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Name Servers Should Not Move

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Passive DNS Database

Nameserver->IP

BGP

IP->ASN

Analysis

Suspicious Name Servers

Further Analysis

Whois

ASN->Owner
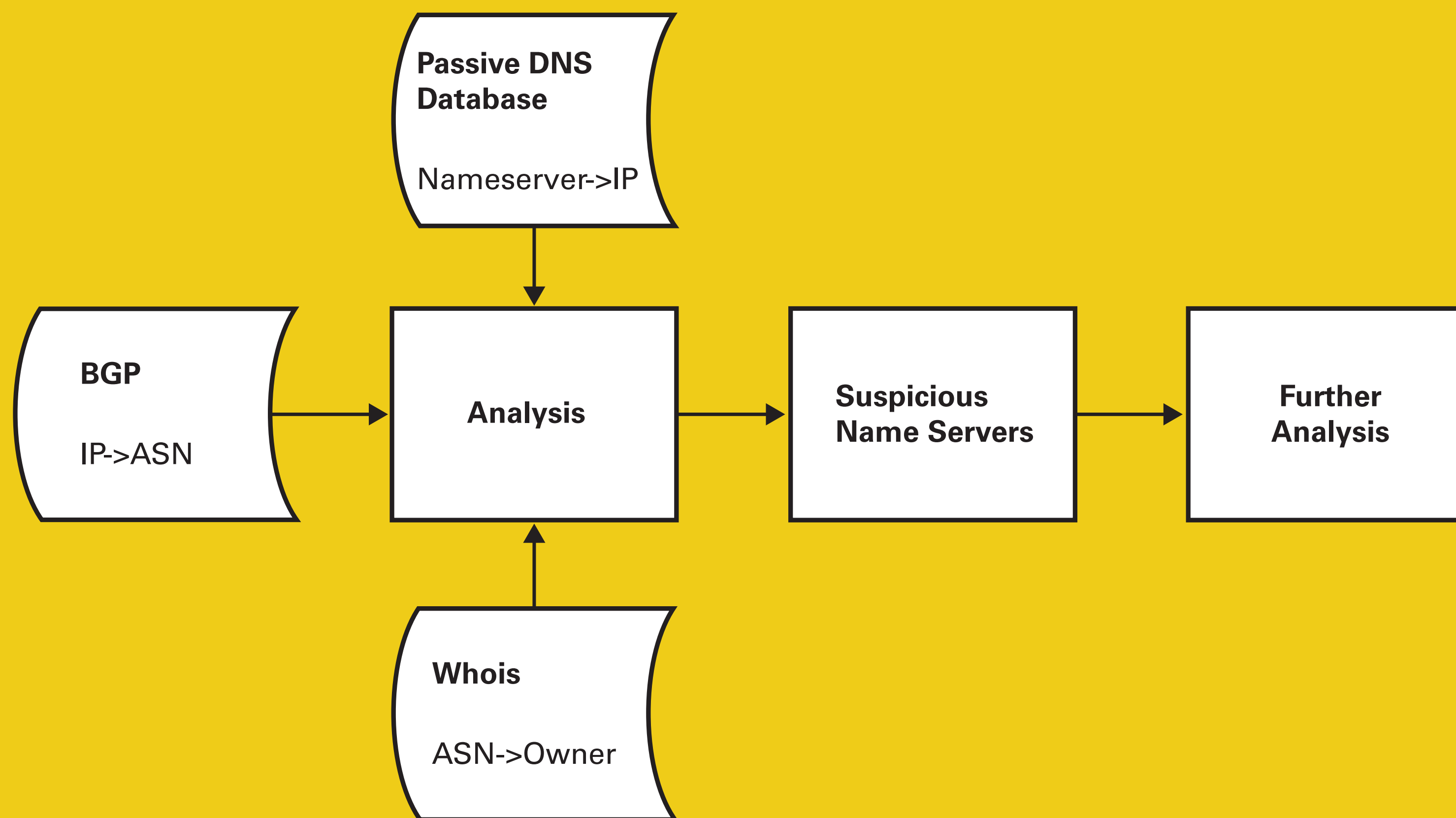
GOAL

Find name servers that move from IP address to IP address too much.

METHOD

Using a passive DNS Database, detect changes in IP addresses from A records three or more times in a month.

CAVEAT

Organizations may have valid use cases for moving name servers (e.g., content distribution networks [CDN]).

FILTER

Select name servers whose IPs are in different ASNs (according to BGP, using available routing data); treat ASNs as different only when they have different owners (according to WHOIS).

RESULT

Name servers that move without a valid reason are probably malicious.

http://www.cert.org/flocon

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