



**UNIVERSIDAD LATINA
DE COSTA RICA**

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Universidad Latina de Costa Rica

Ingeniería del Software

Sistemas Operativos II

Laboratorio Contenedores

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3 de abril del 2024

San Pedro, Montes de Oca

```
ubuntu@ubuntu:~$ sudo apt-get update
Ign:1 cdrom://Ubuntu 24.04 LTS _Noble Numbat_ - Release amd64 (20240424) noble I
nRelease
Hit:2 cdrom://Ubuntu 24.04 LTS _Noble Numbat_ - Release amd64 (20240424) noble R
elease
Get:3 http://security.ubuntu.com/ubuntu noble-security InRelease [89.7 kB]
Get:4 http://archive.ubuntu.com/ubuntu noble InRelease [256 kB]
Get:6 http://archive.ubuntu.com/ubuntu noble-updates InRelease [89.7 kB]
Get:7 http://security.ubuntu.com/ubuntu noble-security/main amd64 Packages [21.1
kB]
Hit:8 http://archive.ubuntu.com/ubuntu noble-backports InRelease
Get:9 http://security.ubuntu.com/ubuntu noble-security/main i386 Packages [17.4
kB]
Get:10 http://security.ubuntu.com/ubuntu noble-security/main Translation-en [631
2 B]
Get:11 http://security.ubuntu.com/ubuntu noble-security/universe i386 Packages [
3172 B]
Get:12 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Packages
[8248 B]
Get:13 http://security.ubuntu.com/ubuntu noble-security/universe Translation-en
[3672 B]
Get:14 http://archive.ubuntu.com/ubuntu noble/main amd64 Packages [1401 kB]
Get:15 http://archive.ubuntu.com/ubuntu noble/main i386 Packages [1041 kB]
Get:16 http://archive.ubuntu.com/ubuntu noble/main Translation-en [513 kB]
Get:17 http://archive.ubuntu.com/ubuntu noble/universe i386 Packages [8514 kB]
Get:18 http://archive.ubuntu.com/ubuntu noble/universe amd64 Packages [15.0 MB]
Get:19 http://archive.ubuntu.com/ubuntu noble/universe Translation-en [5982 kB]
Get:20 http://archive.ubuntu.com/ubuntu noble/restricted amd64 Packages [93.9 kB
]
Get:21 http://archive.ubuntu.com/ubuntu noble/restricted Translation-en [18.7 kB
]
Get:22 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 Packages [21.1
kB]
Get:23 http://archive.ubuntu.com/ubuntu noble-updates/main i386 Packages [17.4 k
B]
Get:24 http://archive.ubuntu.com/ubuntu noble-updates/main Translation-en [6312
B]
Get:25 http://archive.ubuntu.com/ubuntu noble-updates/universe amd64 Packages [8
248 B]
Get:26 http://archive.ubuntu.com/ubuntu noble-updates/universe i386 Packages [31
72 B]
Get:27 http://archive.ubuntu.com/ubuntu noble-updates/universe Translation-en [3
672 B]
Fetched 33.2 MB in 19s (1719 kB/s)
Reading package lists... Done
ubuntu@ubuntu:~$
```

```
Fetched 33.2 MB in 19s (1719 kB/s)
Reading package lists... Done
ubuntu@ubuntu:~$ sudo apt-get install
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
0 upgraded, 0 newly installed, 0 to remove and 16 not upgraded.
ubuntu@ubuntu:~$
```

```
ubuntu@ubuntu:~$ curl -fsSL https://download.docker.com/linux/ubuntu/gpg
-----BEGIN PGP PUBLIC KEY BLOCK-----

mQINBFit2ioBEADhWpZ8/wvZ6hUTiXOwQHXMALaFHCpH9hAtr4F1y2+0YdbtMuth
lqqwp028AqyY+PRfVMtSYMbjuQuu5bbyyKR01BbqYhuS3jttQmLjZ/bJvXqnmiVXh
38UuLa+z077PxyxQhu5BbqntTPQMfiyqEiU+BKbq2WmANUKQf+1AmZY/Iru0Xbnq
L4C1+gJ8vfmXQt99npCaxEjaNRVYfOS8QcixNzHUYNb6emjLANyEVLZzeqo7XKl7
UrwV5inawTSzWNvtjEjj4nJL8NsLwscpLPQUhTQ+7BbQXAwAmeHCUTQIvvWXqw0N
cmhh4HgeQscQHYg0JjjDVfoY5MucvglbIgCqfzAHW9jxmRL4qbMZj+b1XoePEtht
ku4bIQN1X5P07fNwZlgARL5Z4POXDDZTLIQ/El58j9kp4bnWRCJW0lya+f8ocodo
vZZ+Doi+fy4D5ZGrL4XEcIQP/Lv5uFyf+kQtL/94VFYVJ0leAv8W92KdgDkhTcTD
G7c0tIkVEKNUq48b3aQ64NOZQW7fVjfoKwEZdOqPE72Pa45jrZzvUFxSpdiNk2tZ
XYukHjlxxEgBdC/J3cMMNRE1F4NCA3ApfV1Y7/hTeOnmDuDYwr9/obA8t016Yljj
q5rdkywPf4JF8mXUW5eCN1vAFHxeg9ZWemhBtQmGxXnw9M+z6hWwc6ahmwARAQAB
tCtEb2NrZXIgaUmVsZWZlZSAoQ0UgZGVhKSA8ZG9ja2VyQGRvY2tldi5jb20+iQI3
BBMBCgAhBQJYrefAAhsVBQsJCACDBRUKCQgLBRYCAwEAAh4BAheAAAoJEI2BgDwO
v82IsskP/iQZo68fLDQmNvn8X5XTd6RRaUH33kXYXquT6NkHJciS7E2gTJmqvMqd
tI4mNYHCSEYxI5qrcYV5YqX9P6+Ko+vozo4nseUQLPH/ATQ4qL0Zok+1jkag3Lgk
jonyUf9bwtWxFp05HC3GMHPPhcUSexCxQLQvnFWXD2sWLKivHp2fT8QbRGeZ+d3m
6fqcd5Fu7pxsqm0EUDK5NL+nPIgYhN+auTrhgzhK1CSHFgCcM/wfRlei9Utz6p9P
XRKILWnXtT4qNGZNTN0tR+NLG/6Bqd80YBaFAUcue/w1VW6JQ2VGYZHnZu9S8LMc
FYBa5Ig9PwGQ0gq6RDkDbV+PqTQT5EFMeR1mrjckk4DQJjbxMZbiNMG5kGECA8
```

```
ubuntu@ubuntu:~$ sudo apt-get install ca-certificates curl
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
ca-certificates is already the newest version (20240203).
ca-certificates set to manually installed.
The following additional packages will be installed:
  libcurl3t64-gnutls libcurl4t64
The following NEW packages will be installed:
  curl
The following packages will be upgraded:
  libcurl3t64-gnutls libcurl4t64
2 upgraded, 1 newly installed, 0 to remove and 14 not upgraded.
Need to get 900 kB of archives.
After this operation, 532 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 libcurl4t64 amd64 8.5.0-2ubuntu10.1 [341 kB]
Get:2 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 curl amd64 8.5.0-2ubuntu10.1 [227 kB]
Get:3 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 libcurl3t64-gnutls amd64 8.5.0-2ubuntu10.1 [333 kB]
Fetched 900 kB in 1s (686 kB/s)
(Reading database ... 210655 files and directories currently installed.)
```

Next

Next

```
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 client contacted the Docker daemon.  
2. The Docker daemon pulled the "hello-world" image from the Docker Hub.  
   (amd64)  
3. The Docker daemon created a new container from that image which runs the  
   executable that produces the output you are currently reading.  
4. The Docker daemon streamed that output to the Docker client, which sent it  
   to your terminal.
```

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