

Deutsche Post DHL

RedHat Centralized Repo Server Documentation

Version History

Rev #	Release Date	Update By	Reason for Change	Status
1.0	15/06/2022	Sampath Kamasamudram	Initial document	Initial release

Table of Contents

1. Purpose and Scope of Document.....	3
2. Architecture of Central Repository in Each Region.....	3
3. Prerequisites to Build Repository Server	3
4. Installation and Configuration of Repository server	3
4.1 Apache Installation and Configuration	3
4.2 Reposync Configuration In RHEL 7	5
4.3 Reposync Configuration In RHEL 8	6
5. Repo Configuration on Client Servers	7
5.1 Client Configuration in Red Hat Enterprise Linux 7.9 Servers.....	7
5.2 Client Configuration-Red Hat Enterprise Linux 8.1 and 8.4 Servers	7
6. Perform Updates in Client Servers.....	8

1. Purpose and Scope of Document

This document contains the procedure to build a RedHat Enterprise Linux centralized repository server getting updates from `cdn.redhat.com` to fetch updates internally for the client machines without connecting to the outside world.

2. Architecture of Central Repository in Each Region

Below is the architecture defined for the centralized repository server to place in each region (WEU, EUS and SEA).

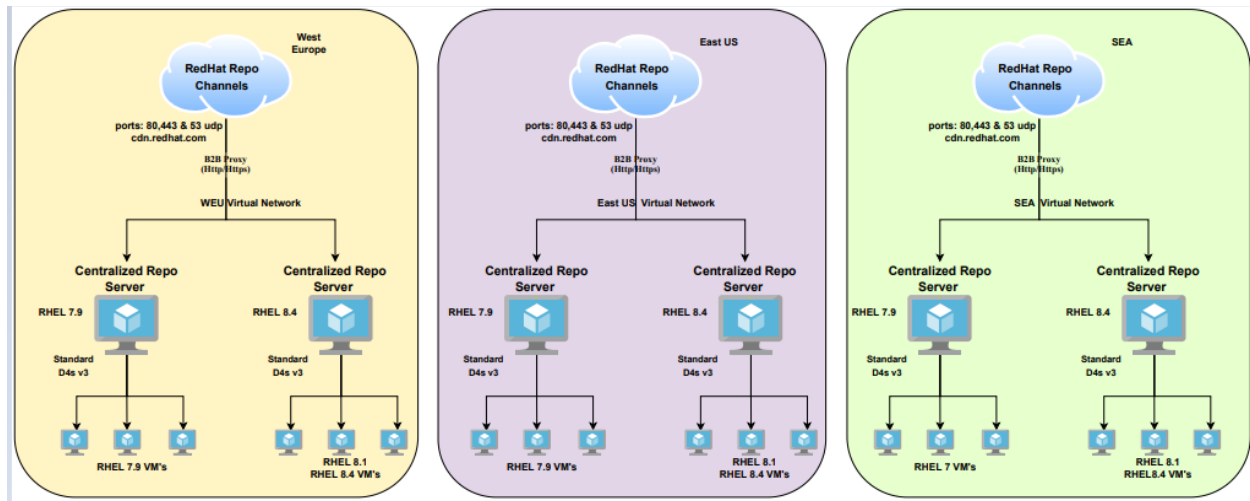


Figure - 1 - Central Repository - Architecture

3. Prerequisites to Build Repository Server

Following are the prerequisites to setup a repository server:

- RHEL 7.9 and RHEL 8.4 Servers in each region.
- Establish connectivity to `cdn.redhat.com` on ports 80,443 & 53 via B2B Proxy.
- Valid RedHat subscription to register to cloud access.
- 500GB additional disk to download repos from RedHat channel.
- Ensure to install Apache package.

4. Installation and Configuration of Repository server

4.1 Apache Installation and Configuration

- Install apache package in both RHEL 7.9 & RHEL 8.4 servers using the command
“Yum install httpd”

```
[root@xal11s610018 yum.repos.d]# yum install httpd
Loaded plugins: langpacks, product-id, search-disabled-repos, subscription-manager
rhel-7-server-optional-rpms                                | 3.2 kB  00:00:00
rhel-7-server-rpms                                         | 3.5 kB  00:00:00
(1/6): rhel-7-server-optional-rpms/7Server/x86_64/group    | 22 kB  00:00:00
(2/6): rhel-7-server-optional-rpms/7Server/x86_64/updateinfo | 3.0 kB  00:00:00
(3/6): rhel-7-server-rpms/7Server/x86_64/group           | 431 kB  00:00:00
(4/6): rhel-7-server-rpms/7Server/x86_64/updateinfo      | 4.1 kB  00:00:00
(5/6): rhel-7-server-optional-rpms/7Server/x86_64/primary_db | 10 MB  00:00:01
(6/6): rhel-7-server-rpms/7Server/x86_64/primary_db      | 88 MB  00:00:03
Resolving Dependencies
--> Running transaction check
--> Package httpd.x86_64 0:2.4.6-97.el7_9.5 will be installed
--> Processing Dependency: httpd-tools = 2.4.6-97.el7_9.5 for package: httpd-2.4.6-97.el7_9.5.x86_64
--> Processing Dependency: /etc/alternatives for package: httpd-2.4.6-97.el7_9.5.x86_64
--> Processing Dependency: libapr-1.so.0()(64bit) for package: httpd-2.4.6-97.el7_9.5.x86_64
--> Processing Dependency: libaprutil-1.so.0()(64bit) for package: httpd-2.4.6-97.el7_9.5.x86_64
--> Running transaction check
--> Package apr.x86_64 0:1.4.6-7.el7 will be installed
--> Package apr-util.x86_64 0:1.5.2-6.el7 will be installed
--> Package httpd-tools.x86_64 0:2.4.6-97.el7_9.5 will be installed
--> Package mailcap.noarch 0:2.1.41-2.el7 will be installed
--> Finished Dependency Resolution

Dependencies Resolved

Package Arch Version Repository Size
Installing:
httpd x86_64 2.4.6-97.el7_9.5 rhel-7-server-rpms 1.2 M
Installing for dependencies:
apr x86_64 1.4.6-7.el7 rhel-7-server-rpms 104 k
apr-util x86_64 1.5.2-6.el7 rhel-7-server-rpms 52 k
httpd-tools x86_64 2.4.6-97.el7_9.5 rhel-7-server-rpms 94 k
mailcap noarch 2.1.41-2.el7 rhel-7-server-rpms 31 k

Transaction Summary
Install 1 Package (+4 Dependent packages)
Total download size: 1.5 M
Installed size: 4.3 M
Is this ok [y/d/N]: y
```

Figure - 2 - Apache Installation and Configuration

- ii. Configure alias name in the httpd configuration with the repo directory as /data in /etc/httpd/conf/httpd.conf file

```
<Directory />
Options FollowSymLinks
AllowOverride none
</Directory>

Alias /data /data
<Directory /data>
Options Indexes MultiViews FollowSymLinks
Order allow,deny
Allow from all
</Directory>
```

Figure - 3 – Apache Configuration File

- iii. Restart apache service post updating configuration.

```
[root@xal11s610018 ~]# systemctl status httpd
● httpd.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/httpd.service; enabled; vendor preset: disabled)
   Active: active (running) since Wed 2022-06-15 10:10:02 CEST; 22h ago
     Docs: man:httpd(8)
           man:apachectl(8)
   Main PID: 2852 (httpd)
   Status: "Total requests: 13; Current requests/sec: 0; Current traffic: 0 B/sec"
   CGroup: /system.slice/httpd.service
           └─2852 /usr/sbin/httpd -DFOREGROUND
             └─2853 /usr/sbin/httpd -DFOREGROUND
               └─2854 /usr/sbin/httpd -DFOREGROUND
                 └─2855 /usr/sbin/httpd -DFOREGROUND
                   └─2856 /usr/sbin/httpd -DFOREGROUND
                     └─2857 /usr/sbin/httpd -DFOREGROUND
                       └─8044 /usr/sbin/httpd -DFOREGROUND
```

Figure - 4 - Apache service Restart

4.2 Reposync Configuration In RHEL 7

- Download required RPM packages (Base OS and Extra packages) for RHEL7 from redhat repository to local repo directory /data using reposync.
- Execution of reposync commands for Base OS and Optional rpms was mentioned below.

```
#reposync --gpgcheck -l --repoid=rhel-7-server-rpms-baseos-rpms --
```

```
download_path=/data
```

```
(3469/33001): dbus-devel-1.10.24-7.el7.i686.rpm | 54 kB 00:00:00
(3470/33001): dbus-devel-1.10.24-7.el7.x86_64.rpm | 54 kB 00:00:00
(3471/33001): dbus-devel-1.10.24-12.el7.i686.rpm | 54 kB 00:00:00
(3472/33001): dbus-devel-1.10.24-12.el7.x86_64.rpm | 54 kB 00:00:00
(3473/33001): dbus-devel-1.10.24-13.el7.i686.rpm | 54 kB 00:00:00
(3474/33001): dbus-devel-1.10.24-13.el7.x86_64.rpm | 54 kB 00:00:00
(3475/33001): dbus-devel-1.10.24-14.el7.i686.rpm | 54 kB 00:00:00
(3476/33001): dbus-devel-1.10.24-14.el7.x86_64.rpm | 54 kB 00:00:00
(3477/33001): dbus-devel-1.10.24-15.el7.i686.rpm | 54 kB 00:00:00
(3478/33001): dbus-devel-1.10.24-15.el7.x86_64.rpm | 54 kB 00:00:00
(3479/33001): dbus-glib-0.100-7.el7.i686.rpm | 103 kB 00:00:00
(3480/33001): dbus-glib-0.100-7.el7.x86_64.rpm | 102 kB 00:00:00
(3481/33001): dbus-glib-devel-0.100-7.el7.i686.rpm | 53 kB 00:00:00
(3482/33001): dbus-glib-devel-0.100-7.el7.x86_64.rpm | 53 kB 00:00:00
(3483/33001): dbus-libs-1.6.12-8.el7.i686.rpm | 151 kB 00:00:00
(3484/33001): dbus-libs-1.6.12-8.el7.x86_64.rpm | 150 kB 00:00:00
(3485/33001): dbus-libs-1.6.12-11.el7.i686.rpm | 150 kB 00:00:00
(3486/33001): dbus-libs-1.6.12-11.el7.x86_64.rpm | 151 kB 00:00:00
(3487/33001): dbus-libs-1.6.12-13.el7.i686.rpm | 151 kB 00:00:00
(3488/33001): dbus-libs-1.6.12-13.el7.x86_64.rpm | 151 kB 00:00:00
(3489/33001): dbus-libs-1.6.12-14.el7.i686.rpm | 151 kB 00:00:00
(3490/33001): dbus-libs-1.6.12-14.el7.x86_64.rpm | 151 kB 00:00:00
(3491/33001): dbus-libs-1.6.12-17.el7.i686.rpm | 152 kB 00:00:00
(3492/33001): dbus-libs-1.6.12-17.el7.x86_64.rpm | 151 kB 00:00:00
(3493/33001): dbus-libs-1.10.24-7.el7.x86_64.rpm | 169 kB 00:00:00
(3494/33001): dbus-libs-1.10.24-7.el7.i686.rpm | 169 kB 00:00:00
(3495/33001): dbus-libs-1.10.24-12.el7.i686.rpm | 170 kB 00:00:00
(3496/33001): dbus-libs-1.10.24-12.el7.x86_64.rpm | 169 kB 00:00:00
(3497/33001): dbus-libs-1.10.24-13.el7.i686.rpm | 170 kB 00:00:00
(3498/33001): dbus-libs-1.10.24-13.el7.x86_64.rpm | 169 kB 00:00:00
(3499/33001): dbus-libs-1.10.24-14.el7.i686.rpm | 170 kB 00:00:00
(3500/33001): dbus-libs-1.10.24-14.el7.x86_64.rpm | 169 kB 00:00:00
(3501/33001): dbus-libs-1.10.24-15.el7.i686.rpm | 170 kB 00:00:00
(3502/33001): dbus-libs-1.10.24-15.el7.x86_64.rpm | 169 kB 00:00:00
(3503/33001): dbus-python-1.1.1-9.el7.x86_64.rpm | 206 kB 00:00:00
(3504/33001): dbus-x11-1.6.12-8.el7.x86_64.rpm | 45 kB 00:00:00
(3505/33001): dbus-x11-1.6.12-11.el7.x86_64.rpm | 46 kB 00:00:00
(3506/33001): dbus-x11-1.6.12-13.el7.x86_64.rpm | 46 kB 00:00:00
(3507/33001): dbus-x11-1.6.12-14.el7.x86_64.rpm | 46 kB 00:00:00
(3508/33001): dbus-x11-1.6.12-17.el7.x86_64.rpm | 46 kB 00:00:00
(3509/33001): dbus-x11-1.10.24-7.el7.x86_64.rpm | 47 kB 00:00:00
(3510/33001): dbus-x11-1.10.24-12.el7.x86_64.rpm | 48 kB 00:00:00
(3511/33001): dbus-x11-1.10.24-13.el7.x86_64.rpm | 48 kB 00:00:00
```

Figure - 5 – reposync for BaseOS RPMs

```
#reposync --gpgcheck -l --repoid=rhel-7-server-optional-rpms --download_path=/data/
```

```
(286/23430): NetworkManager-glib-devel-1.0.0-14.git20150121.b4ea599c.el7.i686.rpm | 599 kB 00:00:00
(287/23430): NetworkManager-glib-devel-1.0.0-14.git20150121.b4ea599c.el7.x86_64.rpm | 599 kB 00:00:00
(288/23430): NetworkManager-glib-devel-1.0.0-16.git20150121.b4ea599c.el7.i686.rpm | 599 kB 00:00:00
(289/23430): NetworkManager-glib-devel-1.0.0-16.git20150121.b4ea599c.el7.x86_64.rpm | 599 kB 00:00:00
(290/23430): NetworkManager-glib-devel-1.0.6-27.el7.i686.rpm | 624 kB 00:00:00
(291/23430): NetworkManager-glib-devel-1.0.6-27.el7.x86_64.rpm | 624 kB 00:00:00
(292/23430): NetworkManager-glib-devel-1.0.6-29.el7.i686.rpm | 624 kB 00:00:00
(293/23430): NetworkManager-glib-devel-1.0.6-29.el7.x86_64.rpm | 624 kB 00:00:00
(294/23430): NetworkManager-glib-devel-1.0.6-30.el7.i686.rpm | 625 kB 00:00:00
(295/23430): NetworkManager-glib-devel-1.0.6-30.el7.x86_64.rpm | 625 kB 00:00:00
(296/23430): NetworkManager-glib-devel-1.0.6-31.el7.i686.rpm | 625 kB 00:00:00
(297/23430): NetworkManager-glib-devel-1.0.6-31.el7.x86_64.rpm | 625 kB 00:00:00
(298/23430): NetworkManager-glib-devel-1.4.0-12.el7.i686.rpm | 1.0 MB 00:00:00
(299/23430): NetworkManager-glib-devel-1.4.0-12.el7.x86_64.rpm | 1.0 MB 00:00:00
(300/23430): NetworkManager-glib-devel-1.4.0-13.el7.i686.rpm | 1.0 MB 00:00:00
(301/23430): NetworkManager-glib-devel-1.4.0-13.el7.x86_64.rpm | 1.0 MB 00:00:00
(302/23430): NetworkManager-glib-devel-1.4.0-14.el7.i686.rpm | 1.0 MB 00:00:00
(303/23430): NetworkManager-glib-devel-1.4.0-14.el7.x86_64.rpm | 1.0 MB 00:00:00
(304/23430): NetworkManager-glib-devel-1.4.0-17.el7.i686.rpm | 1.0 MB 00:00:00
(305/23430): NetworkManager-glib-devel-1.4.0-17.el7.x86_64.rpm | 1.0 MB 00:00:00
(306/23430): NetworkManager-glib-devel-1.4.0-19.el7.i686.rpm | 1.0 MB 00:00:00
(307/23430): NetworkManager-glib-devel-1.4.0-19.el7.x86_64.rpm | 1.0 MB 00:00:00
(308/23430): NetworkManager-glib-devel-1.4.0-20.el7.i686.rpm | 1.0 MB 00:00:00
(309/23430): NetworkManager-glib-devel-1.4.0-20.el7.x86_64.rpm | 1.0 MB 00:00:00
(310/23430): NetworkManager-glib-devel-1.8.0-9.el7.i686.rpm | 928 kB 00:00:00
(311/23430): NetworkManager-glib-devel-1.8.0-9.el7.x86_64.rpm | 928 kB 00:00:00
(312/23430): NetworkManager-glib-devel-1.8.0-11.el7.i686.rpm | 929 kB 00:00:00
(313/23430): NetworkManager-glib-devel-1.8.0-11.el7.x86_64.rpm | 929 kB 00:00:00
(314/23430): NetworkManager-glib-devel-1.10.2-13.el7.i686.rpm | 960 kB 00:00:00
(315/23430): NetworkManager-glib-devel-1.10.2-13.el7.x86_64.rpm | 960 kB 00:00:00
(316/23430): NetworkManager-glib-devel-1.10.2-14.el7.i686.rpm | 960 kB 00:00:00
(317/23430): NetworkManager-glib-devel-1.10.2-14.el7.x86_64.rpm | 960 kB 00:00:00
(318/23430): NetworkManager-glib-devel-1.10.2-16.el7.i686.rpm | 960 kB 00:00:00
(319/23430): NetworkManager-glib-devel-1.10.2-16.el7.x86_64.rpm | 960 kB 00:00:00
(320/23430): NetworkManager-glib-devel-1.12.0-6.el7.i686.rpm | 805 kB 00:00:00
(321/23430): NetworkManager-glib-devel-1.12.0-6.el7.x86_64.rpm | 805 kB 00:00:00
(322/23430): NetworkManager-glib-devel-1.12.0-7.el7.i686.rpm | 805 kB 00:00:00
(323/23430): NetworkManager-glib-devel-1.12.0-7.el7.x86_64.rpm | 805 kB 00:00:00
(324/23430): NetworkManager-glib-devel-1.12.0-8.el7.i686.rpm | 805 kB 00:00:00
```

Figure - 6 – reposync for optional-rpms

- iii. Once packages are downloaded from required repositories then execute createrepo command to contain metadata information for the repository under /data.

#createrepo --update -v /data/

```
[root@xal211s610018 ~]# createrepo --update -v /data/
Scanning old repo data
```

Figure - 7 - createrepo

4.3 Reposync Configuration In RHEL 8

- i. Download required RPM packages (Base OS and Appstream packages) for RHEL8 from redhat repository to local repo directory /data using reposync.
- ii. Execution of reposync commands for Base OS and AppStream rpms was mentioned below.

#reposync -p /data --download-metadata --repo=rhel-8-for-x86_64-baseos-rpms

```
[root@xal211s610021 ~]# reposync -p /data --download-metadata --repo=rhel-8-for-x86_64-baseos-rpms
Red Hat Enterprise Linux 8 for x86_64 - BaseOS (RPMs) 35 kB/s | 4.1 kB 00:00
Modular dependency problems:
Problem 1: conflicting requests
- nothing provides module(perl:5.26) needed by module perl-IO-Socket-SSL:2.066:8030020200430120526:1e4bbb35-0.x86_64
Problem 2: conflicting requests
- nothing provides module(perl:5.26) needed by module perl-libwww-perl:6.34:8030020200428102957:b967a9a2-0.x86_64
Red Hat Enterprise Linux 8 for x86_64 - BaseOS (RPMs) 24% [=====] 27 MB/s | 160 MB 00:17 ETA
```

Figure - 8 - Reposync Configuration for Base OS

#reposync -p /data --download-metadata --repo=rhel-8-for-x86_64-appstream-rpms

```
[root@xal211s610021 ~]# reposync -p /data --download-metadata --repo=rhel-8-for-x86_64-appstream-rpms
Red Hat Enterprise Linux 8 for x86_64 - AppStream (RPMs) 27 kB/s | 4.5 kB 00:00
Red Hat Enterprise Linux 8 for x86_64 - AppStream (RPMs) 29 MB/s | 295 MB 00:10
(1/19509): container-selinux-2.124.0-1.module+el8.1.1+5259+b0dd613a.noarch.rpm 79 kB/s | 47 kB 00:00
(2/19509): libguestfs-1.38.4-11.1.module+el8.0.0+4084+c0eb9f44.x86_64.rpm 2.1 MB/s | 2.8 MB 00:01
(3/19509): compiler-rt-7.0.1-1.module+el8.0.0+3181+ec021930.x86_64.rpm 1.9 MB/s | 2.8 MB 00:01
(4/19509): rust-src-1.47.0-1.module+el8.3.1+8546+07bf6eb2.noarch.rpm 1.8 MB/s | 2.2 MB 00:01
(5/19509): libvirt-daemon-config-network-4.5.0-23.1.module+el8.0.0+3151+3ba813f9.x86_64.rpm 46 kB/s | 27 kB 00:00
(6/19509): containers-common-0.1.41-4.module+el8.3.0+8377+efff33c85.x86_64.rpm 100 kB/s | 51 kB 00:00
(7/19509): libguestfs-javadoc-1.38.4-15.module+el8.2.0+5297+222a20af.noarch.rpm 185 kB/s | 151 kB 00:00
(8/19509): llvm-toolset-8.0.1-1.module+el8.1.0+3866+6be7f4d8.1686.rpm 12 kB/s | 9.5 kB 00:00
(9/19509): postgresql-test-9.6.20-1.module+el8.3.0+8938+7f0e88b6.x86_64.rpm 1.4 MB/s | 1.6 MB 00:01
(10/19509): perl-libnet-3.111-3.module+el8.2+464+ad274eed.noarch.rpm 235 kB/s | 121 kB 00:00
(11/19509): python2-psycopg2-debug-2.7.5-7.module+el8.0.0+49358+98b46920.x86_64.rpm 134 kB/s | 105 kB 00:00
(12/19509): apache-commons-collections-3.2.2-10.module+el8.1.0+3366+6dfb954c.noarch.rpm 811 kB/s | 538 kB 00:00
(13/19509): mysql-8.0.17-3.module+el8.0.0+3898+e09bb8de.x86_64.rpm 6.7 MB/s | 11 MB 00:01
(14/19509): rubygem-io-console-0.4.7-106.module+el8.1.0+3653+beb38ab0.x86_64.rpm 102 kB/s | 67 kB 00:00
(15/19509): nodejs-docs-12.13.1-1.module+el8.1.0+5069+f8aaab94.noarch.rpm 2.7 MB/s | 3.4 MB 00:01
(16/19509): golang-1.12.8-2.module+el8.1.0+44089+be929cf8.x86_64.rpm 1.1 MB/s | 643 kB 00:00
(17/19509): apiguardian-1.1.0-4.module+el8.2.1+7436+4afdcalf.noarch.rpm 27 kB/s | 18 kB 00:00
(18/19509): pki-base-java-10.8.3-2.module+el8.2.0+6294+b7db4606.noarch.rpm 879 kB/s | 704 kB 00:00
(19/19509): sgabios-0.20170427git-3.module+el8.0.0+4084+c0eb9f44.x86_64.rpm 41 kB/s | 20 kB 00:00
(20/19509): libvirt-nss-6.0.0-28.module+el8.3.0+7827+5e65edd7.x86_64.rpm 103 kB/s | 64 kB 00:00
(21/19509): seabios-bin-1.11.1-3.module+el8.0.0+3075+09be6b65.noarch.rpm 169 kB/s | 124 kB 00:00
(22/19509): ipa-common-4.8.0-11.module+el8.1.0+4247+9f3fd721.noarch.rpm 851 kB/s | 749 kB 00:00
(23/19509): podman-1.0.0-2.git921f88f.module+el8+2785+ff8a053f.x86_64.rpm 6.4 MB/s | 9.0 MB 00:01
(24/19509): swig-3.0.12-19.module+el8.3.0+6248+838326ab.x86_64.rpm 1.7 MB/s | 1.5 MB 00:00
(25/19509): modkit-plugin-xz-1.4.2-4.module+el8.0.0+2419+4a72ef89.x86_64.rpm 65 kB/s | 39 kB 00:00
(26/19509): libvirt-daemon-driver-interface-4.5.0-35.3.module+el8.1.0+5931+8897e7e1.x86_64.rpm 173 kB/s | 52 kB 00:00
[27-28/19509]: python3-nss-1.0.1-10.module+el8.1.0+3366+6dfb954c 0% [ 4.8 MB/s | 37 MB 174:46 ETA
```

Figure - 9 - reposync configuration for appstream- rpms

5. Repo Configuration on Client Servers

5.1 Client Configuration in Red Hat Enterprise Linux 7.9 Servers

Create repo file with name rhel7.repo under /etc/yum.repos.d/ with centralized repository server details.

```
[root@xal211s610020 yum.repos.d]# cat rhel7.repo
[rhel7-repo]
name=RedHat
gpgcheck=0
enabled=1
baseurl=http://10.224.2.160/data/
[root@xal211s610020 yum.repos.d]#
```

Figure - 10 - Repo configuration in RHEL 7.9 servers

5.2 Client Configuration-Red Hat Enterprise Linux 8.1 and 8.4 Servers

Create repo file with name rhel8.repo under /etc/yum.repos.d/ with centralized repository server details.

```
[root@xal211s610019 yum.repos.d]# cat rhel8.repo
[BaseOS]
name=BaseOS
enabled=1
gpgcheck=0
baseurl=http://10.224.2.163/data/rhel-8-for-x86_64-baseos-rpms/

[AppStream]
name=AppStream
enabled=1
gpgcheck=0
baseurl=http://10.224.2.163/data/rhel-8-for-x86_64-appstream-rpms/
[root@xal211s610019 yum.repos.d]#
```

Figure - 11 - Repo configuration in RHEL 8.1 & 8.4 servers

6. Perform Updates in Client Servers

In client servers, execute “yum update” command to get updates from respective OS version of repository servers to the targeted servers.

```
[root@server ~]# yum update
Loaded plugins: langpacks, product-id, search-disabled-repos, subscription-manager
Resolving Dependencies
--> Running transaction check
--> Package bash.x86_64 0:4.2.46-34.el7 will be updated
--> Package bash.x86_64 0:4.2.46-35.el7_9 will be an update
--> Package bind-export-libs.x86_64 32:9.11.4-26.P2.el7_9.5 will be updated
--> Package bind-export-libs.x86_64 32:9.11.4-26.P2.el7_9.9 will be an update
--> Package binutils.x86_64 0:2.27-44.base.el7 will be updated
--> Package binutils.x86_64 0:2.27-44.base.el7_9.1 will be an update
--> Package ca-certificates.noarch 0:2020.2.41-70.0.el7_8 will be updated
--> Package ca-certificates.noarch 0:2021.2.50-72.el7_9 will be an update
--> Package cloud-init.x86_64 0:19.4-7.el7_9.5 will be updated
--> Package cloud-init.x86_64 0:19.4-7.el7_9.6 will be an update
--> Package cronie.x86_64 0:1.4.11-23.el7 will be updated
--> Package cronie.x86_64 0:1.4.11-24.el7_9 will be an update
--> Package cronie-anacron.x86_64 0:1.4.11-23.el7 will be updated
```

Figure - 12 - Yum update