

BACKUP SYSTEM

● INSTALLATION

First, you have to set execute permission (x) to required scripts :

- `backup.sh`
- `backups/backup.sh`
- `backups/init.sh`

by the following command :

```
chmod +x backup.sh ; chmod +x backups/backup.sh ; chmod +x backups/init.sh
```

To start the backup system you have to run this command :

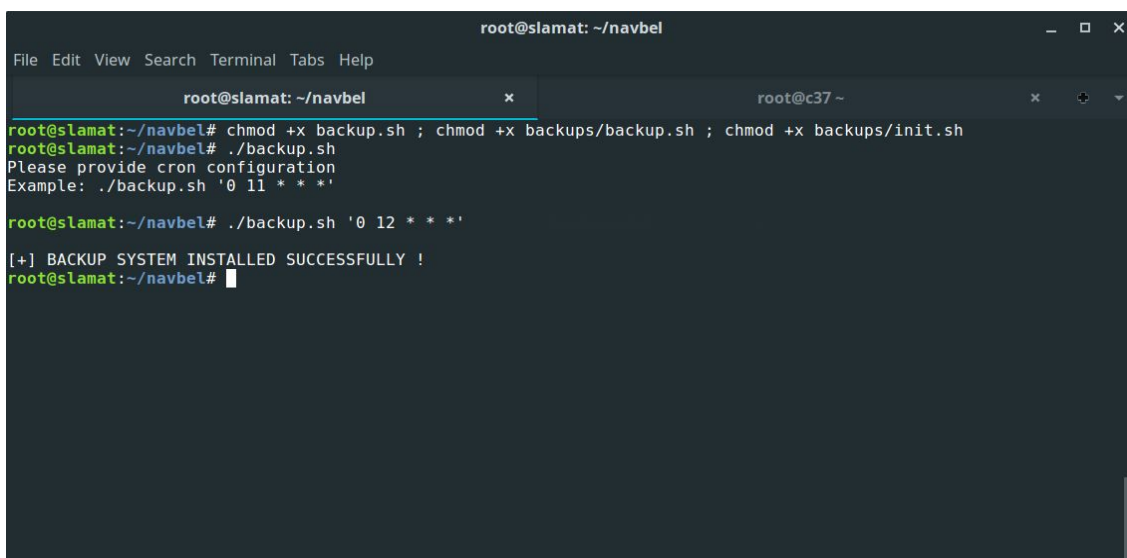
```
./backup.sh "crontab configuration"
```

For Backup time cycle is as crontab configuration time format which enter as argument of `backup.sh`

For more information visit : <https://crontab.guru/>

Example : we will make our system save backups every night at 12 am , so crontab configuration will be

```
0 12 * * *
```

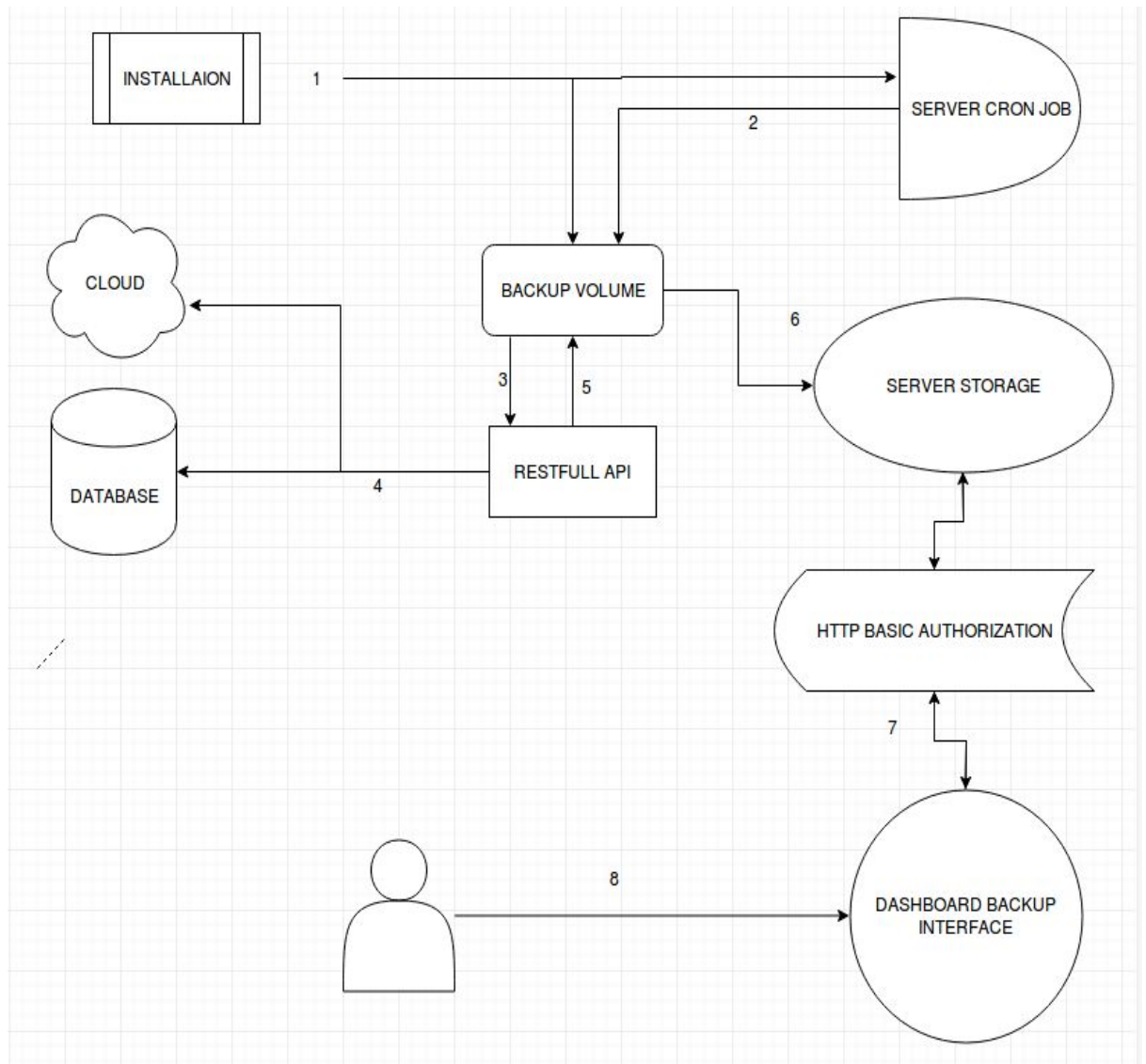
A terminal window titled 'root@slamat: ~/navbel' showing the installation process. The user runs 'chmod +x backup.sh ; chmod +x backups/backup.sh ; chmod +x backups/init.sh'. Then they run './backup.sh' which prompts for a crontab configuration. The user enters './backup.sh '0 12 * * *''. The terminal shows '[+] BACKUP SYSTEM INSTALLED SUCCESSFULLY !' and the prompt returns to 'root@slamat:~/navbel#'.

```
root@slamat: ~/navbel
File Edit View Search Terminal Tabs Help

root@slamat: ~/navbel x root@c37 ~ x + v
root@slamat:~/navbel# chmod +x backup.sh ; chmod +x backups/backup.sh ; chmod +x backups/init.sh
root@slamat:~/navbel# ./backup.sh
Please provide cron configuration
Example: ./backup.sh '0 11 * * *'
root@slamat:~/navbel# ./backup.sh '0 12 * * *'
[+] BACKUP SYSTEM INSTALLED SUCCESSFULLY !
root@slamat:~/navbel#
```

PS : You can view your cron list by : `crontab -e`

● How it Work ?



1. First let's start with `backup.sh` which contains those commands:
creating job in crontab with cron configuration that entered by user (0 12 * * *) this job is programmed to run `backups/init.sh` every night at 12 am
and creating `backups/init.sh` in docker backup volume of restful api container .

and initialize server storage environment and authorization requirement

2. this script `backups/init.sh` programmed to do two things

first, run `backups/backup.sh` from last volume

second, 6. moving all files and databases which created by `backups/backup.sh` to server storage

3 . 4 . 5 is about `backups/backup.sh` which programmed to connect database and dump selected db and zip the restful api files in backup volume

7 . The Dashboard get file & dbs url from server storage which is shared to port 80 and protected by [HTTP basic authentication](#) , username & password stored in `/var/www/html/backups/.htpasswd`

the dashboard send authorization header which stored in required functions to get data from server storage .

and finally the dashboard show backup files :

Example : backups every minute

The screenshot shows a web browser window with the address `23.101.131.75:1999/dashboard/?page=backup`. The page title is "NavBel | Dashboard". On the left is a sidebar with a "NavBel" logo and a menu with items: "Esl Students", "Challenge List", "Add Challenge", "Add Employer", "Rewards", "Send Emails", and "DATA BACKUP". The main content area is titled "Backup System" and contains a table with the following columns: "DOWNLOAD FILE", "FILE SIZE", "DOWNLOAD DATABASE", and "DATABASE SIZE". The table lists 14 backup entries, each with a file path (e.g., `/0022-2019-07-22.zip`), a file size (3.0197849273682MB), a database path (e.g., `/0022-2019-07-22.sql`), and a database size (0.012619972229004MB). A modal dialog titled "Authentication Required" is overlaid on the right side of the table. It contains the text: "http://23.101.131.75 is requesting your username and password. The site says: 'Protected Directory'". Below this text are input fields for "User Name:" and "Password:", and "Cancel" and "OK" buttons.

DOWNLOAD FILE	FILE SIZE	DOWNLOAD DATABASE	DATABASE SIZE
/0022-2019-07-22.zip	3.0197849273682MB	/0022-2019-07-22.sql	0.012619972229004MB
/0023-2019-07-22.zip	3.0197849273682MB	/0023-2019-07-22.sql	0.012619972229004MB
/0024-2019-07-22.zip	3.0197849273682MB	/0024-2019-07-22.sql	0.012619972229004MB
/0025-2019-07-22.zip	3.0197849273682MB	/0025-2019-07-22.sql	0.012619972229004MB
/0026-2019-07-22.zip	3.0197849273682MB	/0026-2019-07-22.sql	0.012619972229004MB
/0027-2019-07-22.zip	3.0197849273682MB	/0027-2019-07-22.sql	0.012619972229004MB
/0028-2019-07-22.zip	3.0197849273682MB	/0028-2019-07-22.sql	0.012619972229004MB
/0029-2019-07-22.zip	3.0197849273682MB	/0029-2019-07-22.sql	0.012619972229004MB
/0030-2019-07-22.zip	3.0197849273682MB	/0030-2019-07-22.sql	0.012619972229004MB
/0031-2019-07-22.zip	3.0197849273682MB	/0031-2019-07-22.sql	0.012619972229004MB

