

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 /serverlshare
[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%	/serverlshare

```

[root@localhost ~]# cd serverlshare
bash: cd: serverlshare: No such file or directory
[root@localhost ~]# cd /serverlshare
[root@localhost serverlshare]# mkdir backup
[root@localhost serverlshare]# ls
backup data
[root@localhost serverlshare]#

```

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 19.00 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 required
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: !: 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

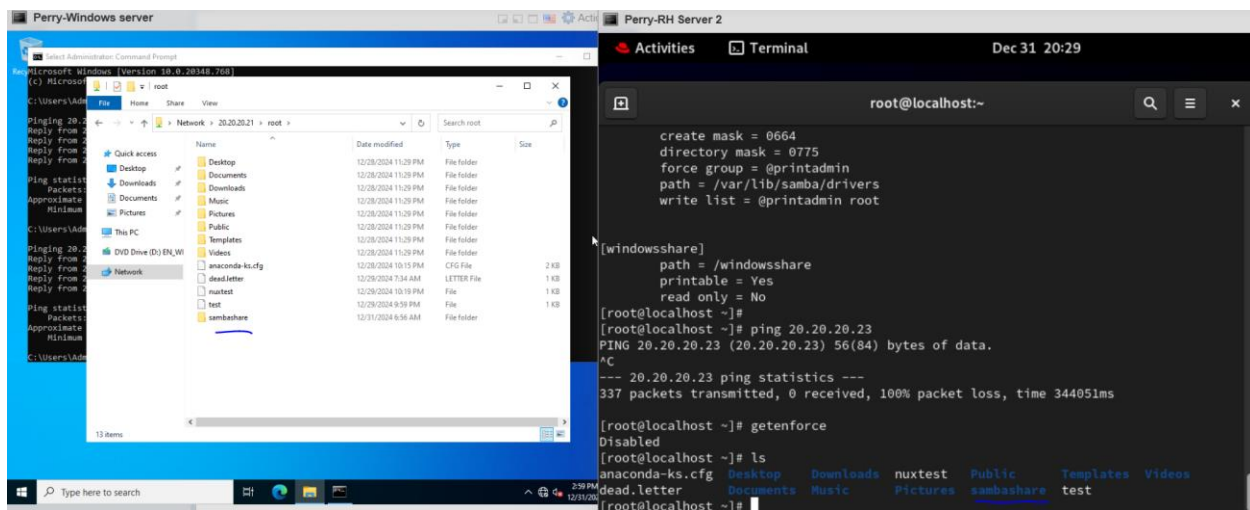
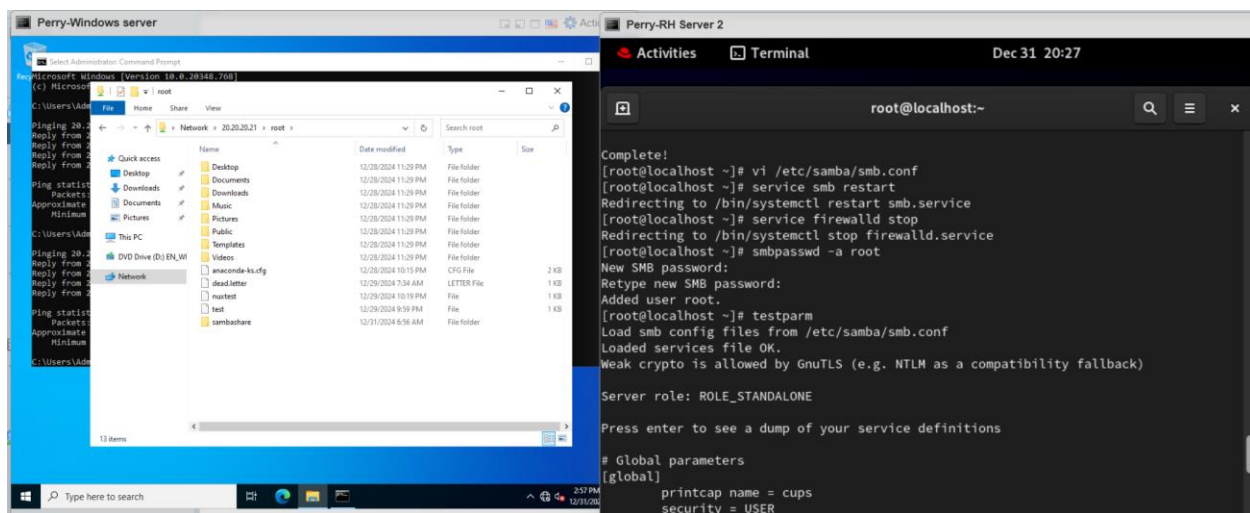
```
[global]
    printcap name = cups
    security = USER
    workgroup = SAMBA
```

```
[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

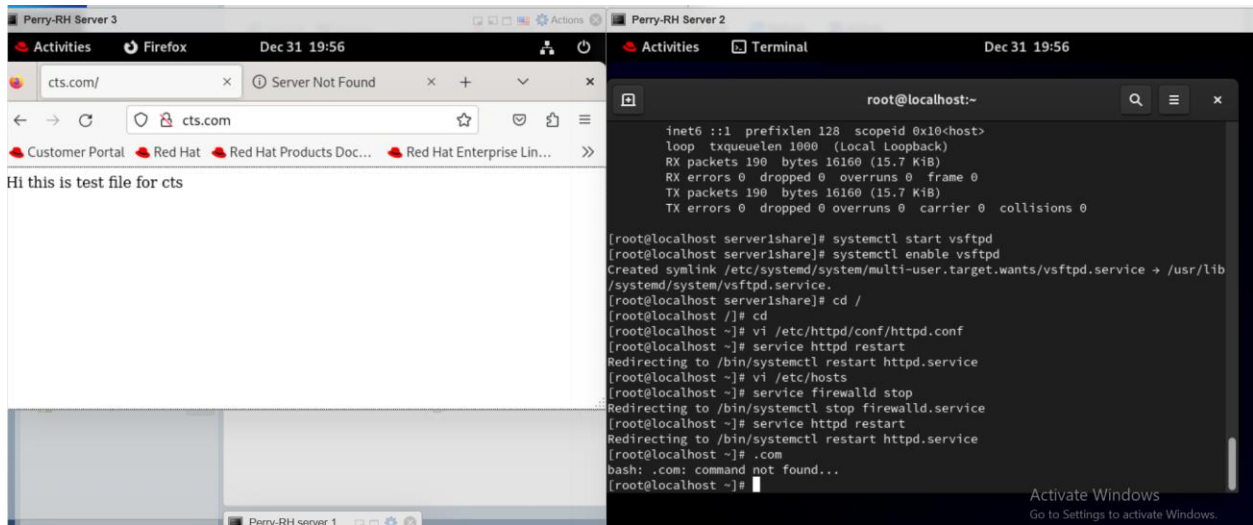
This system is not registered with an entitlement server. You can use subscription-manager to register.

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 0xglo
al>

```

SMTP:

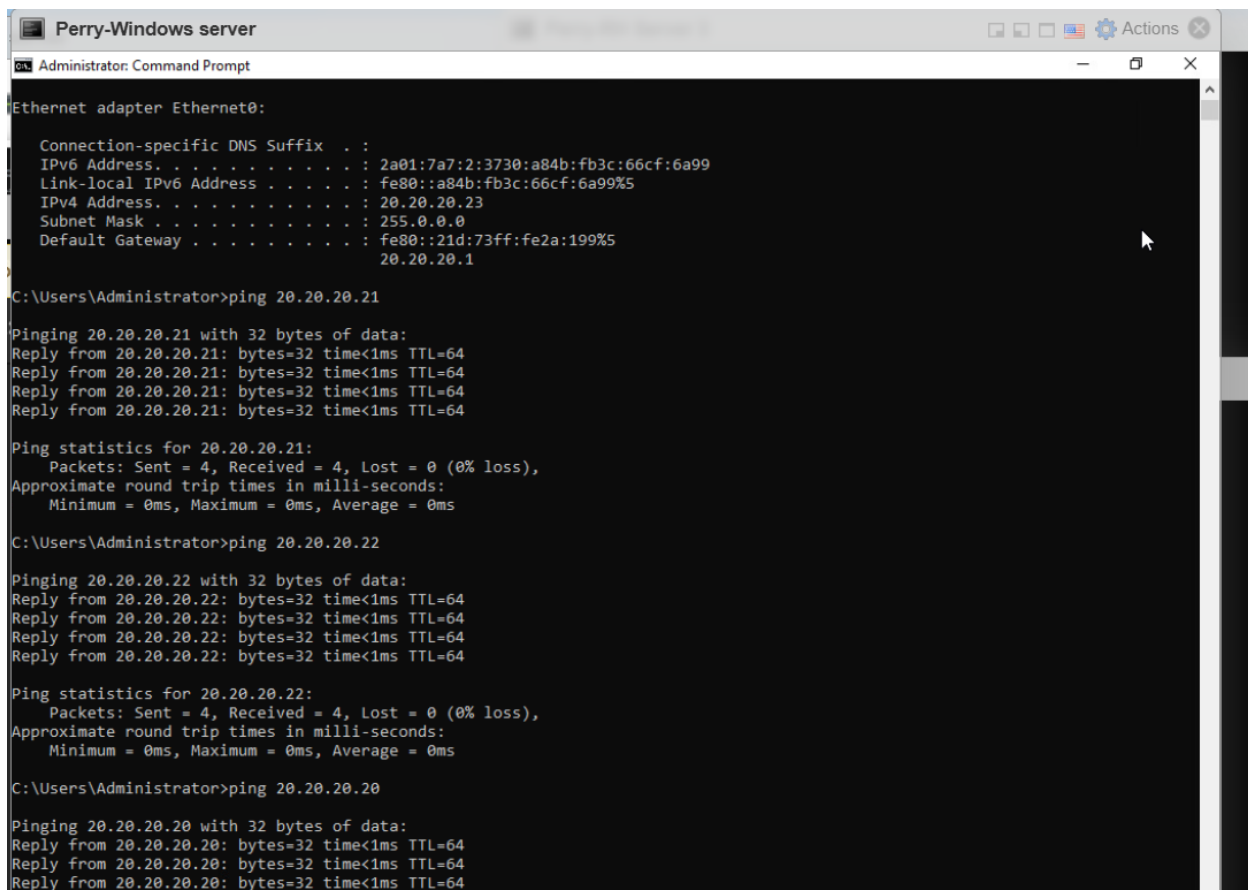
```
[root@localhost ~]# dnf install postfix* -y
Updating Subscription Management repositories.
Unable to read consumer identity

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
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
Reply from 20.20.20.21: bytes=32 time<1ms TTL=64
Reply from 20.20.20.21: bytes=32 time<1ms TTL=64
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
Reply from 20.20.20.22: bytes=32 time<1ms TTL=64
Reply from 20.20.20.22: bytes=32 time<1ms TTL=64
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
Reply from 20.20.20.20: bytes=32 time<1ms TTL=64
```

