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TECHNICAL BULLETIN

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Setting up NetBIOS filters for DI-106 & DI-300 routers.

Introduction
There may be instances when you notice your router is dialling out when there is no apparent traffic on the WAN. This is because there can be protocols running that are not routable. The following filter sets can be configured to prevent the NetBIOS/NetBEUI utilising the ISDN channels.

Configuration
The following filter setup will remove traffic from these ports. Please configure the two filter sets that have 6 and 2 rules respectively based on the following packets in Service Management Terminal (SMT) Menu 21.

Filter Set 1:
Rule 1-Destination port number 137 with protocol number 6 (TCP)
Rule 2-Destination port number 137 with protocol number 17 (UDP)
Rule 3-Destination port number 138 with protocol number 6 (TCP)
Rule 4-Destination port number 138 with protocol number 17 (UDP)
Rule 5-Destination port number 139 with protocol number 6 (TCP)
Rule 6-Destination port number 139 with protocol number 17 (UDP)

Filter Set 2:
Rule 1-Source port number 137, Destination port number 53 with protocol number 6 (TCP)
Rule 2-Source port number 137, Destination port number 53 with protocol number 17 (UDP)

Before starting to set the filter rules, please enter a name for each filter set in the 'Comments' field first. Configure the first filter set 'NetBIOS#1' by selecting the Filter Set number 1.

```
                Menu 21 - Filter Set Configuration

    Filter                              Filter
    Set #        Comments               Set #        Comments
    ------    ----------------          ------    ----------------
      1       NetBIOS#1                    7       _____
      2       NetBIOS#2                    8       _____
      3       _____             9       _____
      4       _____            10       _____
      5       _____            11       _____
      6       _____            12       _____



            Enter Filter Set Number to Configure= 0

            Edit Comments=

            Press ENTER to Confirm or ESC to Cancel:
```

Rule 1-Destination port number 137 with protocol number 6 (TCP)

```
                  Menu 21.1.1 - TCP/IP Filter Rule

         Filter #: 1,1
         Filter Type= TCP/IP Filter Rule
         Active= Yes
         IP Protocol= 6      IP Source Route= No
         Destination: IP Addr= 0.0.0.0
                      IP Mask= 0.0.0.0
                      Port #= 137
                      Port # Comp= Equal
              Source: IP Addr= 0.0.0.0
                      IP Mask= 0.0.0.0
                      Port #= 0
                      Port # Comp= None
         TCP Estab= No
         More= No              Log= None
         Action Matched= Drop
         Action Not Matched= Check Next Rule

         Press ENTER to Confirm or ESC to Cancel:
```

Repeat "IP Protocol" and "Port # = " for all the other filters.

Rule 2-Destination port number 137 with protocol number 17 (UDP)

```
                  Menu 21.1.2 - TCP/IP Filter Rule

         Filter #: 1,2
         Filter Type= TCP/IP Filter Rule
         Active= Yes
         IP Protocol= 17    IP Source Route= No
         Destination: IP Addr= 0.0.0.0
                      IP Mask= 0.0.0.0
                      Port #= 137
                      Port # Comp= Equal
              Source: IP Addr= 0.0.0.0
                      IP Mask= 0.0.0.0
                      Port #= 0
                      Port # Comp= None
         TCP Estab= N/A
         More= No              Log= None
         Action Matched= Drop
         Action Not Matched= Check Next Rule

         Press ENTER to Confirm or ESC to Cancel: █
```

Rule 3-Destination port number 138 with protocol number 6 (TCP)
Rule 4-Destination port number 138 with protocol number 17 (UDP)
Rule 5-Destination port number 139 with protocol number 6 (TCP)
Rule 6-Destination port number 139 with protocol number 17 (UDP)
Note for rule 6 Action not matched is "Forward"

After the first filter set is finished, you will get the complete rules summary as below.
Menu 21.1 - Filter Rules Summary
- - ---- -- - - -
1 Y IP Pr=6, SA=0.0.0.0, DA=0.0.0.0, DP=137 N D N

2 Y IP Pr=17, SA=0.0.0.0, DA=0.0.0.0, DP=137 N D N
3 Y IP Pr=6, SA=0.0.0.0, DA=0.0.0.0, DP=138 N D N
4 Y IP Pr=17, SA=0.0.0.0, DA=0.0.0.0, DP=138 N D N
5 Y IP Pr=6, SA=0.0.0.0, DA=0.0.0.0, DP=139 N D N
6 Y IP Pr=17, SA=0.0.0.0, DA=0.0.0.0, DP=139 N D F

Please apply this first filter set 'NetBIOS#1' in the Menu 11 for the remote node in the 'Call Filter Sets=' field to take active.

```
                    Menu 11.1 - Remote Node Profile

   Rem Node Name= TEST              Route= IP
   Active= Yes                      Bridge= No
   Call Direction= Outgoing
                                    Edit PPP Options= No
   Incoming:                        Rem IP Addr= 0.0.0.0
     Rem Login=                     Edit IP/IPX/Bridge= No
     Rem Password= ********         Telco Option:
     Rem CLID= N/A                    Transfer Type= 64K
     Call Back= N/A                   Allocated Budget(min)= 0
   Outgoing:                          Period(hr)= 0
     My Login= dlink1               Session Options:
     My Password= ********            Input Filter Sets=
     Authen= CHAP/PAP                 Output Filter Sets=
     Pri Phone #= 08453501234         Call Filter Sets= 1
     Sec Phone #=                     Idle Timeout(sec)= 300

            Press ENTER to Confirm or ESC to Cancel: █
```

Press ENTER to Confirm or ESC to Cancel:

Configure the second filter set 'NetBIOS#2' by selecting the Filter Set number 2.
Rule 1-Source port number 137, Destination port number 53 with protocol number 6 (TCP)

```
                  Menu 21.2.1 - TCP/IP Filter Rule

          Filter #: 2,1
          Filter Type= TCP/IP Filter Rule
          Active= Yes
          IP Protocol= 6      IP Source Route= No
          Destination: IP Addr= 0.0.0.0
                       IP Mask= 0.0.0.0
                       Port #= 53
                       Port # Comp= Equal
               Source: IP Addr= 0.0.0.0
                       IP Mask= 0.0.0.0
                       Port #= 137
                       Port # Comp= Equal
          TCP Estab= No
          More= No          Log= None
          Action Matched= Drop
          Action Not Matched= Check Next Rule

       Press ENTER to Confirm or ESC to Cancel: █
```

Rule 2-Source port number 137, Destination port number 53 with protocol number 17 (UDP)

```
                    Menu 21.2.2 - TCP/IP Filter Rule

          Filter #: 2,2
          Filter Type= TCP/IP Filter Rule
          Active= Yes
          IP Protocol= 17    IP Source Route= No
          Destination: IP Addr= 0.0.0.0
                       IP Mask= 0.0.0.0
                       Port #= 53
                       Port # Comp= Equal
               Source: IP Addr= 0.0.0.0
                       IP Mask= 0.0.0.0
                       Port #= 137
                       Port # Comp= Equal
          TCP Estab= N/A
          More= No              Log= None
          Action Matched= Drop
          Action Not Matched= Forward

          Press ENTER to Confirm or ESC to Cancel:
```

Menu 21.2 - Filter Rules Summary

- - ---- -- - - -
1 Y IP Pr=6, SA=0.0.0.0, SP=137, DA=0.0.0.0, DP=53 N D N
2 Y IP Pr=17, SA=0.0.0.0, SP=137, DA=0.0.0.0, DP=53 N D F

After the first filter set is finished, you will get the complete rules summary as below.
Please apply this second filter set 'NetBIOS#2' in the Menu 3.1 (General Ethernet Setup) in 'Input Filter Sets =' field for blocking the packets from LAN interface.

Menu 3.1 – General Ethernet Setup

```
                    Menu 3.1 - General Ethernet Setup

          Input Filter Sets= 2
          Output Filter Sets=
          












          Press ENTER to Confirm or ESC to Cancel:
```