dockerhub

Explore / blacklabelops/logrotate



blacklabelops/logrotate

By blacklabelops • Updated almost 6 years ago

Rotates Logfiles for Docker and Docker Containers! Attach, Compress, Rotate!

IMAGE

☆58 ↓ 50M+

Overview

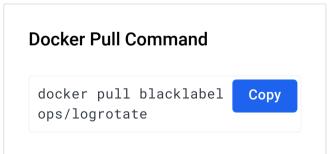
Tags

Dockerized Logrotate



This container can crawl for logfiles and rotate them. It is a side-car container for containers that write logfiles and need a log rotation mechanism. Just hook up some containers and define your backup volumes.

Supported tags and respective Dockerfile links



Distribution	Version	Tag	Dockerfile
Logrotate Alpine	latest, 1.2	latest, 1.2	<u>Dockerfile</u> [♂

Make It Short

In short, this container can rotate all your Docker logfiles just by typing:

```
$ docker run -d \
  -v /var/lib/docker/containers:/var/lib/docker/containers \
  -v /var/log/docker:/var/log/docker \
  -e "LOGS_DIRECTORIES=/var/lib/docker/containers /var/log/docker" \
  blacklabelops/logrotate
```

This will rotate all your Docker logfiles on a daily basis up to 5 times.

You want to do it hourly? Just type:

```
$ docker run -d \
   -v /var/lib/docker/containers:/var/lib/docker/containers \
   -v /var/log/docker:/var/log/docker \
   -e "LOGS_DIRECTORIES=/var/lib/docker/containers /var/log/docker" \
   -e "LOGROTATE_INTERVAL=hourly" \
   blacklabelops/logrotate
```

This will put logrotate on an hourly schedule.

How To Attach to Logs

In order to attach the side-car container to your logs you have to hook your log file folders inside volumes. Afterwards specify the folders logrotate should crawl for log files. The container attaches by default to any file ending with .log inside the specified folders.

Environment variable for specifying log folders: LOGS_DIRECTORIES . Each directory must be separated by a whitespace character.

Example:

```
LOGS_DIRECTORIES=/var/lib/docker/containers /var/log/docker
```

Example Logrotating all Docker logfiles:

```
$ docker run -d \
  -v /var/lib/docker/containers:/var/lib/docker/containers \
  -v /var/log/docker:/var/log/docker \
  -e "LOGS_DIRECTORIES=/var/lib/docker/containers /var/log/docker" \
  blacklabelops/logrotate
```

This will logrotate any logfile(s) under /var/lib/docker/containers, /var/log/docker (or subdirectories of them).

Customize Log File Ending

You can define the file endings fluentd will attach to. The container will by default crawl for files ending with .log. This can be overriden and extended to any amount of file endings.

Example:

```
$ docker run -d \
  -v /var/lib/docker/containers:/var/lib/docker/containers \
  -v /var/log/docker:/var/log/docker \
```

```
-e "LOGS_DIRECTORIES=/var/lib/docker/containers /var/log/docker" \
-e "LOG_FILE_ENDINGS=json xml" \
blacklabelops/logrotate
```

Crawls for file endings .json and .xml.

Set the Log interval

Logrotate can rotate logfile according to the following intervals:

- hourly
- daily
- weekly
- monthly
- yearly

You can override the default setting with the environment variable LOGROTATE_INTERVAL .

Example:

```
$ docker run -d \
  -v /var/lib/docker/containers:/var/lib/docker/containers \
  -v /var/log/docker:/var/log/docker \
  -e "LOGS_DIRECTORIES=/var/lib/docker/containers /var/log/docker" \
  -e "LOGROTATE_INTERVAL=hourly" \
  blacklabelops/logrotate
```

This will logrotate logfile(s) on hourly basis.

Set the Number of Rotations

The default number of rotations is five. Further rotations will delete old logfiles. You can override the default setting with the environment variable LOGROTATE_COPIES.

Example:

```
$ docker run -d \
   -v /var/lib/docker/containers:/var/lib/docker/containers \
   -v /var/log/docker:/var/log/docker \
   -e "LOGS_DIRECTORIES=/var/lib/docker/containers /var/log/docker" \
   -e "LOGROTATE_COPIES=10" \
   blacklabelops/logrotate
```

Will create 10 daily logs before deleting old logs.

Set Maximum File size

Logrotate can do additional rotates, when the logfile exceeds a certain file size. You can specify file size rotation with the environment variable LOGROTATE_SIZE .

Valid example values:

- 100k : Will rotate when log file exceeds 100 kilobytes.
- 100M: Will rotate when log file exceeds 100 Megabytes.
- 100G: Will rotate when log file exceeds 100 Gigabytes.

```
$ docker run -d \
  -v /var/lib/docker/containers:/var/lib/docker/containers \
```

```
-v /var/log/docker:/var/log/docker \
-e "LOGS_DIRECTORIES=/var/lib/docker/containers /var/log/docker" \
-e "LOGROTATE_SIZE=10M" \
blacklabelops/logrotate
```

This will logrotate when logfile(s) reaches 10M+.

Set Log File compression

The default logrotate setting is nocompress. In order to enable logfile compression you can set the environment variable LOGROTATE_COMPRESSION to compress.

Example:

```
$ docker run -d \
   -v /var/lib/docker/containers:/var/lib/docker/containers \
   -v /var/log/docker:/var/log/docker \
   -e "LOGS_DIRECTORIES=/var/lib/docker/containers /var/log/docker" \
   -e "LOGROTATE_COMPRESSION=compress" \
   blacklabelops/logrotate
```

This will compress the logrotated logs.

Set the Output directory

By default, logrotate will rotate logs in their respective directories. You can specify a directory for keeping old logfiles with the environment variable LOGROTATE_OLDDIR. You can specify a full or relative path.

Example:

```
$ docker run -d \
   -v /var/lib/docker/containers:/var/lib/docker/containers \
   -v /var/log/docker:/var/log/docker \
   -v $(pwd)/logs:/logs/ \
   -e "LOGS_DIRECTORIES=/var/lib/docker/containers /var/log/docker" \
   -e "LOGROTATE_OLDDIR=/logs" \
   blacklabelops/logrotate
```

Will move old logfiles in the local directory logs/.

Set the Cron Schedule

You can set the cron schedule independently of the logrotate interval. You can override the default schedule with the environment variable LOGROTATE_CRONSCHEDULE.

Example:

```
$ docker run -d \
   -v /var/lib/docker/containers:/var/lib/docker/containers \
   -v /var/log/docker:/var/log/docker \
   -e "LOGS_DIRECTORIES=/var/lib/docker/containers /var/log/docker" \
   -e "LOGROTATE_INTERVAL=hourly" \
   -e "LOGROTATE_CRONSCHEDULE=* * * * * * *" \
   blacklabelops/logrotate
```

This will logrotate on go-cron schedule * * * * * (every second).

Log and View the Logrotate Output

You can specify a logfile for the periodical logrotate execution. The file is specified using the environment variable LOGROTATE_LOGFILE . Must be a full path!

Example:

```
$ docker run -d \
   -v /var/lib/docker/containers:/var/lib/docker/containers \
   -v /var/log/docker:/var/log/docker \
   -v $(pwd)/logs:/logs \
   -e "LOGS_DIRECTORIES=/var/lib/docker/containers /var/log/docker" \
   -e "LOGROTATE_INTERVAL=hourly" \
   -e "LOGROTATE_CRONSCHEDULE=* * * * * * * *" \
   -e "LOGROTATE_LOGFILE=/logs/logrotatecron.log" \
   blacklabelops/logrotate
```

You will be able to see logrotate output every minute in file logs/logrotatecron.log.

Logrotate Commandline Parameters

You can define the logrotate commandline parameters with the environment variable LOGROTATE_PARAMETERS.

- v: Verbose
- d: Debug, Logrotate will be emulated but never executed!
- f: Force

Example for a typical testrun:

```
$ docker run -d \
  -v /var/lib/docker/containers:/var/lib/docker/containers \
```

```
-v /var/log/docker:/var/log/docker \
-v $(pwd)/logs:/logs \
-e "LOGS_DIRECTORIES=/var/lib/docker/containers /var/log/docker" \
-e "LOGROTATE_PARAMETERS=vdf" \
-e "LOG_FILE=/logs/cron.log" \
blacklabelops/logrotate
```

Will run logrotate with: /usr/bin/logrotate -dvf

Logrotate Status File

Logrotate must remember when files have been rotated when using time intervals, e.g. 'daily'. The status file will be written by default to the container volume but you can specify a custom location with the environment variable LOGROTATE_STATUSFILE.

Example:

```
$ docker run -d \
  -e "LOGROTATE_INTERVAL=hourly" \
  -e "LOGROTATE_CRONSCHEDULE=0 * * * * * * " \
  -e "LOGROTATE_STATUSFILE=/logrotate-status/logrotate.status" \
  -e "ALL_LOGS_DIRECTORIES=/var/log" \
  -e "LOGROTATE_PARAMETERS=vf" \
  blacklabelops/logrotate
```

Writes the latest status file each logrotation. Reads status files at each start.

Log and View the Cron Output

You can specify a separate logfile for cron. The file is specified using the environment variable LOG_FILE . Must be a full path!

Example:

```
$ docker run -d \
   -v /var/lib/docker/containers:/var/lib/docker/containers \
   -v /var/log/docker:/var/log/docker \
   -v $(pwd)/logs:/logs \
   -e "LOGS_DIRECTORIES=/var/lib/docker/containers /var/log/docker" \
   -e "LOGROTATE_INTERVAL=hourly" \
   -e "LOGROTATE_CRONSCHEDULE=* * * * * * * *" \
   -e "LOG_FILE=/logs/cron.log" \
   blacklabelops/logrotate
```

You will be able to see cron output every minute in file logs/cron.log.

Setting a Date Extension

With Logrotate it is possible to split files and name them by the date they were generated when used with <code>LOGROTATE_DATEFORMAT</code> . By setting <code>LOGROTATE_DATEFORMAT</code> you will enable the Logrotate <code>dateext</code> option.

The default Logrotate format is \[-\%Y\%m\%d \], to enable the defaults \[LOGROTATE_DATEFORMAT \] should be set to this.

Example:

```
$ docker run -d \
  -v /var/lib/docker/containers:/var/lib/docker/containers \
  -v /var/log/docker:/var/log/docker \
  -e "LOGROTATE_INTERVAL=daily" \
  -e "LOGROTATE_CRONSCHEDULE=0 * * * * * *" \
```

```
-e "LOGS_DIRECTORIES=/var/lib/docker/containers /var/log/docker" \-e "LOGROTATE_DATEFORMAT=-%Y%m%d" \blacklabelops/logrotate
```

This will set logrotate to split files and name them by date format - %Y%m%d.

Disable Auto Update

With Logrotate by default it auto update its logrotate configuration file to ensure it only captures all the intended log file in the <code>LOGS_DIRECTORIES</code> (before it rotates the log files). It is possible to disable auto update when used with <code>LOGROTATE_AUTOUPDATE</code> . By setting <code>LOGROTATE_AUTOUPDATE</code> (to not equal true) you will disable the auto update of Logrotate.

```
The default LOGROTATE_AUTOUPDATE is true, to disable the defaults LOGROTATE_AUTOUPDATE should be set not equal true.
```

Example:

```
docker run -d \
  -v /var/lib/docker/containers:/var/lib/docker/containers \
  -v /var/log/docker:/var/log/docker \
  -e "LOGS_DIRECTORIES=/var/lib/docker/containers /var/log/docker" \
  -e "LOGROTATE_AUTOUPDATE=false" \
  blacklabelops/logrotate
```

This will disable logrotate configuration file update (when logrotate action is triggering).

Set Time Zone

With Logrotate by default it logrotate logs in $\[UTC \]$ time zone. It is possible to set time zone when used with $\[TZ \]$. By setting $\[TZ \]$ (to a valid time zone) it will logrotate logs in the specified time zone.

The default TZ is "", to set to different time zone. E.g Australia/Melbourne.

Example:

```
docker run -d \
  -v /var/lib/docker/containers:/var/lib/docker/containers \
  -v /var/log/docker:/var/log/docker \
  -e "LOGS_DIRECTORIES=/var/lib/docker/containers /var/log/docker" \
  -e "TZ=Australia/Melbourne" \
  blacklabelops/logrotate
```

This will logrotate in Australia/Melbourne time zone.

Used in Kubernetes

When we run container in Kubernetes, we can use the logrotate container to rotate the logs. As we create

an DaemonSet in cluster, we can deploy an logrotate container in every nodes of the cluster.

```
# kubectl create -f logrotate_ds.yaml
daemonset "logrotate" created
```

Support

Leave a message and ask questions on Hipchat: blacklabelops/hipchat []

References

- Logrotate ☐
- Docker Homepage ☐
- Docker Userquide 🖸



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