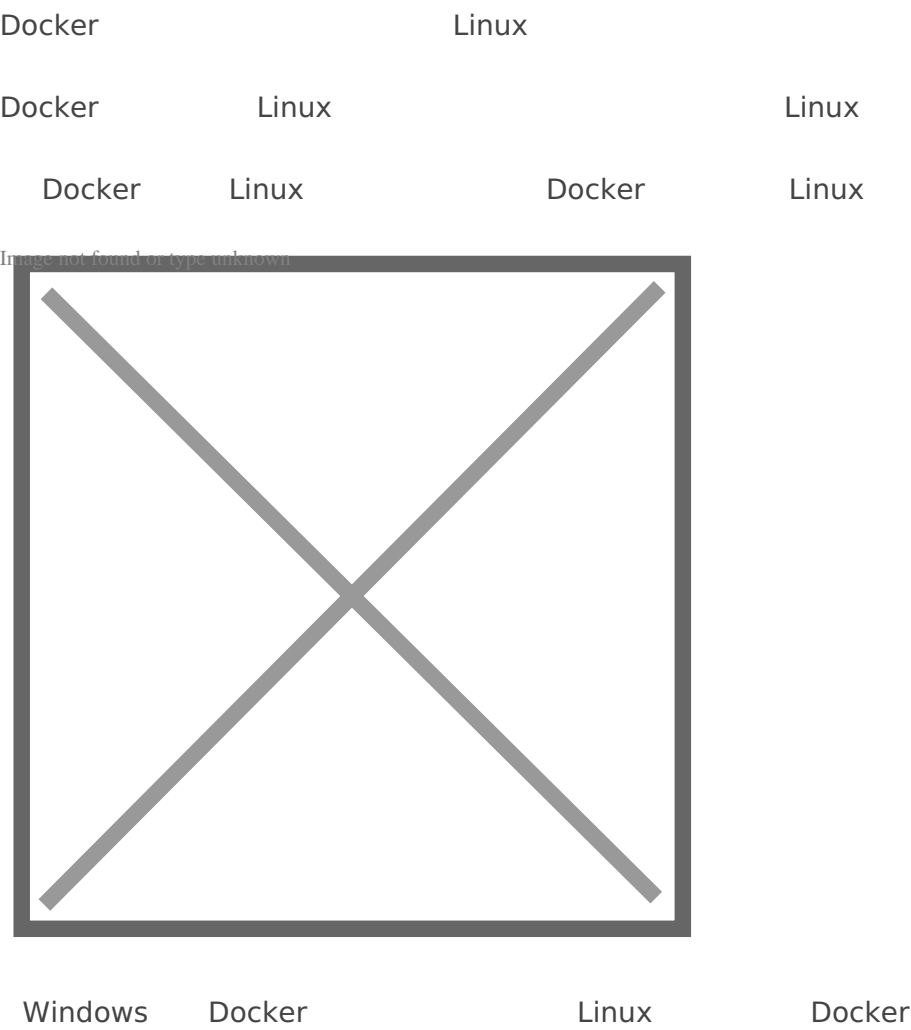


Docker

- [Windows Docker](#)
- [MacOS Docker](#)
- [Docker](#)
- [Docker](#)
- [Docker](#) [Dockerfile](#) [tomcat](#)

Windows Docker



Win10

Docker Desktop Docker Windows 10 macOS Linux Docker

Docker Desktop <https://hub.docker.com/editions/community/docker-ce-desktop-windows>

Windows 10

Hyper-V

Hyper-V VMWare VirtualBox Windows 10 Docker Desktop for Windows
QEMU VirtualBox VMWare Workstation 15 Android

Hyper-V



Windows



Hyper-V



Hyper-V

PowerShell

```
Enable- WindowsOptionalFeature -Online -FeatureName Microsoft-Hyper-V -All
```

Docker Desktop for Windows

[Get started with Docker Desktop](#) Windows



Docker for Windows Installer Next Finish



Docker Docker

docker version

docker run hello-world

Windows Docker

image not found or type unknown



image not found or type unknown



WSL 2

PowerShell

```
docker run hello-world
```

image not found or type unknown



win7 win8

win7 win8

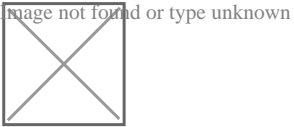
docker toolbox <http://mirrors.aliyun.com/docker-toolbox/windows/docker-toolbox/>

image not found or type unknown



docker toolbox

- Docker CLI - docker
- Docker Machine - Windows docker
- Docker Compose - docker-compose
- Kitematic - Docker GUI
- Docker QuickStart shell - Docker
- Oracle VM Virtualbox -



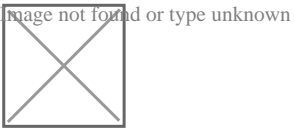
Docker QuickStart

Docker Toolbox

User Account Control

VirtualBox

Yes



\$

```
$ docker run hello-world

Unable to find image 'hello-world:latest' locally
Pulling repository hello-world
91c95931e552: Download complete
a8219747be10: Download complete
Status: Downloaded newer image for hello-world:latest
Hello from Docker.

This message shows that your installation appears to be working correctly.
```

To generate this message, Docker took the following steps:

1. The Docker Engine CLI client contacted the Docker Engine daemon.
2. The Docker Engine daemon pulled the "hello-world" image from the Docker Hub.
(Assuming it was not already locally available.)
3. The Docker Engine daemon created a new container from that image which runs the executable that produces the output you are currently reading.
4. The Docker Engine daemon streamed that output to the Docker Engine CLI client, which sent it
to your terminal.

To try something more ambitious, you can run an Ubuntu container with:

```
$ docker run -it ubuntu bash
```

For more examples and ideas, visit:

<https://docs.docker.com/userguide/>

MacOS Docker

Homebrew

macOS

Homebrew

Docker

Homebrew

Cask

Docker for Mac

Homebrew Cask

```
$ brew install --cask --appdir=/Applications docker

==> Creating Caskroom at /usr/local/Caskroom
==> We'll set permissions properly so we won't need sudo in the future
Password: # macOS
==> Satisfying dependencies
==> Downloading https://download.docker.com/mac/stable/21090/Docker.dmg
##### 100.0%
==> Verifying checksum for Cask docker
==> Installing Cask docker
==> Moving App 'Docker.app' to '/Applications/Docker.app'.
&#x1f37a; docker was successfully installed!
```

Docker app

Next

macOS

Docker

Install Docker Desktop on Mac

Download Docker Desktop for Mac:

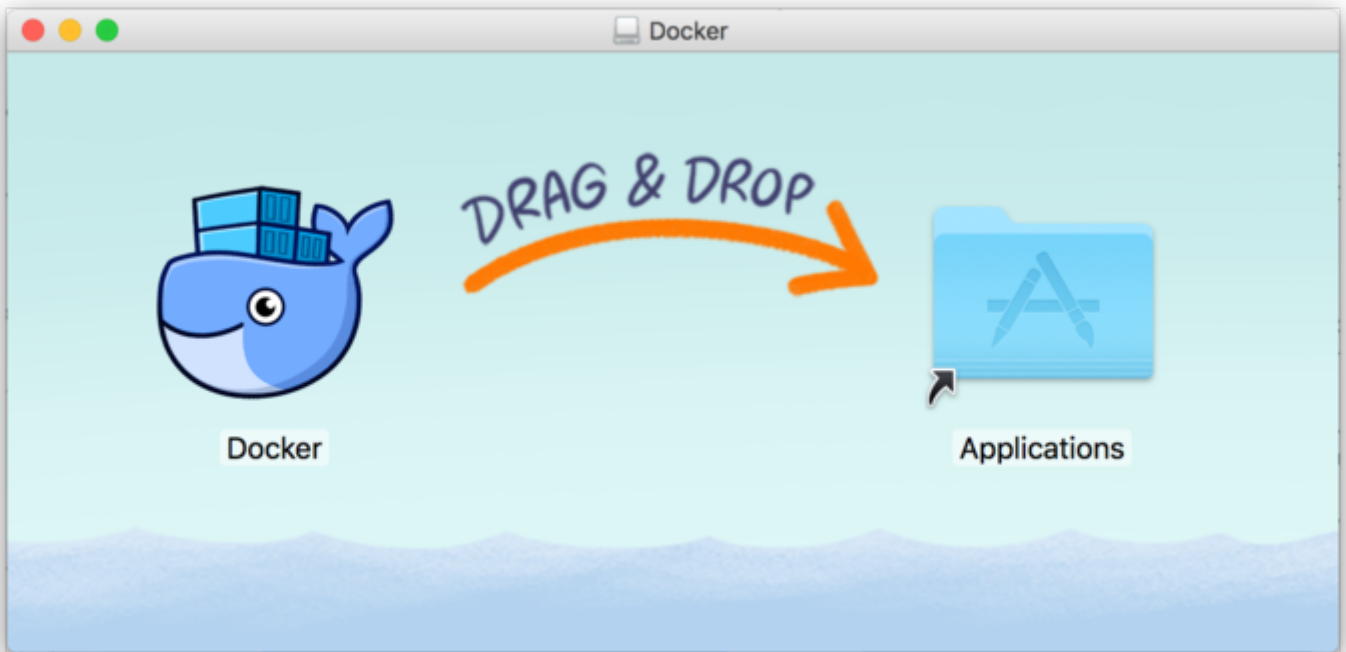
Mac with Intel chip

Mac with A

macOS

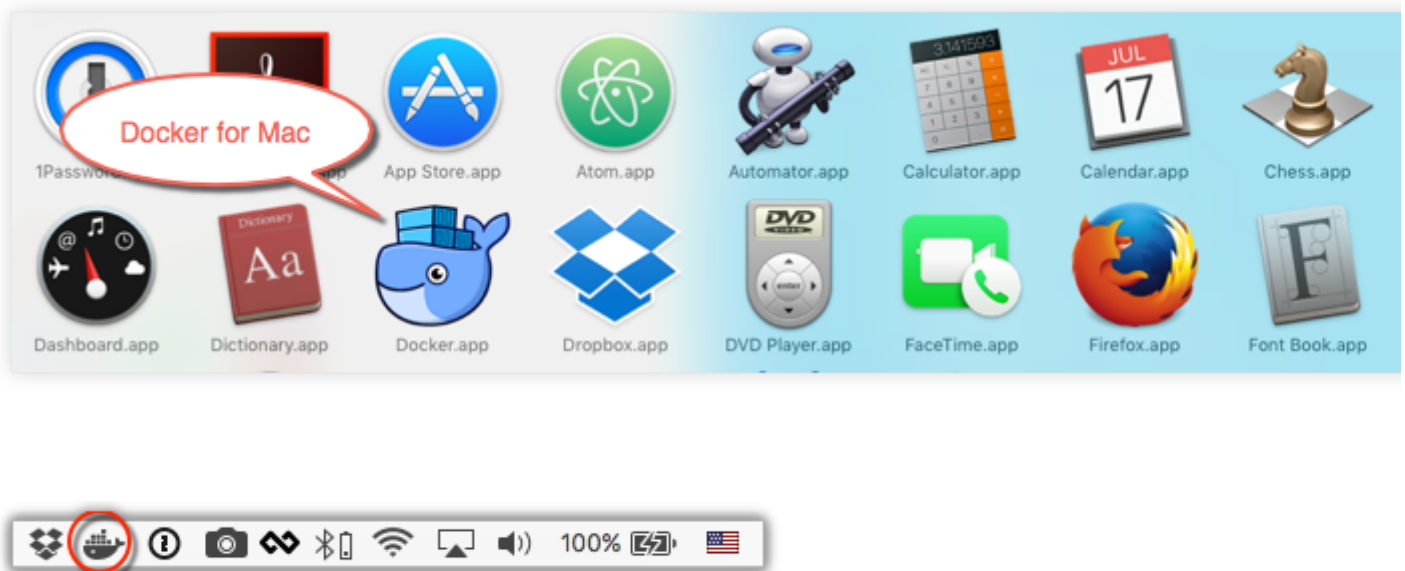
.dmg

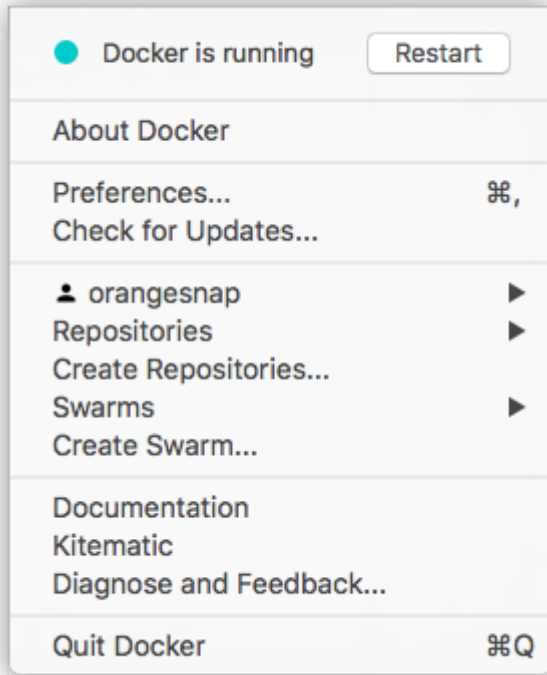
Application



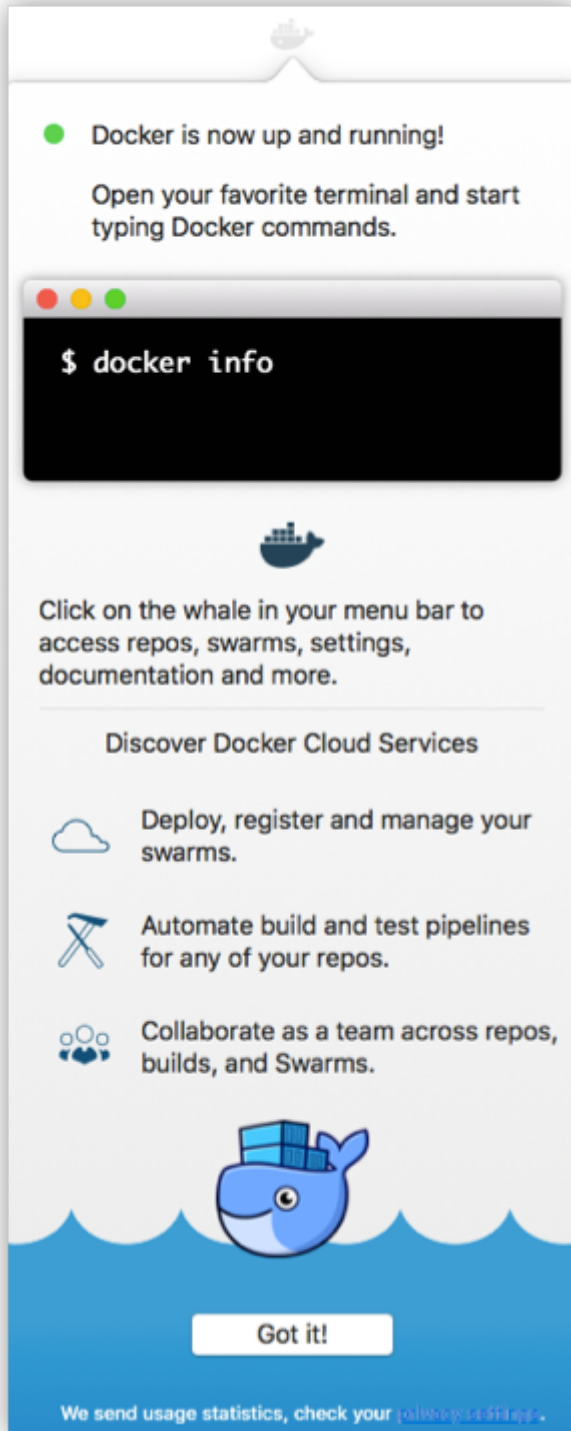
Docker

macOS





"Got it!"



Docker

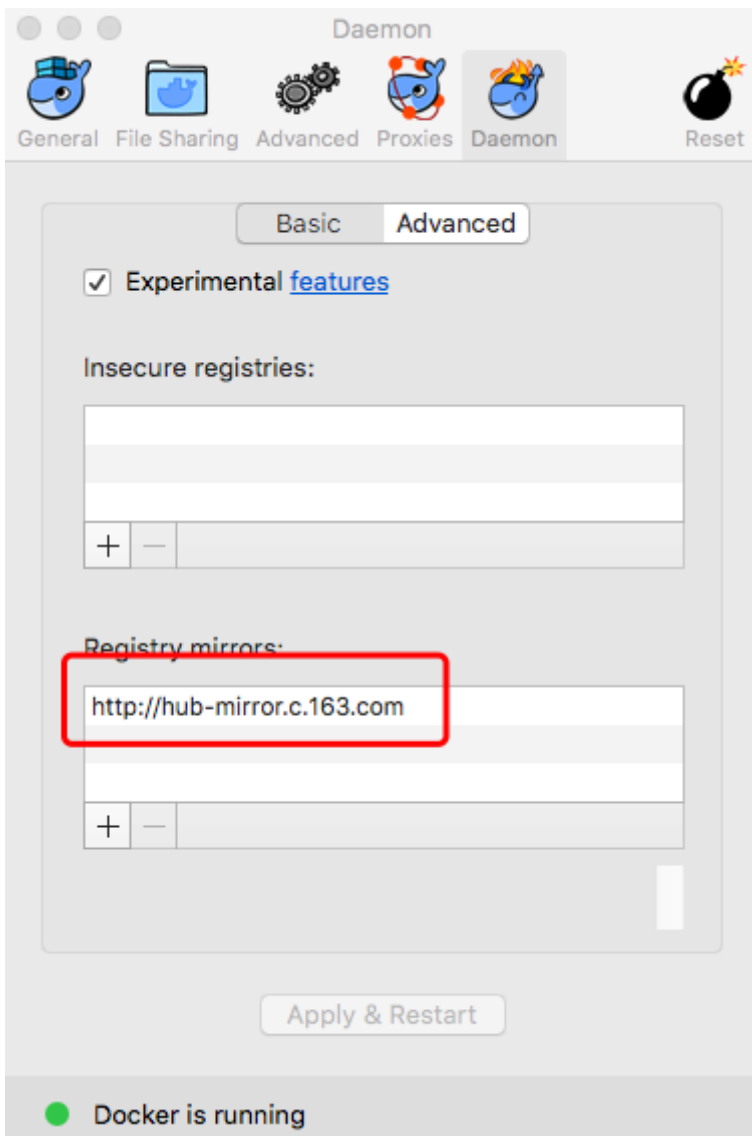
```
docker --version
```

```
Docker version 17.09.1-ce, build 19e2cf6
```

Docker

<http://hub-mirror.c.163.com>

Docker for mac -> Preferences... -> Daemon -> Registry mirrors



docker info

```
$ docker info
...
Registry Mirrors:
  http://hub-mirror.c.163.com
Live Restore Enabled: false
```

Docker

docker compose

??	??
docker compose build	
docker compose convert	
docker compose cp	/
docker compose create	
docker compose down	
docker compose events	
docker compose exec	
docker compose images	
docker compose kill	
docker compose logs	
docker compose ls	
docker compose pause	
docker compose port	
docker compose ps	
docker compose pull	
docker compose push	
docker compose restart	
docker compose rm	
docker compose run	
docker compose start	
docker compose stop	
docker compose top	

??	??
docker compose unpause	
docker compose up	
docker compose version	Docker Compose

Docker

Docker

Docker Docker Docker

Dockerfile

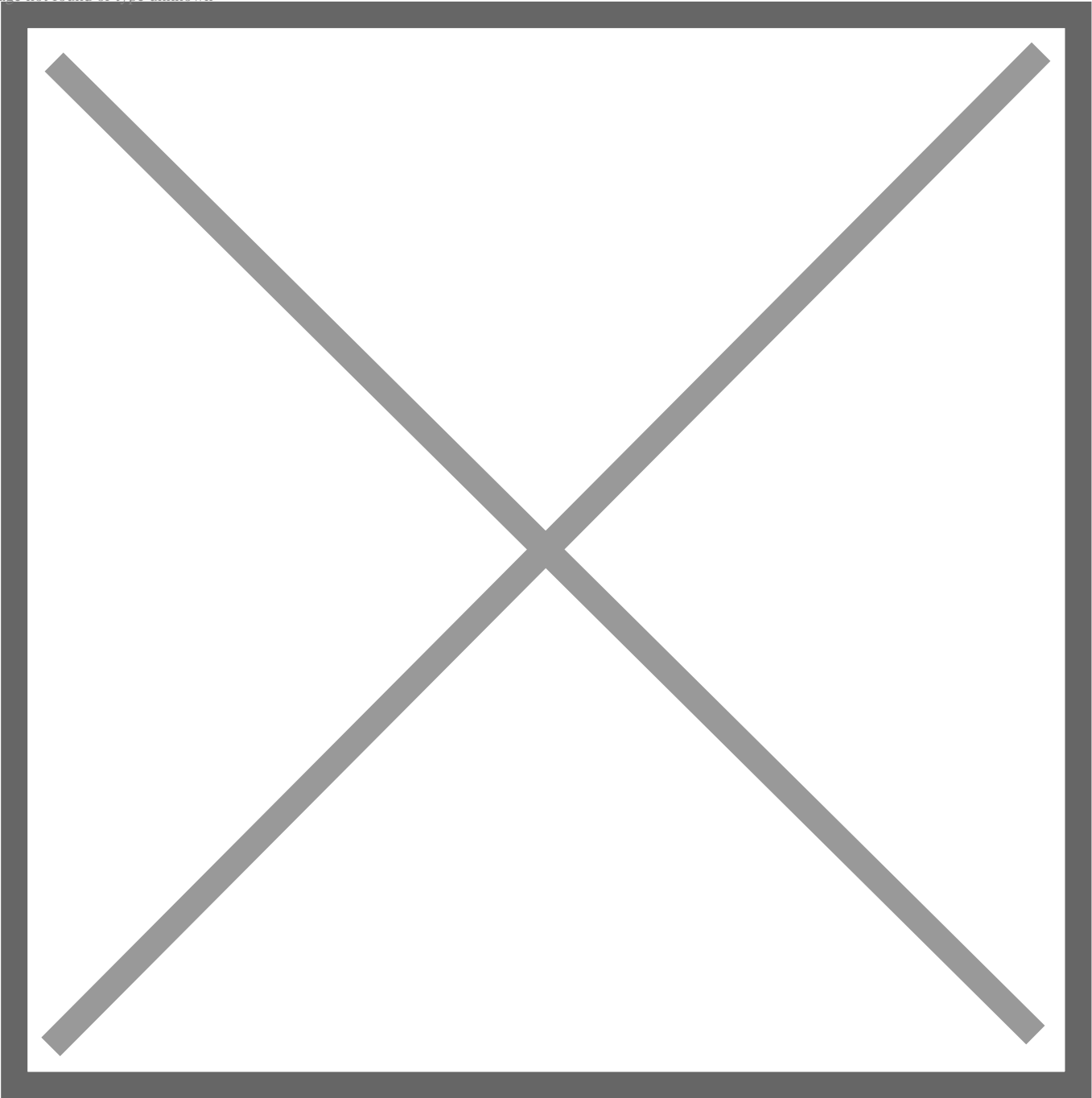
Docker Dockerfile Dockerfile

Docker Compose

Docker Compose Compose YAML

"Docker"
" " "Docker" F5 "Docker"

Image not found or type unknown



Docker

Docker
Compose
Compose
Compose
Compose

Docker

Docker

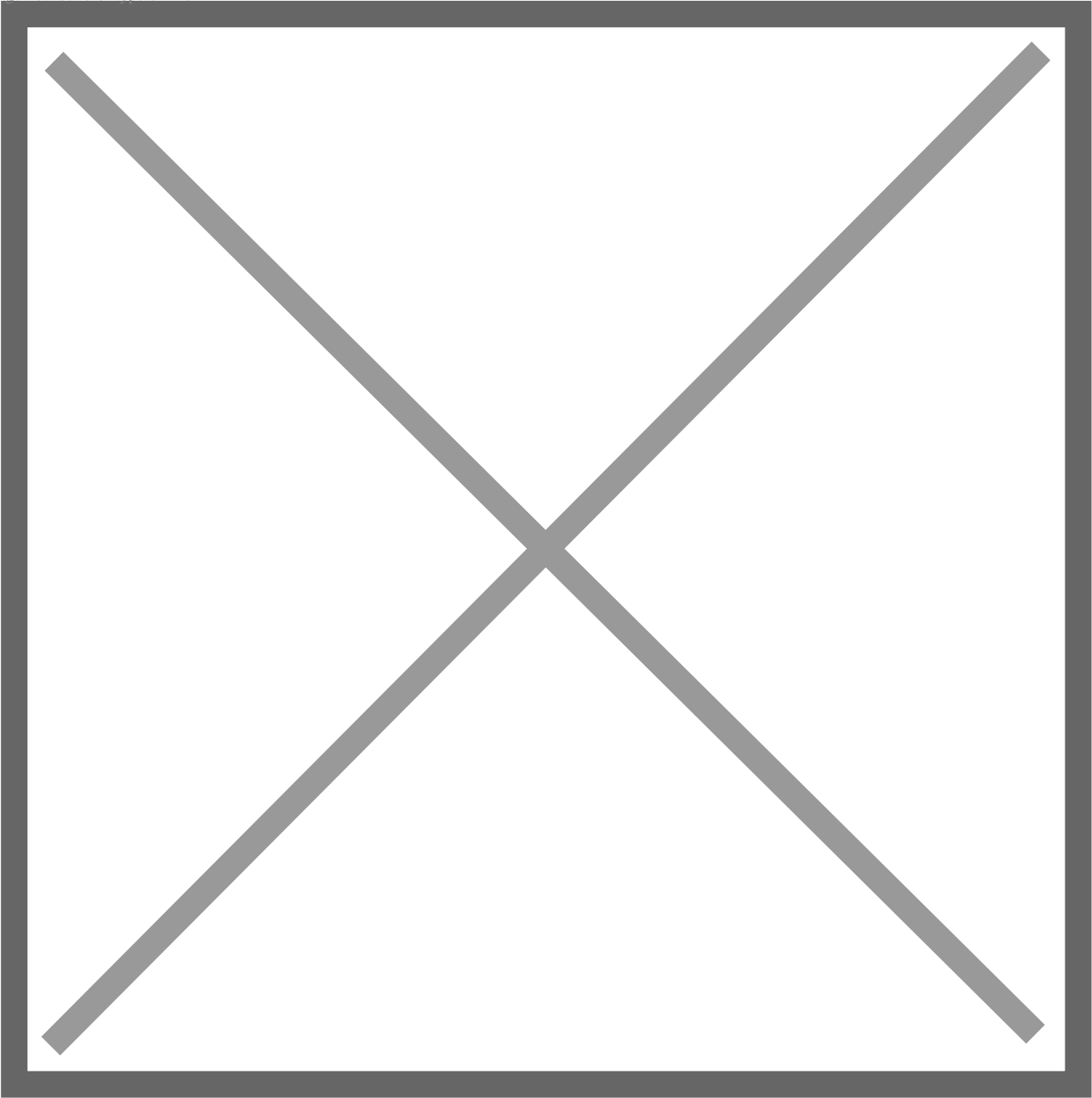
Compose yaml

Docker

Docker

Docker

Image not found or type unknown



- Docker

docker mysql:5.7
mysql:5.7 mysql 5.7 ":"

Image not found or type unknown

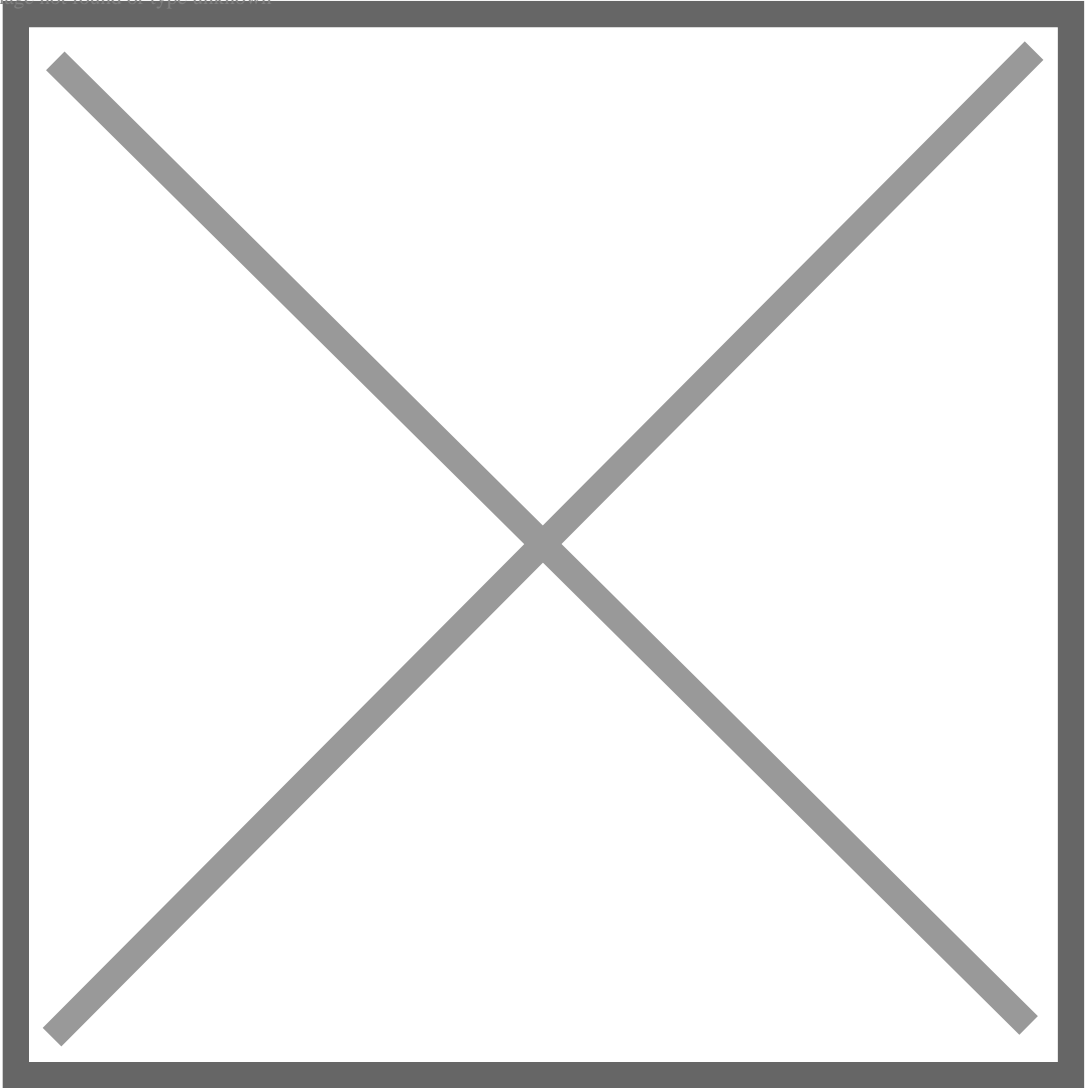
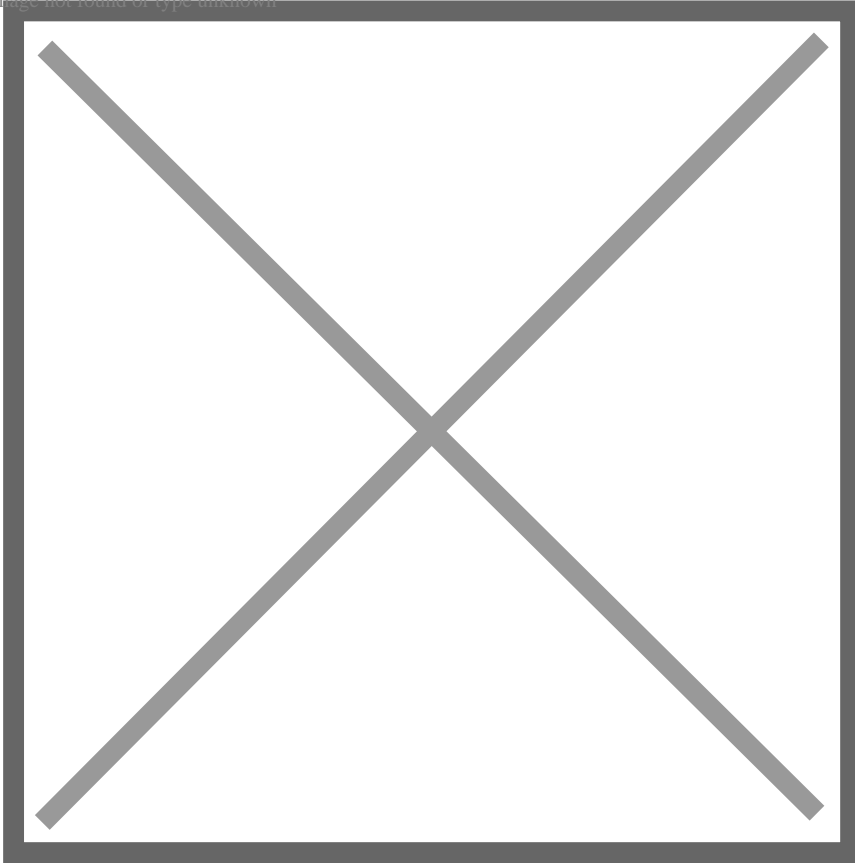
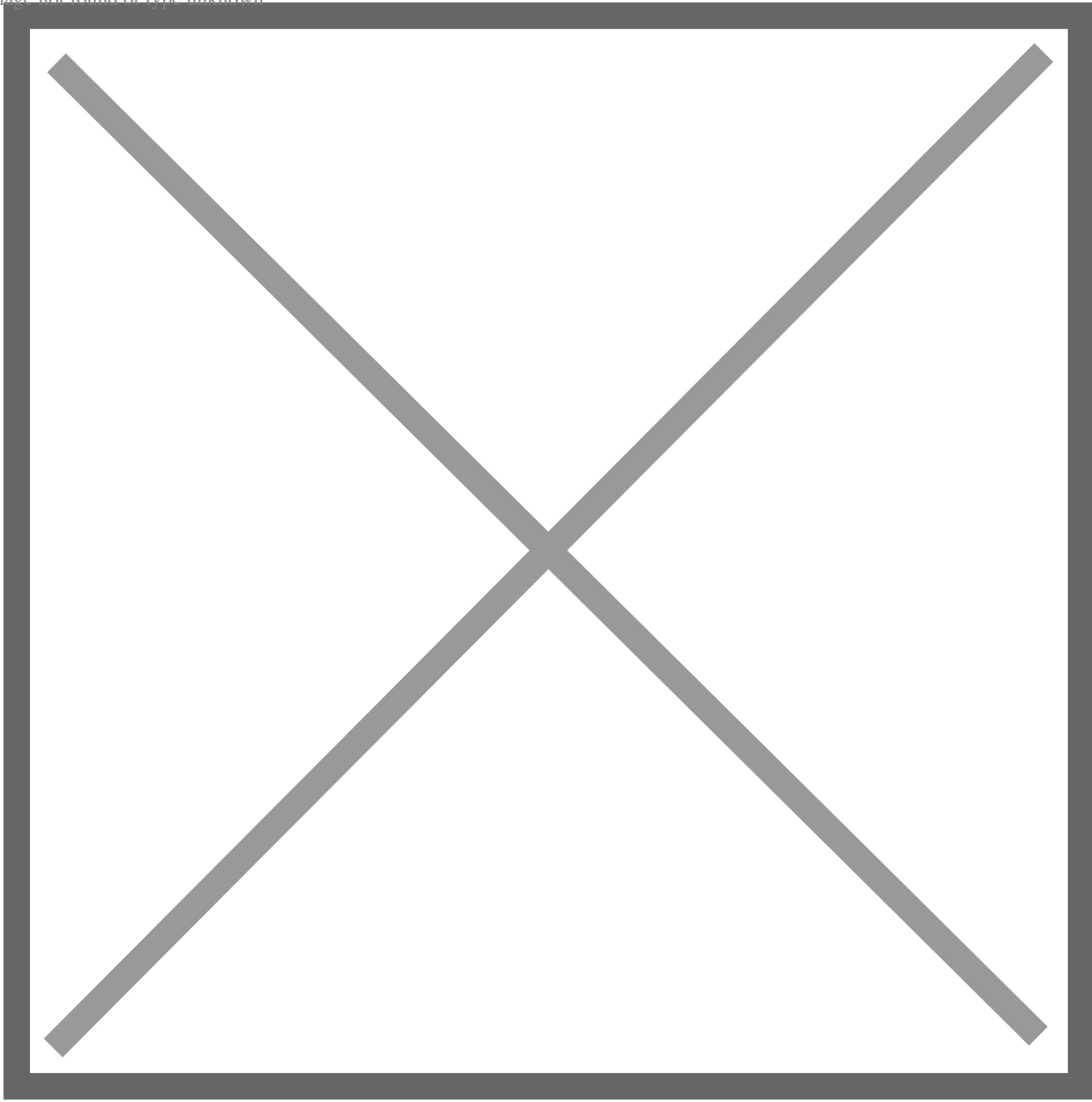


Image not found or type unknown



- Dockerfile
[Dockerfile](#)

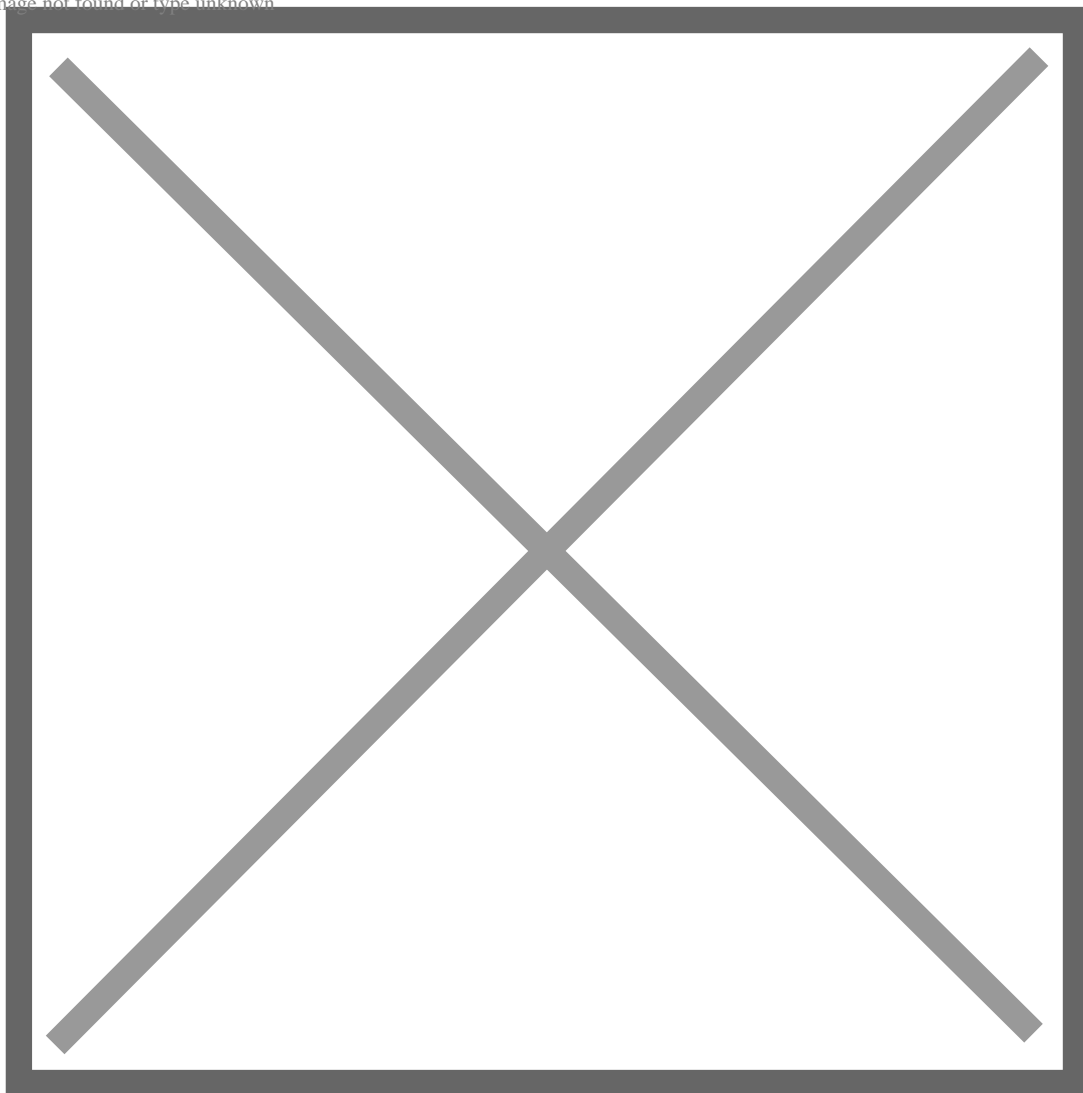
Image not found or type unknown



•

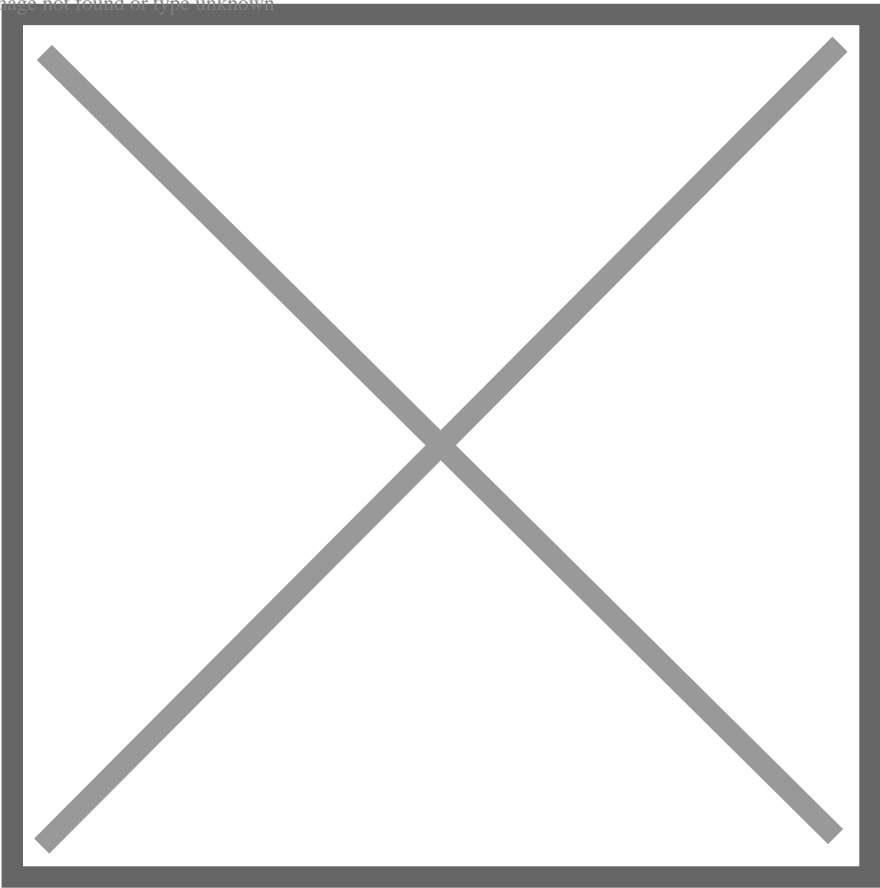
:

Image not found or type unknown



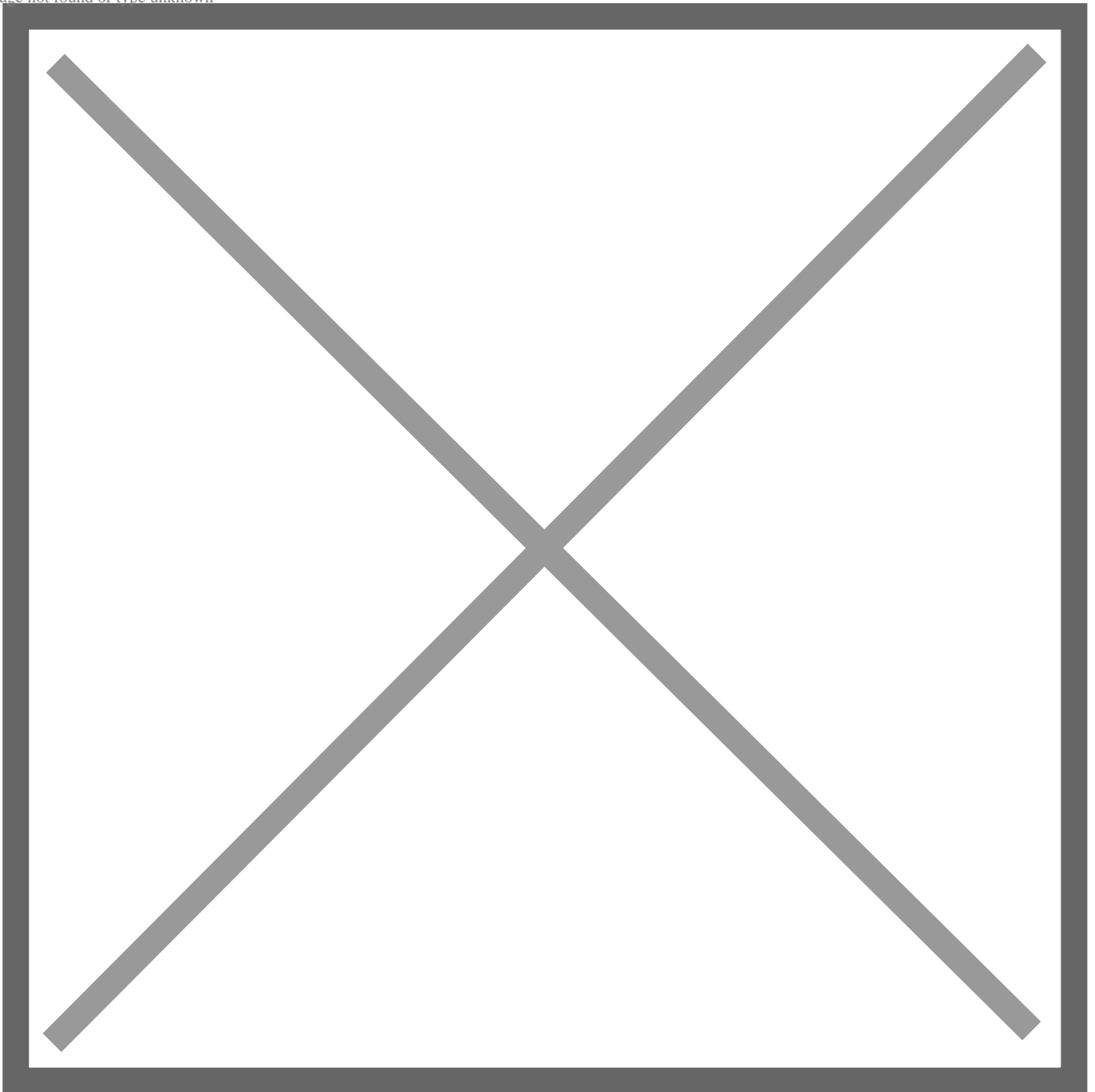
.

Image not found or type unknown



- ID sha256 ID
- Docker " / " " : "
-

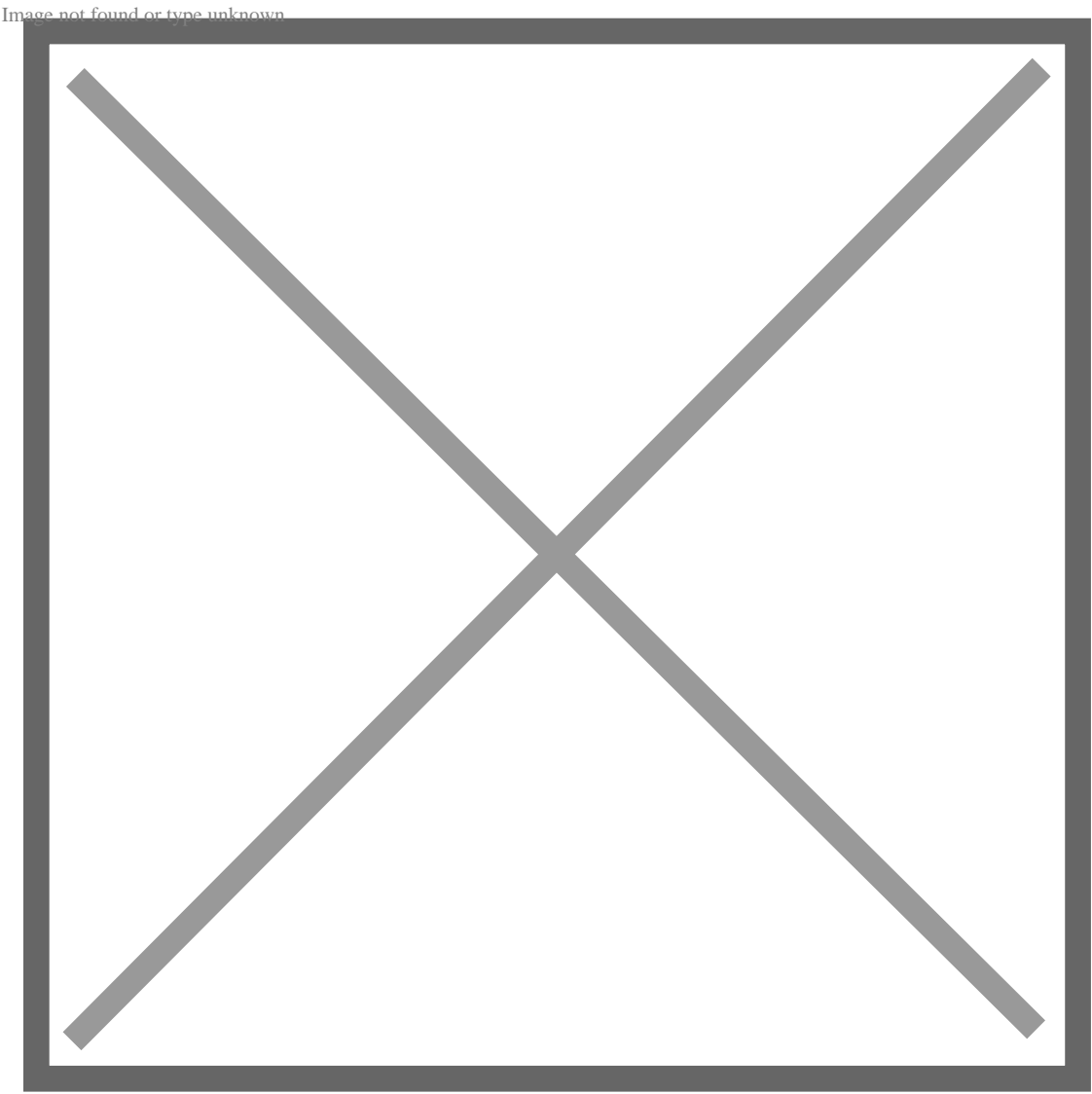
Image not found or type unknown



- Compose
"mysql:5.7"
:
1. docker run -d --name mysql_test -p 3361:3306 -v
/docker/mysql_data/:/var/lib/mysql/ -e MYSQL_ROOT_PASSWORD=my-passwd
mysql:5.7

run mysql:5.7

-d			
--name	mysql_test		
-p 3361:3306	3361	3306	
-v /docker/mysql_data/:/var/lib/mysql/	/docker/mysql_data/	/var/lib/mysql/	
-e MYSQL_ROOT_PASSWORD=my-passwd	,	MySQL root	my-passwd mysql

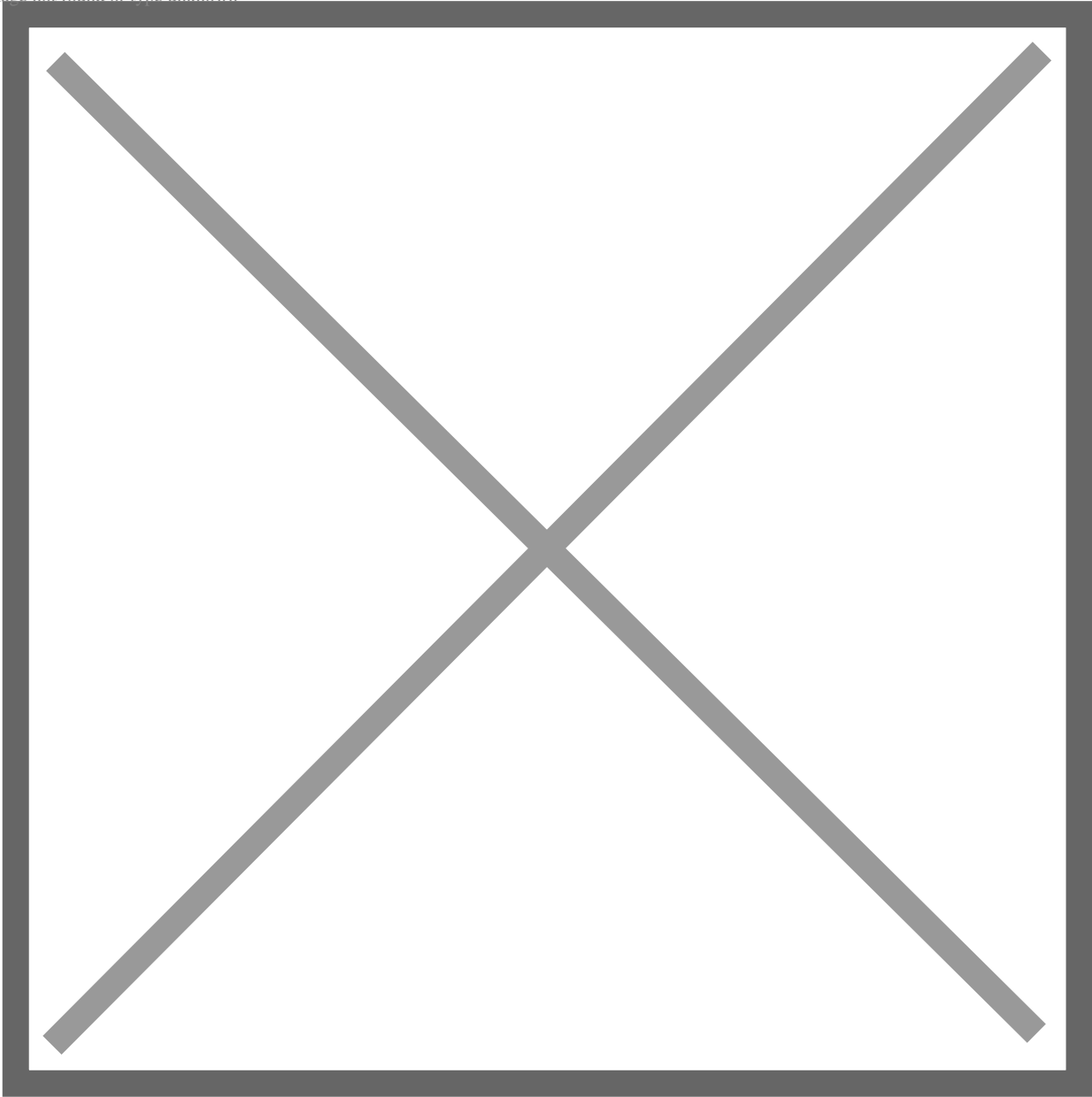


--name
mysql:5.7
-p 3361:3306 +
CPU
-v /docker/mysql_data/:/var/lib/mysql/ " + "

-e MYSQL_ROOT_PASSWORD=my-passwd		
/ Docker		
/ Docker		
(5)	5	
run -d		

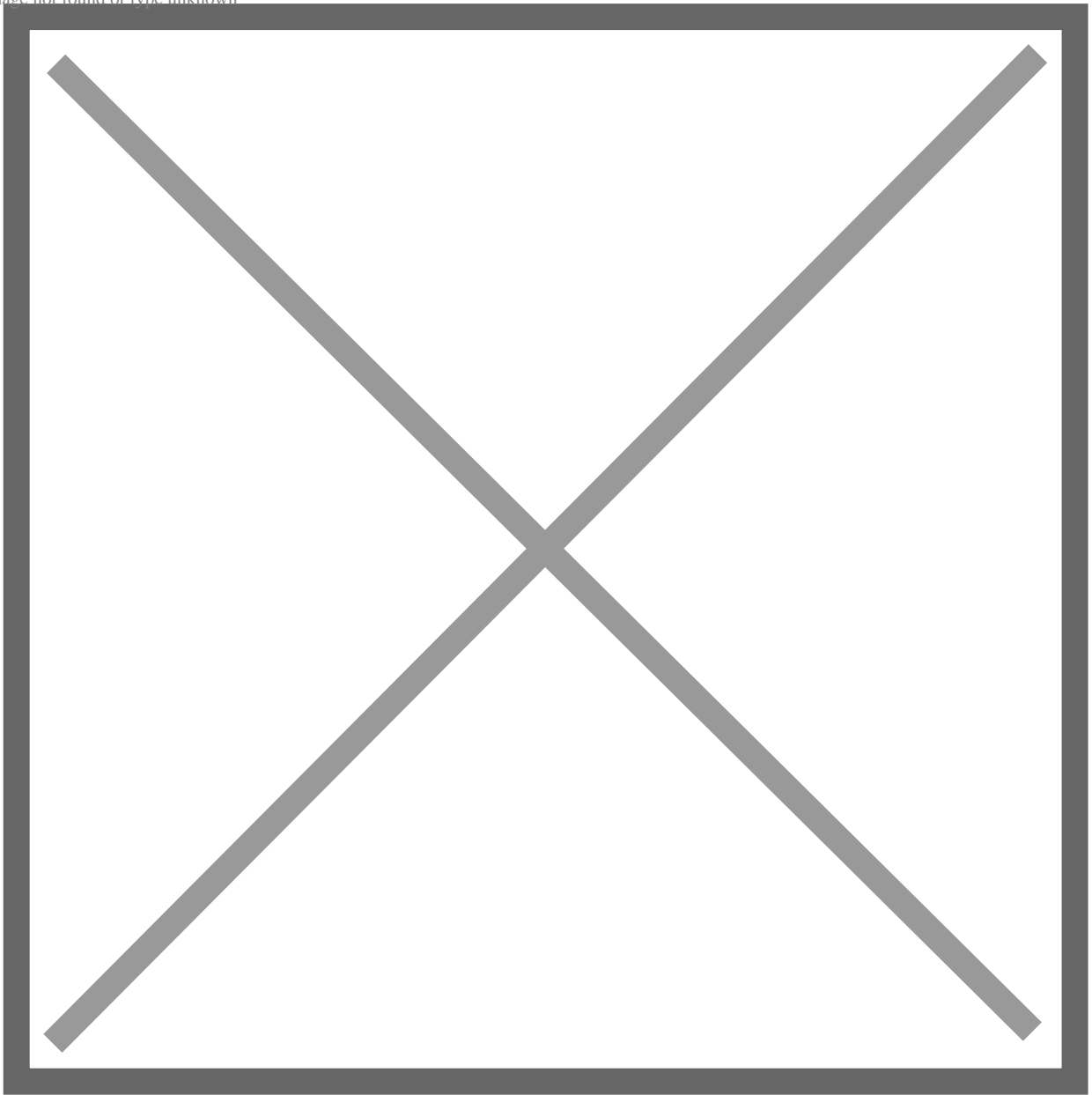
- CPU IO IO

Image not found or type unknown



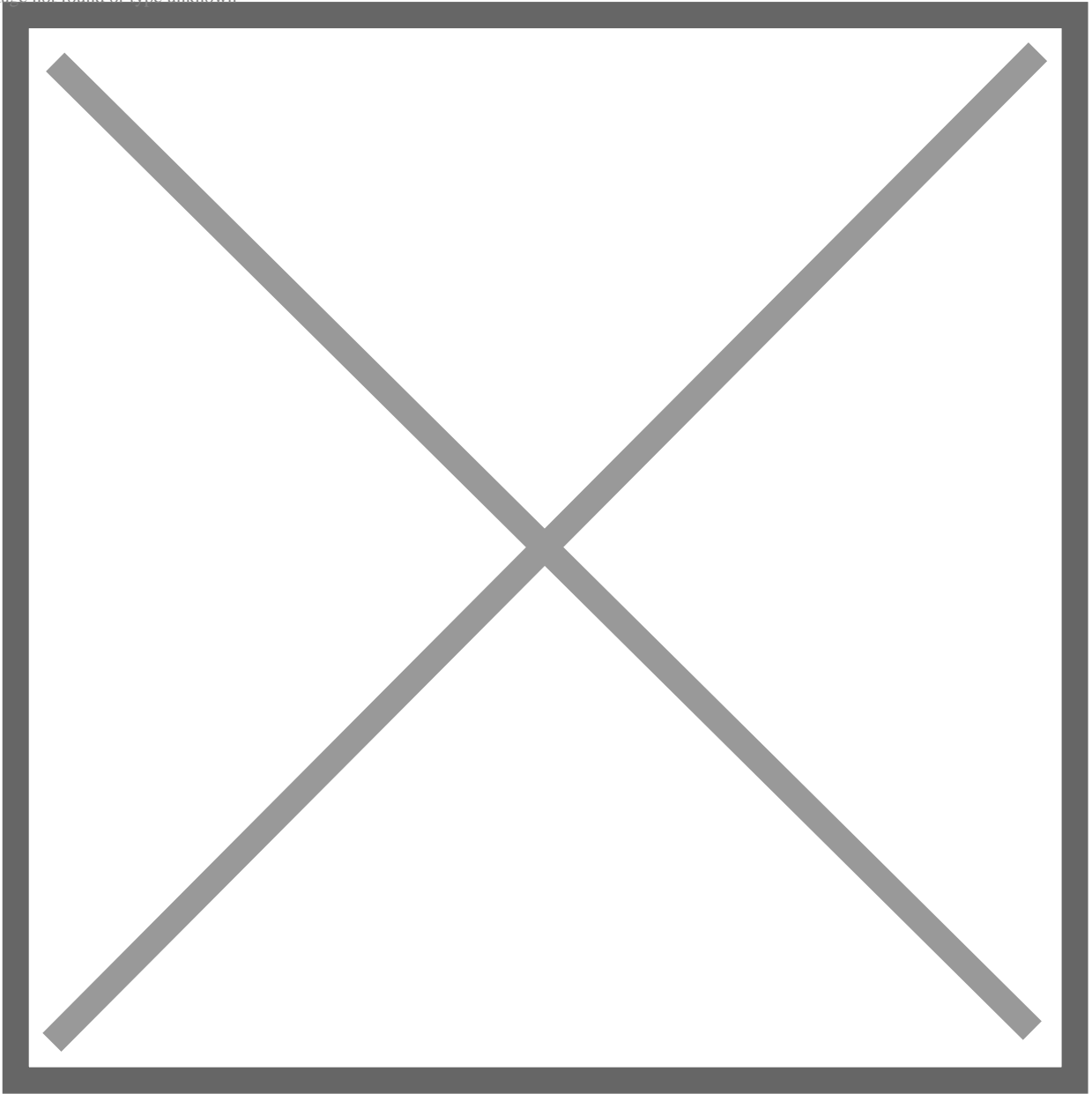
-

Image not found or type unknown



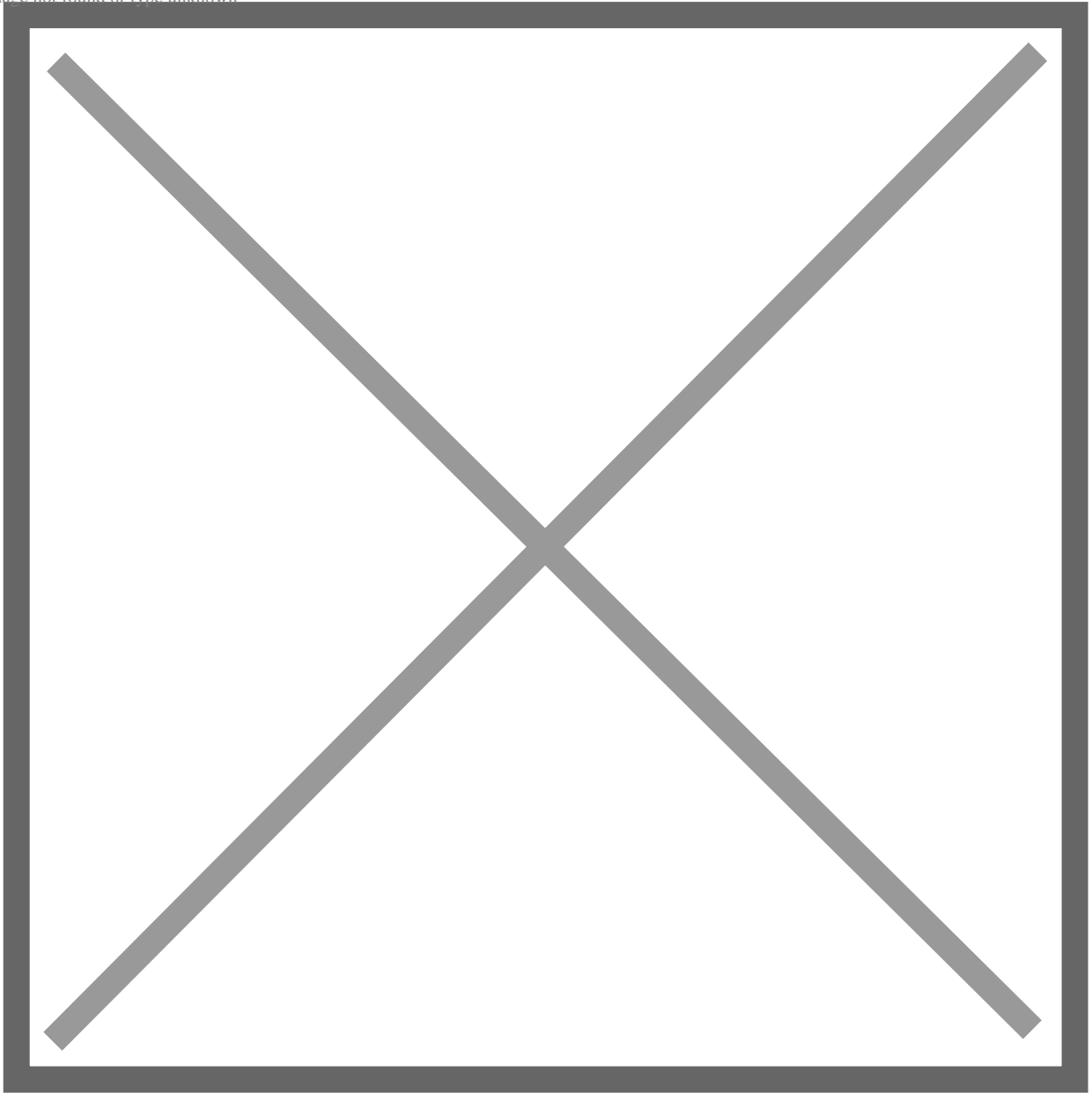
•

Image not found or type unknown



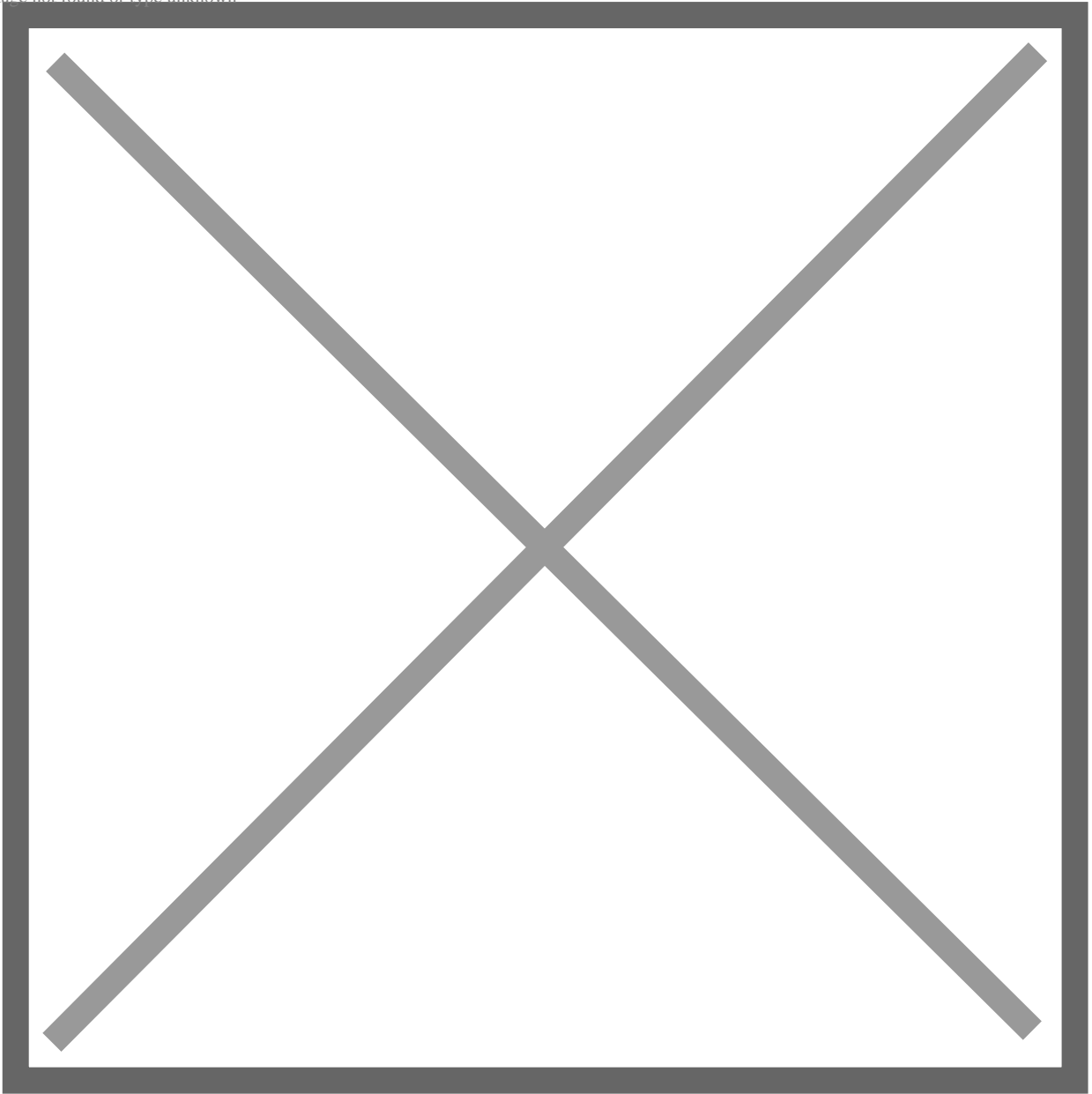
•

Image not found or type unknown



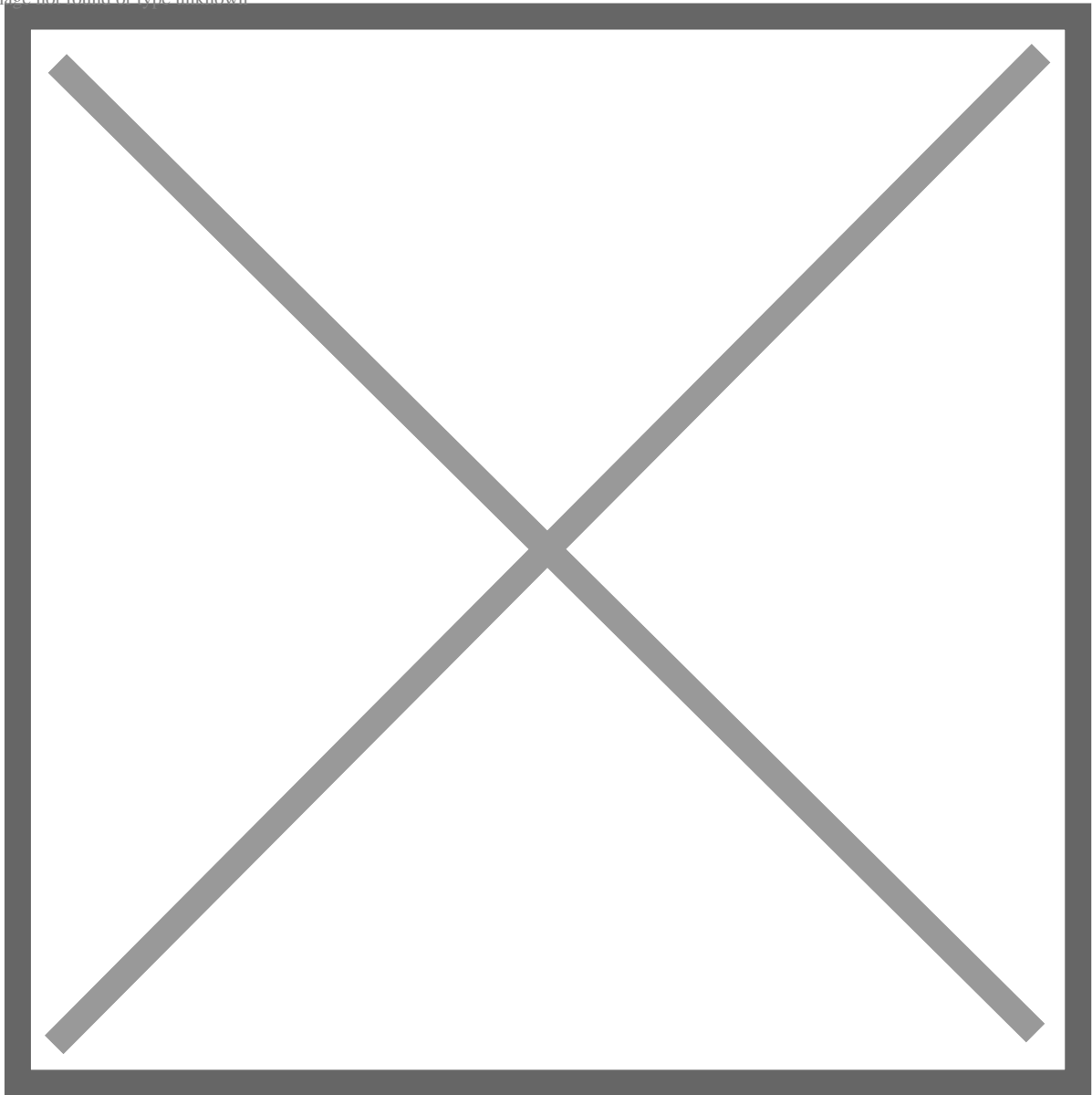
- (1) “ ” “ ” “ ”
“ ” “...”

Image not found or type unknown



(2)

Image not found or type unknown

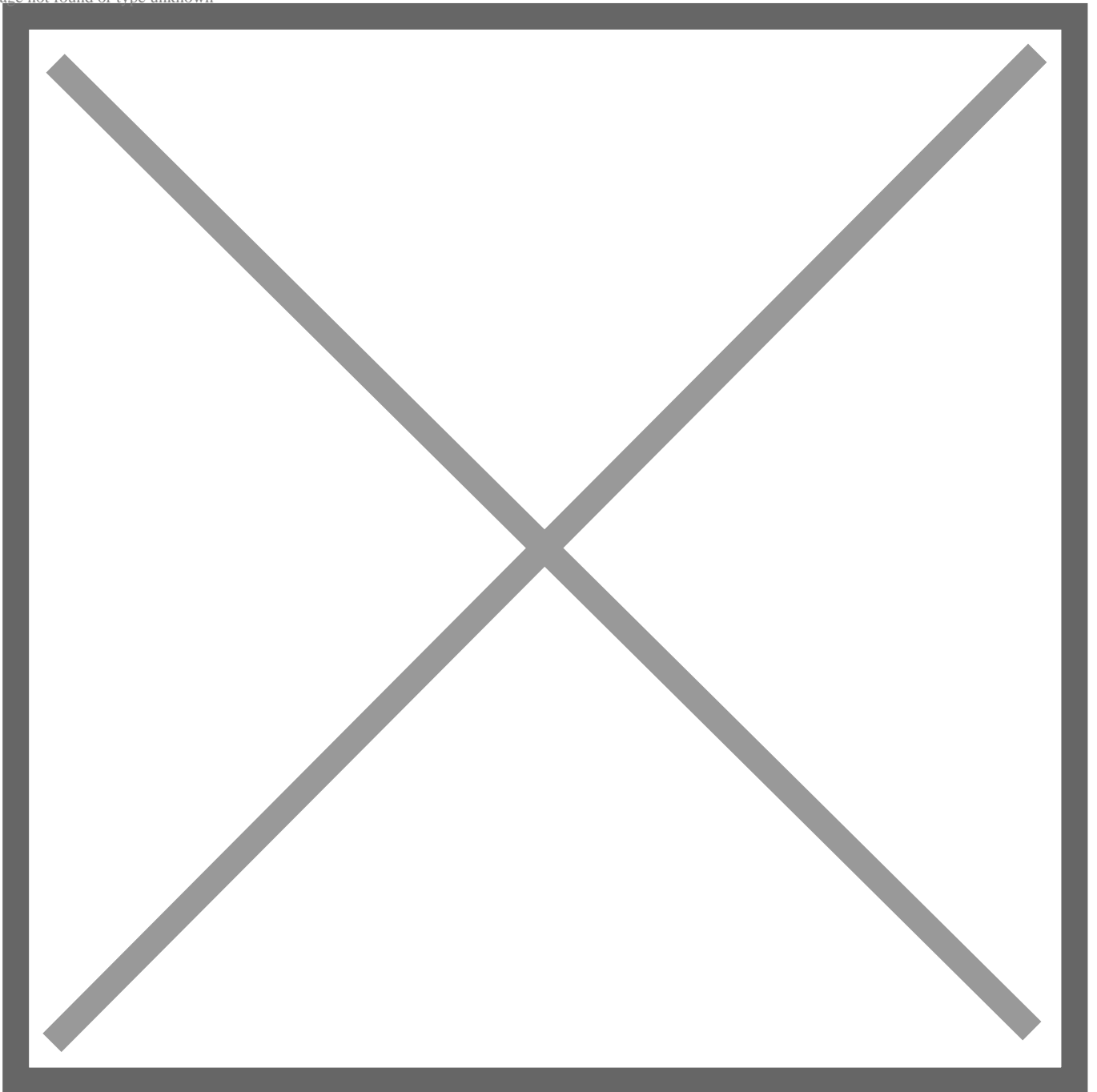


-
- IP IP
- CPU CPU
- (-->)
- 1

Compose

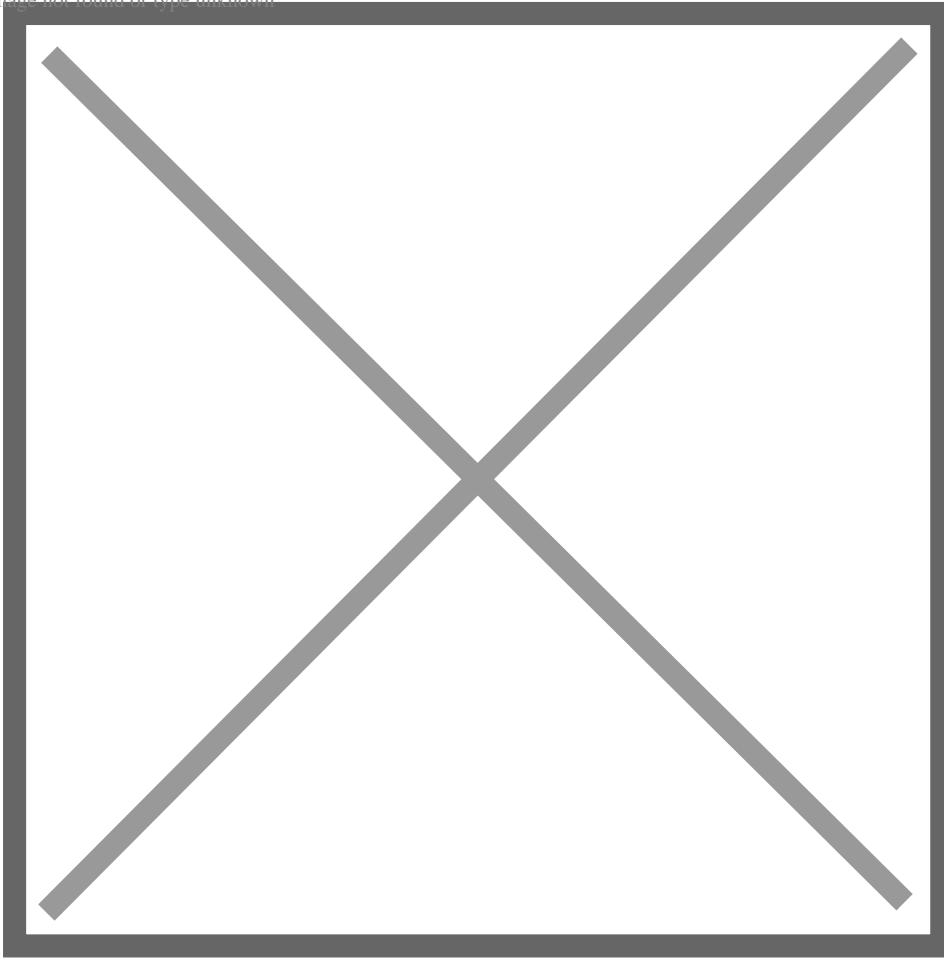
Compose

Image not found or type unknown



- Compose Compose
 Docker Compose [Docker Compose](#)

Image not found or type unknown



•

(1) Compose

Compose

(2)

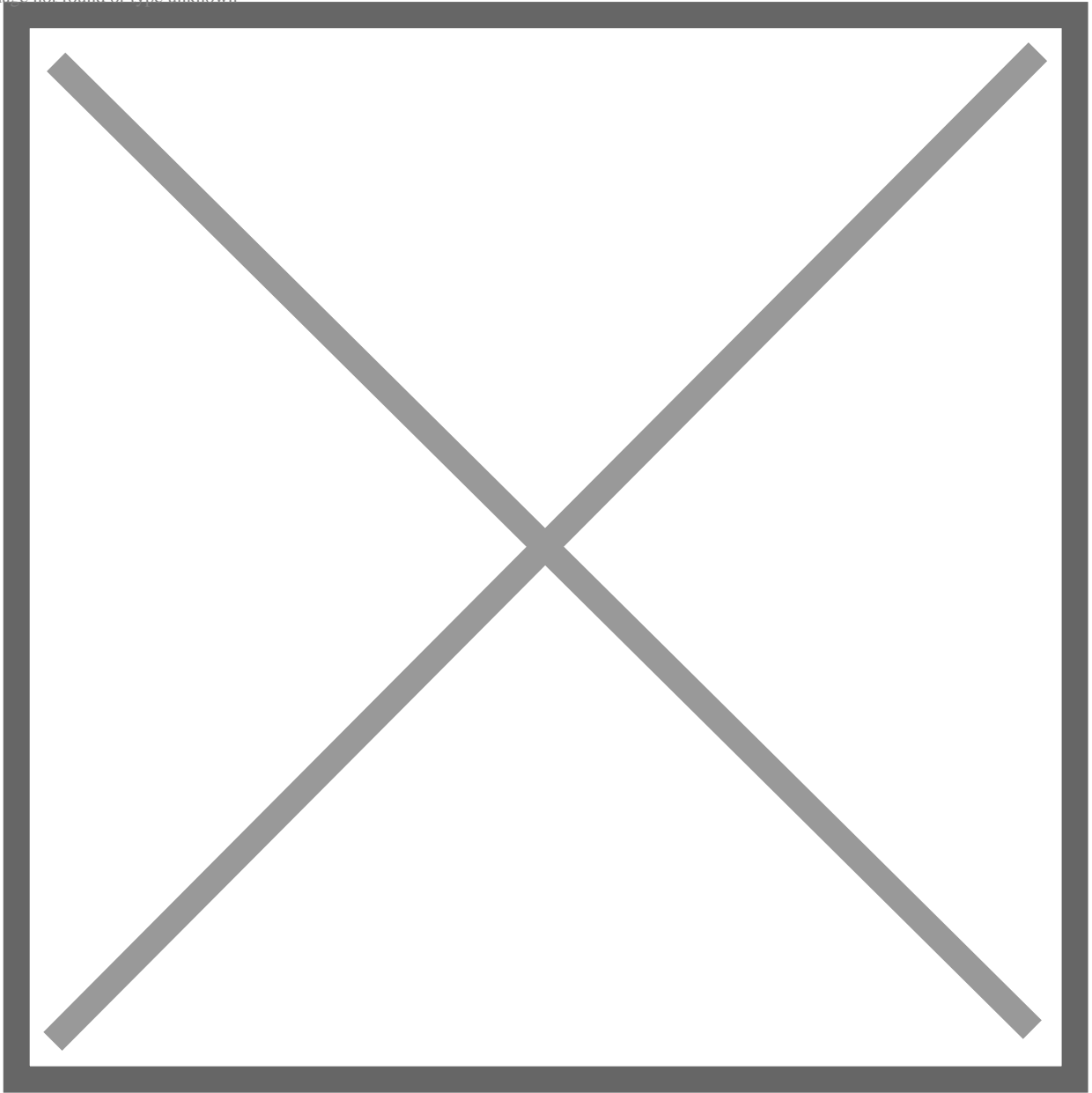
(3)

(4)

(5)

(6)

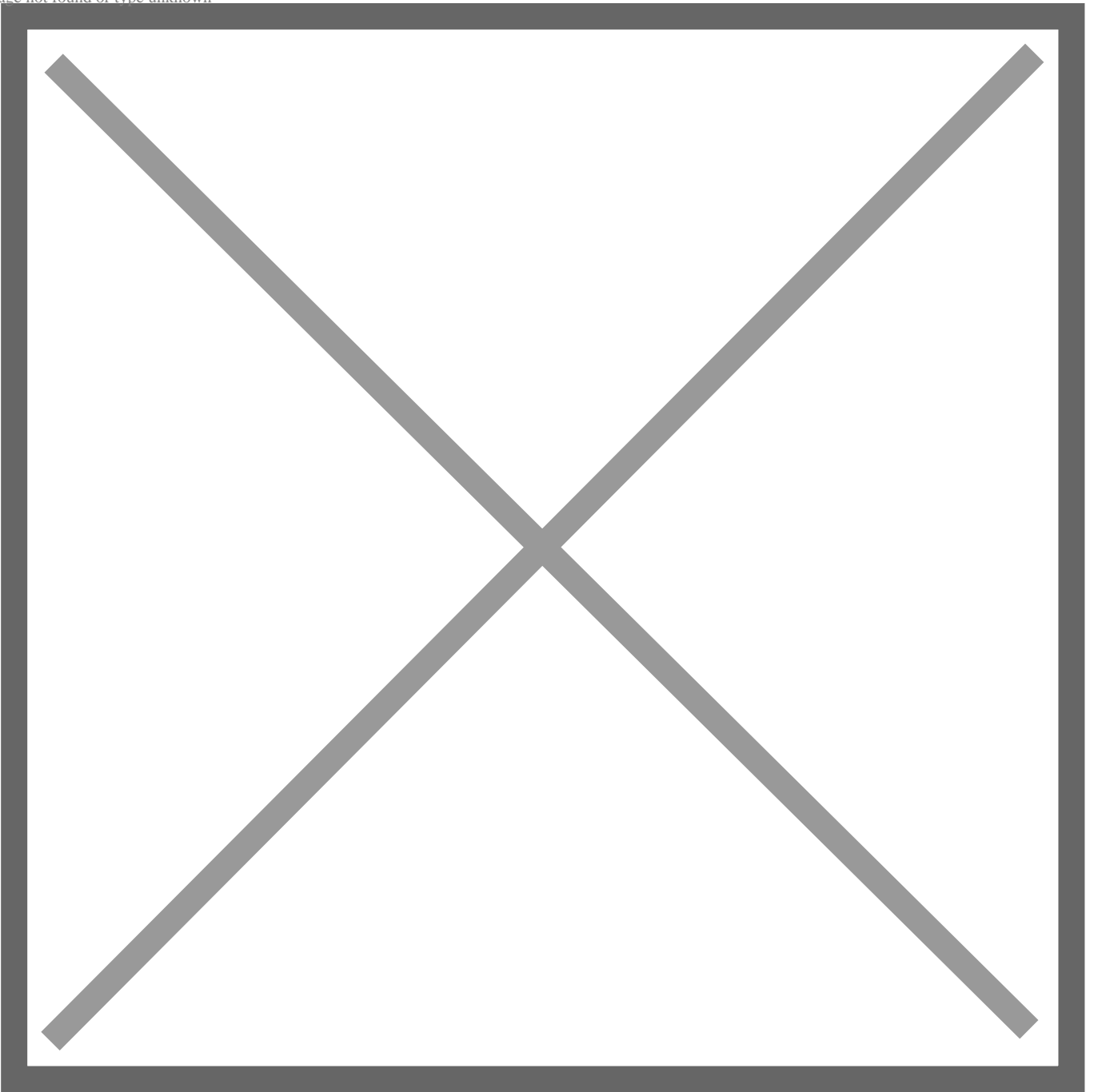
Image not found or type unknown



- Compose
- Compose
- 1 Compose

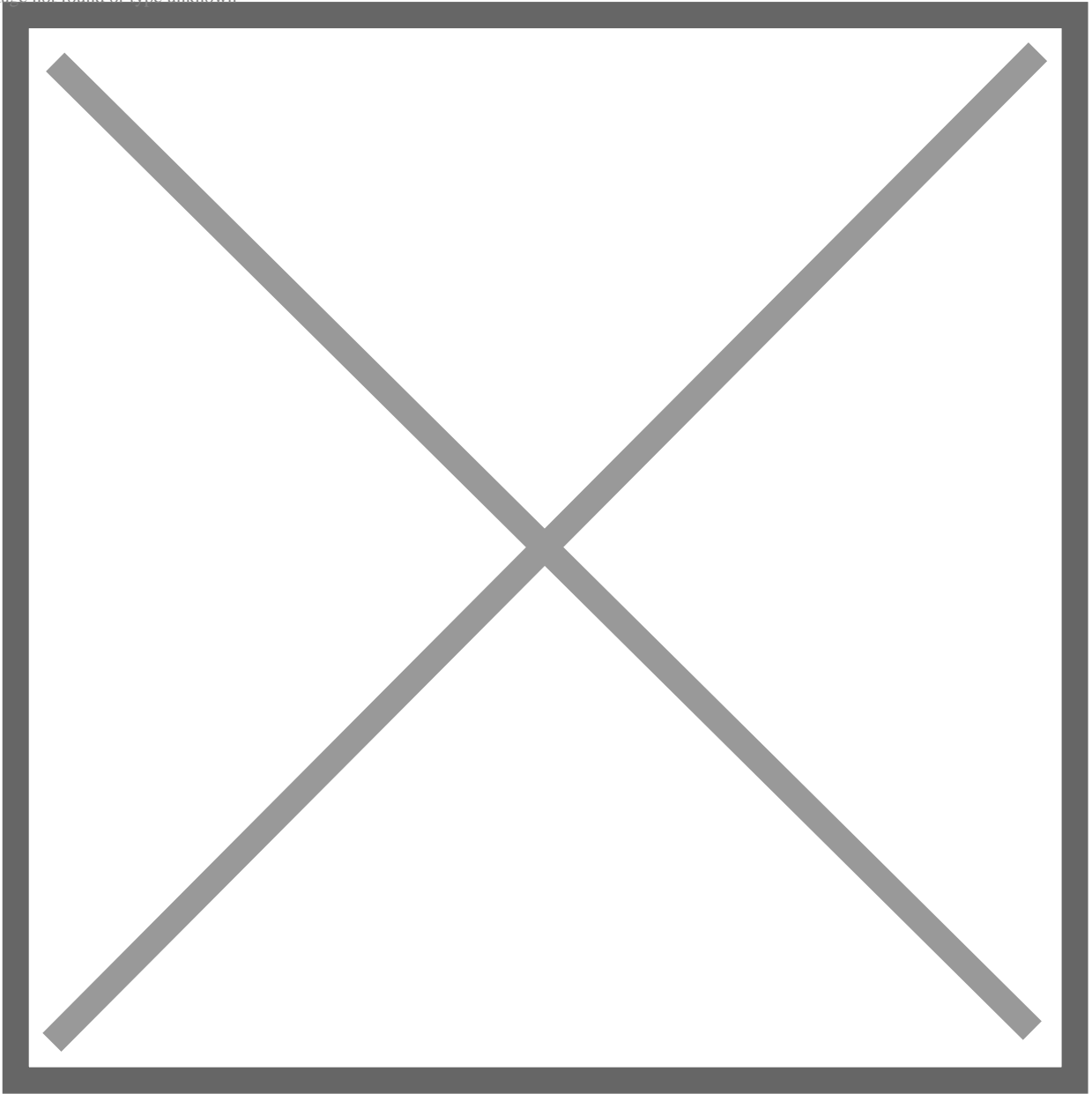
Compose
Compose

Image not found or type unknown



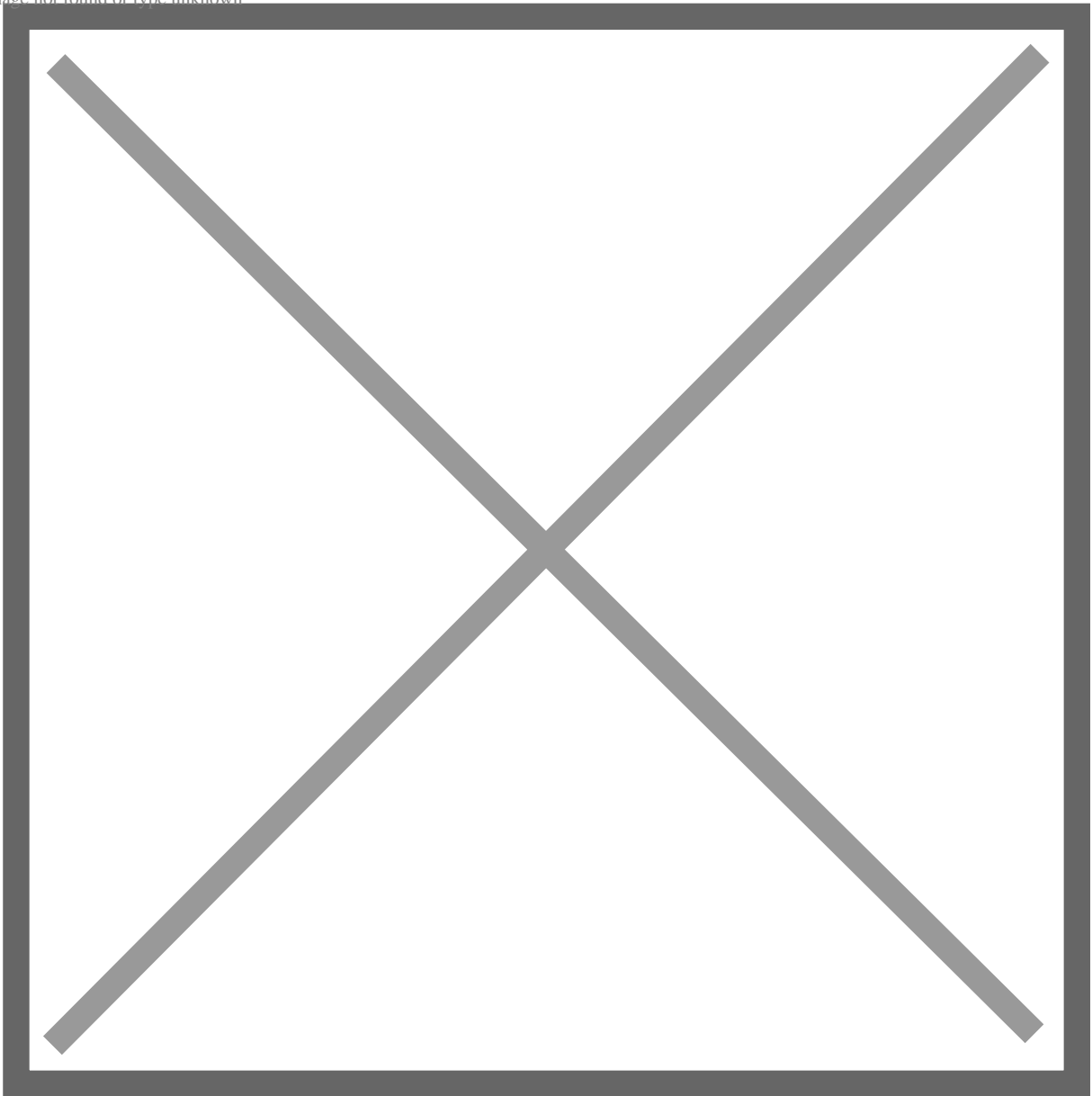
- Compose

Image not found or type unknown



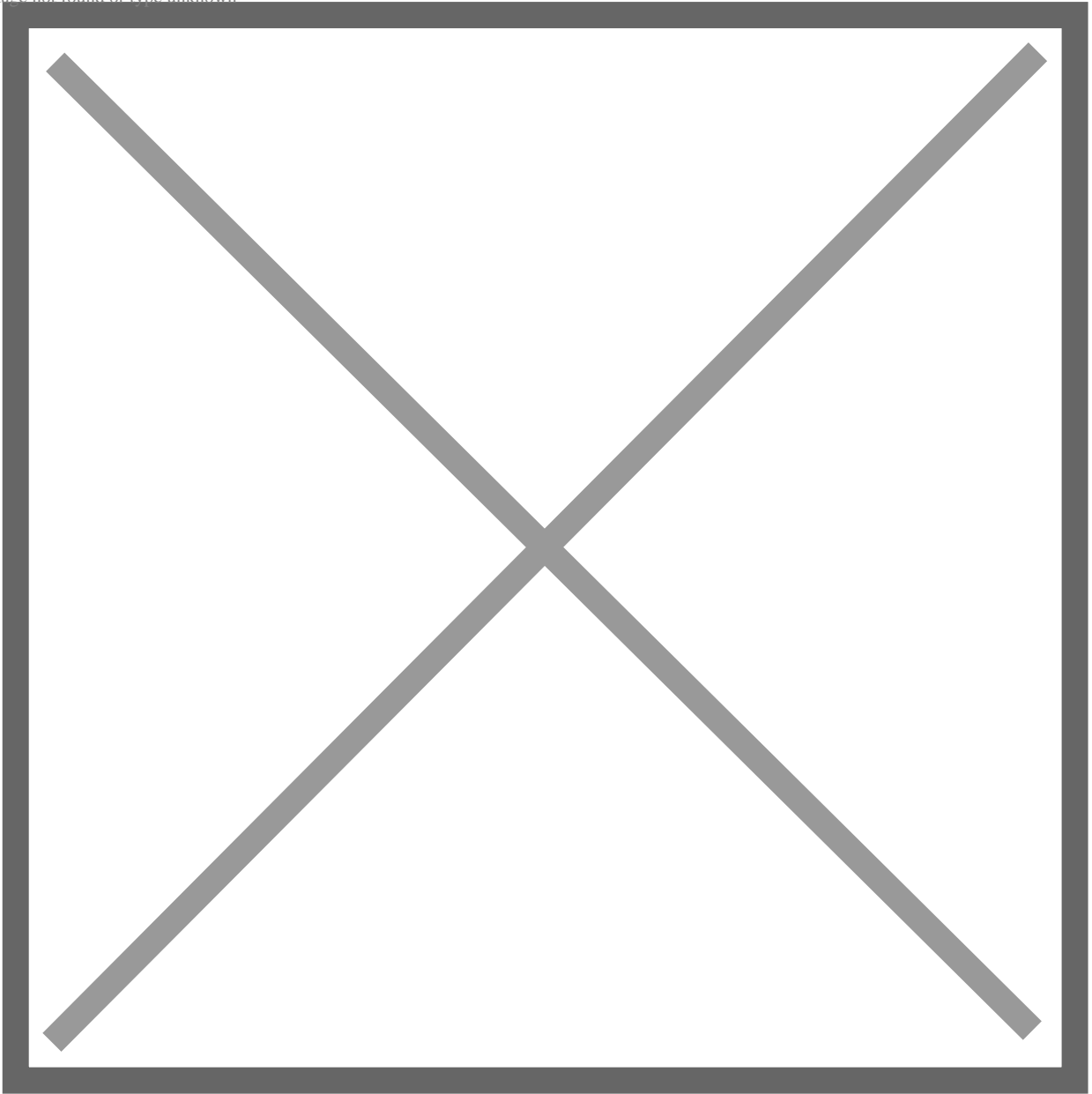
- Compose

Image not found or type unknown



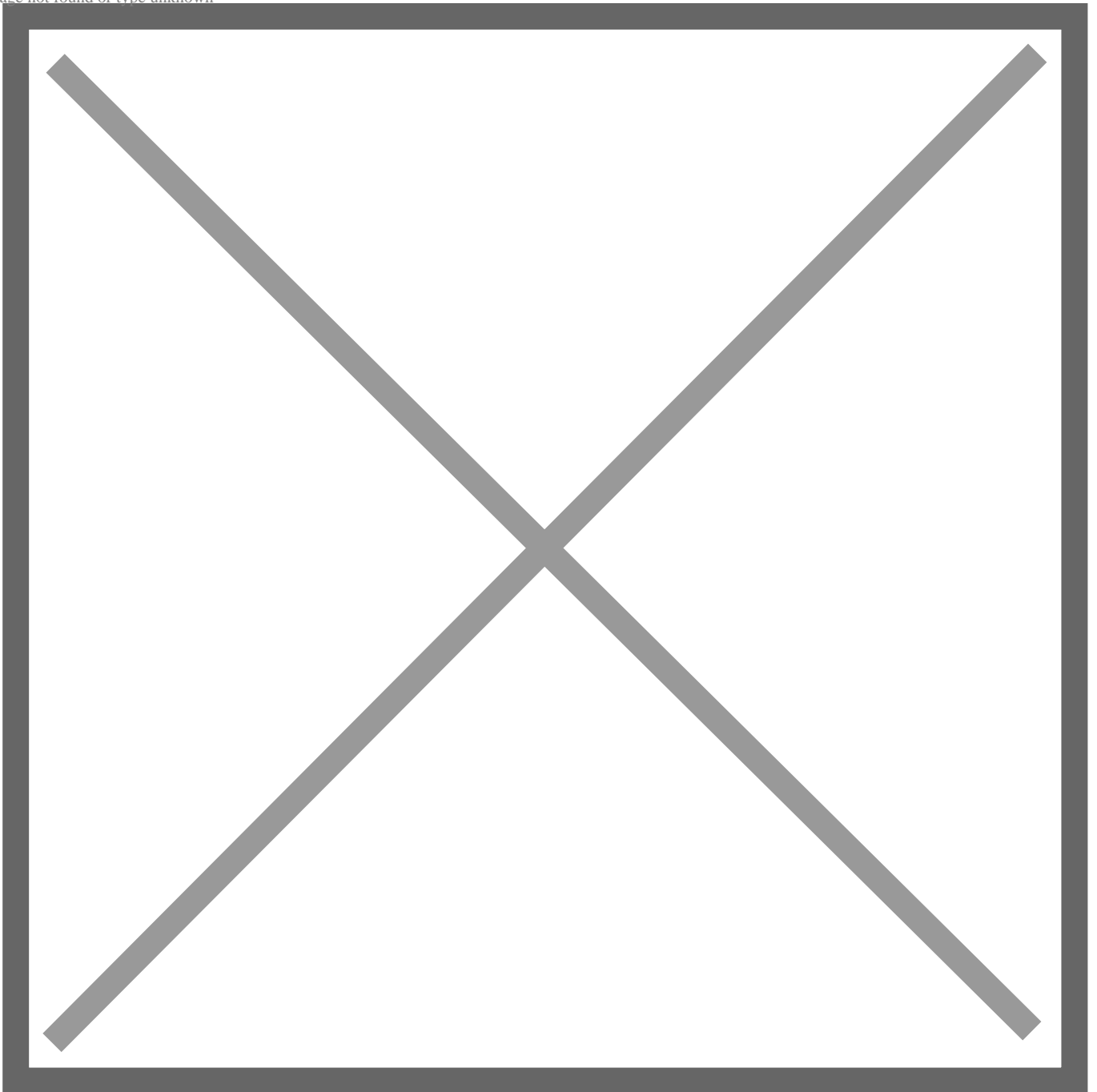
- Compose

Image not found or type unknown



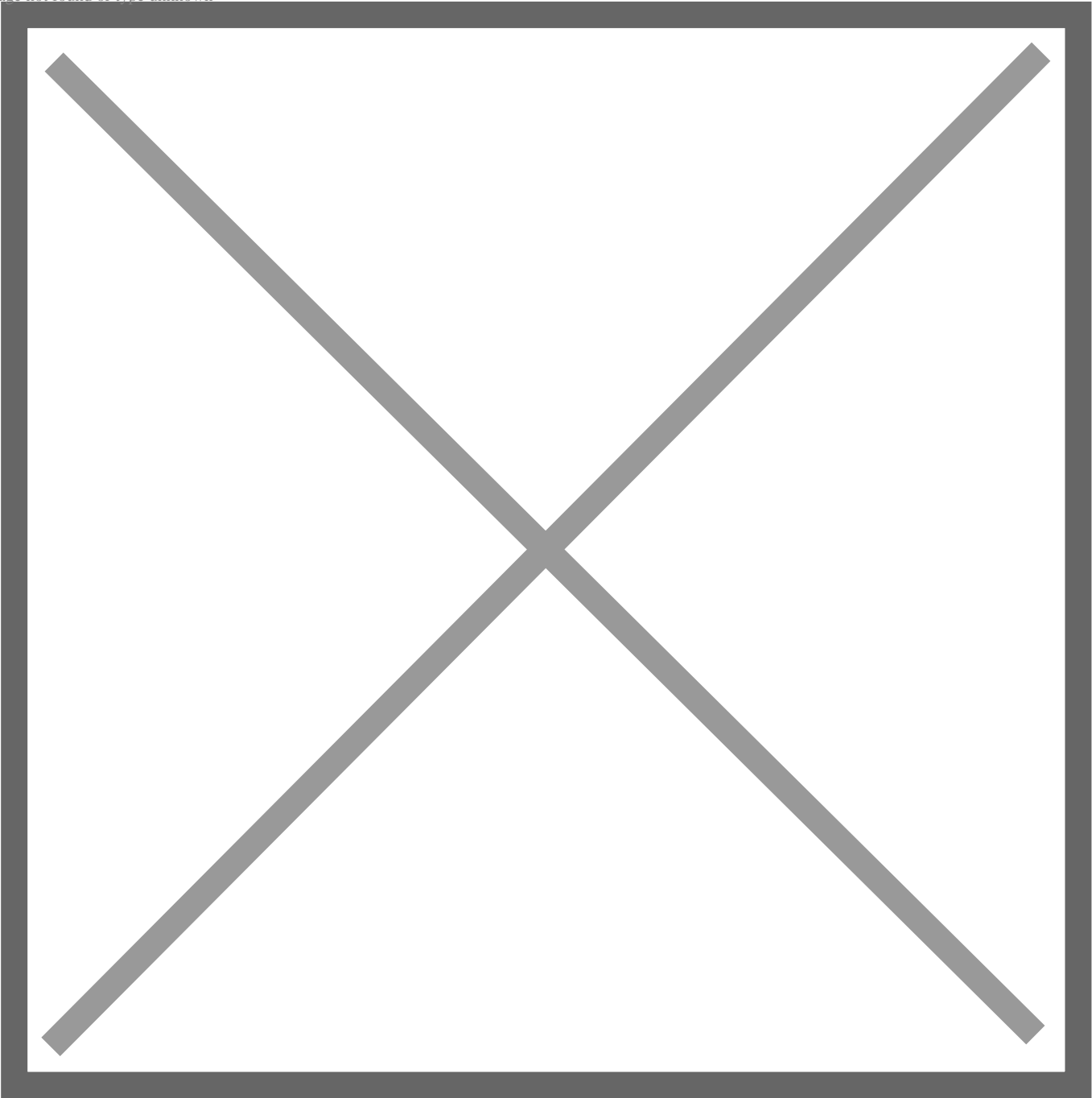
- Compose
- 1 Compose

Image not found or type unknown



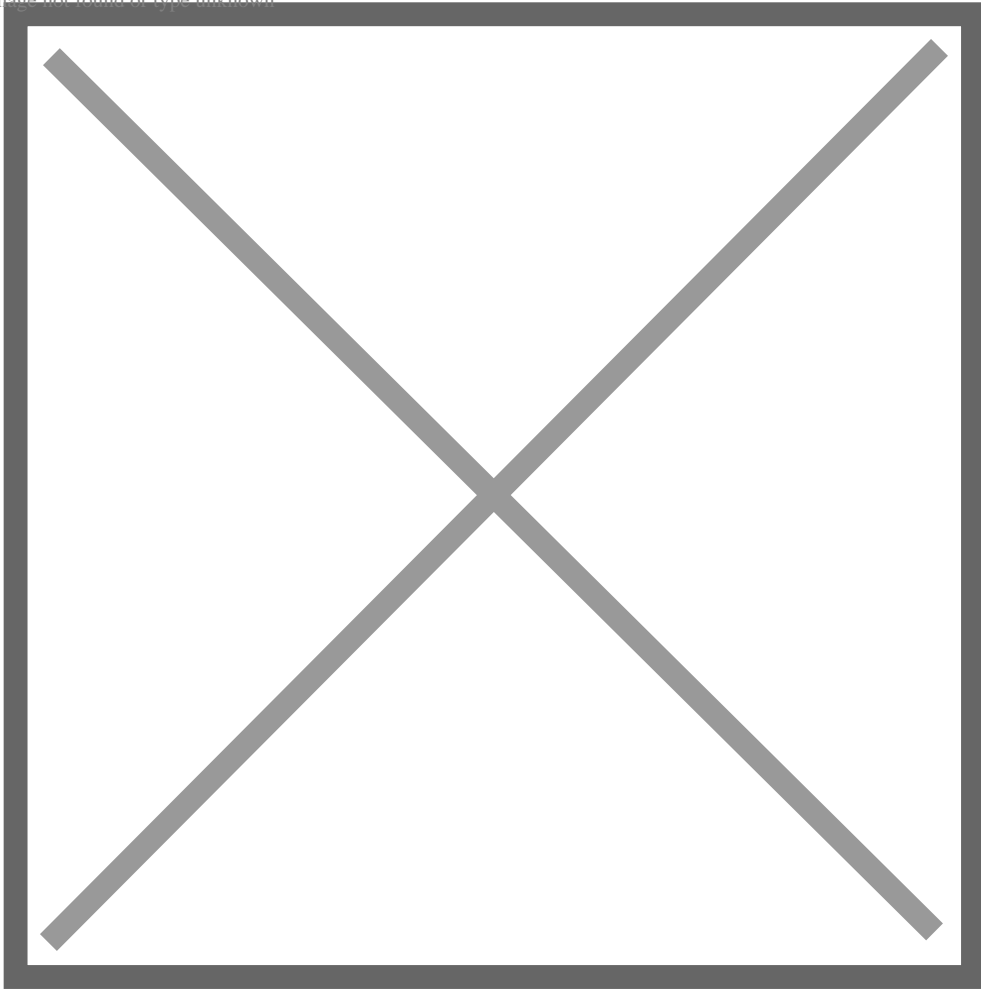
- Docker
- - (1) none none
 - (2) host host
 - (3) bridge bridge
- IP
- IP
- 1

Image not found or type unknown



.

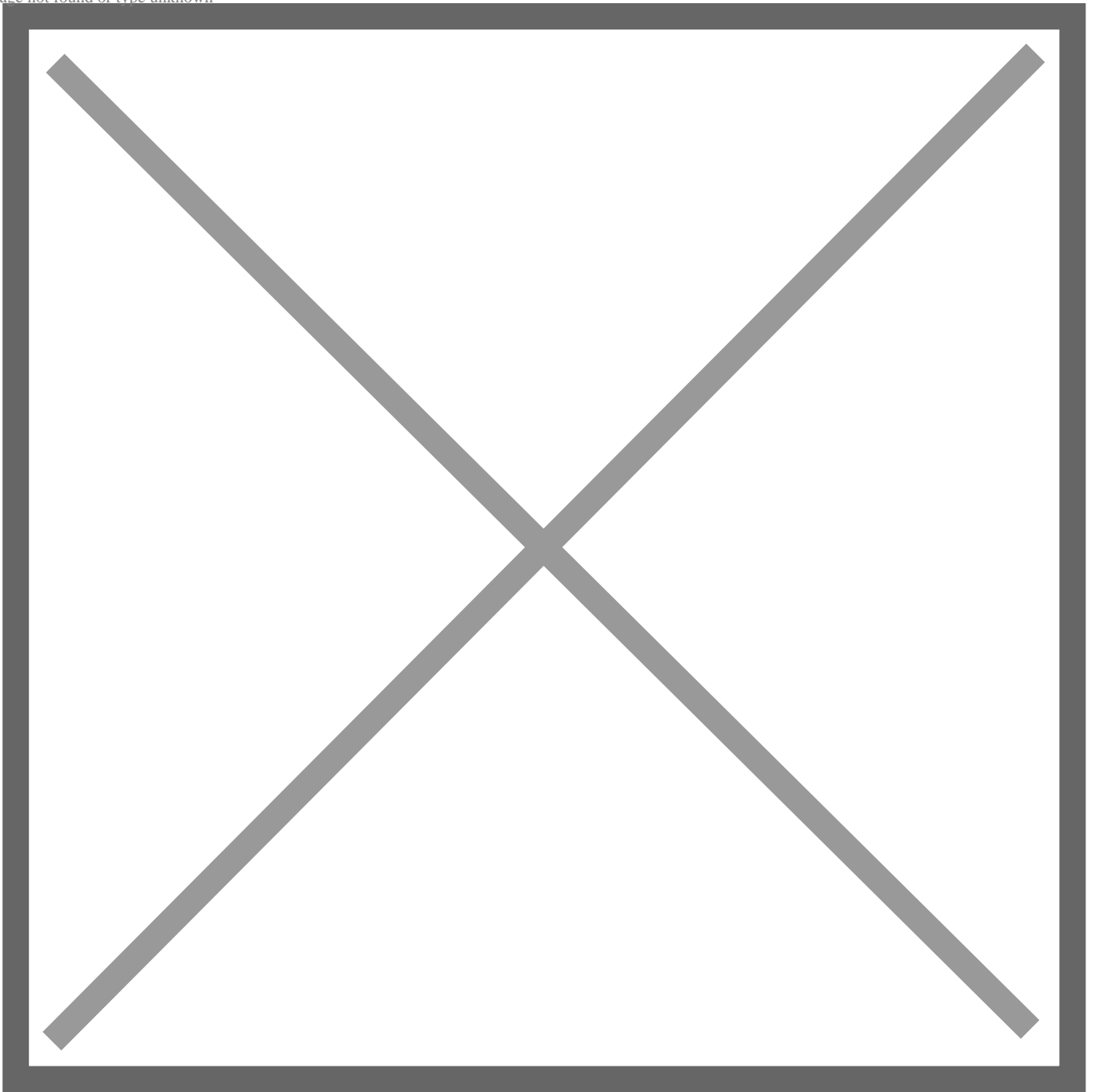
Image not found or type unknown



-

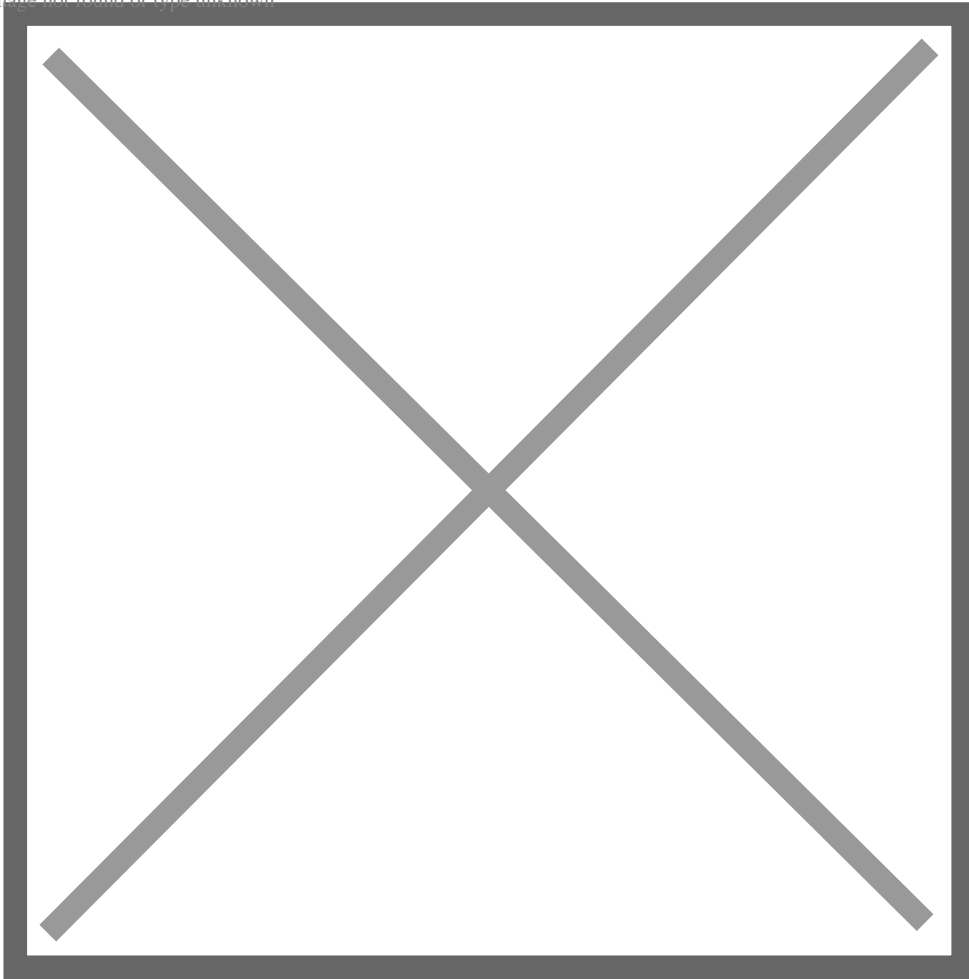
1

Image not found or type unknown



- docker
docker

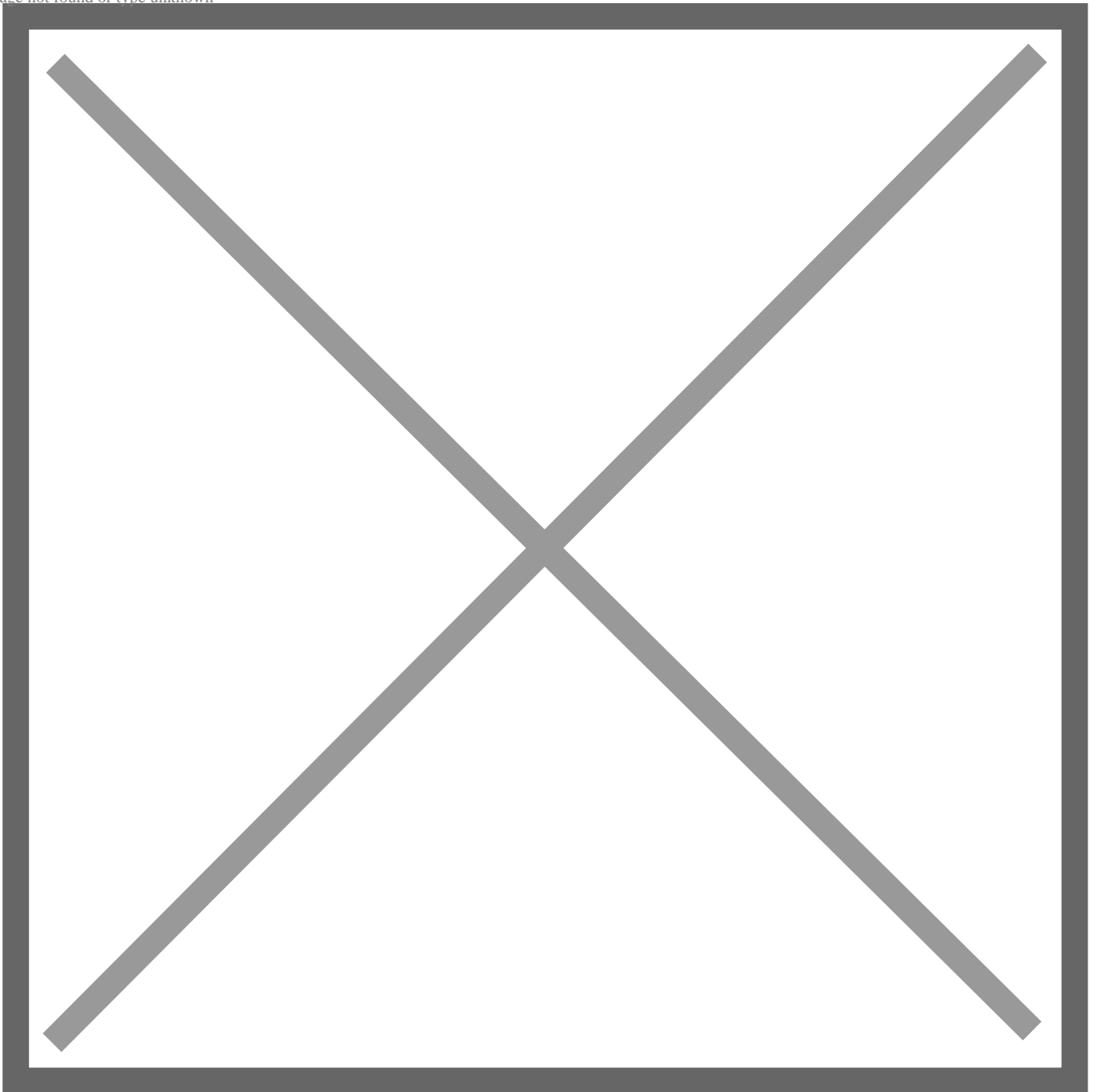
Image not found or type unknown



<https://www.bt.cn/bbs/thread-80965-1-1.html>

- URL
- /
- 1

Image not found or type unknown



- Docker Docker Docker
- CPU
- 30
- URL URL Docker URL

1. <https://docker.mirrors.ustc.edu.cn/>

1. <https://hub-mirror.c.163.com/>

<https://cr.console.aliyun.com/>

Docker ---2022/7/5

CentOS7.9.2009 x86_64 3.10.0
7.9.2

Python 3.7.9

Docker

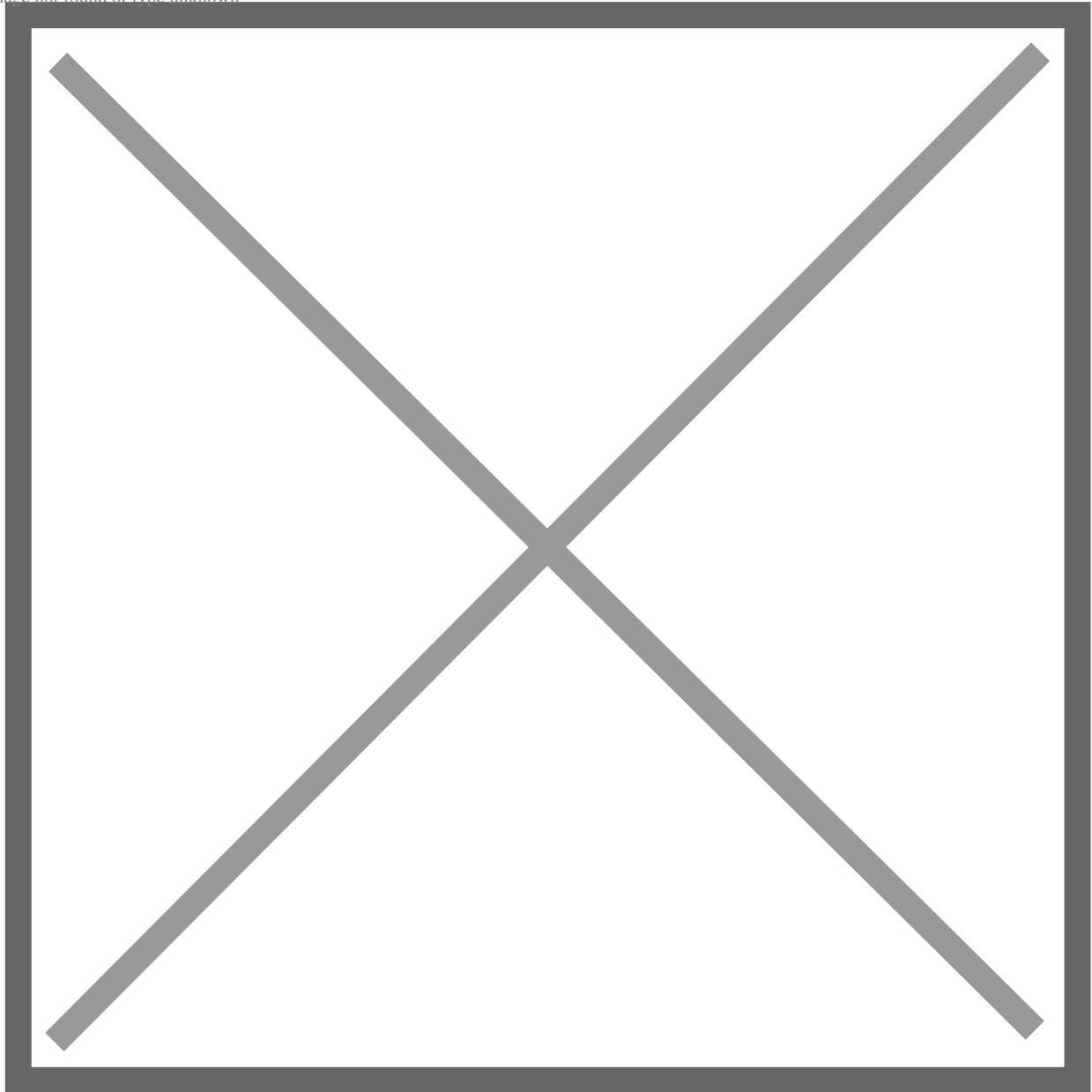
Dockerfile

t

Dockerfile **tomcat**

•

/www/mydockerfile/tomcat dockerfile apptest tomcat jdk
Image not found or type unknown

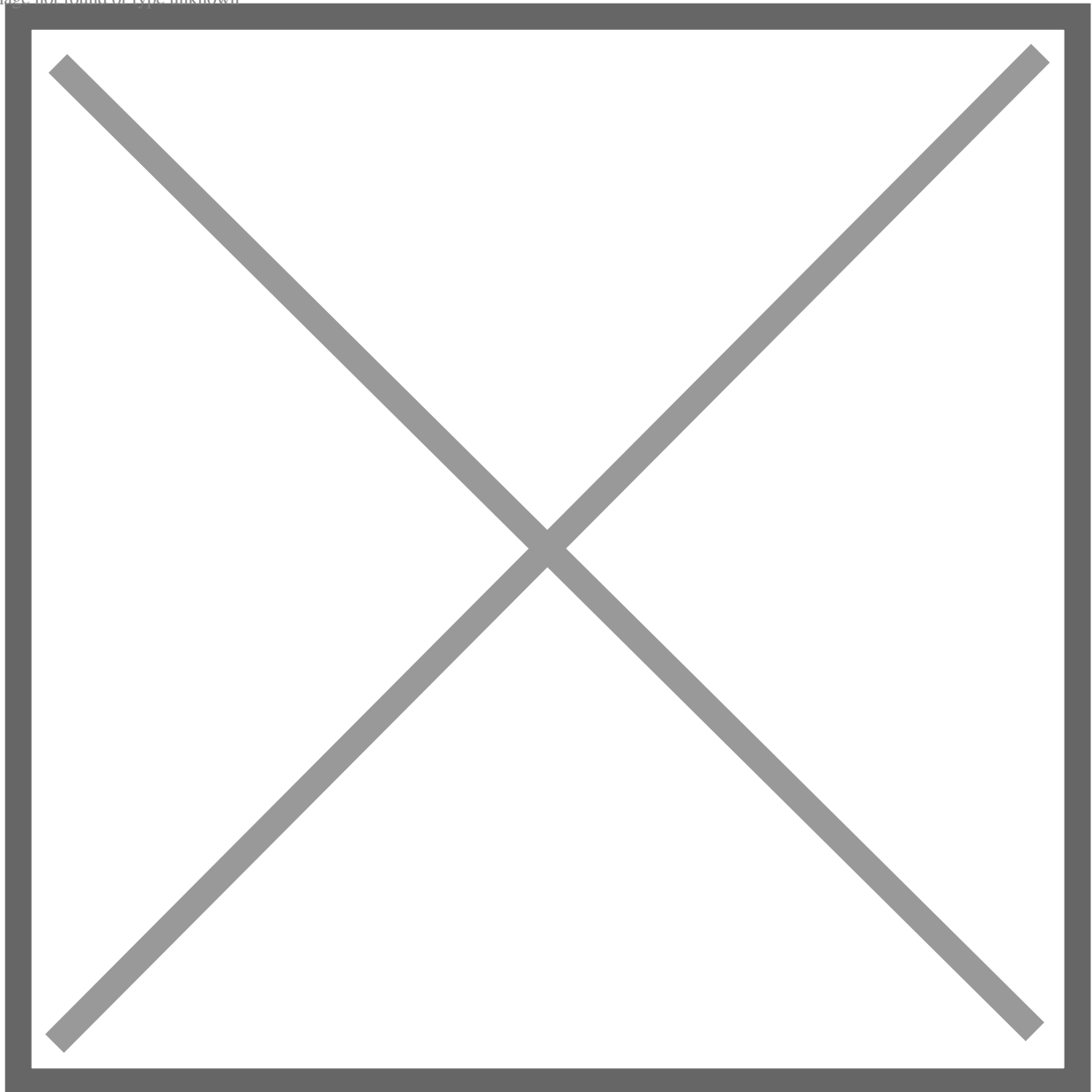


tomcat jdk

1. mkdir -p /www/mydockerfile/tomcat/apptest
2. cd /www/mydockerfile/tomcat
3. echo "Tomcat test app1" > /www/mydockerfile/tomcat/apptest/index.jsp

4. `wget http://dg1.bt.cn/install/src/apache-tomcat-9.0.62.tar.gz && wget http://dg1.bt.cn/install/src/jdk-8u121-linux-x64.rpm`
- 5.

Image not found or type unknown



dockerfile

SSH

```
cat > dockerfile << EOF
FROM centos
## FROM    centos

ADD apache-tomcat-9.0.62.tar.gz /usr/local
## ADD      /usr/local/apache-tomcat-9.0.62

COPY apptest /usr/local/apache-tomcat-9.0.62/webapps/apptest
## COPY     apptest                apptest
```

```
COPY jdk-8u121-linux-x64.rpm /tmp/
```

```
## COPY      jdk-8u121-linux-x64.rpm      /tmp/
```

```
ENV MYPATH=/usr/local/apache-tomcat-9.0.62
```

```
## ENV
```

```
WORKDIR \${MYPATH}
```

```
## WORKDIR
```

```
EXPOSE 8080 8009
```

```
## EXPOSE
```

```
RUN rpm -ivh /tmp/jdk-8u121-linux-x64.rpm && rm -f /tmp/jdk-8u121-linux-x64.rpm
```

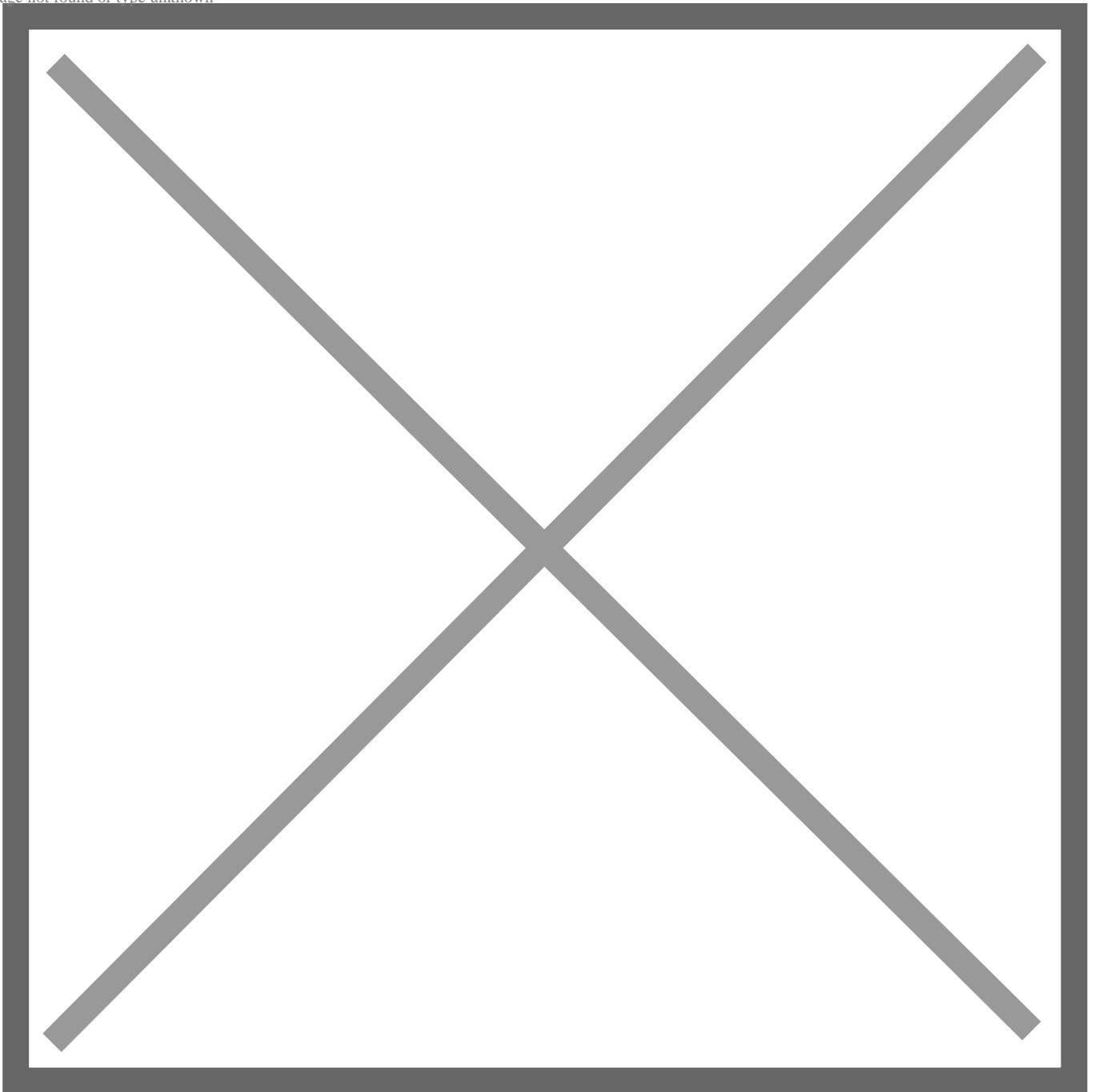
```
## RUN      jdk
```

```
CMD ["/usr/local/apache-tomcat-9.0.62/bin/catalina.sh", "run"]
```

```
## CMD      tomcat
```

```
EOF
```

Image not found or type unknown



- tomcat
Docker --> -->
Dockerfile /www/mydockerfile/tomcat/dockerfile
tomcat_test:1.0

Image not found or type unknown

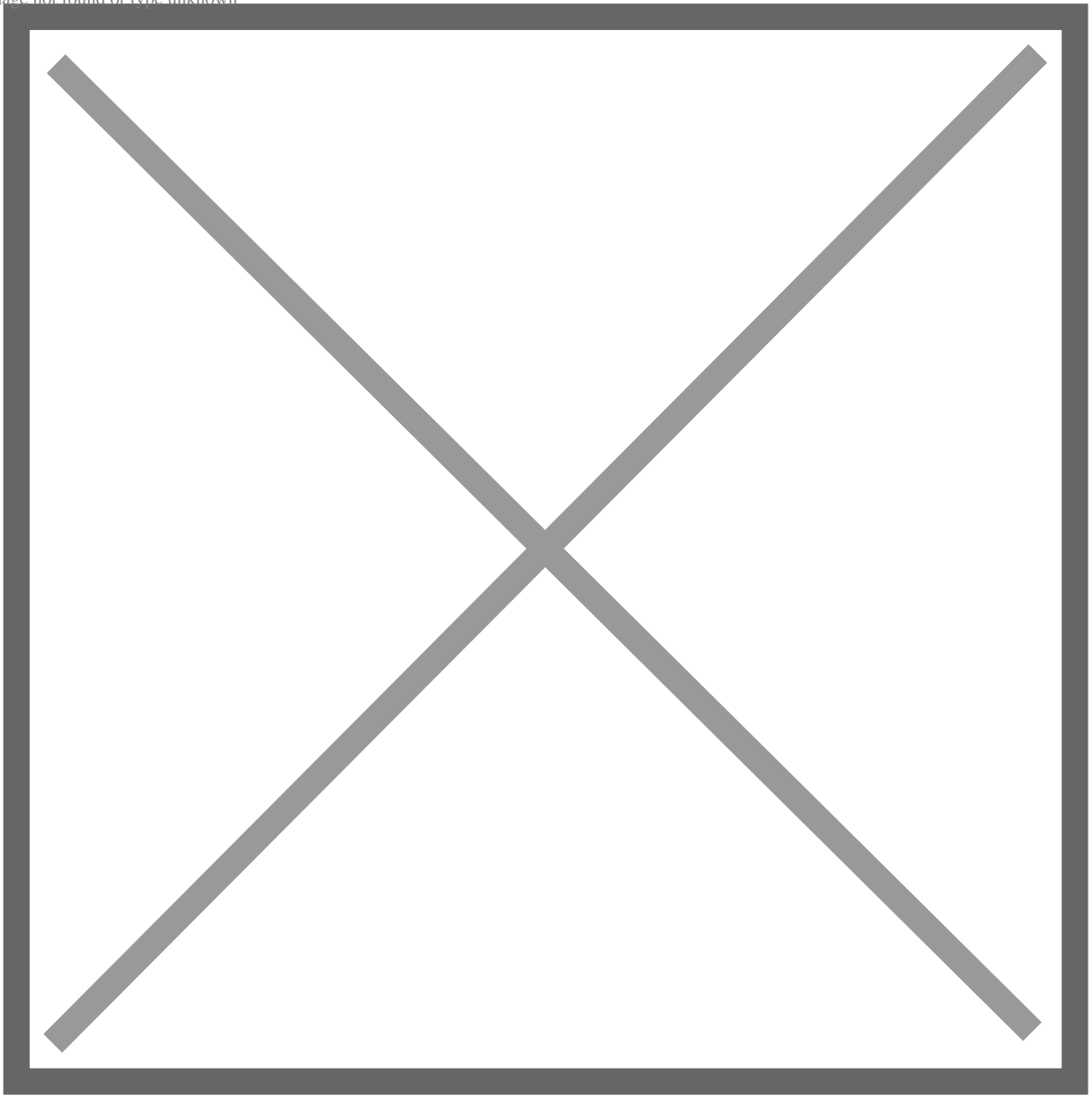


Image not found or type unknown

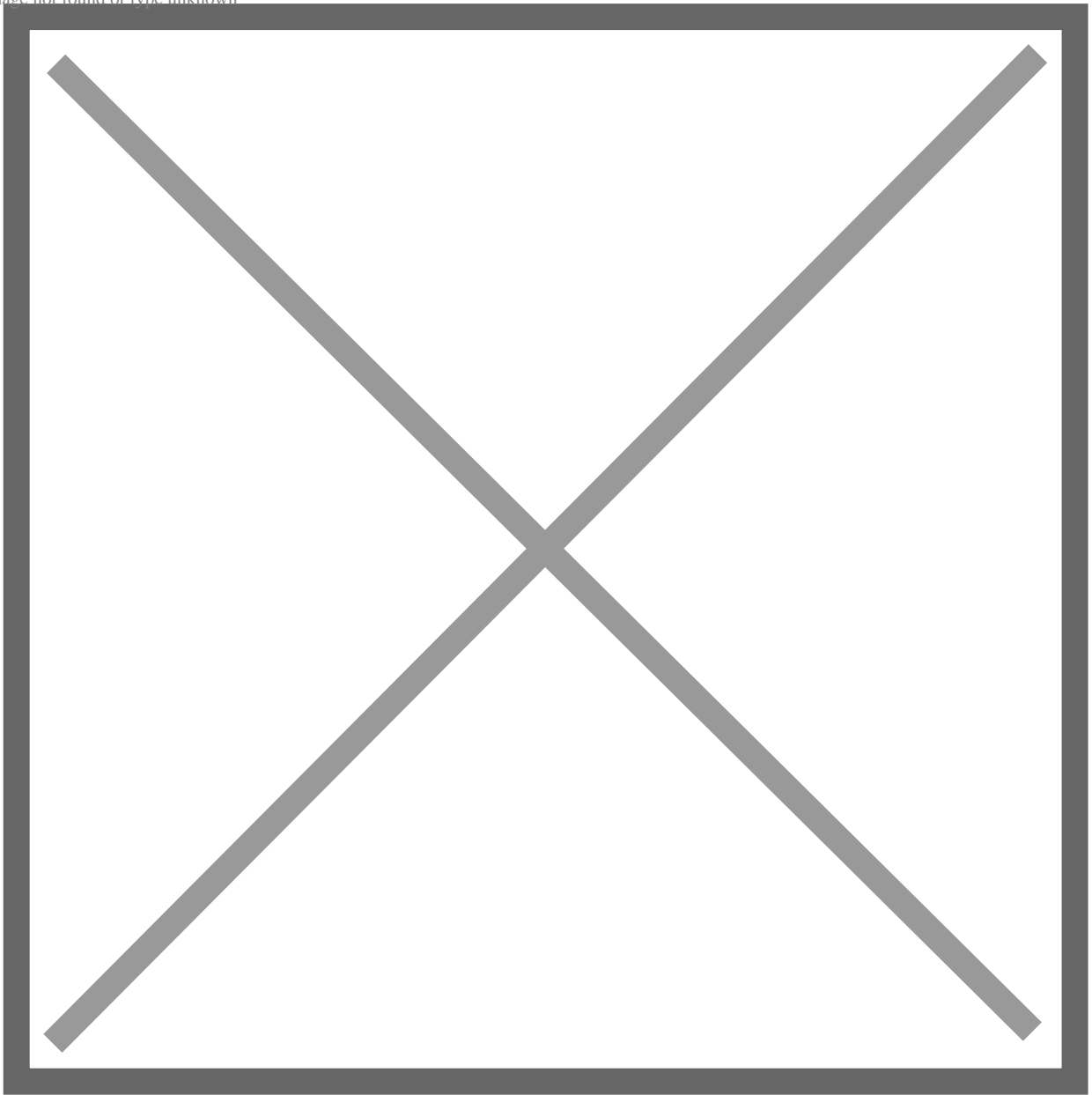
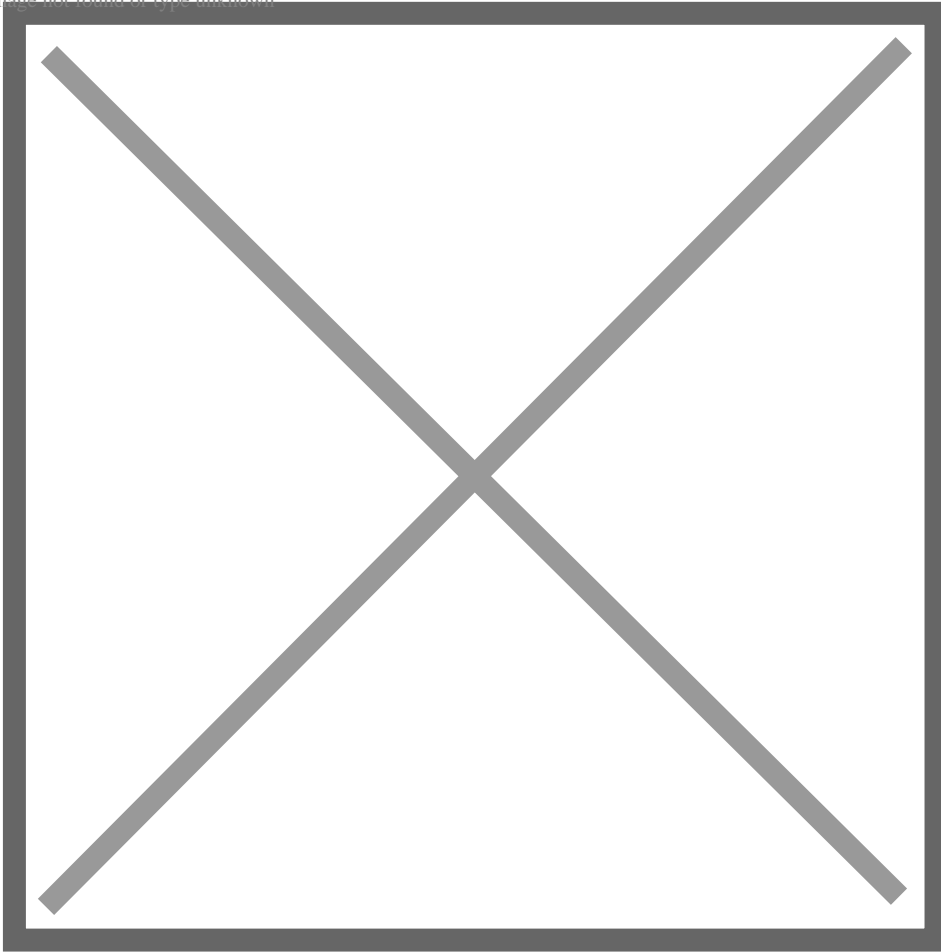


Image not found or type unknown



•

-->

Image not found or type unknown

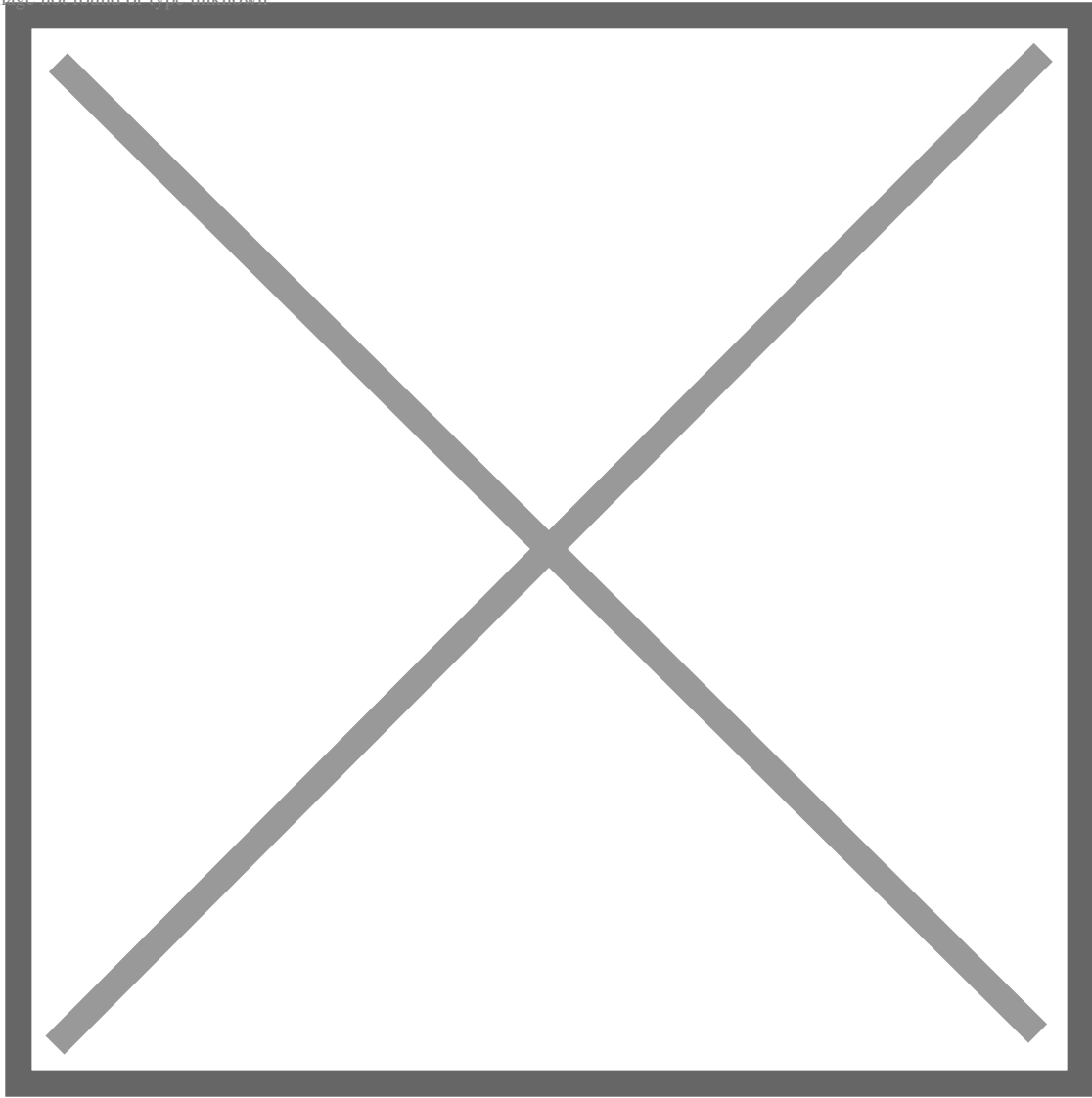


Image not found or type unknown

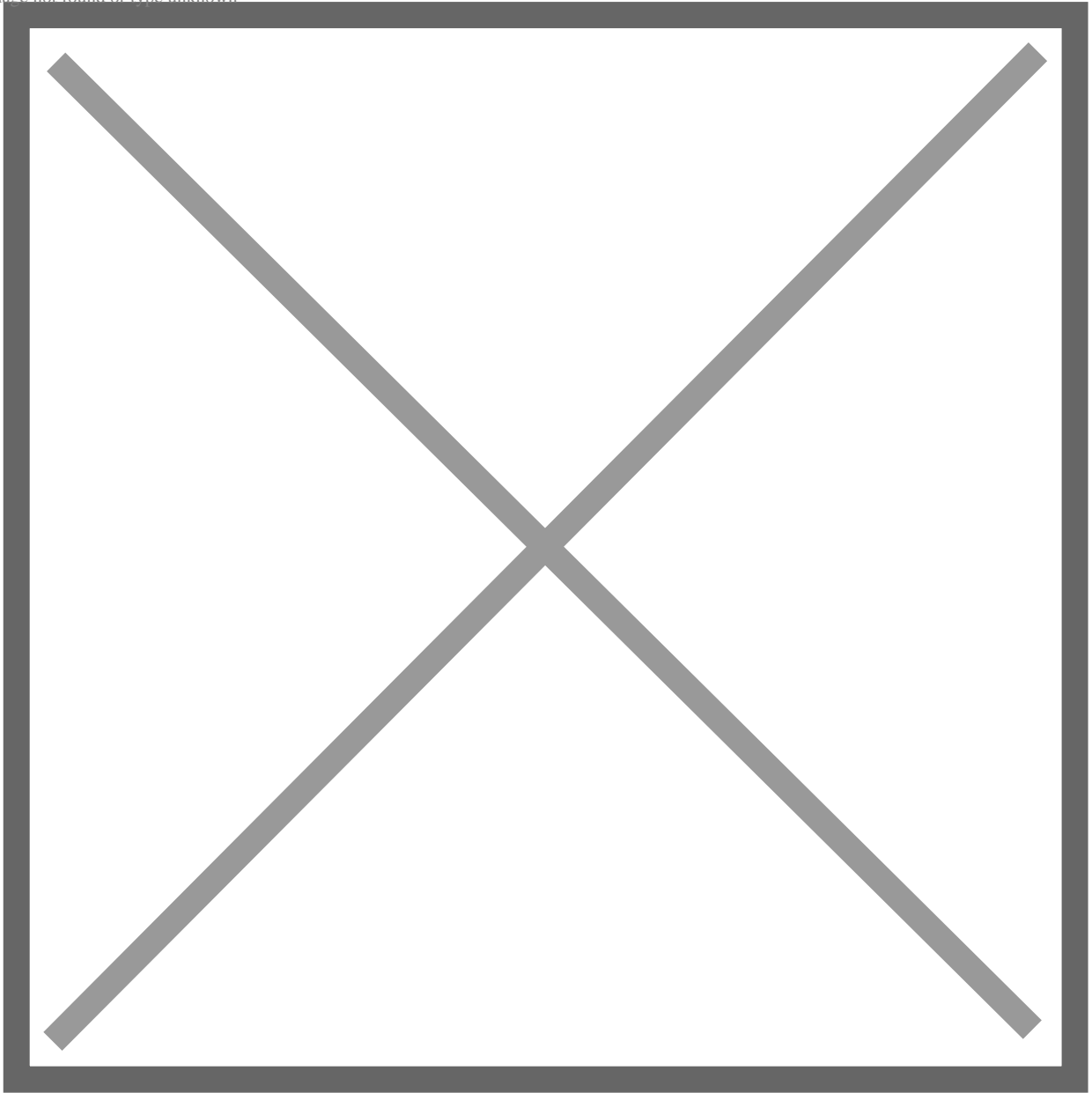
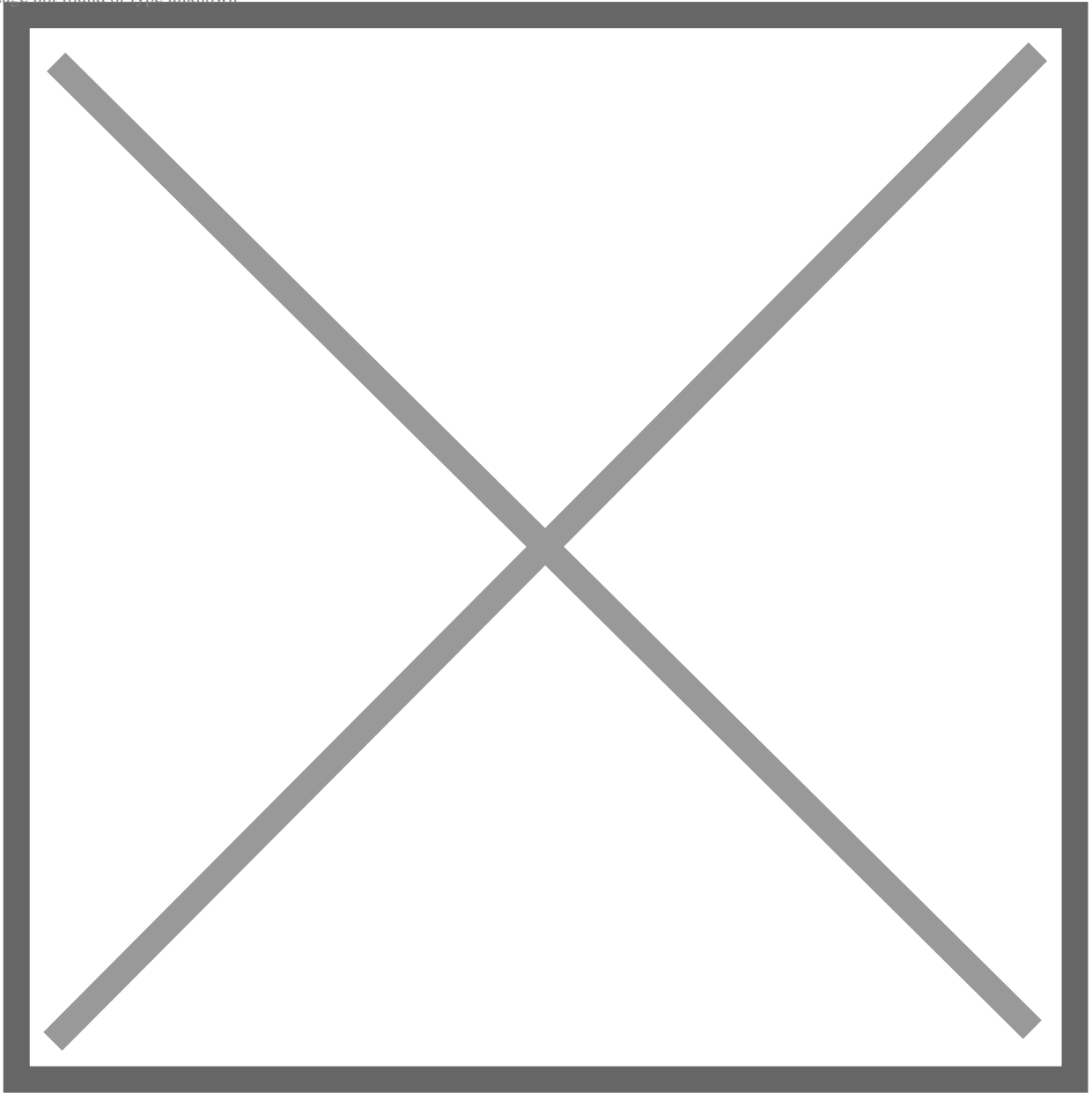
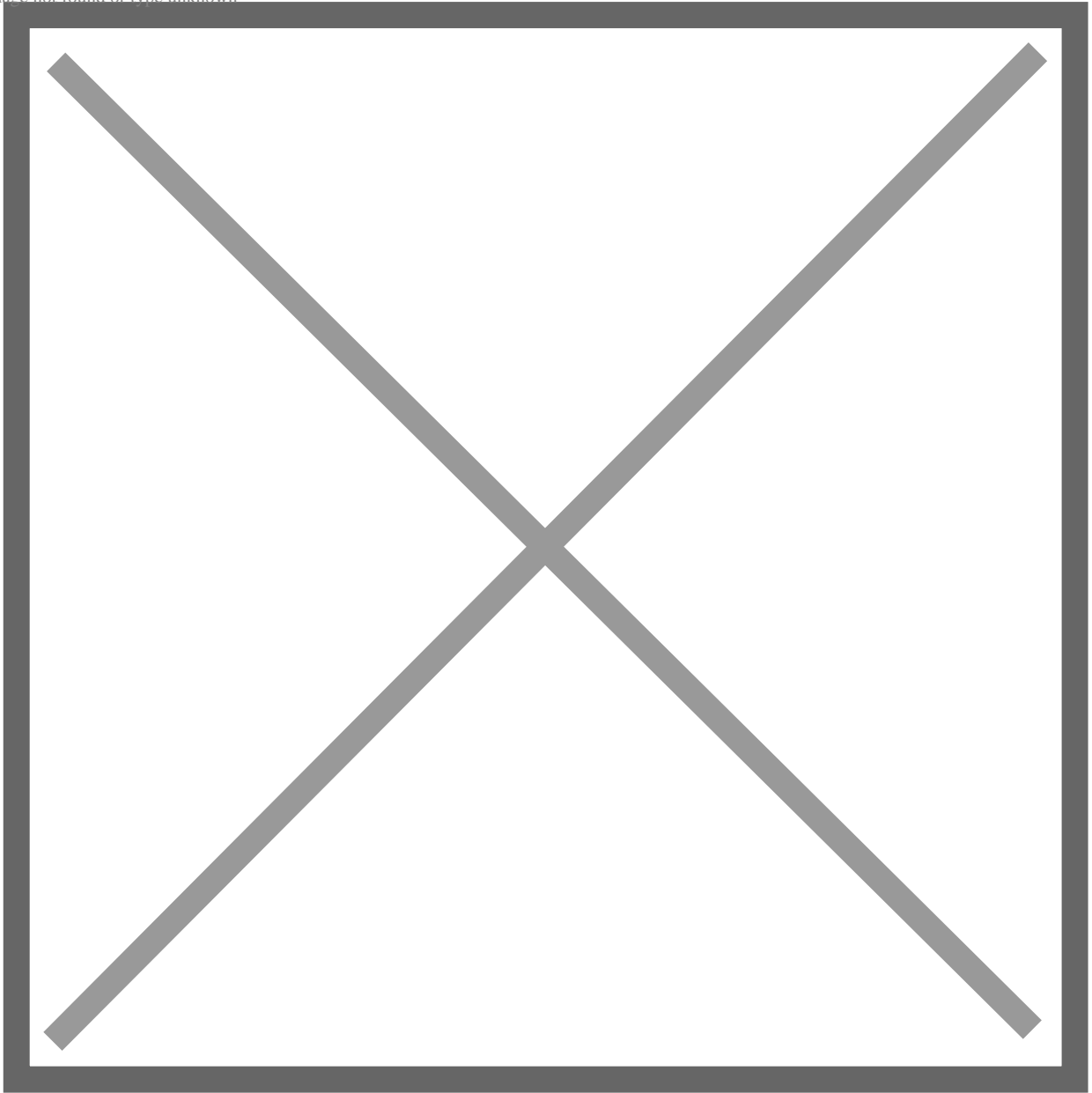


Image not found or type unknown



- tomcat 8080
http://ip:8080/apptest/

Image not found or type unknown



tomcat.png (917 KB, : 3)

tomcat.png

2022-7-7 10:26

dockerfile [Docker](#)