

**NAME**

iptables-translate — translation tool to migrate from iptables to nftables

ip6tables-translate — translation tool to migrate from ip6tables to nftables

**DESCRIPTION**

There is a set of tools to help the system administrator translate a given ruleset from **iptables(8)** and **ip6tables(8)** to **nftables(8)**.

The available commands are:

- iptables-translate
- iptables-restore-translate
- ip6tables-translate
- ip6tables-restore-translate

**USAGE**

They take as input the original **iptables(8)**/**ip6tables(8)** syntax and output the native **nftables(8)** syntax.

The **iptables-restore-translate** tool reads a ruleset in the syntax produced by **iptables-save(8)**. Likewise, the **ip6tables-restore-translate** tool reads one produced by **ip6tables-save(8)**. No ruleset modifications occur, these tools are text converters only.

The **iptables-translate** reads a command line as if it was entered to **iptables(8)**, and **ip6tables-translate** reads a command like as if it was entered to **ip6tables(8)**.

**EXAMPLES**

Basic operation examples.

Single command translation:

```
root@machine:~# iptables-translate -A INPUT -p tcp --dport 22 -m conntrack --ctstate NEW -j ACCEPT
nft add rule ip filter INPUT tcp dport 22 ct state new counter accept
```

```
root@machine:~# ip6tables-translate -A FORWARD -i eth0 -o eth3 -p udp -m multiport --dports 111,222 -j ACCEPT
nft add rule ip6 filter FORWARD iifname eth0 oifname eth3 meta l4proto udp udp dport { 111,222 } counter accept
```

Whole ruleset translation:

```
root@machine:~# iptables-save > save.txt
root@machine:~# cat save.txt
# Generated by iptables-save v1.6.0 on Sat Dec 24 14:26:40 2016
*filter
:INPUT ACCEPT [5166:1752111]
:FORWARD ACCEPT [0:0]
:OUTPUT ACCEPT [5058:628693]
-A FORWARD -p tcp -m tcp --dport 22 -m conntrack --ctstate NEW -j ACCEPT
COMMIT
# Completed on Sat Dec 24 14:26:40 2016
```

```
root@machine:~# iptables-restore-translate -f save.txt
# Translated by iptables-restore-translate v1.6.0 on Sat Dec 24 14:26:59 2016
add table ip filter
```

```
add chain ip filter INPUT { type filter hook input priority 0; }
add chain ip filter FORWARD { type filter hook forward priority 0; }
add chain ip filter OUTPUT { type filter hook output priority 0; }
add rule ip filter FORWARD tcp dport 22 ct state new counter accept

root@machine:~# iptables-restore-translate -f save.txt > ruleset.nft
root@machine:~# nft -f ruleset.nft
root@machine:~# nft list ruleset
table ip filter {
    chain INPUT {
        type filter hook input priority 0; policy accept;
    }

    chain FORWARD {
        type filter hook forward priority 0; policy accept;
        tcp dport ssh ct state new counter packets 0 bytes 0 accept
    }

    chain OUTPUT {
        type filter hook output priority 0; policy accept;
    }
}
```

## LIMITATIONS

Some (few) extensions may be not supported (or fully-supported) for whatever reason (for example, they were considered obsolete, or we didn't have the time to work on them).

There are no translations available for **ebtables(8)** and **arptables(8)**.

To get up-to-date information about this, please head to <https://wiki.nftables.org/>.

## SEE ALSO

**nft(8)**, **iptables(8)**

## AUTHORS

The nftables framework is written by the Netfilter project (<https://www.netfilter.org>).

This manual page was written by Arturo Borrero Gonzalez <[arturo@netfilter.org](mailto:arturo@netfilter.org)>.

This documentation is free/libre under the terms of the GPLv2+.