

Creating and using an external repo in 11.x

Scenario -

Due to a slow or unstable WAN link between remote host(s) and the NW Admin Server (node-zero) host, installs and/or upgrades are failing to complete successfully.

Solution – External Repo

Create an external netwitness repo for yum to pull the files from during upgrades, even if the original install was done using the NW server, you can later point host(s) to an external repo to speed up upgrades.

In this process we will be publishing the 11.3.0.0 and 11.3.0.1 repos to the external repository server.

The Process -

1. SSH to the NW node-x host, which is local to the site you require an external repo, and install nginx web services.

```
yum install nginx -y
```

2. After nginx rpm is installed, modify the “/etc/nginx/conf.d/default.conf” file to serve out the repo directory.
`vi /etc/nginx/conf.d/default.conf`

Insert the **red** text at noted location:

```
location / {
    root    /usr/share/nginx/html;
    index  index.html index.htm;
}
location /nwrpmrepo {
    alias  /var/netwitness/common/repo;
    index index.html index.htm;
    autoindex on;
}

#error_page 404                /404.html;
```

3. Create the directory path, for the repo files, then restart nginx.service

```
mkdir -p /var/netwitness/common/repo
systemctl restart nginx
```

4. Copy the 11.3.0.0 and 11.3.0.1 zip files to the host under /tmp and then use the “external-repo-creator” script to create the repos on the external host

```
/opt/rsa/saTools/bin/external-repo-creator /tmp/netwitness-11.3.0.0.zip /var/netwitness/common/repo
/opt/rsa/saTools/bin/external-repo-creator /tmp/netwitness-11.3.0.1.zip /var/netwitness/common/repo
```

5. Create a backup of the following files:

```
mkdir /root/conf-backup
cp /etc/netwitness/config-management/environments/netwitness.json /root/conf-backup
cp /etc/sysconfig/iptables-config /root/conf-backup
cp /etc/sysconfig/iptables/root/conf-backup
```

6. Edit the original files:

- a. `netwitness.json` - add the “customer-firewall” entry after the Global heading (if not already there):

```
"default_attributes" : {
    "global" : {
```

```
"customer-firewall" : true,  
"nodezeroipaddress" : "192.168.1.129",
```

b. `iptables-config` - enable saving of rule changes:

```
iptables-save --save  
IPTABLES_SAVE_ON_STOP="no" to IPTABLES_SAVE_ON_STOP="yes"  
IPTABLES_SAVE_ON_RESTART="no" to IPTABLES_SAVE_ON_RESTART="yes"
```

7. Insert repo rule for port 80 to iptables before the INPUT drop rule

a. Find the line number of the INPUT chain DROP rule:

```
iptables -L -n --line-numbers
```

```
10 ACCEPT tcp -- 0.0.0.0/0 0.0.0.0/0 tcp multiport  
dports 5432 /* postgresql-listen-port */ ctstate NEW  
11 ACCEPT tcp -- 0.0.0.0/0 0.0.0.0/0 tcp multiport  
dports 60007 /* rsa-nw-malware-analytics-server ports */ ctstate NEW  
12 DROP all -- 0.0.0.0/0 0.0.0.0/0
```

b. Insert the rule above the drop rule:

```
iptables -I INPUT 12 -p tcp -m tcp -m multiport --dports 80 -m comment --comment  
"external-repo-port" -m conntrack --ctstate NEW -j ACCEPT
```

```
iptables -L -n --line-numbers
```

```
11 ACCEPT tcp -- 0.0.0.0/0 0.0.0.0/0 tcp multiport  
dports 60007 /* rsa-nw-malware-analytics-server ports */ ctstate NEW  
12 ACCEPT tcp -- 0.0.0.0/0 0.0.0.0/0 tcp multiport  
dports 80 /* external-repo-port */ ctstate NEW  
13 DROP all -- 0.0.0.0/0 0.0.0.0/0
```

c. Restart the iptables service

```
systemctl restart iptables.service
```

d. Verify repo rule is persistent

8. On host to be upgraded:

a. Test access to the new repo

```
curl http://192.168.10.132/nwrpmrepo/
```

```
<html>  
<head><title>Index of /nwrpmrepo/</title></head>  
<body bgcolor="white">  
<h1>Index of /nwrpmrepo/</h1><hr><pre><a href="..">../</a>  
<a href="11.3.0.0/">11.3.0.0/</a> 20-Jun-2019 04:24 -  
<a href="11.3.0.1/">11.3.0.1/</a> 20-Jun-2019 14:02 -  
</pre><hr></body>  
</html>
```

b. Create the `/etc/netwitness/platform/repo` file.

```
echo "http://192.168.10.132/nwrpmrepo" > /etc/netwitness/platform/repo
```

9. From NW Admin Server (node-zero), initiate offline upgrade of the host (using the IP address of the host to be upgraded):

```
upgrade-cli-client --upgrade --version 11.3.0.1 --host-addr 192.168.10.131
```

Client will use External repo to download rpms for the upgrade.