

Docker un-used resources cleanup: Post 4 of 5 [Script]

```
#!/bin/bash
```

```
# -----
```

```
# Script Name: docker_unused_res_cleanup.sh
```

```
# Author: Shiivam Agnihotri
```

```
# Date: (14 March 2024)
```

```
# Description: Clean docker unused resources based on threshold value.
```

```
# -----
```

```
# Set variables for cleanup thresholds
```

```
CONTAINER_THRESHOLD=7d
```

```
IMAGE_THRESHOLD=7d
```

```
VOLUME_THRESHOLD=30d
```

```
# Clean stopped containers older than threshold
```

```
echo "Cleaning stopped containers older than $CONTAINER_THRESHOLD..."
```

```
docker container prune --filter "until=$CONTAINER_THRESHOLD" -f
```

```
# Clean unused images older than threshold
```

```
echo "Cleaning unused images older than $IMAGE_THRESHOLD..."
```

```
docker image prune --filter "until=$IMAGE_THRESHOLD" -f
```

```
# Clean unused volumes older than threshold
```

```
echo "Cleaning unused volumes older than $VOLUME_THRESHOLD..."
```

```
docker volume prune --filter "until=$VOLUME_THRESHOLD" -f
```

```
echo "Docker cleanup complete."
```

Explanation

#!/bin/bash: This line is called a shebang and indicates that the script should be executed using the Bash shell.

Comments: Lines starting with # are comments and are ignored by the shell. They are used to provide information about the script, such as its purpose, author, and date.

CONTAINER_THRESHOLD=7d, IMAGE_THRESHOLD=7d, VOLUME_THRESHOLD=30d: These lines set variables to define the thresholds for cleaning up Docker resources. The thresholds are specified in days (d). For example, CONTAINER_THRESHOLD=7d means that containers older than 7 days will be cleaned up.

echo "Cleaning stopped containers older than \$CONTAINER_THRESHOLD...": This line prints a message indicating that stopped containers older than the threshold are being cleaned up. The value of \$CONTAINER_THRESHOLD is substituted into the message.

docker container prune --filter "until=\$CONTAINER_THRESHOLD" -f: This line executes the docker container prune command to remove stopped containers. The --filter "until=\$CONTAINER_THRESHOLD" flag filters containers that are older than the specified threshold. The -f flag forces the command to execute without interactive confirmation.

echo "Cleaning unused images older than \$IMAGE_THRESHOLD...": This line prints a message indicating that unused images older than the threshold are being cleaned up. The value of \$IMAGE_THRESHOLD is substituted into the message.

docker image prune --filter "until=\$IMAGE_THRESHOLD" -f: This line executes the docker image prune command to remove unused images. The --filter "until=\$IMAGE_THRESHOLD" flag filters images that are older than the specified threshold. The -f flag forces the command to execute without interactive confirmation.

echo "Cleaning unused volumes older than \$VOLUME_THRESHOLD...": This line prints a message indicating that unused volumes older than the threshold are being cleaned up. The value of \$VOLUME_THRESHOLD is substituted into the message.

docker volume prune --filter "until=\$VOLUME_THRESHOLD" -f: This line executes the docker volume prune command to remove unused volumes. The --filter "until=\$VOLUME_THRESHOLD" flag filters volumes that are older than the specified threshold. The -f flag forces the command to execute without interactive confirmation.

echo "Docker cleanup complete.": This line prints a message indicating that the Docker cleanup process is complete.

For Example: If you want to execute this script on every Sunday at 6pm then you can update like this in crontab:

```
0 18 * * 0 /path/to/your/script.sh
```

You can customize it as per your need.

Explanation:

0: Minute (0 represents 6pm)

18: Hour (24-hour format; 18 corresponds to 6pm)

*****: Day of month (**ignored** since we specify day of week)

*****: Month (**ignored** since we specify day of week)

0: Day of week (0 or 7 both represent Sunday)

/path/to/your/script.sh: The path to your script file

Follow [Shivam Agnihotri](#) on LinkedIn for useful DevOps Content.

Join DevOps Ocean Group: <https://www.linkedin.com/groups/9189158/>

If you are looking for a Dedicated 1:1 session with me to boost your DevOps Productivity, then please book a session from here: https://topmate.io/shivam_agnihotri



DevOps Ocean