

DOCKER CASE STUDY

AUTOMATE INFRA ALLOCATION FOR L&D

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REQUIREMENTS:

- Dynamic Allocation of Linux systems for users
- Each user should have independent Linux System
- Specific training environment should be created in Container
- User should not allow to access other containers/images
- User should not allow to access docker command
- Monitor participants containers
- Debug/live demo for the participants if they have any doubts/bug in running applications.
- Automate container creation and deletion.

CREATE USER LIST:

(username.txt)

User a

User b

User c

CREATE CONTAINER FOR EACH USER:

(createcontainers.sh)

```
echo -n "Enter filename:"
```

```
read filename
```

```
while read username
```

```
do
```

```
    docker create -it --name $username docker_image/bin/bash
```

```
done < $filename
```

creates docker container corresponding to each user

USE ALLOCATED CONTAINER:

(usecontainers.sh)

```
echo -n "Enter container username:"
```

```
read username
```

```
docker start $username
```

```
docker attach $username
```

user has access to the particular linux system only

MONITOR CONTAINER:

(monitorcontainers.sh)

```
echo -n "Enter container username to monitor:"
```

```
read username
```

```
docker logs -f $username
```

monitor activities of particular user

DELETE CONTAINER:

(deletecontainer.sh)

```
echo -n "Enter filename:"
```

```
read filename
```

```
while read username
```

```
do
```

```
    docker stop $username
```

```
    docker rm $username
```

```
done < $filename
```

automate task of deleting containers

NOW:

EXECUTE SHELL SCRIPT USING

```
sh <shell_script>
```