

NFS,SAMBA,FTP,HTTP,SMTP Configuration



Server 1

Install FTP:

```
[root@localhost ~]# dnf install vsftpd* -y
Updating Subscription Management repositories.
Unable to read consumer identity

This system is not registered with an entitlement server. You can use subscription-manager to register.

baseos                               39 MB/s | 2.0 MB     00:00
appstream                            52 MB/s | 6.5 MB     00:00
Last metadata expiration check: 0:00:01 ago on Sun 29 Dec 2024 11:42:35 AM IST.
Dependencies resolved.
=====
 Package          Architecture      Version       Repository      Size
=====
Installing:
=====

```

Installed products updated.

Installed:

```
  vsftpd-3.0.5-5.el9.x86_64
```

Complete!

```
[root@localhost ~]# vi /etc/vsftpd/vsftpd.conf
[root@localhost ~]# service vsftpd restart
Redirecting to /bin/systemctl restart vsftpd.service
```

Install NFS:

```
[root@localhost ~]# dnf install nfs-util* -y
Updating Subscription Management repositories.
Unable to read consumer identity

This system is not registered with an entitlement server. You can use subscription-manager to register.

Last metadata expiration check: 0:02:17 ago on Sun 29 Dec 2024 11:42:35 AM IST.
Dependencies resolved.
=====
 Package           Architecture Version      Repository  Size
 =====
 Installing:
 nfs-utils        x86_64          1:2.5.4-20.el9   base       458 k
```

```
Complete!
[root@localhost ~]# vi /etc/exports
[root@localhost ~]# service nfs-server restart
Redirecting to /bin/systemctl restart nfs-server.service
[root@localhost ~]#
```

```
[root@localhost ~]# service firewalld stop
Redirecting to /bin/systemctl stop firewalld.service
[root@localhost ~]# service nfs-server restart
Redirecting to /bin/systemctl restart nfs-server.service
[root@localhost ~]# chmod -R 777 /myshare
[root@localhost ~]#
[root@localhost ~]# ls
anaconda-ks.cfg  Documents  Music    Public    Videos
Desktop          Downloads  Pictures  Templates
[root@localhost ~]# cd /myshare
[root@localhost myshare]# ls
backup
[root@localhost myshare]# touch data
[root@localhost myshare]#
```

```
[root@localhost ~]# mount -t nfs 20.20.20.20:/myshare /server1share
[root@localhost ~]# df -h
Filesystem      Size  Used Avail Use% Mounted on
devtmpfs        4.0M   0    4.0M  0% /dev
tmpfs          882M   0   882M  0% /dev/shm
tmpfs          353M  7.2M  346M  3% /run
/dev/sda2       8.8G  4.7G  4.1G  54% /
/dev/sda1       1.6G  7.0M  1.6G  1% /boot/efi
tmpfs          177M   92K  177M  1% /run/user/0
/dev/sr0         9.9G  9.9G    0 100% /run/media/root/RHEL-9-3-0-BaseOS-x86_64
20.20.20.20:/myshare 8.8G  4.4G  4.4G  50% /server1share
[root@localhost ~]# cd server1share
bash: cd: server1share: No such file or directory
[root@localhost ~]# cd /server1share
[root@localhost server1share]# mkdir backup
[root@localhost server1share]# ls
backup data
[root@localhost server1share]#
```

Logical Volume Create:

```
[root@localhost ~]# fdisk -l
Disk /dev/sda: 16 GiB, 17179869184 bytes, 33554432 sectors
Disk model: Virtual disk
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disklabel type: gpt
Disk identifier: BB3B6BD9-3AAE-4223-B322-04016ECDE7D4

Device      Start    End  Sectors  Size Type
/dev/sda1     2048 3278847 3276800  1.6G EFI System
/dev/sda2   3278848 21710847 18432000  8.8G Linux filesystem
/dev/sda3   21710848 25806847 4096000    2G Linux filesystem
/dev/sda4   25806848 29083647 3276800  1.6G Linux swap
```

```
Disk /dev/sdb: 20 GiB, 21474836480 bytes, 41943040 sectors
Disk model: Virtual disk
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
[root@localhost ~]#
[root@localhost ~]# pvcreate /dev/sdb
  Physical volume "/dev/sdb" successfully created.
  Creating devices file /etc/lvm/devices/system.devices
[root@localhost ~]# vgcreate movies /dev/sdb
  Volume group "movies" successfully created
[root@localhost ~]# lvcreate -L 15GB -n tamil movies
  Logical volume "tamil" created.
[root@localhost ~]# mkfs.ext4 /dev/mapper/movies-tamil
mke2fs 1.46.5 (30-Dec-2021)
Creating filesystem with 3932160 4k blocks and 983040 inodes
Filesystem UUID: b7b1fb30-5a8d-4915-9c0b-d1d8c95624a1
Superblock backups stored on blocks:
            32768, 98304, 163840, 229376, 294912, 819200, 884736, 1605632, 2654208

Allocating group tables: done
Writing inode tables: done
Creating journal (16384 blocks): done
```

```
[root@localhost ~]# mkdir /tamil
[root@localhost ~]# mount /dev/mapper/movies-tamil /tamil
[root@localhost ~]# df -h
Filesystem              Size  Used  Avail Use% Mounted on
devtmpfs                 4.0M    0   4.0M   0% /dev
tmpfs                    882M    0   882M   0% /dev/shm
tmpfs                     353M   7.2M   346M   3% /run
/dev/sda2                  8.8G   4.3G   4.5G  50% /
/dev/sda1                  1.6G   7.0M   1.6G   1% /boot/efi
/dev/sda3                  1.9G   46M   1.9G   3% /emails
tmpfs                     177M  104K   177M   1% /run/user/0
/dev/sr0                   9.9G   9.9G     0 100% /run/media/root/RHEL-9-3-0-Base0
S-x86_64
/dev/mapper/movies-tamil   15G   24K   14G   1% /tamil
[root@localhost ~]# lvextend -L 19GB /dev/mapper/movies-tamil
      Size of logical volume movies/tamil changed from 15.00 GiB (3840 extents) to 1
9.00 GiB (4864 extents).
Logical volume movies/tamil successfully resized.
[root@localhost ~]# resize2fs /dev/mapper/movies-tamil
resize2fs 1.46.5 (30-Dec-2021)
Filesystem at /dev/mapper/movies-tamil is mounted on /tamil; on-line resizing re
quired
old_desc_blocks = 2, new_desc_blocks = 3
The filesystem on /dev/mapper/movies-tamil is now 4980736 (4k) blocks long.
```

```
[root@localhost ~]# df -h
Filesystem              Size  Used  Avail Use% Mounted on
devtmpfs                 4.0M    0   4.0M   0% /dev
tmpfs                    882M    0   882M   0% /dev/shm
tmpfs                     353M   7.2M   346M   3% /run
/dev/sda2                  8.8G   4.3G   4.5G  50% /
/dev/sda1                  1.6G   7.0M   1.6G   1% /boot/efi
/dev/sda3                  1.9G   46M   1.9G   3% /emails
tmpfs                     177M  104K   177M   1% /run/user/0
/dev/sr0                   9.9G   9.9G     0 100% /run/media/root/RHEL-9-3-0-Base0
S-x86_64
/dev/mapper/movies-tamil   19G   24K   18G   1% /tamil
[root@localhost ~]# █
```

SERVER 2:

FTP:

```
[root@localhost ~]# dnf install vsftpd* -y
Updating Subscription Management repositories.
Unable to read consumer identity

This system is not registered with an entitlement server. You can use subscription-manager to register.

baseos                               22 MB/s | 2.0 MB    00:00
appstream                            23 MB/s | 6.5 MB    00:00
Dependencies resolved.
=====
 Package           Architecture   Version       Repository  Size
 =====
 Installing:
  vsftpd          x86_64        3.0.5-5.el9      app        172 k

Transaction Summary
=====
Install 1 Package

Total size: 172 k
```

```
bash: vi: command not found...
[root@localhost ~]# vi /etc/vsftpd/vsftpd.conf
[root@localhost ~]# service vsftpd restart
Redirecting to /bin/systemctl restart vsftpd.service
[root@localhost ~]#
```

SAMBA

```
[root@localhost ~]# dnf install samba* -y
Updating Subscription Management repositories.
Unable to read consumer identity

This system is not registered with an entitlement server. You can use subscription-manager to register.

Last metadata expiration check: 0:05:03 ago on Sun 29 Dec 2024 01:24:16 PM IST.
Package samba-client-libs-4.18.6-100.el9.x86_64 is already installed.
Package samba-common-4.18.6-100.el9.noarch is already installed.
Package samba-common-libs-4.18.6-100.el9.x86_64 is already installed.
Dependencies resolved.
=====
 Package           Arch      Version       Repo      Size
=====
Installing:
 samba            x86_64    4.18.6-100.el9   base     984 k
 samba-client     x86_64    4.18.6-100.el9   app      678 k
 samba-common-tools x86_64    4.18.6-100.el9   base     461 k
```

```
samba-winbind-krb5-locator-4.18.6-100.el9.x86_64
samba-winbind-modules-4.18.6-100.el9.x86_64
samba-winexe-4.18.6-100.el9.x86_64
```

Complete!

```
[root@localhost ~]# mkdir /myshare
[root@localhost ~]# vi /etc/samba/smb.conf
[root@localhost ~]# service smb restart
Redirecting to /bin/systemctl restart smb.service
```

```
[root@localhost ~]# testparm
Load smb config files from /etc/samba/smb.conf
Loaded services file OK.
Weak crypto is allowed by GnuTLS (e.g. NTLM as a compatibility fallback)
```

Server role: ROLE_STANDALONE

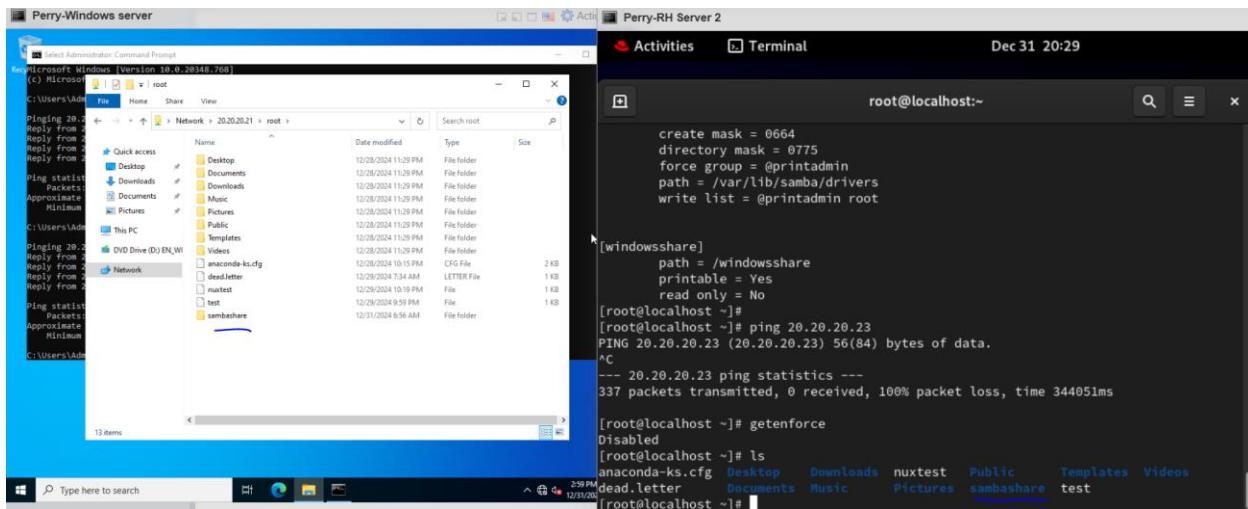
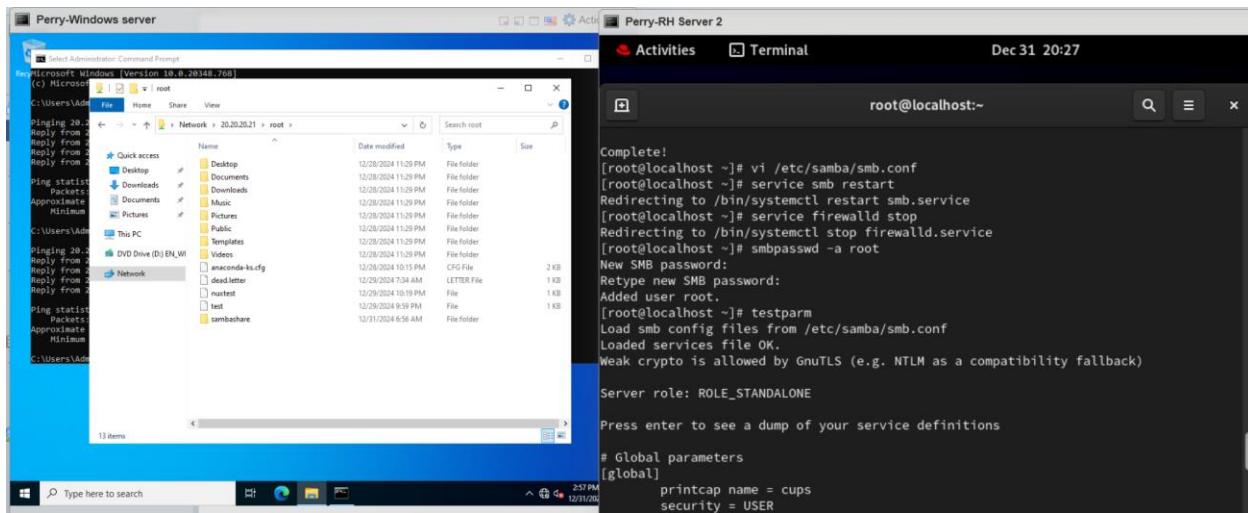
Press enter to see a dump of your service definitions

```
# Global parameters
[global]
    printcap name = cups
    security = USER
    workgroup = SAMBA

[printers]
    browseable = No
    comment = All Printers
    create mask = 0600
    path = /var/tmp
    printable = Yes

[print$]
    comment = Printer Drivers
    create mask = 0664
    directory mask = 0775
    force group = @printadmin
    path = /var/lib/samba/drivers
    write list = @printadmin root

[myshare]
    path = /myshare
    printable = Yes
    read only = No
[root@localhost ~]# █
```



HTTP SITES:

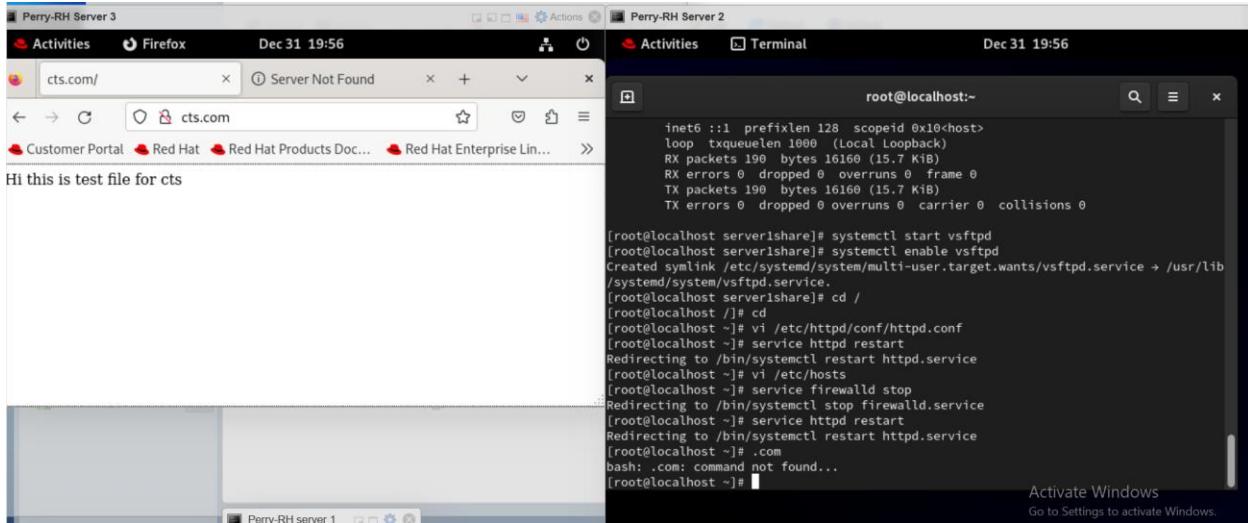
```
[root@localhost ~]# dnf install httpd* -y
Updating Subscription Management repositories.
Unable to read consumer identity

This system is not registered with an entitlement server. You can use subscription-manager to register.

Last metadata expiration check: 0:10:52 ago on Sun 29 Dec 2024 08:53:38 PM IST.
Dependencies resolved.
=====
Package           Architecture Version   Repository  Size
=====
Installing:
httpd            x86_64      2.4.57-5.el9    app        52 k
httpd-core       x86_64      2.4.57-5.el9    app        1.5 M
httpd-devel      x86_64      2.4.57-5.el9    app        211 k
httpd-filesystem noarch     2.4.57-5.el9    app        16 k
httpd-manual     noarch     2.4.57-5.el9    app        2.2 M
mod_http2-1.15.19-5.el9.x86_64      mod_lua-2.4.57-5.el9.x86_64
openldap-devel-2.6.3-1.el9.x86_64      redhat-logos-httpd-90.4-2.el9.noarch

Complete!
[root@localhost ~]# vi /etc/httpd/conf/httpd.conf
[root@localhost ~]# mkdir /var/www/cts
[root@localhost ~]# mkdir /var/www/tcs
[root@localhost ~]# mkdir /var/www/ibm
[root@localhost ~]# cd /var/www/ibm
[root@localhost ibm]# vi index.html
[root@localhost ibm]# cd /var/www/cts
[root@localhost cts]# vi index.html
[root@localhost cts]# cd /var/www/tcs
[root@localhost tcs]# vi index.html
[root@localhost tcs]# ifconfig
ens192: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
      inet 20.20.20.21  netmask 255.255.255.255 broadcast 0.0.0.0
      inet6 2a01:7a7:2:3730:20c:29ff:fe5f:bb65  prefixlen 64  scopeid 0x0<global
al>
```

```
[root@localhost tcs]# vi /etc/hosts
[root@localhost tcs]# service httpd restart
Redirecting to /bin/systemctl restart httpd.service
[root@localhost tcs]#
```



SERVER 3

FTP:

```
[root@localhost ~]# dnf install vsftpd* -y
Updating Subscription Management repositories.
Unable to read consumer identity

This system is not registered with an entitlement server. You can use subscription-manager to register.

baseos                               105 MB/s | 2.0 MB     00:00
appstream                            88 MB/s | 6.5 MB     00:00
Dependencies resolved.
```

```
Installed:
  vsftpd-3.0.5-5.el9.x86_64

Complete!
[root@localhost ~]# vi /etc/vsftpd/vsftpd.conf
[root@localhost ~]# service vsftpd restart
Redirecting to /bin/systemctl restart vsftpd.service
[root@localhost ~]# vi /etc/sysconfig/network-scripts/ifcfg-ens192
[root@localhost ~]# nmtui
[root@localhost ~]# nmtui
[root@localhost ~]# systemctl restart NetworkManager.service
[root@localhost ~]# ifconfig
ens192: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
      inet 20.20.20.21 netmask 255.255.255.255 broadcast 0.0.0.0
      inet6 2a01:7a7:2:3730:20c:29ff:fe5f:bb65 prefixlen 64 scopeid 0x0<global>
```

SMTP:

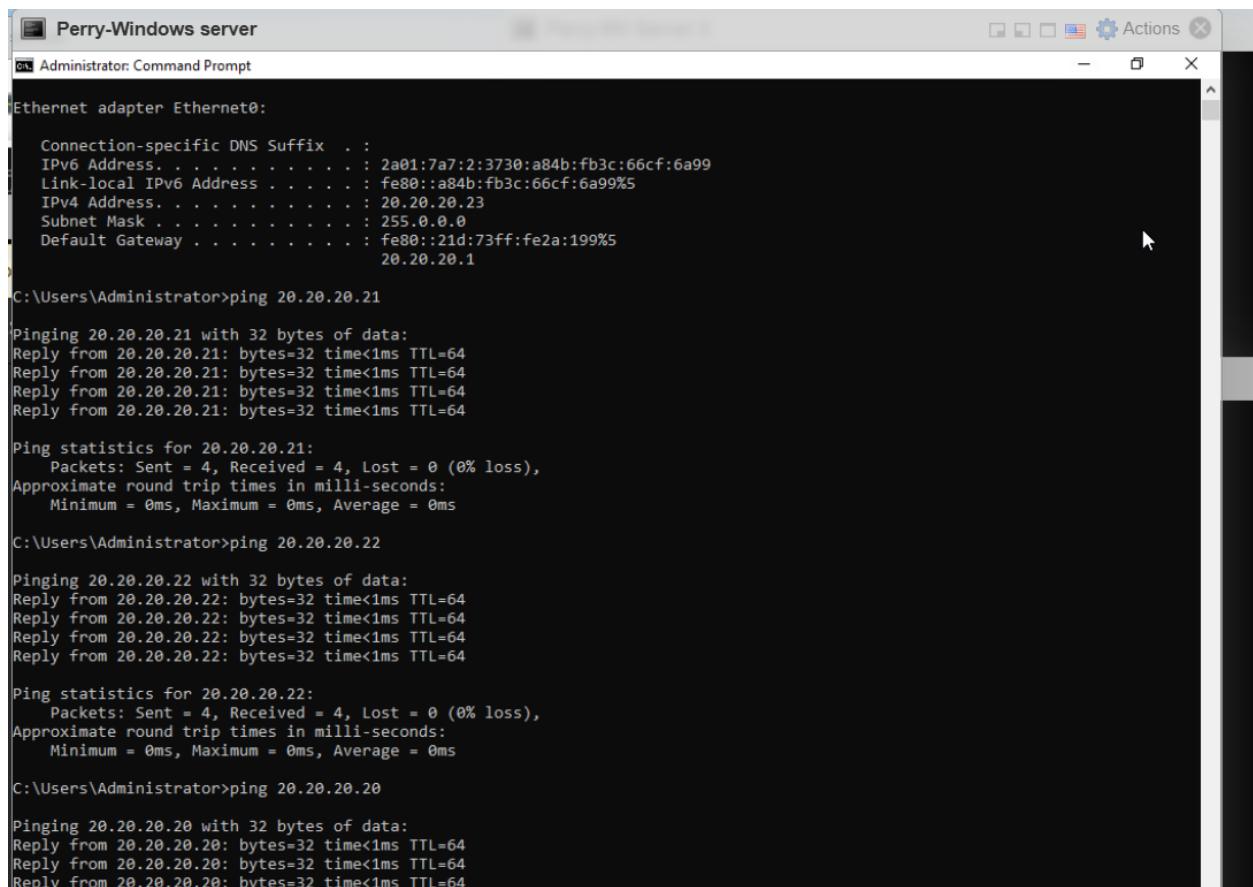
```
[root@localhost ~]# dnf install postfix* -y
Updating Subscription Management repositories.
Unable to read consumer identity

This system is not registered with an entitlement server. You can use subscription-manager to register.

Last metadata expiration check: 0:13:38 ago on Sun 29 Dec 2024 08:26:39 PM IST.
Dependencies resolved.
=====
Package           Arch      Version       Repo      Size
=====
Installing:
postfix          x86_64    2:3.5.9-24.el9   app      1.5 M
postfix-cdb      x86_64    2:3.5.9-24.el9   app      18 k
postfix-ldap     x86_64    2:3.5.9-24.el9   app      42 k
postfix-lmdb     x86_64    2:3.5.9-24.el9   app      25 k
postfix-mysql    x86_64    2:3.5.9-24.el9   app      27 k
tinycdb          x86_64    0.78-18.el9      n/a      25 k
postfix-pgsql-2:3.5.9-24.el9.x86_64
postfix-sqlite-2:3.5.9-24.el9.x86_64
tinycdb-0.78-18.el9.x86_64

Complete!
[root@localhost ~]# vi /etc/postfix/main.cf
[root@localhost ~]# service postfix restart
Redirecting to /bin/systemctl restart postfix.service
[root@localhost ~]# dnf install mailx -y
Updating Subscription Management repositories.
Unable to read consumer identity
```

WINDOWS SERVER:



```
Perry-Windows server
Administrator: Command Prompt

Ethernet adapter Ethernet0:

Connection-specific DNS Suffix . :
IPv6 Address . . . . . : 2a01:7a7:2:3730:a84b:fb3c:66cf:6a99
Link-local IPv6 Address . . . . . : fe80::a84b:fb3c:66cf:6a99%5
IPv4 Address . . . . . : 20.20.20.23
Subnet Mask . . . . . : 255.0.0.0
Default Gateway . . . . . : fe80::21d:73ff:fe2a:199%5
                                         20.20.20.1

C:\Users\Administrator>ping 20.20.20.21

Pinging 20.20.20.21 with 32 bytes of data:
Reply from 20.20.20.21: bytes=32 time<1ms TTL=64

Ping statistics for 20.20.20.21:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\Users\Administrator>ping 20.20.20.22

Pinging 20.20.20.22 with 32 bytes of data:
Reply from 20.20.20.22: bytes=32 time<1ms TTL=64

Ping statistics for 20.20.20.22:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\Users\Administrator>ping 20.20.20.20

Pinging 20.20.20.20 with 32 bytes of data:
Reply from 20.20.20.20: bytes=32 time<1ms TTL=64
Reply from 20.20.20.20: bytes=32 time<1ms TTL=64
Reply from 20.20.20.20: bytes=32 time<1ms TTL=64
```

