

# iptables-translate

Benefits and need

# Users involved

1. New to packet classification framework (User 1)
2. New to nftables but been using iptables for a while (User 2)

# Adding up rules in nftables

## User1's domain:

- Iptables rulesets all over the internet
- Guides to iptables and nftables
- Wiki

## User2's domain:

- User1's domain + Knowledge about packet filtering with iptables

# Example rule

In iptables,

```
# iptables -A FORWARD -m mark --mark 2 -j ACCEPT
```

In nft,

```
# nft add rule ip filter FORWARD mark 2 accept
```

# Simple Observation

Simple mapping from iptables to nft rule:

iptables -A -----> nft add rule ip filter

-m mark --mark 2 -j ACCEPT -----> mark 2 accept

# One more example

In iptables,

```
# iptables -A INPUT -m length --length 40 -j ACCEPT
```

Going by the previous observation, nft rule should be,

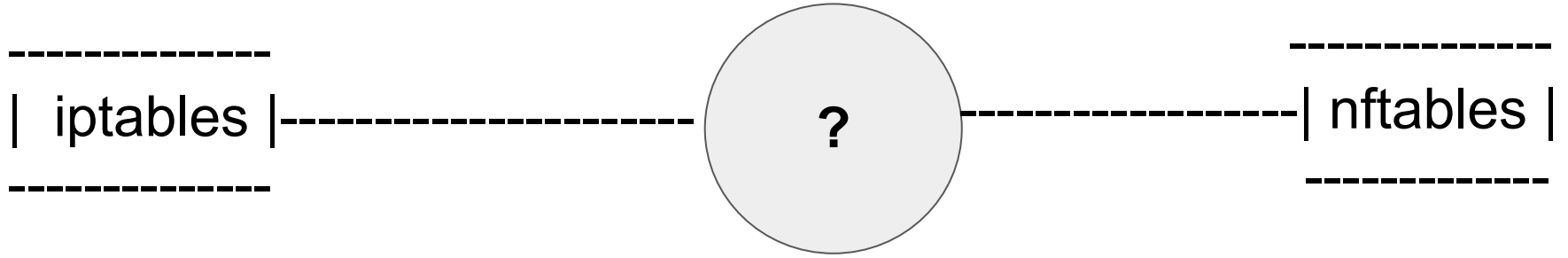
```
# nft add rule ip filter INPUT length 40 accept
```

```
# nft add rule ip filter INPUT length 40 accept
```

The actual result of the above rule is:

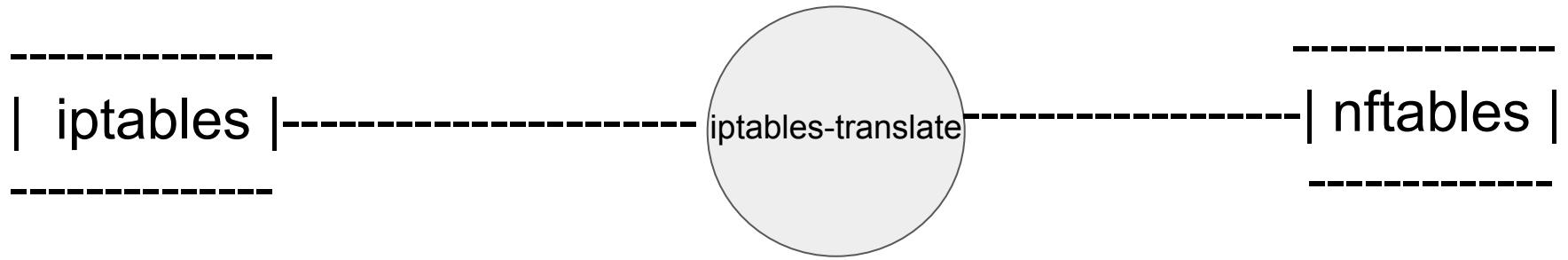
```
<cmdline>:1:26-31: Error: syntax error, unexpected length  
add rule ip filter INPUT length 40 counter accept  
      ^^^^^^^
```

# Problem





# Solution



# Usage

```
$ iptables-translate <iptables_rule>
```

Example:

For the previous rule,

```
$ iptables-translate -A INPUT -m length --length 40
```

# Result

The correct nft rule:

```
nft add rule ip filter INPUT meta length 40 counter
```

# Pros

- User friendly
- Easy to use
- Comes with iptables package

# Current scenario

Fully translatable extensions:	~67.8%
Partially translatable extensions:	~20.3%
Untranslatable extensions:	~11.8%

# Special thanks

- Pablo Neira Ayuso
- Outreachy

**Thanks!**