What is a hostname?

A **hostname** is the **name assigned to your system** that identifies it on a **network**.

Think of it like a **computer's name**, just like a person's name on an office ID.

- Uniquely identifies a Linux machine on a network
- Helps other systems recognize and communicate with it
- Is used in logs, prompts, and network services

Example:

```
sd.lin.com
pqr.rhel.com
```

Types of hostnames in RHEL 9

RHEL uses **three hostname types**:

1. **Static hostname**
   - Set by the admin
   - Stored in `/etc/hostname`
   - Example: `rhel9-server`
2. **Transient hostname**
   - Temporary
   - Assigned by DHCP
   - Lost after reboot
3. **Pretty hostname**
   - Human-friendly name
   - Can include spaces and capital letters
   - Example: `Production Database Server`

How to check hostname in RHEL 9

`Hostname`

```
[root@pqr ~]# hostname
pqr.rad.com
```

or (recommended)

hostnamectl

```
[root@pqr ~]# hostnamectl
 Static hostname: pqr.rad.com
       Icon name: computer-vm
         Chassis: vm □
      Machine ID: 8bd038f364f4445a9a02d4767f389bd5
         Boot ID: 1d31e5053bbd42a1b870d6dcbb70a3c7
  Virtualization: vmware
Operating System: Red Hat Enterprise Linux 9.2 (Plow)
     CPE OS Name: cpe:/o:redhat:enterprise_linux:9::baseos
          Kernel: Linux 5.14.0-284.11.1.el9_2.x86_64
    Architecture: x86-64
 Hardware Vendor: VMware, Inc.
  Hardware Model: VMware Virtual Platform
Firmware Version: 6.00
```

Sample output:

```
Static hostname: rhel9-server
Pretty hostname: RHEL 9 Server
```

How to set/change hostname in RHEL 9

Temporary (until reboot)

```
hostname test-server
```

Permanent (recommended way)

```
hostnamectl set-hostname rhel9-server
```

Set pretty hostname

```
hostnamectl set-hostname "RHEL 9 Production Server" –pretty
```

Via file

/etc/hostname

```
vi /etc/hostname

OR
```

/etc/hosts:

```
IP_Address   Hostname   Alias(optional)

vi/etc/hosts

127.0.0.1   localhost localhost.localdomain localhost4
localhost4.localdomain4
::1         localhost localhost.localdomain localhost6
localhost6.localdomain6
172.16.0.100 pqr.rad.com pqr
```

Where hostname is used

- Shell prompt:
- `user@rhel9-server`
- Network identification
- SSH connections
- System logs
- Monitoring tools

Rules for hostname (important for exams & real systems)

✔ Letters (a–z)
✔ Numbers (0–9)
✔ Hyphen (-)
 No spaces (except pretty hostname)
 No special characters

Real-world example

In a company:

- `web01.company.com` → Web server
- `db01.company.com` → Database server
- `backup01.company.com` → Backup server

Pinging Hostname

[root@pqr ~]# ping pqr.rad.com

PING pqr.rad.com (192.168.11.128) 56(84) bytes of data.

64 bytes from pqr.rad.com (192.168.11.128): icmp_seq=1 ttl=64 time=0.091 ms

64 bytes from pqr.rad.com (192.168.11.128): icmp_seq=2 ttl=64 time=0.224 ms

64 bytes from pqr.rad.com (192.168.11.128): icmp_seq=3 ttl=64 time=0.175 ms

64 bytes from pqr.rad.com (192.168.11.128): icmp_seq=4 ttl=64 time=0.224 ms

^C

--- pqr.rad.com ping statistics ---

4 packets transmitted, 4 received, 0% packet loss, time 3060ms

rtt min/avg/max/mdev = 0.091/0.178/0.224/0.054 ms

Pinging alias of hostname

[root@pqr ~]# ping pqr

PING pqr.rad.com (192.168.11.128) 56(84) bytes of data.

64 bytes from pqr.rad.com (192.168.11.128): icmp_seq=1 ttl=64 time=0.126 ms

64 bytes from pqr.rad.com (192.168.11.128): icmp_seq=2 ttl=64 time=0.210 ms

64 bytes from pqr.rad.com (192.168.11.128): icmp_seq=3 ttl=64 time=0.138 ms

^C

--- pqr.rad.com ping statistics ---

3 packets transmitted, 3 received, 0% packet loss, time 2078ms

rtt min/avg/max/mdev = 0.126/0.158/0.210/0.037 ms