

Project LeoEnergy

Anforderungen

Ausgangssituation

- Auf einer vm (leoenergy genannt) werden von einem schuleigenen Server in einem 5min - Intervall per sftp Datendateien im json-Format heruntergeladen
- Die Quarkus App liest diese json-Dateien ein und schreibt diese in eine influxdb
 - Dabei ist auf korrektes Tagging zu achten
- Es werden laufend neue json-Dateitypen hinzugefügt.
 - Am Dashboard soll angezeigt werden, welche Dateien (Struktur des Namens) derzeit importiert
 - Wieviele verschiedene Dateiarten gibt es im Verzeichnis
 - Wieviele verschieden Dateiarten werden derzeit importiert

InfluxDb and Grafana

Docker

- [Easily Install InfluxDB, Telegraf, & Grafana with Docker](#)
- <https://sweetcode.io/set-up-telegraf-influxdb-and-grafana-with-docker-compose/>
- <https://lovethepenguin.com/docker-how-to-work-with-grafana-and-influxdb-188a78d61b7>

Allgemein

- <https://docs.influxdata.com/telegraf/v1.25/> (mit gratis Kurs)
- <https://www.tobiasklingel.com/it-project/it-infrastructure-monitoring/>
- <https://blog.ordix.de/schnelles-aufsetzen-eines-monitorings-durch-grafana-und-influxdb>

Move files from remote server to local machine per sftp (shell-scripts)

Copy ssh-key to vm

- <https://linuxhint.com/use-ssh-copy-id-command/>

Prepare the keys

```
cd ~/.ssh  
ssh-keygen -t rsa
```

Copy the public Key to the remote machine

```
ssh-copy-id -i ~/.ssh/<ssh-file>.pub <username>@<server>
```

Eintrag in ~/.ssh/config

```
Host ftpserver  
    Hostname <server>  
    User <username>  
    IdentityFile ~/.ssh/<ssh-file>
```

```
ssh ftpserver
```

Connect to sftp from linux shell

- <https://linuxize.com/post/how-to-use-linux-sftp-command-to-transfer-files/>

```
# connect  
sftp <username>@<server>  
  
# check local folder  
lpwd  
  
# change local folder  
lcd /opt/docker/download-json/ftp-data  
  
ls *.json  
get *.*
```

Copy a file from remote machine to local machine

```
scp <username>@<server>:/home/stuetz/ftp-data-sik/7-10979582-20221205175720.json .
```

Cron job to SFTP files in a directory

- [How to use ftp batch](#)

run-sftp-batch.sh

```
#!/bin/bash
set -e
sftp -b /opt/docker/download-json/sftpbatch.txt admin@ftpserver
```

sftpbatch.txt

```
cd /home/admin
lcd /opt/docker/download-json/ftp-data
get *.json
rm *.json
```

config cron-job

```
crontab -e
```

result

```
no crontab for stuetz - using an empty one

Select an editor. To change later, run 'select-editor'.
 1. /bin/nano          <---- easiest
 2. /usr/bin/vim.basic
 3. /usr/bin/vim.tiny
 4. /bin/ed

Choose 1-4 [1]: 1
```

every 5 min run the shell-script

```
# Edit this file to introduce tasks to be run by cron.
#
# Each task to run has to be defined through a single line
# indicating with different fields when the task will be run
# and what command to run for the task
#
# To define the time you can provide concrete values for
# minute (m), hour (h), day of month (dom), month (mon),
# and day of week (dow) or use '*' in these fields (for 'any').
#
# Notice that tasks will be started based on the cron's system
# daemon's notion of time and timezones.
#
# Output of the crontab jobs (including errors) is sent through
# email to the user the crontab file belongs to (unless redirected).
#
# For example, you can run a backup of all your user accounts
# at 5 a.m every week with:
```

```
# 0 5 * * 1 tar -zcf /var/backups/home.tgz /home/  
#  
# For more information see the manual pages of crontab(5) and cron(8)  
#  
# m h dom mon dow  command  
*/5 * * * * /opt/docker/download-json/run-sftp-batch.sh
```

result

```
crontab: installing new crontab
```

Count files in Directory

- <https://devconnected.com/how-to-count-files-in-directory-on-linux/>

```
ls | wc -l
```