

## DE-CIX BLACKHOLING ADVANCED FILTER LIST

### 1. Overview

Blackholing Advanced provides a fine-grained control over the DE-CIX Blackholing service. This is achieved by providing the capability to filter on specific IP port and protocols. These filtering capabilities are controlled by using BGP and DE-CIX specific extended community values. A full description of the Blackholing Advanced features can be found in the latest release of the "[DE-CIX GlobePEER Technical Service Description](#)".

The table below shows the list of current dropping/shaping rules. For any given rule, it is possible either to drop completely the related packets or to partially allow some of them to go through. This is achieved by using either the "Drop Community" or the "Shape Community" values. When a "Shape Community" is utilized, up to 5 Mbps of traffic related to the specific rule is forwarded to the destination. The size of the shape can be adapted by the customer service ([support@de-cix.net](mailto:support@de-cix.net)) if needed.

In addition, it is possible to exempt traffic from dropping/shaping (whitelisting rules). This is done with whitelisting communities. Whitelisting rules are always applied to a packet before any dropping/shaping is applied. As an example, consider the announcement of the following two communities on a route:

<b>Prefix</b>	<b>Drop Community</b>	<b>Whitelisting Community</b>
10.0.0.1/32	RT:6695:4200000002 (UDP)	RT:6695:4200001007 (UDP, destination port = 53 (DNS))

This announcement drops all UDP traffic for prefix 10.0.0.1/32 except DNS traffic.

You can announce Blackholing Advanced routes to any route server at DE-CIX. We accept Blackholing Advanced routes with any prefix length, but you need to cover the prefix with an IRR entry or an RPKI ROA. In the latter case, we ignore the maximum prefix length, if the route is tagged with a Blackholing Advanced community.

### 2. Table of rules

#### 2.1 Drop/Shape Communities

<b>Rule</b>	<b>Drop Community (all packets matching the rule will be dropped)</b>	<b>Shape Community (all packets matching the rule will be shaped to max. 5Mbps)</b>
All traffic	RT:6695:4200000000	RT:6695:4200000001
UDP	RT:6695:4200000002	RT:6695:4200000003

UDP, source port = 0 (unassigned)	RT:6695:4200000004	RT:6695:4200000005
UDP, source port = 19 (CharGen)	RT:6695:4200000006	RT:6695:4200000007
UDP, source port = 53 (DNS)	RT:6695:4200000008	RT:6695:4200000009
UDP, source port = 111 (rpcbind)	RT:6695:4200000016	RT:6695:4200000017
UDP, source port = 123 (NTP)	RT:6695:4200000010	RT:6695:4200000011
UDP, source port = 137 (NetBIOS)	RT:6695:4200000018	RT:6695:4200000019
UDP, source port = 138 (NetBIOS)	RT:6695:4200000020	RT:6695:4200000021
UDP, source port = 161 (SNMP)	RT:6695:4200000022	RT:6695:4200000023
UDP, source port = 162 (SNMP)	RT:6695:4200000024	RT:6695:4200000025
UDP, source port = 389 (LDAP)	RT:6695:4200000012	RT:6695:4200000013
UDP, source port = 520 (RIPv1)	RT:6695:4200000026	RT:6695:4200000027
UDP, source port = 1434 (MS SQL RS)	RT:6695:4200000028	RT:6695:4200000029
UDP, source port = 1701 (L2TP)	RT:6695:4200000030	RT:6695:4200000031
UDP, source port = 1900 (SSDP)	RT:6695:4200000032	RT:6695:4200000033
UDP, source port = 3283 (ARMS)	RT:6695:4200000034	RT:6695:4200000035
UDP, source port = 3702 (WSD)	RT:6695:4200000036	RT:6695:4200000037
UDP, source port = 5353 (mDNS)	RT:6695:4200000038	RT:6695:4200000039
UDP, source port = 11211 (Memcached)	RT:6695:4200000014	RT:6695:4200000015
UDP, destination port = 25 (SMTP)	RT:6695:4200000040	RT:6695:4200000041
UDP, destination port = 69 (TFTP)	RT:6695:4200000042	RT:6695:4200000043
UDP, destination port = 80 (HTTP)	RT:6695:4200000044	RT:6695:4200000045
UDP, destination port = 443 (HTTPS)	RT:6695:4200000046	RT:6695:4200000047
UDP, destination port = 33434..33529 (traceroute)	RT:6695:4200000070	RT:6695:4200000071
ICMP	RT:6695:4200000048	RT:6695:4200000049
GRE	RT:6695:4200000050	RT:6695:4200000051
TCP, source port = 21 (FTP)	RT:6695:4200000052	RT:6695:4200000053
TCP, source port = 22 (SSH)	RT:6695:4200000054	RT:6695:4200000055
TCP, source port = 25 (SMTP)	RT:6695:4200000056	RT:6695:4200000057
TCP, source port = 80 (HTTP)	RT:6695:4200000058	RT:6695:4200000059
TCP, source port = 443 (HTTPS)	RT:6695:4200000060	RT:6695:4200000061
TCP, source port = 1900 (SSDP)	RT:6695:4200000062	RT:6695:4200000063
TCP, source port = 3389 (RDP)	RT:6695:4200000064	RT:6695:4200000065
TCP, source port = 7547 (CWMP)	RT:6695:4200000066	RT:6695:4200000067
TCP, source port = 11211 (Memcached)	RT:6695:4200000068	RT:6695:4200000069

## 2.2 Whitelisting Communities

<b>Rule</b>	<b>Whitelisting Community (all packets matching the rule will be exempted from any dropping or shaping rules)</b>
All traffic	RT:6695:4200001028
UDP	RT:6695:4200001029
TCP	RT:6695:4200001030
TCP, destination port = 20 (FTP)	RT:6695:4200001000
TCP, destination port = 21 (FTP)	RT:6695:4200001001
TCP, destination port = 22 (SSH)	RT:6695:4200001002
TCP, destination port = 23 (Telnet)	RT:6695:4200001004
TCP, destination port = 25 (SMTP)	RT:6695:4200001005
TCP, destination port = 53 (DNS)	RT:6695:4200001006
TCP, destination port = 80 (HTTP)	RT:6695:4200001009
TCP, destination port = 110 (POP3)	RT:6695:4200001011
TCP, destination port = 119 (NNTP)	RT:6695:4200001012
TCP, destination port = 143 (IMAP)	RT:6695:4200001014
TCP, destination port = 161 (SNMP)	RT:6695:4200001016
TCP, destination port = 162 (SNMP)	RT:6695:4200001018
TCP, destination port = 443 (HTTPS)	RT:6695:4200001021
TCP, destination port = 989 (FTPS)	RT:6695:4200001022
TCP, destination port = 990 (FTPS)	RT:6695:4200001023
TCP, destination port = 3389 (RDP)	RT:6695:4200001025
UDP, destination port = 22 (SSH)	RT:6695:4200001003
UDP, destination port = 53 (DNS)	RT:6695:4200001007
UDP, destination port = 69 (TFTP)	RT:6695:4200001008
UDP, destination port = 80 (HTTP)	RT:6695:4200001010
UDP, destination port = 123 (NTP)	RT:6695:4200001013
UDP, destination port = 143 (IMAP)	RT:6695:4200001015
UDP, destination port = 161 (SNMP)	RT:6695:4200001017
UDP, destination port = 162 (SNMP)	RT:6695:4200001019
UDP, destination port = 443 (HTTPS)	RT:6695:4200001020
UDP, destination port = 3389 (RDP)	RT:6695:4200001024
UDP, destination port = 33434..33529 (traceroute)	RT:6695:4200001027
ICMP	RT:6695:4200001026