

Troubleshoot Clients Not Receiving Rundown Updates

ENPS servers communicate updates to scripts and rundowns via UDP broadcasts, or Multicast, to the client workstations. For the sake of this document, we are focusing on UDP Broadcast issues. If you are using Multicast, please contact the ENPS help desk at 1-866-ENPS-911. Depending on settings in the NOM.ini on the ENPS server, these broadcasts may either be sent to just the server's local subnet (Broadcast=1) or they could be sent to specific additional subnets (with entries under the [Reflectors] section). Broadcast=0 in the NOM.ini will prevent the server from broadcasting updates to the local subnet. Similarly, the NWP.ini settings will manage how wire updates are sent to the clients. In this document, we will discuss rundown updates, but the same basics will apply to wires.

In some cases, users may not see updates to rundowns or scripts. To troubleshoot those issues, examine the following items:

- In the Control Panel for the client workstation open the Windows Firewall. Make sure that it is either turned off, that it has an exception for ENPS or that it has the necessary ports open for communicating with the ENPS server. For a list of ports refer to “Port Assignments” on page 109 in the ENPS Operations Guide. If the workstation has a third-party firewall running you should also check to see if it has the ENPS network ports enabled.
- If the updates are not reaching multiple workstations check to see if those computers are on a different subnet than the other workstations. If they are, make sure that the appropriate broadcast IP address information for the subnet is listed in the [Reflectors] section of both the \NOM\NOM.INI and the \NWP\NWP.INI on the Primary Server. Refer to “Reflectors” on page 110 in the ENPS Operations Guide for more information.
- If the reflectors are properly configured in the NOM.ini and the News Object Manager has been restarted since they were entered, the issue could be in the routers on your network. Routers need to be configured to use IP Directed Broadcast. If they are not, they will not pass on the UDP broadcasts. To enable this on Cisco IOS 11.x + you would enable the following on Ethernet interface 0 (or whichever interface is the LAN interface).

```
conf t
int e0
ip directed-broadcast
end
write mem
```

This will allow packets from any other interface (serial or ethernet) to be sent directly to the broadcast address of the Ethernet 0 (e0) interface.

Note: This is not a helper address i.e. forwarding all broadcasts from one vlan to the other. You're only enabling DIRECTED UDP from the source server to the destination vlan. In that case it's considered a unicast UDP until it reaches the destination vlan and at that point it's a broadcast.

You may also enable a packet tracking utility in the ENPS client to obtain more information about the issue. To do so, follow these steps:

1. Use Notepad or another text editor to open \NWP\NWP.INI on the ENPS WORK drive. In the [TCPIP] section set PacketVersion=2. If this value was set to 1 you may want to set it back to its original value when you complete these steps.
2. Close the ENPS client if it is open. Use Notepad or another text editor to open C:\Program Files\ENPS\ENPS.INI and change the following settings:

```
[ENPS]

CtrlAlt=1

[TCPIP]

UDPInfo=1

PacketVersion=2
```

3. Open the ENPS client. Open a story in a public folder, save it, then press Ctrl+Alt+U. Note the value on the counter then close it. Press Ctrl+Alt+U again and look at the counter. Each time you change the story and save it you should see the UDP count increase.

Listener	IP	Port	Packets
NOM PV1	All/Broadcast	10502	0
NWP PV1	All/Broadcast	10512	13
NOM PV2	All/Broadcast	10507	13
NWP	233.28.129.17	10517	2
BNCEENPS01	233.28.129.17	10609	0
BNCEENPS02	233.28.129.18	10610	0

Number of single-part datagrams:	11
Number of multi-part packages:	1
Number of timed-out incomplete packages:	0
Number of multi-part packages pending:	0

IP	Packets	Missed Packets	Reliability
10.6.132.11	13	0	100.000%

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You may also choose to use an ENPS utility called FlushUDP to compare what packets the client received as compared to the packets the server sent. To do so, perform the following steps:

4. Use Notepad or another text editor to open C:\Program Files\ENPS\ENPS.INI. In the [TCPIP] section add the setting FlushUDP=1 then add this setting to in the \NOM\NOM.INI on the Primary Server's ENPS WORK drive.
5. Open C:\Program Files\ENPS\UDP on the client workstation and \NOM\UDP on the Primary Server's ENPS WORK drive. Each of these folders tracks UDP traffic. If the file count in either of this folders is substantially different from the other you should investigate why there is UDP packet loss on your network.

There are other settings that can be tweaked in order to troubleshoot potential packet loss during ENPS usage, however it is recommended that you contact the ENPS helpdesk in order to make those changes.