

Laporan Praktikum Sistem Operasi

“Ping SSH”



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```
sitizulaika@localhost:~ — ping 10.0.2.15
[sitizulaika@localhost ~]$ ifconfig
enp0s3: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 10.0.2.15 netmask 255.255.255.0 broadcast 10.0.2.255
    inet6 fe80::a00:27ff:feb2:8f78 prefixlen 64 scopeid 0x20<link>
    ether 08:00:27:b2:8f:78 txqueuelen 1000 (Ethernet)
    RX packets 10881 bytes 15224798 (14.5 MiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 1247 bytes 97578 (95.2 KiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
```

Untuk mengetahui alamat IP kita berapa, Maka silahkan ketik “if config”

```
[sitizulaika@localhost ~]$ ping 10.0.2.15
PING 10.0.2.15 (10.0.2.15) 56(84) bytes of data.
64 bytes from 10.0.2.15: icmp_seq=1 ttl=64 time=0.098 ms
64 bytes from 10.0.2.15: icmp_seq=2 ttl=64 time=0.096 ms
64 bytes from 10.0.2.15: icmp_seq=3 ttl=64 time=0.101 ms
```

Ping Alamat IP

```
root@ubuntu:~# apt-get install openssh-server
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following extra packages will be installed:
  libck-connector0 ncurses-term openssh-sftp-server ssh-import-id
Suggested packages:
  rssh molly-guard monkeysphere
The following NEW packages will be installed:
  libck-connector0 ncurses-term openssh-server openssh-sftp-server
  ssh-import-id
0 upgraded, 5 newly installed, 0 to remove and 51 not upgraded.
Need to get 618 kB of archives.
After this operation, 3,424 kB of additional disk space will be used.
Do you want to continue? [Y/n] Y
```

Instal ubuntu ssh-server

```
[sitizulaika@10 ~]$ ssh -V
OpenSSH_8.7p1, OpenSSL 3.0.7 1 Nov 2022
```

Open ssh

```
root@ubuntu:~#
root@ubuntu:~# netstat -tulnp | grep ssh
tcp        0      0 0.0.0.0:22          0.0.0.0:*          LISTEN
3657/sshd
tcp6       0      0 :::22              :::*                LISTEN
3657/sshd
root@ubuntu:~#
```

Netstat ssh

```
sitizulaika@10:~  
udp6      0      0 :::38284      :::*  
-  
[sitizulaika@10 ~]$ sudo ufw allow ssh  
[sudo] password for sitizulaika:  
sitizulaika is not in the sudoers file. This incident will be reported.  
[sitizulaika@10 ~]$ sudo ufw status  
[sudo] password for sitizulaika:  
sitizulaika is not in the sudoers file. This incident will be reported.  
[sitizulaika@10 ~]$ ll /etc/systemd/system/  
total 8  
drwxr-xr-x. 2 root root   65 Jan 25 19:48 basic.target.wants  
drwxr-xr-x. 2 root root   31 Jan 25 19:46 bluetooth.target.wants  
lrwxrwxrwx. 1 root root   37 Jan 25 19:46 ctrl-alt-del.target -> /usr/lib/syste  
md/system/reboot.target  
lrwxrwxrwx. 1 root root   41 Jan 25 19:46 dbus-org.bluez.service -> /usr/lib/sy  
stemd/system/bluetooth.service  
lrwxrwxrwx. 1 root root   41 Jan 25 19:48 dbus-org.fedoraproject.FirewallD1.ser  
vice -> /usr/lib/systemd/system/firewalld.service
```

```
GNU nano 4.8 /etc/ssh/sshd_config Modified  
# $OpenBSD: sshd_config,v 1.103 2018/04/09 20:41:22 tj Exp $  
  
# This is the sshd server system-wide configuration file. See  
# sshd_config(5) for more information.  
  
# This sshd was compiled with PATH=/usr/bin:/bin:/usr/sbin:/sbin  
  
# The strategy used for options in the default sshd_config shipped with  
# OpenSSH is to specify options with their default value where  
# possible, but leave them commented. Uncommented options override the  
# default value.  
  
Include /etc/ssh/sshd_config.d/*.conf  
  
Port 2222  
#AddressFamily any  
#ListenAddress 0.0.0.0  
#ListenAddress ::
```

```
#LoginGraceTime 2m  
#PermitRootLogin prohibit-password  
PermitRootLogin no  
#StrictModes yes  
#MaxAuthTries 6  
#MaxSessions 10
```

Kesimpulan

- **ping**

Ping adalah perintah yang digunakan untuk menguji koneksi jaringan antara dua perangkat dengan mengirimkan paket data dan menunggu respons dari perangkat tujuan.

Dalam konteks AlmaLinux, Anda dapat menggunakan perintah ping di terminal untuk memeriksa ketersediaan perangkat atau host lain di jaringan yang sama.

Hasil ping menunjukkan keberhasilan atau kegagalan dalam mengirim dan menerima paket data serta memberikan informasi tentang waktu respons (round-trip time) dari perangkat tujuan.

- **SSH (secure shell)**

SSH adalah protokol jaringan yang digunakan untuk mengakses perangkat jarak jauh secara aman melalui koneksi yang terenkripsi.

Dalam AlmaLinux, Anda dapat menggunakan perintah ssh untuk mengakses dan mengelola perangkat jarak jauh melalui terminal.

SSH memungkinkan Anda untuk melakukan berbagai tugas administratif pada server atau perangkat jarak jauh, seperti mengelola file, menjalankan perintah, dan melakukan konfigurasi sistem.