

# nftables: the New Fangled (ip)Tables (but actually netfilter tables)

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```
iptables -I input -p tcp --dport  
80 -m state --state NEW -m  
hashlimit --hashlimit-above  
20/sec --hashlimit-mode srcip  
--hashlimit-name http -j DROP
```

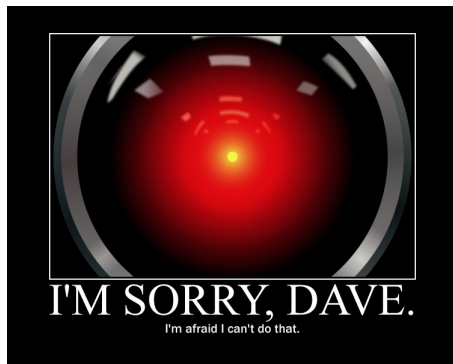
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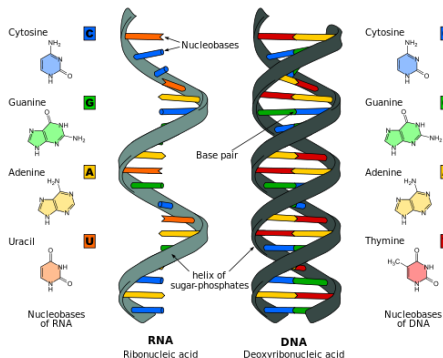
- iptables is old, but more importantly cumbersome af
  - Fifteen tender years
  - Code duplication and inconsistencies: protocol specificities
- Generic, easily extensible architecture
  - Sets, maps
  - Unified dual-stack classification
  - Netlink API
- A real syntax language!



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- Syntax
- Fully-configurable tables and chains
- Linear (for now) evaluation of expressions
- Several actions in one rule allowed
- Counters optional
- Better dynamic updates
- Unified dual-stack administration
- Set and map data structures
- Concatenations
- Updates without updating kernel



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## Userspace

- `nft` — note one userspace program, compared to at least four!
- `libmn1` — Netlink API
- `libnftnl` — nftables API

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## Userspace

- `nft` — note one userspace program, compared to at least four!
- `libmnl` — Netlink API
- `libnftnl` — `nftables` API

This is usually part of a unified `nftables` package or collection of dependencies

Demo time!

