

**Description of the detailed issues faced while attempting to build the ESnet docker containers on PRP's U55 Cluster.**

<https://github.com/esnet/xilinx-labtools-docker>

**Documented**

<https://github.com/esnet/smartnic-dpdk-docker>

**Documented**

<https://github.com/esnet/esnet-smartnic-fw>

**U55 Not Supported Yet**

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Steps to build the required ESnet docker containers and images on PRP's platform:

**Step 1:**

**1. Git clone:**

<https://github.com/esnet/xilinx-labtools-docker.git>

**2. Git clone & submodule:**

<https://github.com/esnet/smartnic-dpdk-docker>

**3. On node:**

a. Apt update & upgrade

b. Follow: <https://docs.docker.com/engine/install/ubuntu/>

**ERROR: tini init system for k8s containers**

**Failed to run docker!**

**Will investigate**

c. Follow: <https://docs.docker.com/engine/install/linux-postinstall/>

d. Try: docker run hello-world

e.

```
mkdir -p ~/.docker/cli-plugins/  
  
curl -SL  
https://github.com/docker/compose/releases/download/v2.12.2/d  
ocker-compose-linux-x86_64 -o  
~/.docker/cli-plugins/docker-compose  
  
chmod +x ~/.docker/cli-plugins/docker-compose
```

f. Try: docker compose version

g. Download Vivado 2021.1 installer and 2021.1.1 update.

**Lengthy (~3 hours), could be bandwidth.**

**Step 2:**

- **Cd into xilinx...**
- **docker build --pull -t xilinx-labtools-docker:v2022.1-latest .**
- **docker image ls**

**Step 3:**

- **Cd into smartnic-dpdk-docker**
- **docker build --pull -t smartnic-dpdk-docker:\${USER}-dev .**
- **docker image ls**
- **If step 4 fails, do the rest of the steps and come back to 4.**