

Traffic counting on the CCGX

There are situations in which it is interesting to know the traffic usage of the color control. This can be done on the CCGX using [iptables](#). To do so requires a number of changes on the CCGX, which are described on this page.

The rules

The following code clears all the existing rules from iptables and adds rules for counting specific traffic.

```
#Flush all
iptables -F
#Delete all user defined chains
iptables -X

#ACCEPT traffic to local host
iptables -I INPUT -s 127.0.0.0/8 -j ACCEPT
iptables -I OUTPUT -d 127.0.0.0/8 -j ACCEPT
#ACCEPT traffic to the local LAN
iptables -I INPUT -s 10.0.0.0/8 -j ACCEPT
iptables -I OUTPUT -d 10.0.0.0/8 -j ACCEPT
iptables -I INPUT -s 172.16.0.0/12 -j ACCEPT
iptables -I OUTPUT -d 172.16.0.0/12 -j ACCEPT
iptables -I INPUT -s 192.168.0.0/16 -j ACCEPT
iptables -I OUTPUT -d 192.168.0.0/16 -j ACCEPT

#ACCEPT multicast traffic
iptables -I INPUT -d 224.0.0.0/4 -j ACCEPT
iptables -I OUTPUT -d 224.0.0.0/4 -j ACCEPT

#ACCEPT broadcast traffic (dhcp)
iptables -I INPUT -d 255.255.255.255 -j ACCEPT
iptables -I OUTPUT -d 255.255.255.255 -j ACCEPT

#Send all remaining traffic to OTHER_IN/OUT and log
iptables -N OTHER_IN
#The following line can only be used when the xt_limit kernel module is
available
#iptables -A OTHER_IN -j LOG -m limit --limit 10/hour --log-prefix
"IPTables-OTHER_IN: " --log-level 7
iptables -A OTHER_IN -j ACCEPT
iptables -N OTHER_OUT
#The following line can only be used when the xt_limit kernel module is
available
#iptables -A OTHER_OUT -j LOG -m limit --limit 10/hour --log-prefix
"IPTables-OTHER_IN: " --log-level 7
```

Last update: 2015-03-30 open_source:ccgx:ccgx_traffic_counting https://www.victronenergy.com/live/open_source:ccgx:ccgx_traffic_counting?rev=1427719565
14:46

```
iptables -A OTHER_OUT -j ACCEPT
iptables -A INPUT -g OTHER_IN
iptables -A OUTPUT -g OTHER_OUT

iptables -N REMOTE_SUPPORT_IN
iptables -I REMOTE_SUPPORT_IN -j ACCEPT
iptables -N REMOTE_SUPPORT_OUT
iptables -I REMOTE_SUPPORT_OUT -j ACCEPT
iptables -I OTHER_IN -s supporthost.victronenergy.com -g REMOTE_SUPPORT_IN
iptables -I OTHER_OUT -d supporthost.victronenergy.com -g REMOTE_SUPPORT_OUT

iptables -N VRM_IN
iptables -I VRM_IN -j ACCEPT
iptables -N VRM_OUT
iptables -I VRM_OUT -j ACCEPT
iptables -I OTHER_IN -s ccgxlogging.victronenergy.com -g VRM_IN
iptables -I OTHER_OUT -d ccgxlogging.victronenergy.com -g VRM_OUT

iptables -N UPDATE_IN
iptables -I UPDATE_IN -j ACCEPT
iptables -N UPDATE_OUT
iptables -I UPDATE_OUT -j ACCEPT
iptables -I OTHER_IN -s updates.victronenergy.com -g UPDATE_IN
iptables -I OTHER_OUT -d updates.victronenergy.com -g UPDATE_OUT

iptables -N PUBNUB_IN
iptables -I PUBNUB_IN -j ACCEPT
iptables -N PUBNUB_OUT
iptables -I PUBNUB_OUT -j ACCEPT
iptables -I OTHER_IN -s 54.246.196.128/26 -g PUBNUB_IN
iptables -I OTHER_OUT -d 54.246.196.128/26 -g PUBNUB_OUT
iptables -I OTHER_IN -s 54.93.127.192/26 -g PUBNUB_IN
iptables -I OTHER_OUT -d 54.93.127.192/26 -g PUBNUB_OUT

iptables -N NTP_IN
iptables -I NTP_IN -j ACCEPT
iptables -N NTP_OUT
iptables -I NTP_OUT -j ACCEPT
iptables -I OTHER_IN -p udp --sport 123 -g NTP_IN
iptables -I OTHER_OUT -p udp --dport 123 -g NTP_OUT

iptables -N DNS_IN
iptables -I DNS_IN -j ACCEPT
iptables -N DNS_OUT
iptables -I DNS_OUT -j ACCEPT
iptables -I OTHER_IN -p tcp --sport domain -g DNS_IN
iptables -I OTHER_IN -p udp --sport domain -g DNS_IN
iptables -I OTHER_OUT -p tcp --dport domain -g DNS_OUT
iptables -I OTHER_OUT -p udp --dport domain -g DNS_OUT
```

```
#Connman online check
iptables -N CONNMAN_IN
iptables -I CONNMAN_IN -j ACCEPT
iptables -N CONNMAN_OUT
iptables -I CONNMAN_OUT -j ACCEPT
iptables -I OTHER_IN -s ipv4.connman.net -g CONNMAN_IN
iptables -I OTHER_OUT -d ipv4.connman.net -g CONNMAN_OUT
```

Viewing the data

After executing these commands, the traffic by iptables. The data can be viewed by giving the command

```
iptables -L -x -v -n
```

From:
<https://www.victronenergy.com/live/> - **Victron Energy**

Permanent link:
https://www.victronenergy.com/live/open_source:ccgx:ccgx_traffic_counting?rev=1427719565

Last update: **2015-03-30 14:46**

