

Lab Guide: Installing & Running OWASP Juice Shop on Kali Linux (via Docker)

Lab Objectives

By the end of this lab, you will be able to:

- Install **Docker** on Kali Linux.
 - Run **OWASP Juice Shop** inside a container.
 - Access Juice Shop through a web browser.
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Pre-Requisites

- Kali Linux VM running in VirtualBox.
 - Internet access.
 - At least **2 GB RAM** and **2 CPU cores** allocated to the VM.
 - Administrative (sudo) privileges.
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Part 1: Install Docker on Kali Linux

Step 1: Remove any old Docker packages

```
sudo apt remove docker docker-engine docker.io containerd runc
```

Step 2: Install prerequisites

```
sudo apt update  
sudo apt install -y ca-certificates curl gnupg lsb-release
```

Step 3: Add Docker's official GPG key

```
sudo mkdir -p /etc/apt/keyrings  
curl -fsSL https://download.docker.com/linux/debian/gpg | sudo gpg  
--dearmor -o /etc/apt/keyrings/docker.gpg  
sudo chmod a+r /etc/apt/keyrings/docker.gpg
```

Step 4: Add Docker repository (use Debian 12 “bookworm” source)


```
echo "deb [arch=$(dpkg --print-architecture)  
signed-by=/etc/apt/keyrings/docker.gpg] \  
https://download.docker.com/linux/debian bookworm stable" | \  
sudo tee /etc/apt/sources.list.d/docker.list > /dev/null
```

Step 5: Install Docker Engine

```
sudo apt update  
sudo apt install -y docker-ce docker-ce-cli containerd.io  
docker-buildx-plugin docker-compose-plugin
```

Step 6: Enable and test Docker

```
sudo systemctl enable --now docker  
sudo docker run hello-world
```

If you see the “Hello from Docker!” message, installation worked. 

Part 2: Run OWASP Juice Shop in Docker

Step 1: Start Juice Shop container

```
sudo docker run --rm -p 3000:3000 bkimminich/juice-shop
```

- `--rm` removes the container when stopped.
- `-p 3000:3000` maps container port 3000 to host port 3000.

Step 2: Access Juice Shop

- Open Firefox in Kali Linux.

Navigate to:

`http://localhost:3000`

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- You should see the Juice Shop homepage. 🎉

Part 3: Run Juice Shop in the Background (Optional)

To keep Juice Shop running without holding the terminal open:

```
sudo docker run -d --name juice-shop --restart unless-stopped -p 3000:3000 bkimminich/juice-shop
```

- `-d` runs in detached mode (background).
- `--restart unless-stopped` ensures it starts on boot.

Check logs:

```
sudo docker logs -f juice-shop
```

Stop the container:

```
sudo docker stop juice-shop
```

Part 4: Verification Checklist

- `sudo docker run --rm -p 3000:3000 bkimminich/juice-shop` works.
 - Browser shows Juice Shop at <http://localhost:3000>.
 - Optional: open Score Board at <http://localhost:3000/#/score-board>.
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Lab Deliverables

- Screenshot of `sudo docker run --rm -p 3000:3000 bkimminich/juice-shop`
- Screenshot of Juice Shop homepage in Firefox.
- Screenshot of Score Board page.