A plan for email over IPv6
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IPv6 is coming!

People in the computer networking world

IPv6 is coming

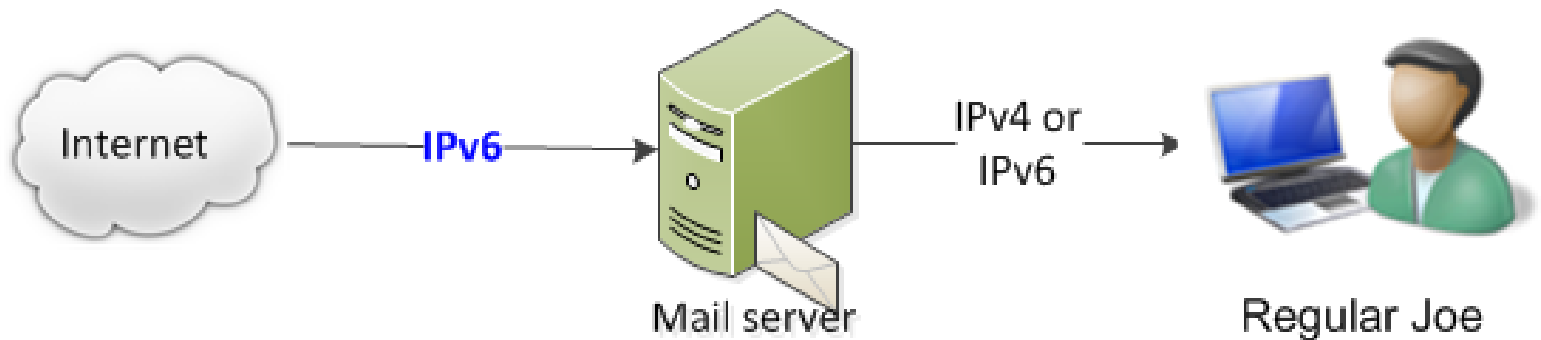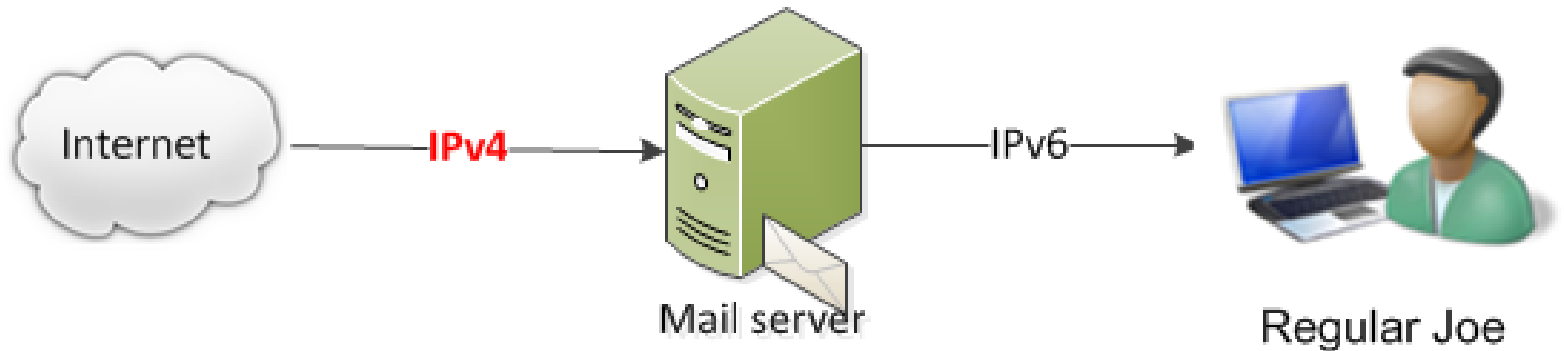Everyone who works in email

Why? Because of scale!

Feeding your family…
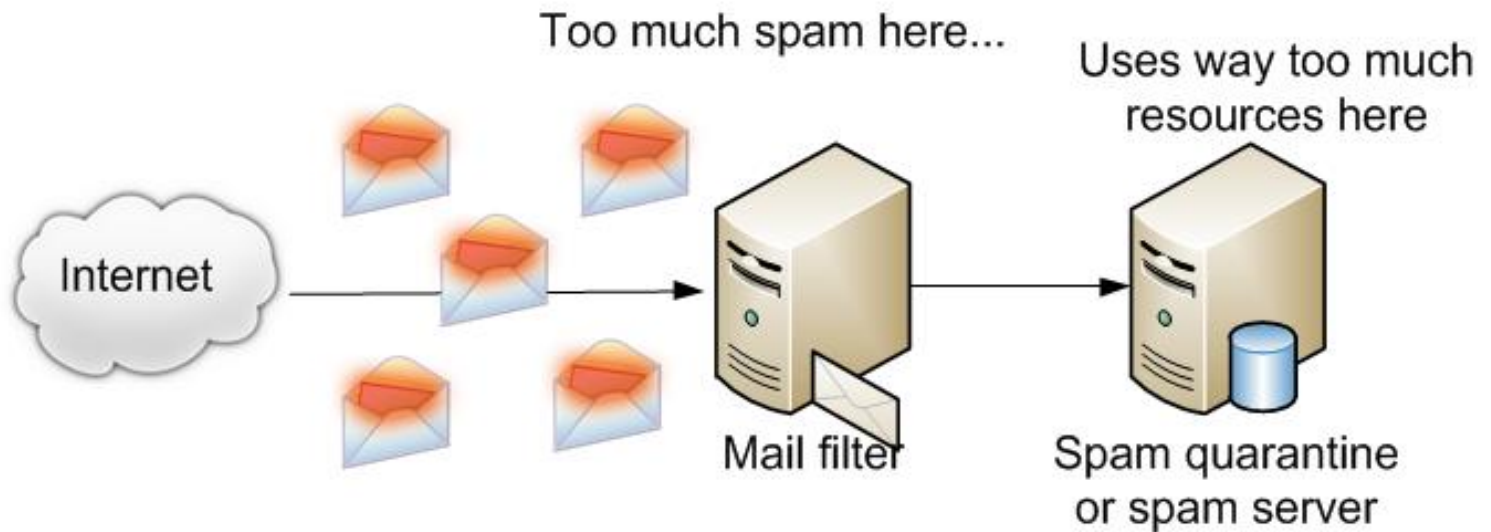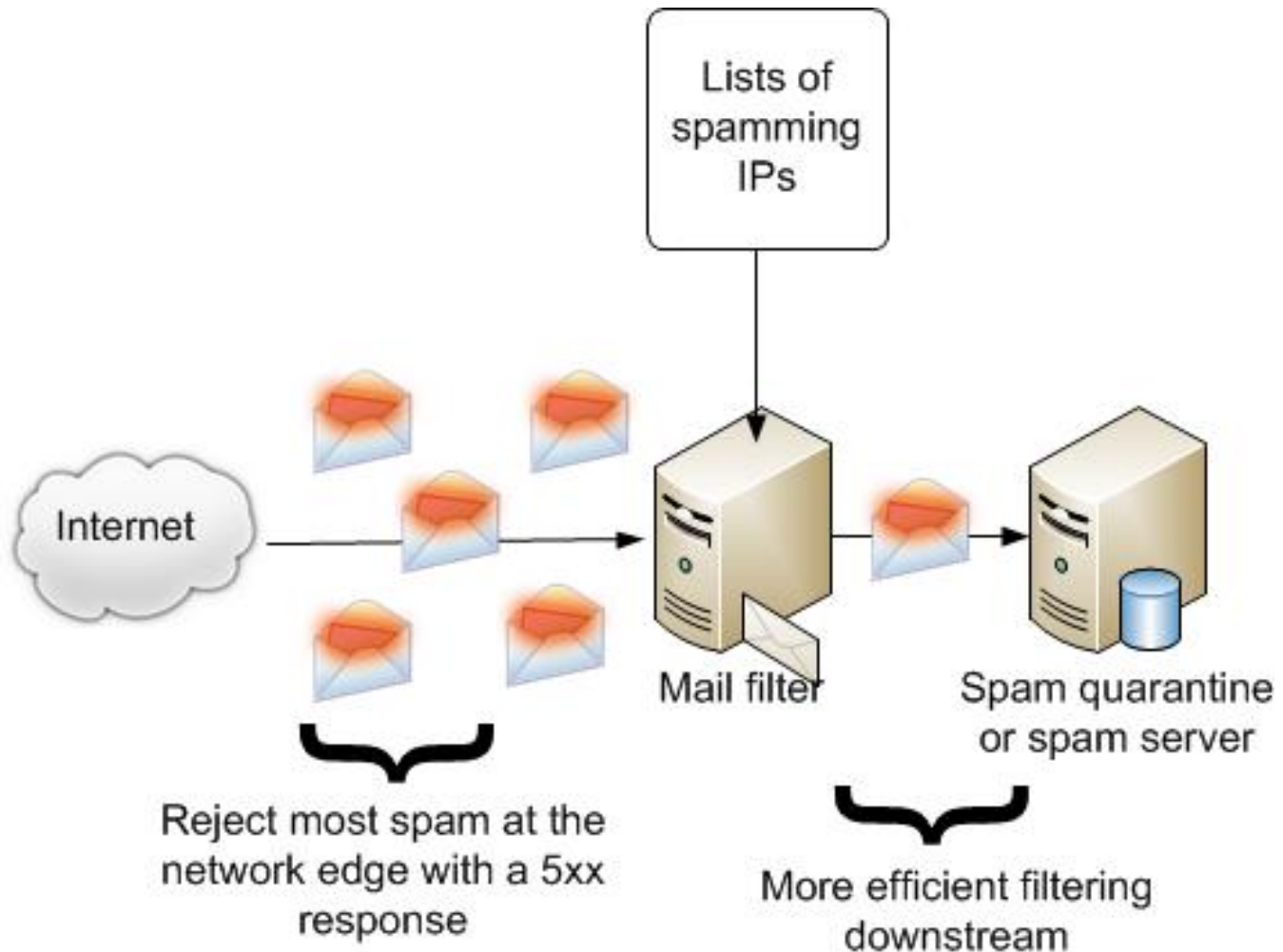
… vs feeding the world

What we mean by email over IPv6

Modern spam filters

Too much spam here...

Uses way too much resources here
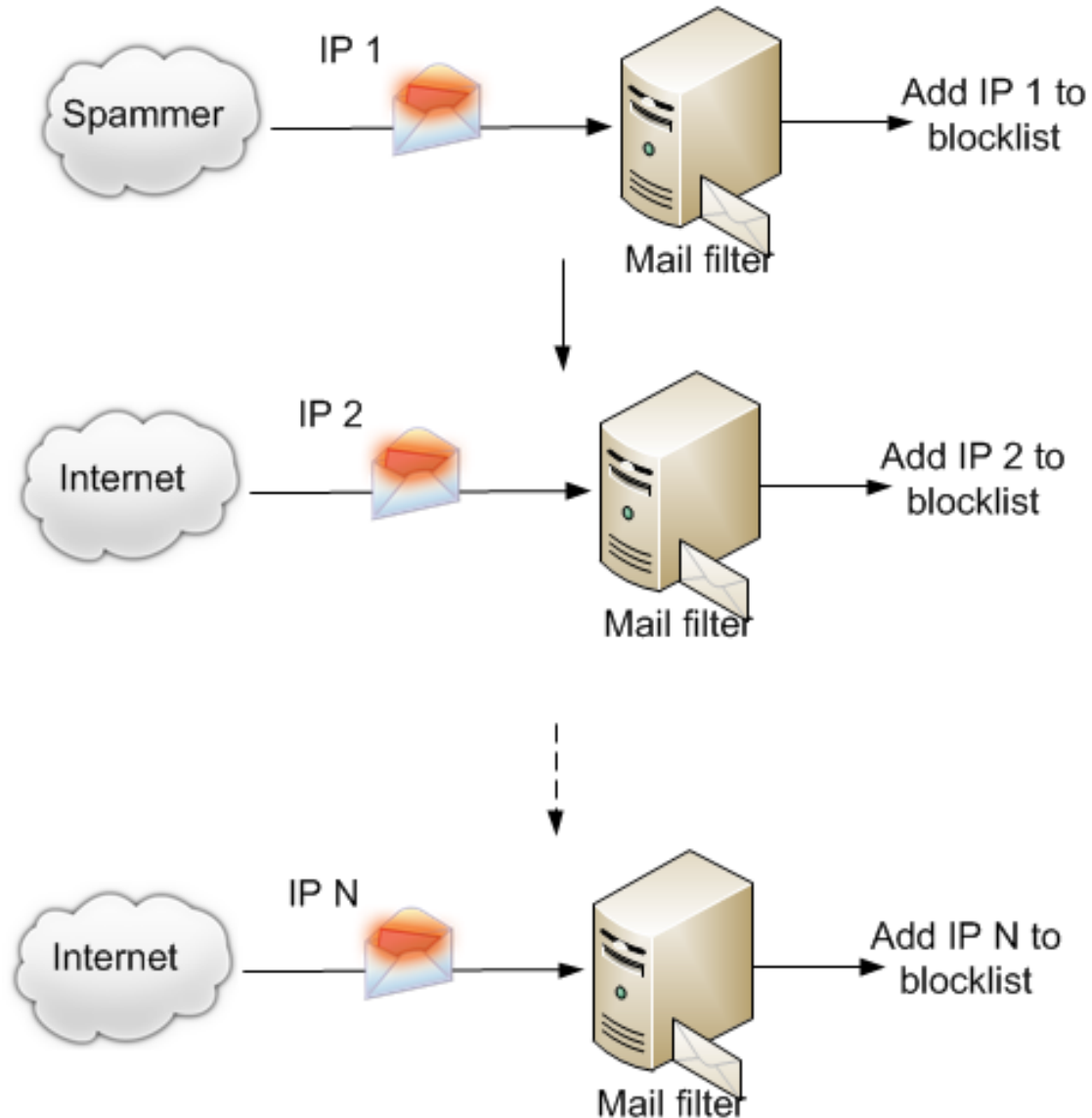
Internet

Mail filter
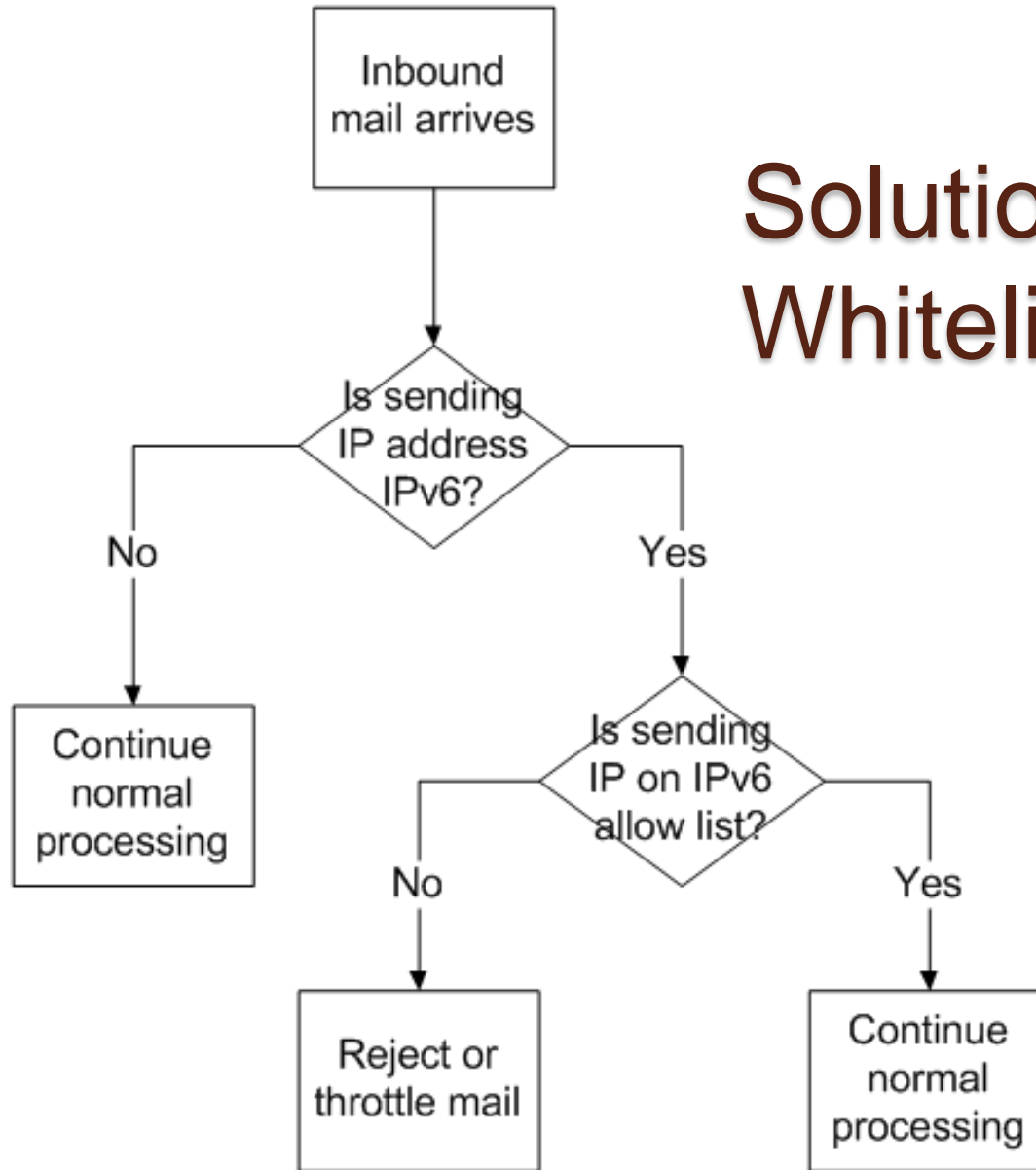
Spam quarantine or spam server

Modern spam filters

Future spam filters?

Solution: Whitelists!

Types of whitelists

- IP address-based

- Domains – SPF checks or DKIM checks

- Certificates such as TLS

Population

- Manually
- 3rd party reputation service
- Pre-population using domain whitelists or SPF records
- Enlisting web page
- Build reputation over time
  - Low reputation = high throttling

Removal

- Keep track of IP's reputation (spam/non-spam volumes)

- If bad:
  - Use as weight in filter
  - Lower reputation for higher throttling
  - Remove from whitelist

IPv4 vs IPv6

IPv4	IPv6
Default trust	Default distrust
Blocking	Allowing
Constant additions	Less frequent additions
First time easy to send	First time difficult to send

Standards

Conclusions

- IPv6 is coming

- Eventually we will send email over IPv6

- We need to do something different than what we do in IPv4

QUESTIONS?

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