D-Link (Europe) Ltd.
D-Link House
6 Garland Road
Stanmore
London HA7 1DP
U.K.
Tel: +44-208-2355555
Fax: +44-208-2355500

TECHNICAL BULLETIN

Setting Up NetBIOS Filter for DI-206 Router

Introduction

In a local area network you may have protocols configured which may adversely effect the performance of a router such as the DI-206. These protocols are non routable, when they arrive at the router, they may cause the router to a dial a remote network or the internet, if its configured, unnecessarily increasing line usage resulting in wasteful phone calls. By adding a series of simple filters, the router will ignore the non routable protocols such as NetBIOS/NetBEUI, and only dial when a remote connection is required.

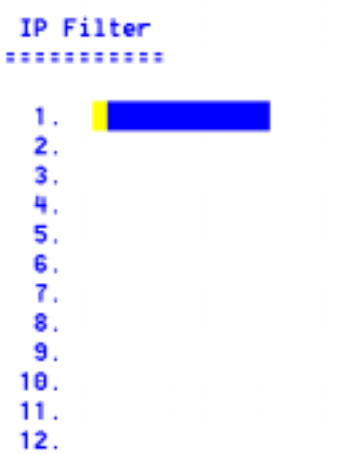
Filters Required

Ports

137	TCP & UDP NetBIOS Name Service
138	TCP & UDP NetBIOS Datagram Service
139	TCP & UDP NetBIOS Session Service

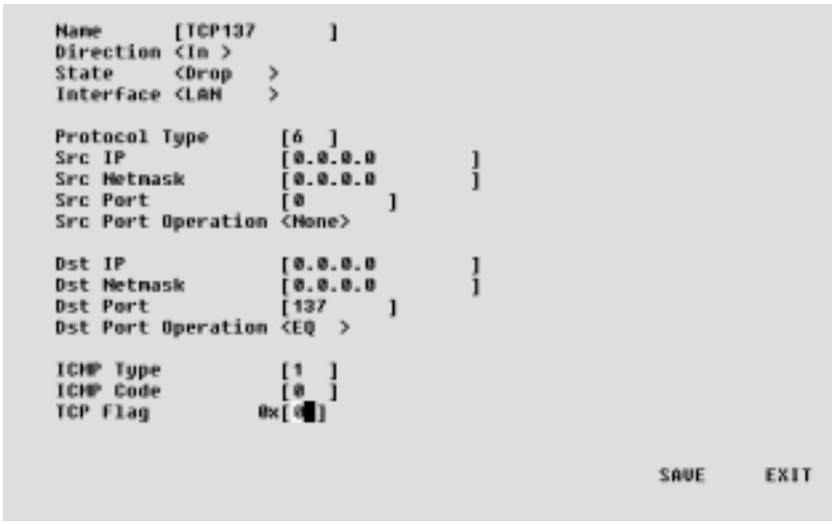
The above ports should be filtered out. See the filter setting below to add filters in the router to stop the router dialling out.

- Main Menu – Advanced Functions – Filter Configuration – IP Filter -



Select number 1.

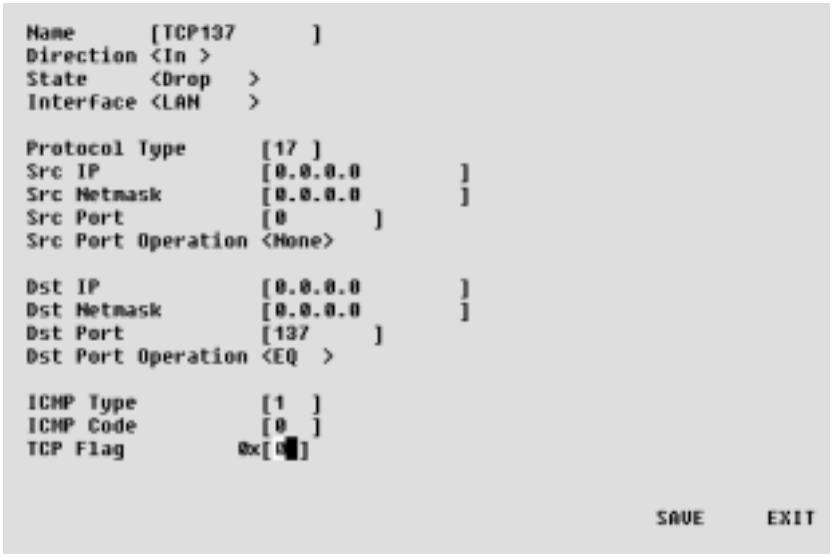
TCP Filter settings



The name is just an appropriate name for this filter. The protocol type is 6 indicating a TCP packet. Set the other settings as shown and save the configuration.

Repeat this for the other ports 138 and 139.

UDP Filter Settings



The name is just an appropriate name for this filter. The protocol type is now 17 indicating a UDP User datagram. Set the other settings as shown and save the configuration.

Repeat this for the other ports 138 and 139.

```
Name      [src137tcp   ]
Direction <In >
State     <Drop   >
Interface <LAN    >

Protocol Type      [6  ]
Src IP             [0.0.0.0        ]
Src Netmask        [0.0.0.0        ]
Src Port           [137     ]
Src Port Operation <EQ  >

Dst IP             [0.0.0.0        ]
Dst Netmask        [0.0.0.0        ]
Dst Port           [0       ]
Dst Port Operation <None>

ICMP Type          [1  ]
ICMP Code          [0  ]
TCP Flag         0x[0 ]
```

```
Name      [src137udp    ]
Direction <In >
State     <Drop   >
Interface <LAN    >

Protocol Type      [17 ]
Src IP             [0.0.0.0        ]
Src Netmask        [0.0.0.0        ]
Src Port           [137     ]
Src Port Operation <EQ  >

Dst IP             [0.0.0.0        ]
Dst Netmask        [0.0.0.0        ]
Dst Port           [0       ]
Dst Port Operation <None>

ICMP Type          [1  ]
ICMP Code          [0  ]
TCP Flag         0x[0 ]
```

IP Filters

1. TCP137
2. TCP138
3. TCP139
4. UDP137
5. UDP138
6. UDP139
7. src137udp
8. src137tcp

The router will need powering down for filters to take effect.

Filter State of Interface

```
                Layer 2 Filter   IP Filter
                --------------   ---------
     LAN          <Disable>      <Forward>
```