

# 07.emqx容器部署

## 一、自建镜像

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```
go get github.com/nuvo/emq_exporter
cd /root/go/src/github.com/nuvo/emq_exporter

wget https://github.com/nuvo/emq_exporter/releases/download/v0.4.1/emq_exporter-0.4.1-linux.tar.gz
tar xf emq_exporter-0.4.1-linux.tar.gz
mv emq_exporter-0.4.1-linux/emq_exporter .

docker build -t emq_exporter:v1.0 .
```



```

1 root@it5-prometheus-mo... 2 root@it5-prometheus-monit... +
(base) [root@it5-prometheus-monitor ~]# go get github.com/nuvo/emq_exporter 01.go get 获取github上 emq_exporter 文件
(base) [root@it5-prometheus-monitor ~]# cd go/src/
code.cloudfoundry.org/ github.com/ golang.org/ gopkg.in/
(base) [root@it5-prometheus-monitor ~]# cd go/src/github.com/

1 root@it5-prometheus-mo... 2 root@it5-prometheus-monit... +
(base) [root@it5-prometheus-monitor ~]# cd go/src/github.com/nuvo/emq_exporter/ 01.进入文件目录
(base) [root@it5-prometheus-monitor emq_exporter]# wget https://github.com/nuvo/emq_exporter/releases/download/v0.4.1/emq_exporter-0.4.1-linux.tar.gz
-2019-08-06 12:01:39-- https://github.com/nuvo/emq_exporter/releases/download/v0.4.1/emq_exporter-0.4.1-linux.tar.gz 02.wget 下载emq_exporter 二进制文件
Resolving github.com (github.com)... 13.250.177.223
Connecting to github.com (github.com)[13.250.177.223]:443... connected.
HTTP request sent, awaiting response... 302 Found
Location: https://github-production-release-asset-2e65be.s3.amazonaws.com/157383466/fa58ba80-2967-11e9-8def-bf9adf9785217X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=AKIAIWNJYAX4CSVEH53A%2F20190806%2Fus-east-1%2F%3%2Faws4_request%26X-Amz-Date=20190806T040139Z%26X-Amz-Expires=300&X-Amz-Signature=da23e7ea54646de3bc47159974a43264de151d706951c353ea68823a9288fd76X-Amz-SignedHeaders=host&actor_id=0&response-content-disposition=attachment%3B%20filename%3Ddemo_exporter-0.4.1-linux.tar.gz&response-content-type=application%2Foctet-stream [following]
-2019-08-06 12:01:40-- https://github-production-release-asset-2e65be.s3.amazonaws.com/157383466/fa58ba80-2967-11e9-8def-bf9adf9785217X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=AKIAIWNJYAX4CSVEH53A%2F20190806%2Fus-east-1%2F%3%2Faws4_request%26X-Amz-Date=20190806T040139Z%26X-Amz-Expires=300&X-Amz-Signature=da23e7ea54646de3bc47159974a43264de151d706951c353ea68823a9288fd76X-Amz-SignedHeaders=host&actor_id=0&response-content-disposition=attachment%3B%20filename%3Ddemo_exporter-0.4.1-linux.tar.gz&response-content-type=application%2Foctet-stream
Resolving github-production-release-asset-2e65be.s3.amazonaws.com (github-production-release-asset-2e65be.s3.amazonaws.com)... 52.216.186.75
Connecting to github-production-release-asset-2e65be.s3.amazonaws.com (github-production-release-asset-2e65be.s3.amazonaws.com)[52.216.186.75]:443... connect
ed.
HTTP request sent, awaiting response... 200 OK
Length: 3351520 (3.2M) [application/octet-stream]
Saving to: 'emq_exporter-0.4.1-linux.tar.gz'

100%[=====] 3,351,520 1.53MB/s in 2.1s

2019-08-06 12:01:43 (1.53 MB/s) - 'emq_exporter-0.4.1-linux.tar.gz' saved [3351520/3351520] 03.解压emq_exporter二进制文件

(base) [root@it5-prometheus-monitor emq_exporter]# tar xf emq_exporter-0.4.1-linux.tar.gz
(base) [root@it5-prometheus-monitor emq_exporter]# mv emq_exporter-0.4.1-linux/emq_exporter . 03.拷贝emq_exporter 执行文件到当前目录
(base) [root@it5-prometheus-monitor emq_exporter]#

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1 root@it5-prometheus-mo... 2 root@it5-prometheus-monit... +
(base) [root@it5-prometheus-monitor emq_exporter]# docker build -t emq_exporter:v1.0 .
Sending build context to Docker daemon 12.42MB
Step 1/4 : FROM quay.io/prometheus/busybox:latest
latest: Pulling from prometheus/busybox
Digest: sha256:7bf3754069d6a404400d69f2e075bcc18b62cb45c0007b396f24f5d56ac7f84a
Status: Downloaded newer image for quay.io/prometheus/busybox:latest
--> a130381627cc
Step 2/4 : COPY emq_exporter /bin/emq_exporter
--> 94b8f62ac4c1
Step 3/4 : EXPOSE 9505
--> Running in 4b912f5af5b3
Removing intermediate container 4b912f5af5b3
--> f1b7186984eb
Step 4/4 : ENTRYPOINT [ "/bin/emq_exporter" ]

```

```

--> Running in e40de9722cf1
Removing intermediate container e40de9722cf1
--> 5d2183547283
Successfully built 5d2183547283
Successfully tagged emq_exporter:v1.0
(base) [root@it5-prometheus-monitor emq_exporter]#

(base) [root@it5-prometheus-monitor emq_exporter]# docker images

```

REPOSITORY	TAG	IMAGE ID	CREATED	SIZE
emq_exporter	v1.0	5d2183547283	56 seconds ago	11.5MB
node_exporter	v1.0	8b5a20af1dd2	51 minutes ago	22.0MB

01.查看emq\_exorter镜像信息

## 二、添加emq-exporter的配置

```
mkdir -pv /data/emq_exporter/
```

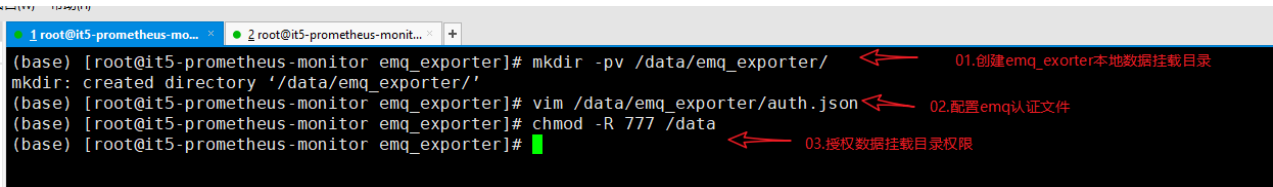
```
vim /data/emq_exporter/auth.json
```

```

{
  "username": "754389cf20963",
  "password": "Mjg4NTkzNTUzNDQyNTIyMzU0ODUxOTI1NTMyNDQyMjE0NDA"
}

```

```
chmod -R 777 /data
```



```
(base) [root@it5-prometheus-monitor emq_exporter]# mkdir -pv /data/emq_exporter/
mkdir: created directory '/data/emq_exporter/'
(base) [root@it5-prometheus-monitor emq_exporter]# vim /data/emq_exporter/auth.json
(base) [root@it5-prometheus-monitor emq_exporter]# chmod -R 777 /data
(base) [root@it5-prometheus-monitor emq_exporter]#
```

01.创建emq\_exorter本地数据挂载目录

02.配置emq认证文件

03.授权数据挂载目录权限

### 三、启动emq-exporter的监控节点

```
docker run -d \
-p 9540:9540 \
--name emq-exporter-banna \
-v /data/emq_exporter/auth.json:/etc/emq/auth.json \
emq_exporter:v1.0 \
--emq.uri "http://10.101.1.5:8080" \
--emq.node "db-monitor@127.0.0.1" \
--emq.api-version "v3" \
--emq.creds-file "/etc/emq/auth.json"
```



```

1 root@it5-prometheus-mo... 2 root@it5-prometheus-monit...
(base) [root@it5-prometheus-monitor emq_exporter]# docker run -d \
> -p 9540:9540 \
> --name emq-exporter-banna \
> -v /data/emq_exporter/auth.json:/etc/emq/auth.json \
> emq_exporter:v1.0 \
> --emq.uri "http://10.101.1.5:8080" \
> --emq.node "56cbcb907dbb@172.17.0.5" \
> --emq.api-version "v3" \
> --emq.creds-file "/etc/emq/auth.json"
7d852b04050e40b160e8d126d64496bb67b93aed07fd06fela7377d74c1e2b93
(base) [root@it5-prometheus-monitor emq_exporter]# docker ps -a
CONTAINER ID        IMAGE               COMMAND                  CREATED            STATUS              NAMES
7d852b04050e        emq_exporter:v1.0   "/bin/emq_exporter -..." 2 seconds ago      Up 1 second        emq-exporter-banna
56cbcb907dbb        emqx/emqx:v3.2.1    "/usr/bin/docker-ent..." 2 minutes ago      Up 2 minutes       emqx-banna
c9bf9db2bdc        google/cadvisor:v0.33.0 "/usr/bin/cadvisor -..." 50 minutes ago     Up 50 minutes (healthy) cadvisor
eab7ea4d4386        node_exporter:v1.0   "/bin/node_exporter ..." 57 minutes ago     Up 57 minutes       node-exporter-banna
7b1ead919ad        grafana:v1.0        "/run.sh"                 About an hour ago   Up About an hour    grafana-banna
a5bfff6e983d7        alertmanger:v1.0     "/bin/alertmanager -..." 2 hours ago        Up 2 hours          alertmanger-banna
7e93c5c0103f        prometheus:v1.0     "/bin/prometheus --c..." 16 hours ago       Up 16 hours         prometheus-banna
(base) [root@it5-prometheus-monitor emq_exporter]#

(base) [root@it5-prometheus-monitor emq_exporter]# docker logs --tail 100 -f 7d852b04050e
time="2019-08-06T04:15:13Z" level=info msg="Loading authentication credentials" source="emq_exporter.go:180"
time="2019-08-06T04:15:13Z" level=info msg="Starting emq_exporter" source="emq_exporter.go:187"
time="2019-08-06T04:15:13Z" level=info msg="Version v0.4.1 (git-09cd6c3)" source="emq_exporter.go:188"
time="2019-08-06T04:15:13Z" level=info msg="Listening on :9540" source="emq_exporter.go:196"

promhttp_metric_handler_requests_total{code="503"} 0
(base) [root@it5-prometheus-monitor emq_exporter]#
(base) [root@it5-prometheus-monitor emq_exporter]#
(base) [root@it5-prometheus-monitor emq_exporter]#
(base) [root@it5-prometheus-monitor emq_exporter]#
(base) [root@it5-prometheus-monitor emq_exporter]#
(base) [root@it5-prometheus-monitor emq_exporter]#
(base) [root@it5-prometheus-monitor emq_exporter]#
(base) [root@it5-prometheus-monitor emq_exporter]# curl http://localhost:9540/metrics|more

# HELP emq_exporter_total_scrapes Current total scrapes.
# TYPE emq_exporter_total_scrapes counter
emq_exporter_total_scrapes 2

```

```
# HELP emq_up Was the last scrape of EMQ successful
# TYPE emq_up gauge
emq_up 0
# HELP go_gc_duration_seconds A summary of the GC invocation durations.
# TYPE go_gc_duration_seconds summary
go_gc_duration_seconds{quantile="0"} 0
go_gc_duration_seconds{quantile="0.25"} 0
go_gc_duration_seconds{quantile="0.5"} 0
go_gc_duration_seconds{quantile="0.75"} 0
go_gc_duration_seconds{quantile="1"} 0
go_gc_duration_seconds_sum 0
go_gc_duration_seconds_count 0
# HELP go_goroutines Number of goroutines that currently exist.
# TYPE go_goroutines gauge
go_goroutines 6
# HELP go_info Information about the Go environment.
# TYPE go_info gauge
go_info{version="go1.11.5"} 1
# HELP go_memstats_alloc_bytes Number of bytes allocated and still in use.
# TYPE go_memstats_alloc_bytes gauge
go_memstats_alloc_bytes 764520
# HELP go_memstats_alloc_bytes_total Total number of bytes allocated, even if freed.
# TYPE go_memstats_alloc_bytes_total counter
go_memstats_alloc_bytes_total 764520
# HELP go_memstats_buck_hash_sys_bytes Number of bytes used by the profiling bucket hash table.
# TYPE go_memstats_buck_hash_sys_bytes gauge
go_memstats_buck_hash_sys_bytes 1.443263e+06
# HELP go_memstats_frees_total Total number of frees.
```

