nft-sync

Distributing nftables rulesets across the network

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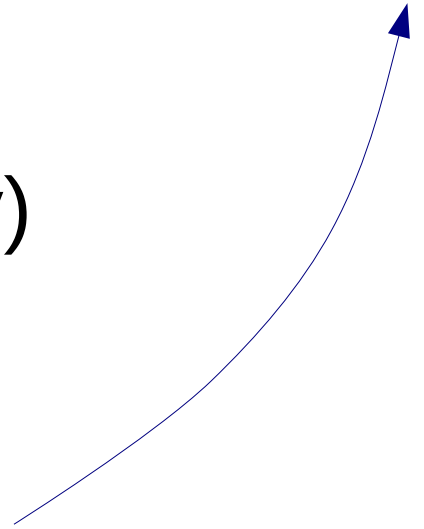
Netfilter Workshop 2014
Montpelier, France

nft-sync

Main scenarios to face:

- Cluster syncing
- Ruleset distribution (repository)



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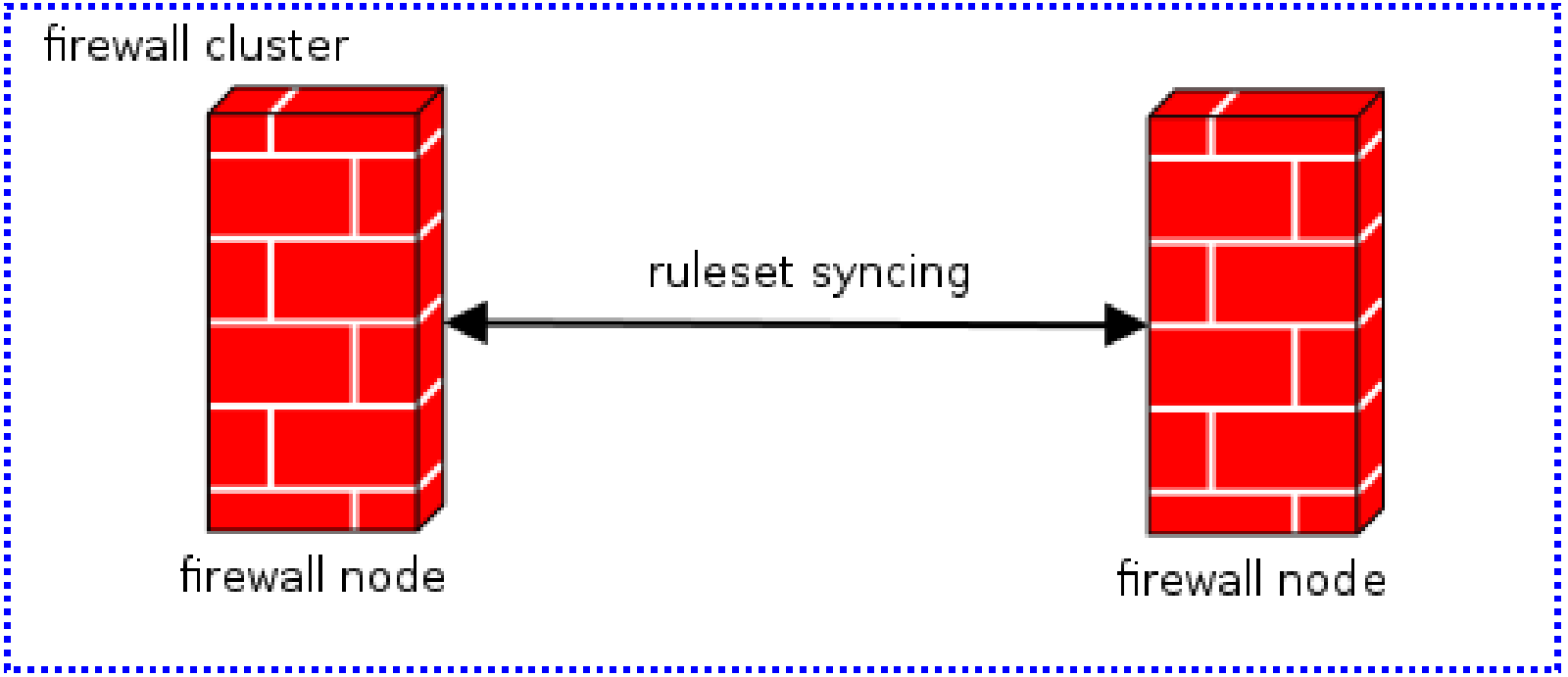
Cluster syncing



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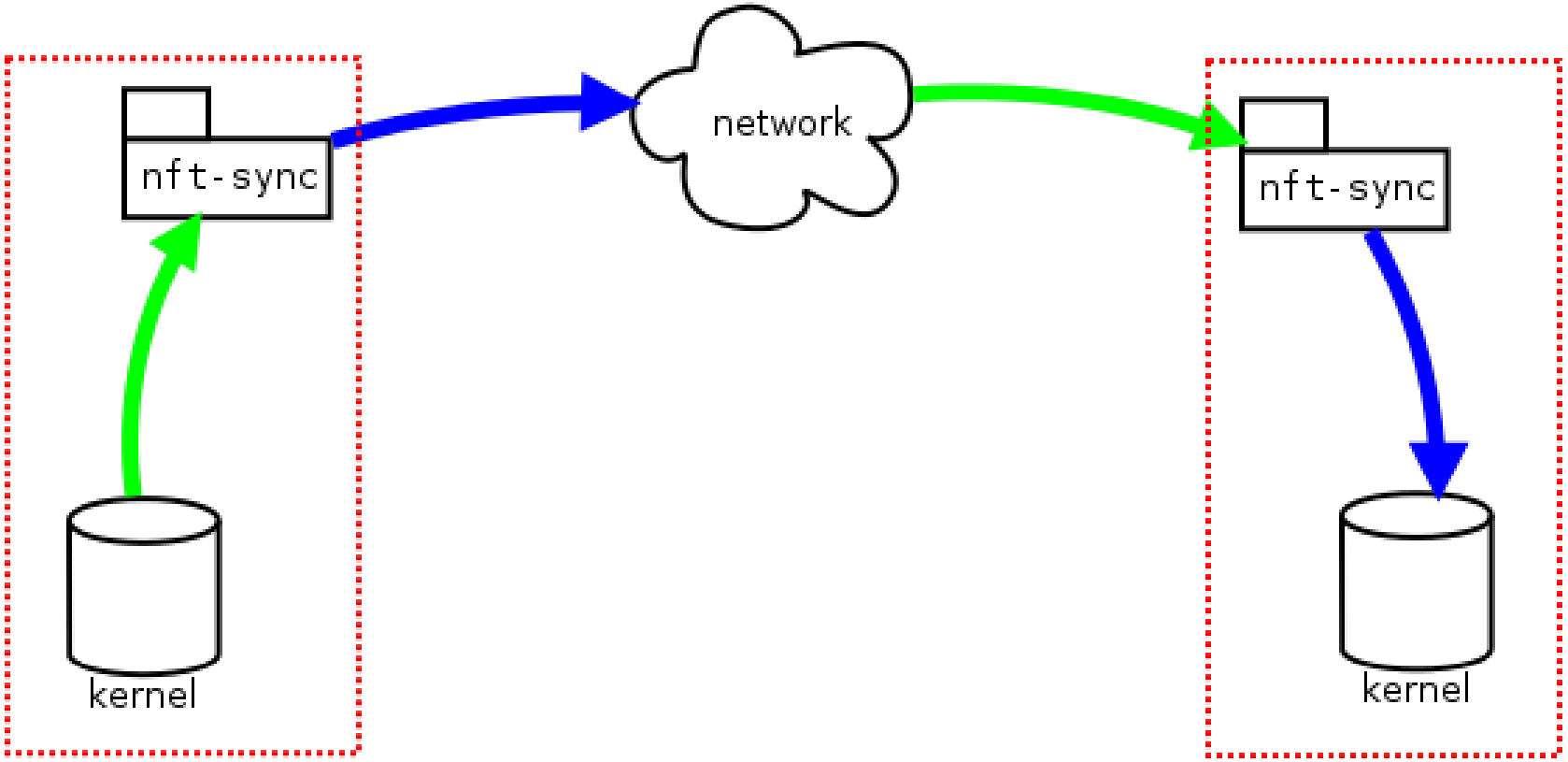

→ Event handler

→ Action

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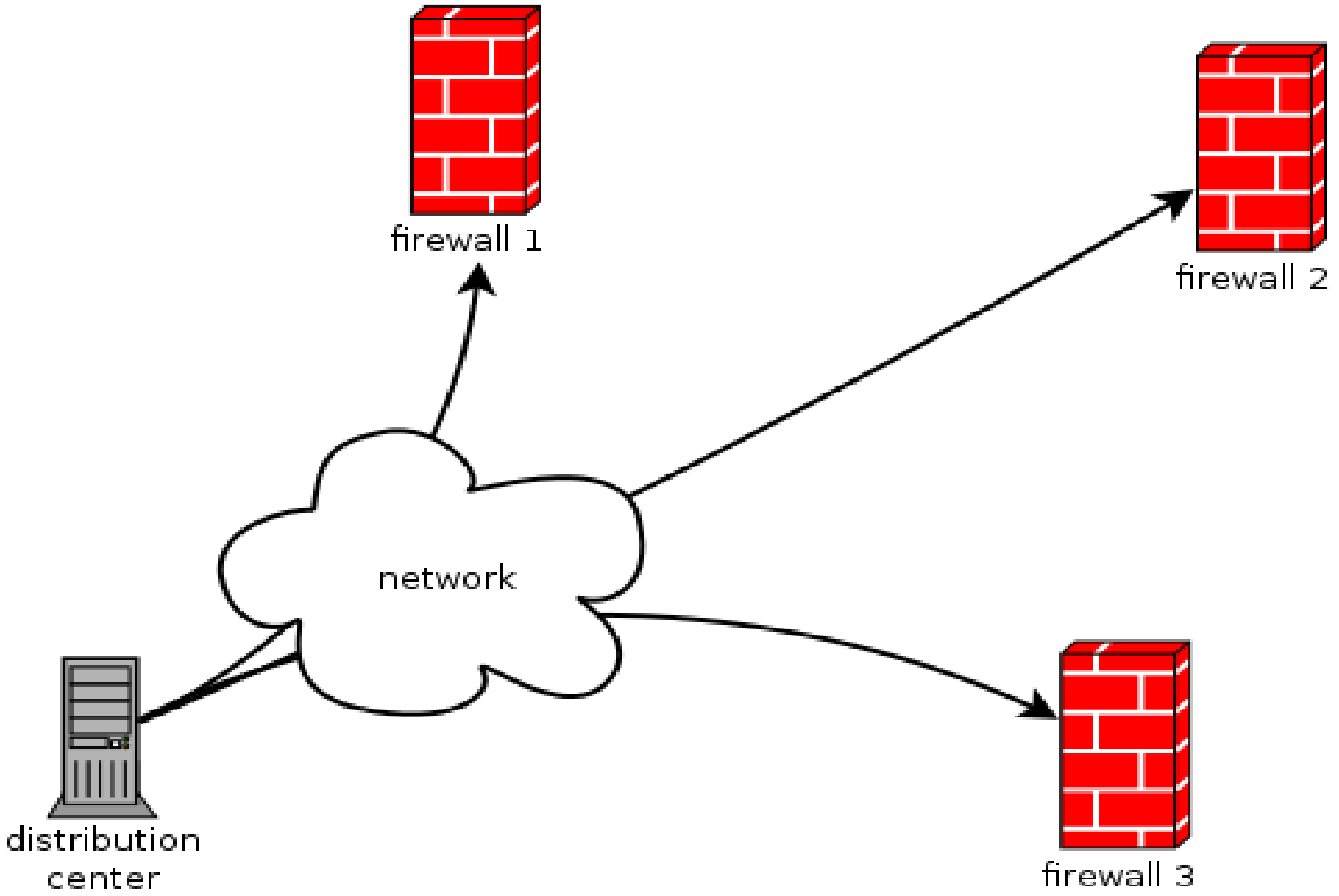
Ruleset distribution (repository)



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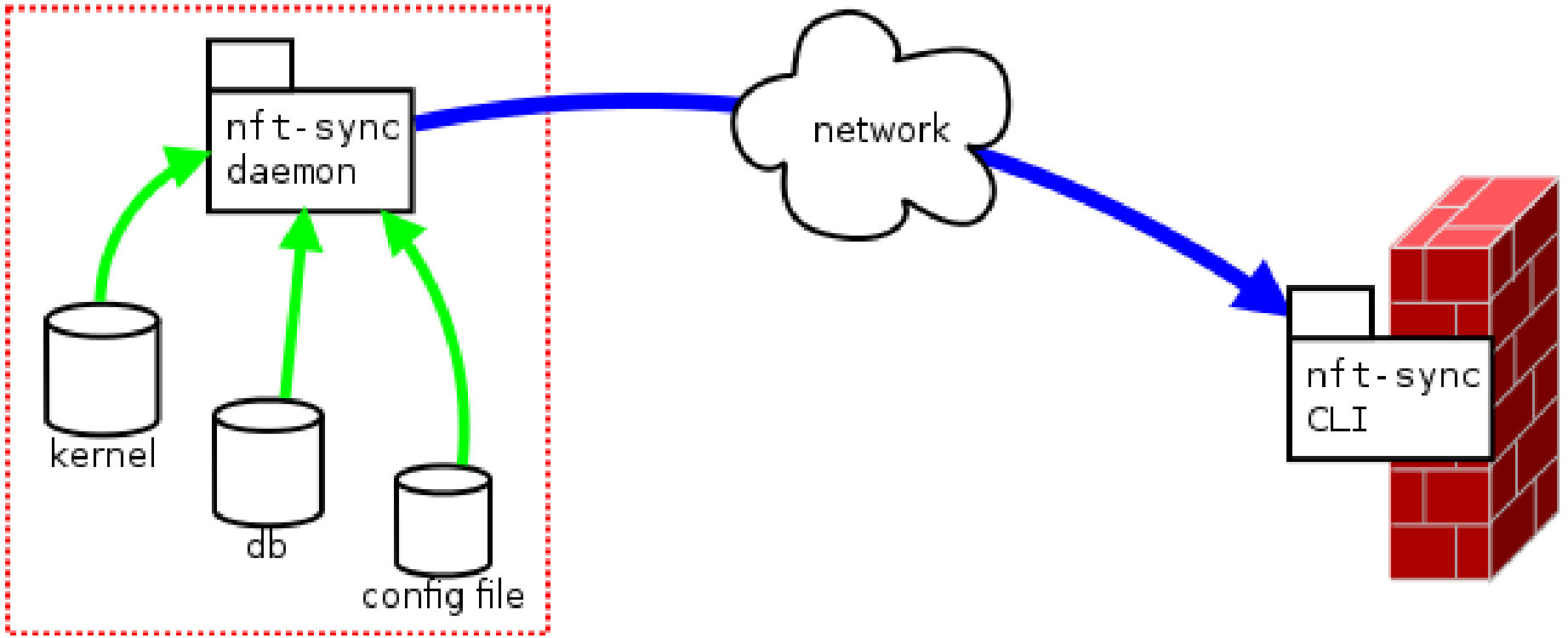

→ Ruleset reading
→ Distribution

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Derivated scenarios:

- Remote management
- Distributed policing

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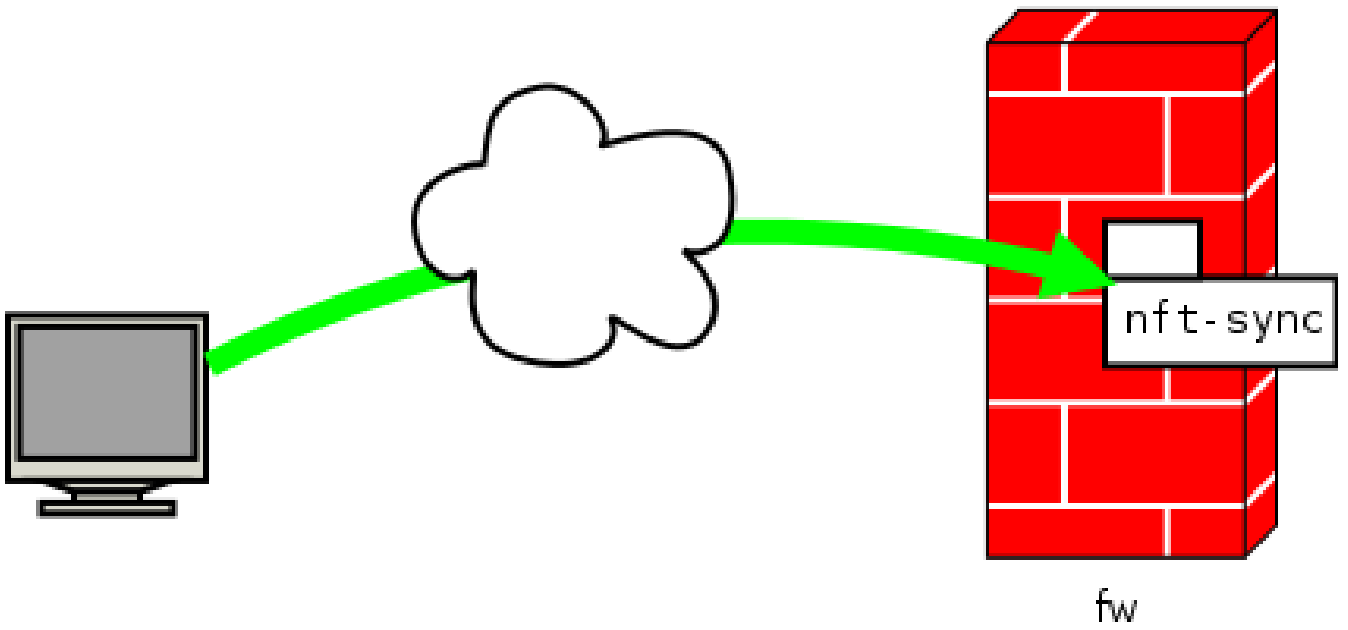
Remote management

- Offers a public API



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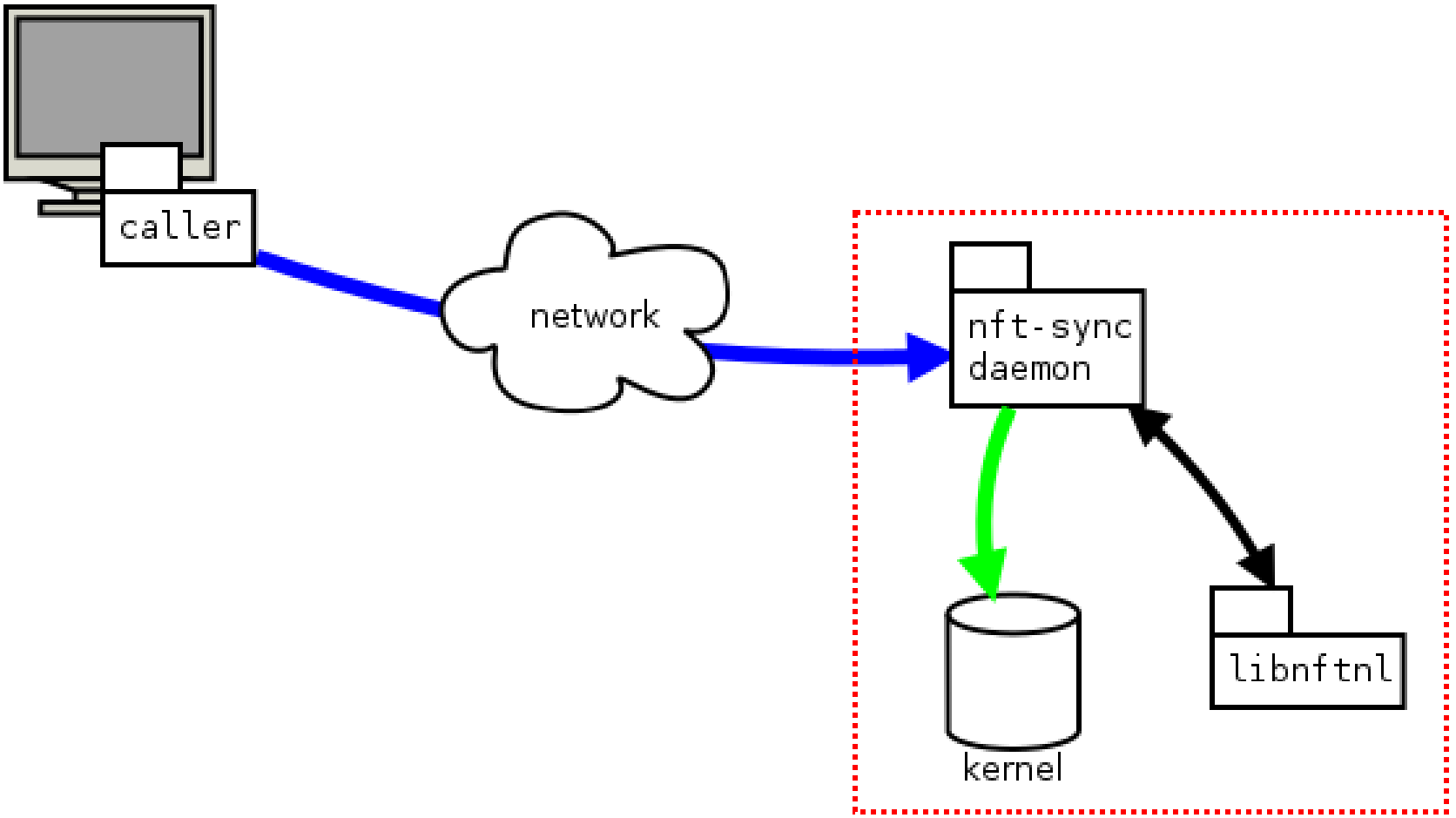

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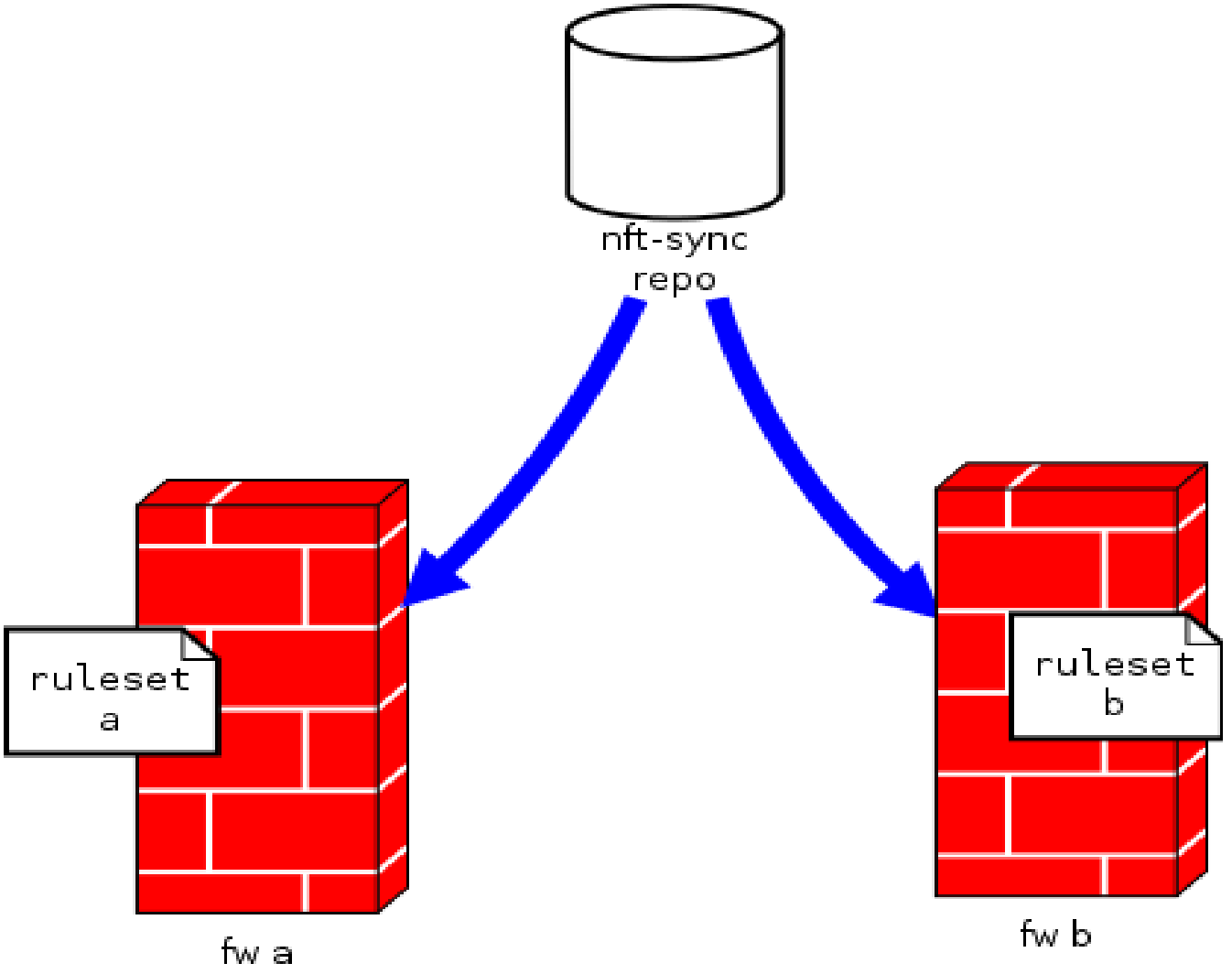
Distributed policing



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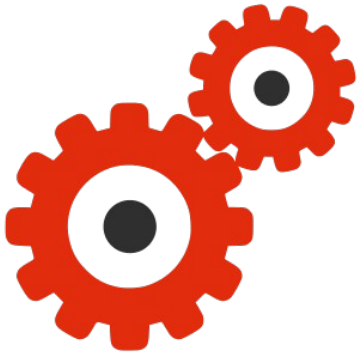
How it works



→ Basic config file

→ Running modes: daemon, CLI

→ Operations: fetch, pull, sync, …

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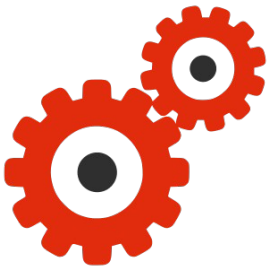
How it works

→ Simple sync protocol (inspired by git)

→ XML / JSON (provided by libnftnl)

→ libev based



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The protocol:

```
struct nft_sync_hdr {
        uint32_t        len;
        char            data[0];
};
```

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iptables vs nftables

	iptables	nftables
Events reporting	no	Yes
XML / Json	weak	Yes
Public library / API	no	Yes
Built-in data sets	no	Yes

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Conclusions:

- Just bootstraped (May 2014)
- Proof of concept
- Initial work funded by nlnet and Google

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Future works:

- Complete all operations
- SSL-Based comunications
- Give flexibility, config options

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More info:

- Announcement by Netfilter Project

  http://marc.info/?l=netfilter&m=139991701024628&w=2

- Source code

  http://git.netfilter.org/nft-sync/

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