

Linux Cluster Monitor Manual

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Deployment Steps:

1. Install Docker, Docker-compose and ncat:

I. Docker: <https://docs.docker.com/engine/install/centos/>

II. Docker-compose: <https://docs.docker.com/compose/install/>

III. Ncat: `$ yum install nmap-ncat.x86_64`

IV. Configure the default bridge, create “/etc/docker/daemon.json” file and restart docker:

```
{  
  "default-address-pools":  
  [  
    {"base":"10.10.0.0/16","size":24}  
  ]  
}
```

2. Pull images:

If you skip this step, the images will be pulled automatically when deploy the containers. However, all the images are private, so the authentication is needed.

I. Front-end images, including node view and rack view:

`docker pull neonadia/sysmonitorfrontend`

`docker pull neonadia/rackobserver`

II. Back-end images, including one-time reader and real-time reader:

`docker pull neonadia/sysmonitorbackend`

`docker pull neonadia/sysmonitorsensor`

III. Deployment image:

`docker pull neonadia/autostart`

IV. Database:

`docker pull mongo`

V. Uploader: (This image is going to deprecated soon)

`docker pull neonadia/sysmonitorupload2`

3. Bash shell script for deployment:

https://www.dropbox.com/s/91xzx4pskjed8td/docker_deploy.sh?dl=0

4. Create input files and start deployment:

I. Create a folder for input files.

II. Copy “.csv” files into folders.

III. Create an “auto.env” file, example can be found below :

https://www.dropbox.com/sh/jsgaerdl49xx6qi/AADRq3ZNG9sfdeXGP_OgLIKia?dl=0

IV. Run: `$./docker_deploy.sh FOLDERNAME`

V. Stop firewall: `$ systemctl stop firewalld`

Errors:

ERROR: Failed to Setup IP tables: Unable to enable SKIP DNAT rule: (iptables failed: iptables --wait -t nat -I DOCKER -i br-79c12f098a37 -j RETURN: iptables: No chain/target/match by that name. (exit status 1))

Start the firewall will resolve the issue, after successfully deployed you can stop the firewall again.

Error: no response from RAKP 1 message

It happens sometime when redfish cannot get the IKVM address. This problem can be automatically resolved when LCM running the next round data query. So, it is not critical.

Seems Boot Up Not Completed Yet (Error 500)

This error could be due to one of the following reasons:

1. LCM does not boot up completely.
2. Wrong Redfish API.

To resolve this error, you need to check the log information of the container.

Redfish login failed

This error could be due to one of the following reasons:

1. IPMI did not activated.
2. Request confliction (Not critical).

To activate IPMI, one can use sum to activate it, check “DCMS Single Key Activate Guide” for details.

For example:

```
$ ./sum -i 172.27.28.51 -u ADMIN -p ADMIN -c ActivateProductKey --key xxxxxxxxxxxxxxxxxxxxxx
```

Firmware updating cannot started, error code: 503

This error is due to something block the firmware update, please make sure the following pages have been closed:

1. Correspond IPMI page.
2. Correspond IKVM page.
3. Correspond remote console.

To resolve this issue, simply cancel the update will work.

Container neonadia/sysmonitorsensor was stoped:

This problem could due to network issue, wrong authentication or power outage. The container will automatically try to restart itself if it has been stopped. User need to make sure the network, authentication and power are all good.

The best way to debug this issue is to run a redfish get request to make sure it is working.

