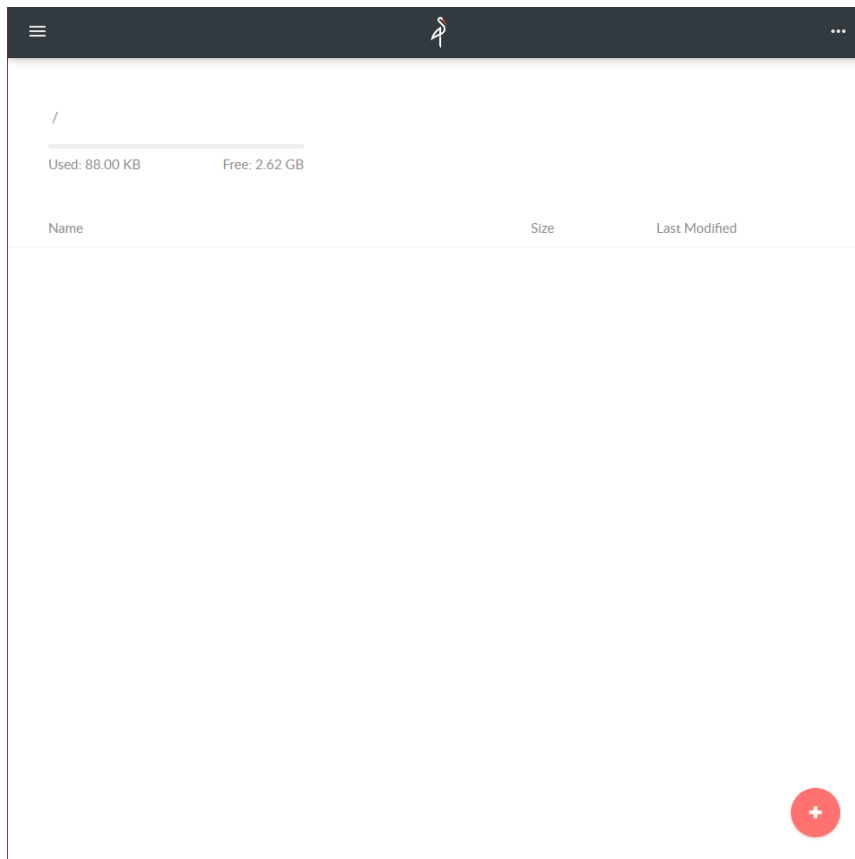
▶ data-sisdig

☒ Enable Browser

Certificate

SAVE CANCEL

6. Aktivasi layanan s3 dengan klik toggle-button running dan centang Start Automatically
7. Akses layanan S3 dengan MinIO Web Based dengan buka <http://IP.FreeNAS:9000>
8. Kemudian login menggunakan acces key dan password yang sudah dibuat tadi.
9. Berikut adalah tampilan dashboard MinIO



10. Klik tombol panah kemudian creat bucket dengan nama bucket-personal dan bucket-public
11. Mencoba s3cmd untuk upload data
 - a. Nuka situs <http://link.upnyk.ac.id/s3cmd> atau <https://s3tools.org/download> kemudian unduh paket aplikasi s3cmd dalam bentuk zip dan ekstrak ke folder VM-NIM
 - b. Setelah start kemudian buka cmd dan pilih “Run as administrator” kemudian ikuti perintah seperti gambar dibawah

```

Administrator: Command Prompt
Microsoft Windows [Version 10.0.17763.678]
(c) 2018 Microsoft Corporation. All rights reserved.

C:\Windows\system32>D:

D:\>cd VM-123170028\s3cmd-2.0.2

D:\VM-123170028\s3cmd-2.0.2>python setup.py install
Using xml.etree.ElementTree for XML processing
running install
running bdist_egg
running egg_info
writing s3cmd.egg-info\PKG-INFO
writing dependency_links to s3cmd.egg-info\dependency_links.txt
writing requirements to s3cmd.egg-info\requires.txt
writing top-level names to s3cmd.egg-info\top_level.txt
reading manifest file 's3cmd.egg-info\SOURCES.txt'
reading manifest template 'MANIFEST.in'
writing manifest file 's3cmd.egg-info\SOURCES.txt'
installing library code to build\bdist.win32\egg
running install_lib
running build_py
creating build
creating build\lib
creating build\lib\S3
copying S3\AccessLog.py -> build\lib\S3
copying S3\ACL.py -> build\lib\S3
  
```

- c. Setelah install, konfigurasi dengan ikuti langkah dibawah:

```
Administrator: Command Prompt
D:\VM-123170028\s3cmd-2.0.2>python s3cmd --configure
ERROR: Option --preserve is not yet supported on MS Windows platform. Assuming --no-preserve.
ERROR: Option --progress is not yet supported on MS Windows platform. Assuming --no-progress.

Enter new values or accept defaults in brackets with Enter.
Refer to user manual for detailed description of all options.

Access key and Secret key are your identifiers for Amazon S3. Leave them empty for using the env variables.
Access Key: S3rafly
Secret Key: 123170028
Default Region [US]:

Use "s3.amazonaws.com" for S3 Endpoint and not modify it to the target Amazon S3.
S3 Endpoint [s3.amazonaws.com]: 192.168.64.56:9000

Use "%(bucket)s.s3.amazonaws.com" to the target Amazon S3. "%(bucket)s" and "%(location)s" vars can be used if the target S3 system supports dns based buckets.
DNS-style bucket+hostname:port template for accessing a bucket [(bucket)s.s3.amazonaws.com]:

Encryption password is used to protect your files from reading by unauthorized persons while in transfer to S3
Encryption password:
Path to GPG program:

When using secure HTTPS protocol all communication with Amazon S3 servers is protected from 3rd party eavesdropping. This method is slower than plain HTTP, and can only be proxied with Python 2.7 or newer
Use HTTPS protocol [Yes]: No

On some networks all internet access must go through a HTTP proxy. Try setting it here if you can't connect to S3 directly
HTTP Proxy server name:

New settings:
  Access Key: S3rafly
  Secret Key: 123170028
  Default Region: US
  S3 Endpoint: 192.168.64.56:9000
  DNS-style bucket+hostname:port template for accessing a bucket: %(bucket)s.s3.amazonaws.com
  Encryption password:
  Path to GPG program: None
  Use HTTPS protocol: False
  HTTP Proxy server name:
  HTTP Proxy server port: 0

Test access with supplied credentials? [Y/n] Y
Please wait, attempting to list all buckets...
Success. Your access key and secret key worked fine :-)
```

- d. Untuk mengupload, ketikkan "python s3cmd put "namafile" s3://nama-bucket"

B. NetData

Tahapan :

1. Masuk menu services dan pilih NetData dan centang start automatically, lalu klik launch
2. Untuk dokumentasi buka <https://netdata.cloud>

C. Transmission

Transmission merupakan file downloader torrent.