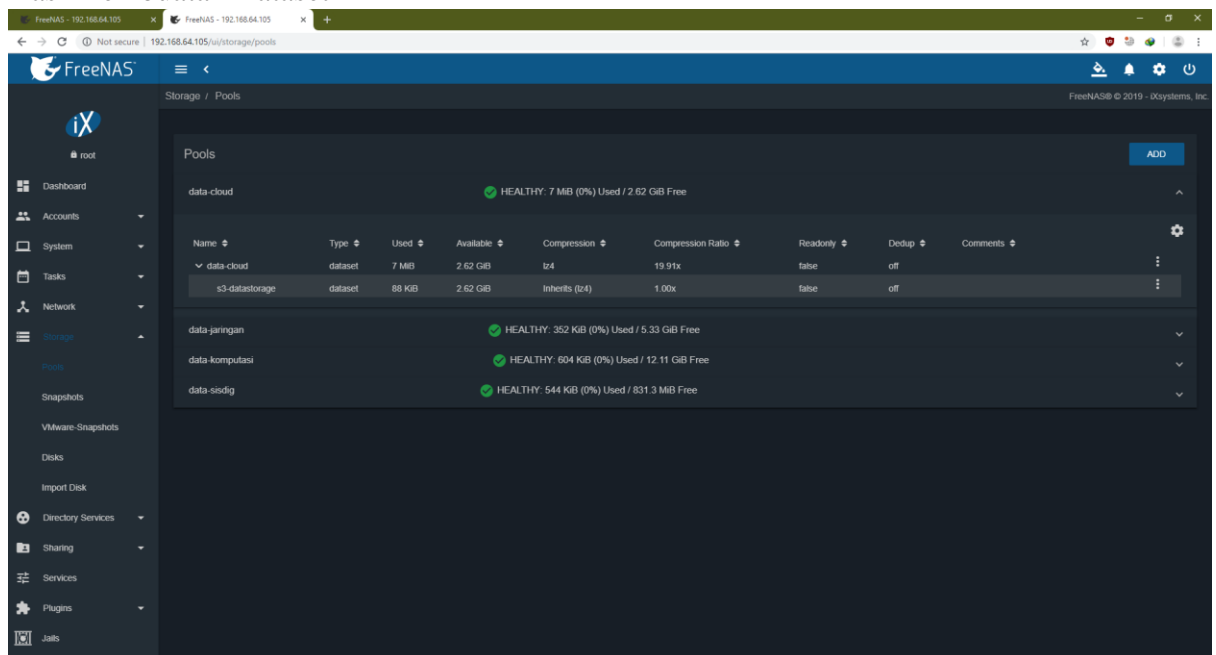


Vannya Yure Putra Swandjana
123170082
Prak. Cloud Computing (C)

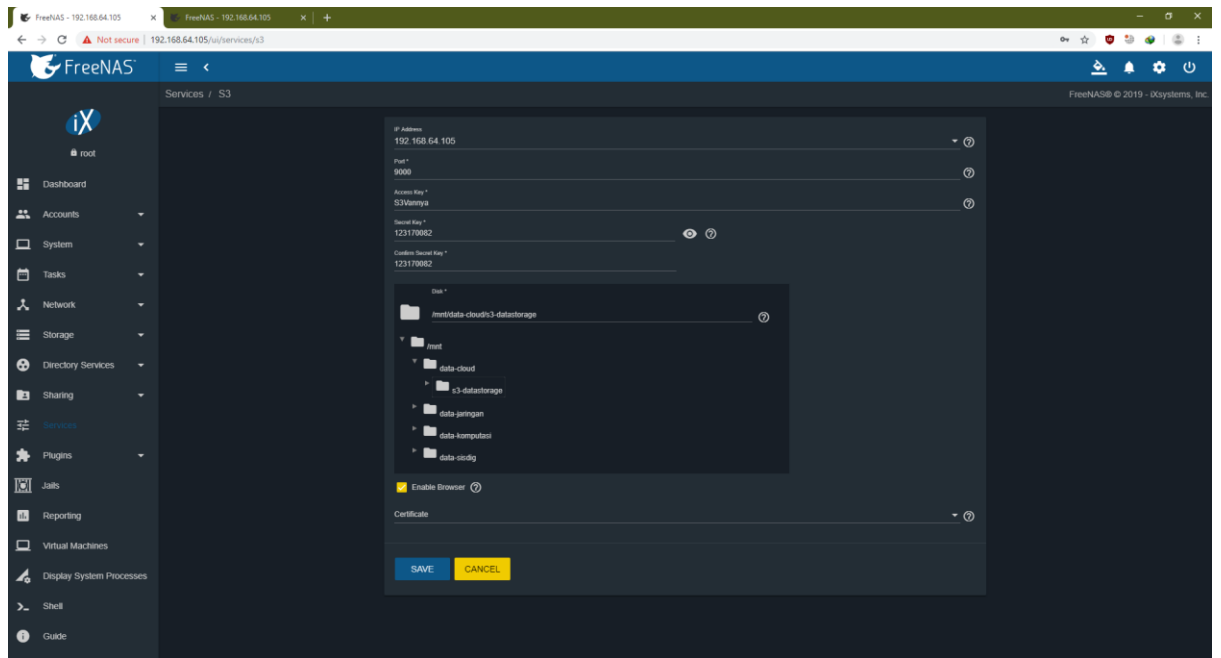
Konfigurasi Layanan Cloud Computing Pada FreeNAS

Langkah Konfigurasi S3 Bucket Service

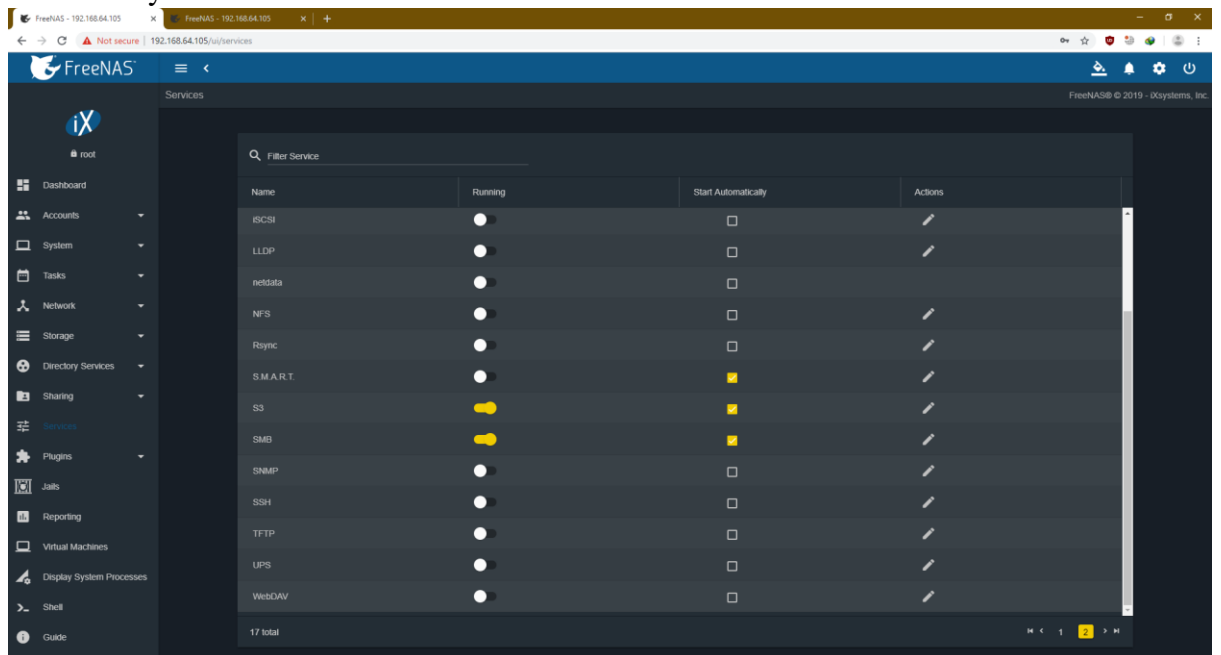
1. Login Dashboard
2. Masuk Menu Storage Pool
3. Buat Dataset Baru
4. Hasil Pembuatan Dataset



5. Masuk ke menu services
6. Konfigurasi S3 services

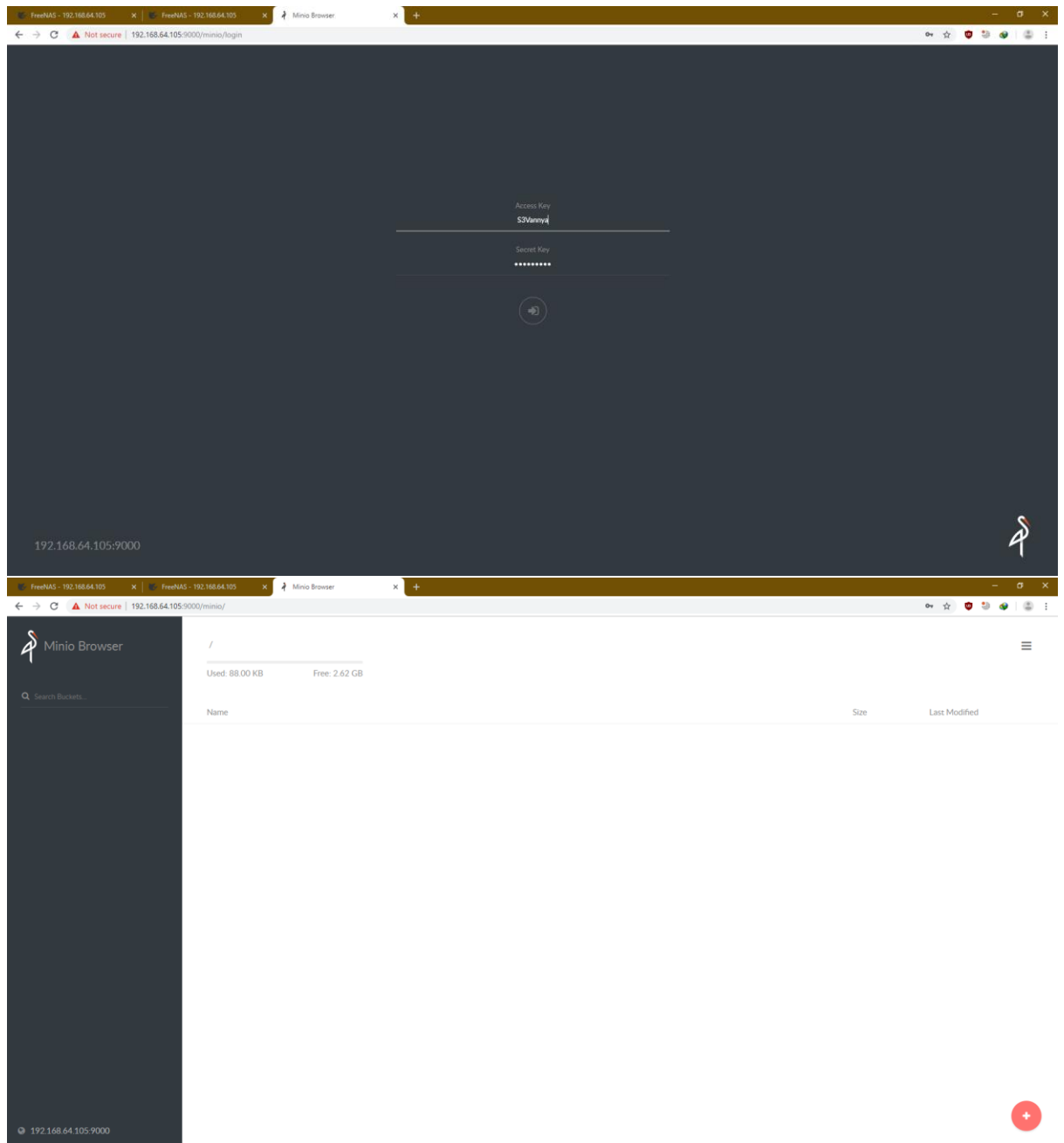


7. Aktivasi layanan s3

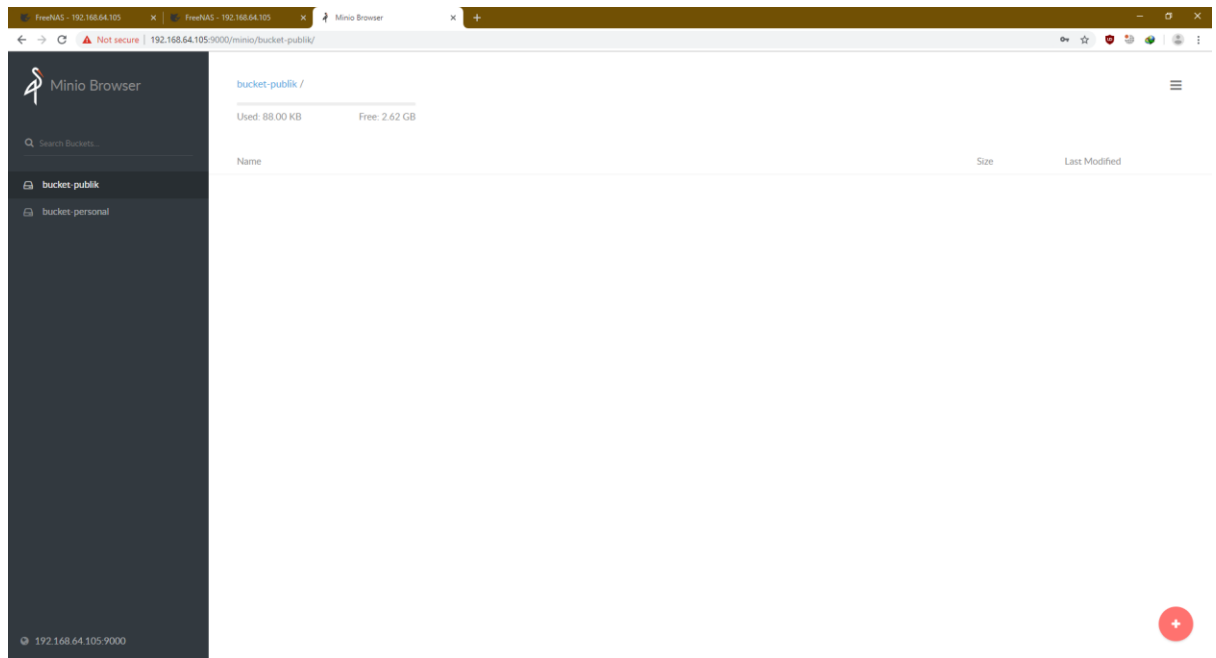


8. Akses layanan s3 dengan MiniIO Web Based (<http://IP.FREENAS:9000>)

9. Login MiniIO



10. Membuat bucket baru dengan nama bucket-personal dan bucket-publik
11. Hasil pembuatan bucket

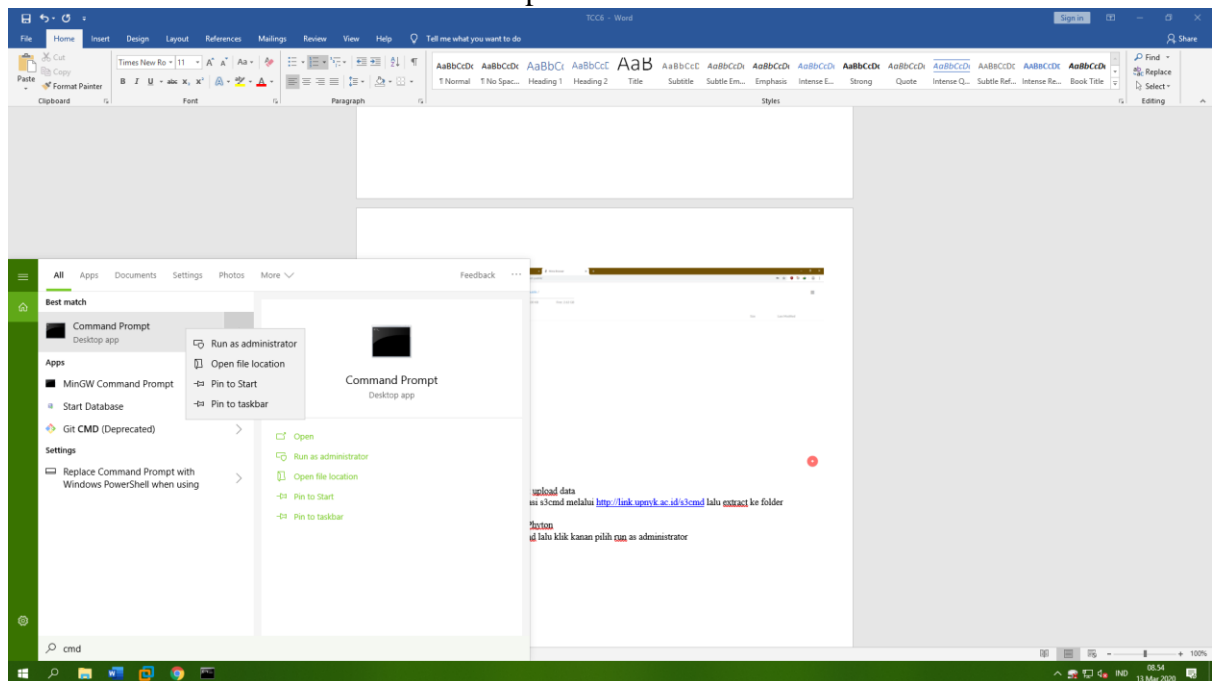


12. Mencoba s3cmd untuk upload data

Download paket aplikasi s3cmd melalui <http://link.upnyk.ac.id/s3cmd> lalu extract ke folder VM-NIM

13. Install s3cmd dengan Phytton

Klik start lalu ketik cmd lalu klik kanan pilih run as administrator



14. Working directory ke folder s3 hasil unduh

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

C:\Windows\system32>D:

D:\>cd VM-123170082

D:\VM-123170082>cd s3cmd-2.0.2

D:\VM-123170082\s3cmd-2.0.2>python setup.py install
'python' is not recognized as an internal or external command,
operable program or batch file.

D:\VM-123170082\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
```

15. Konfigurasi s3cmd

Dengan mengetikkan “python s3cmd --configure”

```
Administrator: Command Prompt - python s3cmd --configure
Installing python_dateutil-2.8.1-py2.py3-none-any.whl to c:\program files (x86)\python37-32\lib\site-packages
writing requirements to c:\program files (x86)\python37-32\lib\site-packages\python_dateutil-2.8.1-py3.7.egg\EGG-INFO\re
quires.txt
Adding python-dateutil 2.8.1 to easy-install.pth file

Installed c:\program files (x86)\python37-32\lib\site-packages\python_dateutil-2.8.1-py3.7.egg
Searching for six>=1.5
Reading https://pypi.org/simple/six/
Downloading https://files.pythonhosted.org/packages/65/eb/1f97cb97bfc2390a276969c6fae16075da282f5058082d4cb10c6c5c1dba/s
ix-1.14.0-py2.py3-none-any.whl#sha256=8f3cd2e254d8f793e7f3d6d9df77b92252b52637291d0f0da013c76ea2724b6c
Best match: six 1.14.0
Processing six-1.14.0-py2.py3-none-any.whl
Installing six-1.14.0-py2.py3-none-any.whl to c:\program files (x86)\python37-32\lib\site-packages
Adding six 1.14.0 to easy-install.pth file

Installed c:\program files (x86)\python37-32\lib\site-packages\six-1.14.0-py3.7.egg
Finished processing dependencies for s3cmd==2.0.2

D:\VM-123170082\s3cmd-2.0.2>python s3cmd--configure
python: can't open file 's3cmd--configure': [Errno 2] No such file or directory

D:\VM-123170082\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: 
```

16. Parameter konfigurasi

Access Key isikan sesuai S3nickname

Secret Key isikan sesuai NIM

Region kosongkan

Endpoint isikan IP.FREENAS:9000

Encryption kosongkan

GPG kosongkan

HTTPS protocol isikan No.

Yang lain kosongkan

Lalu ketik Y

```
Administrator: Command Prompt - python s3cmd --configure
Access key and Secret key are your identifiers for Amazon S3. Leave them empty for using the env variables.
Access Key: S3Vannya
Secret Key: 123170082
Default Region [US]:

Use "s3.amazonaws.com" for S3 Endpoint and not modify it to the target Amazon S3.
S3 Endpoint [s3.amazonaws.com]: 192.168.64.105:9000

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]: 1

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: S3Vannya
  Secret Key: 123170082
  Default Region: US

Administrator: Command Prompt - python s3cmd --configure
if the target S3 system supports dns based buckets.
DNS-style bucket+hostname:port template for accessing a bucket [%(bucket)s.s3.amazonaws.com]: 1

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: S3Vannya
  Secret Key: 123170082
  Default Region: US
  S3 Endpoint: 192.168.64.105:9000
  DNS-style bucket+hostname:port template for accessing a bucket: 1
  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
```

```
Administrator: Command Prompt
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: S3Vannya
  Secret Key: 123170082
  Default Region: US
  S3 Endpoint: 192.168.64.105:9000
  DNS-style bucket+hostname:port template for accessing a bucket: 1
  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 :-)

Now verifying that encryption works...
Not configured. Never mind.

Save settings? [y/N] Y
Configuration saved to 'C:\Users\Lab Informatika\AppData\Roaming\s3cmd.ini'

D:\VM-123170082\s3cmd-2.0.2>
```

17. Mencoba perintah s3cmd

Ketikkan python s3cmd ls

```
Administrator: Command Prompt
Try setting it here if you can't connect to S3 directly
HTTP Proxy server name:

New settings:
  Access Key: S3Vannya
  Secret Key: 123170082
  Default Region: US
  S3 Endpoint: 192.168.64.105:9000
  DNS-style bucket+hostname:port template for accessing a bucket: 1
  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 :-)

Now verifying that encryption works...
Not configured. Never mind.

Save settings? [y/N] Y
Configuration saved to 'C:\Users\Lab Informatika\AppData\Roaming\s3cmd.ini'

D:\VM-123170082\s3cmd-2.0.2>python s3cmd ls
2020-03-13 01:47  s3://bucket-personal
2020-03-13 01:47  s3://bucket-publik

D:\VM-123170082\s3cmd-2.0.2>
```

18. Buka dokumentasi s3cmd melalui <https://docs.min.io/docs/s3cmd-with-minio.html>

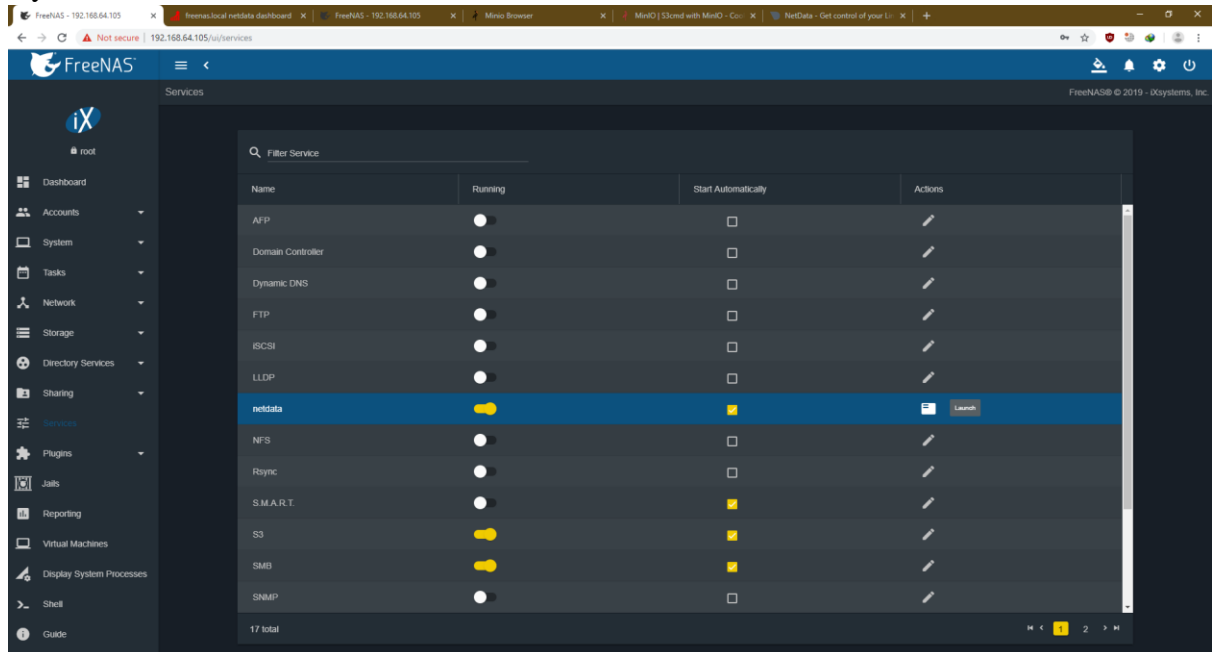
Untuk upload file

```
s3cmd put newfile s3://testbucket

upload: 'newfile' -> 's3://testbucket/newfile'
```

Monitoring Dengan Netdata Service

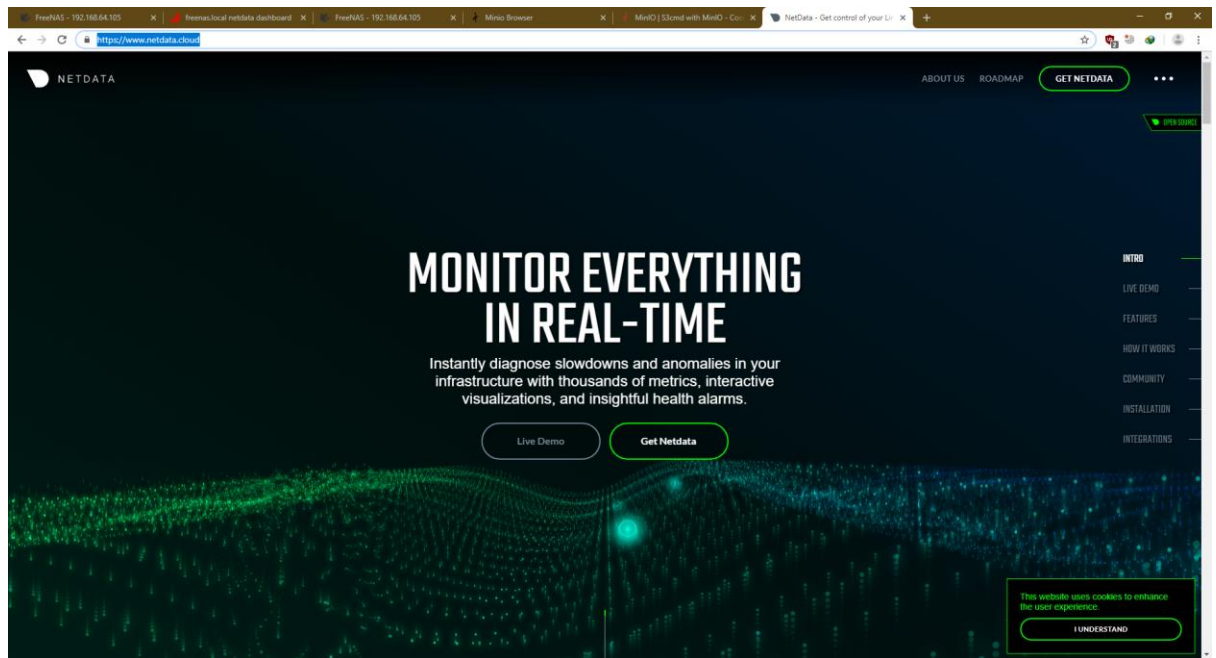
1. Login
2. Cari netdata dibagian services
3. Nyalakan service netdata



4. Tampilan netdata dengan klik launch



5. Dokumentasi netdata (<https://www.netdata.cloud/>)



Mencoba Jails Dengan Transmission

1.