

# **ID-SAVE:** ***Incrementally Deployable*** ***Source Address Validity*** ***Enforcement***

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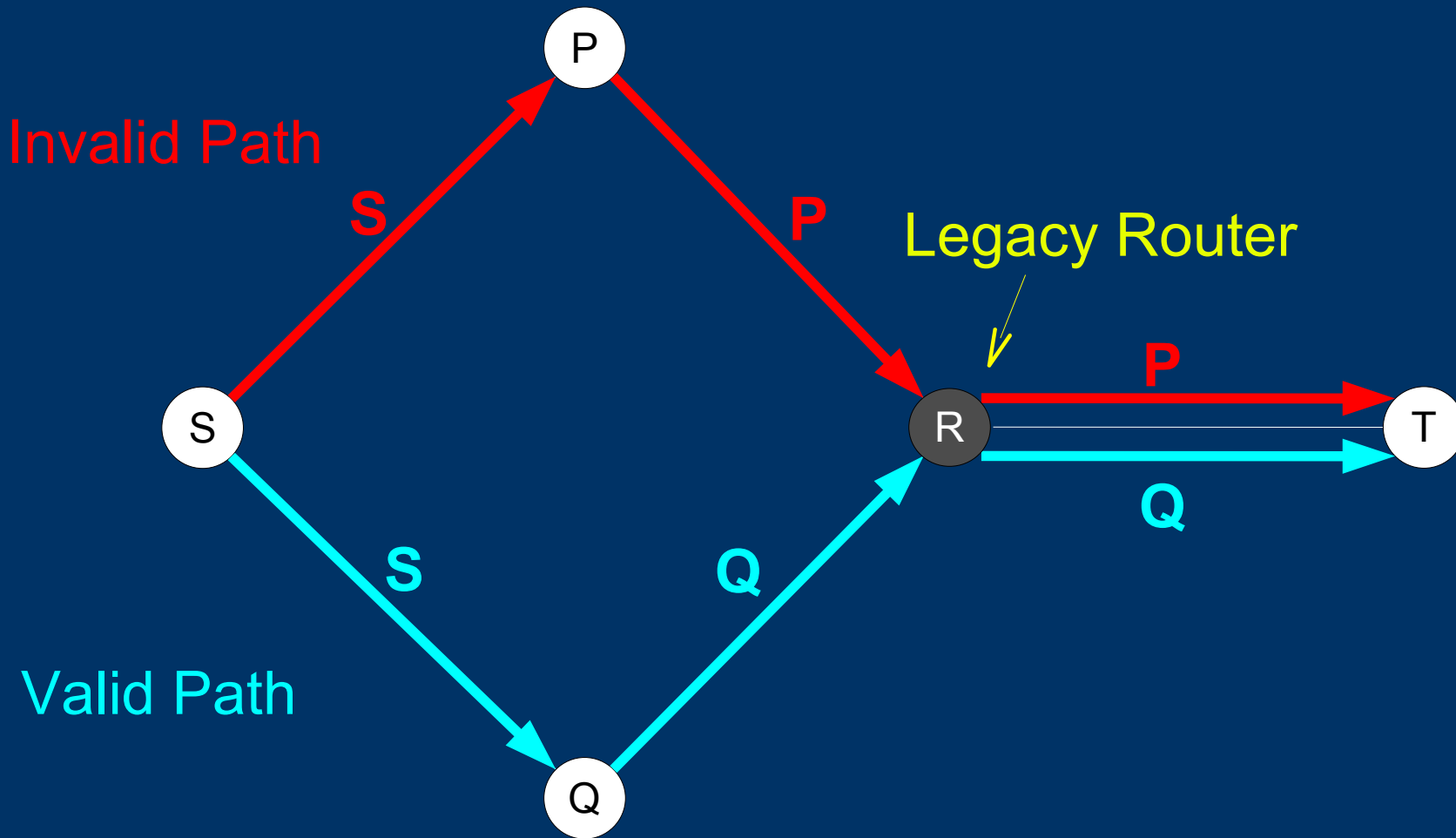
# What's The Problem?

- While routers know which direction a packet should be **sent towards**, they do not know which direction a packet should **come from**
- Lack of this knowledge is the **root cause** of problems seen today:
  - IP spoofing is a common attack
  - Source address based protocols are unreliable
- ID-SAVE attacks this root cause!

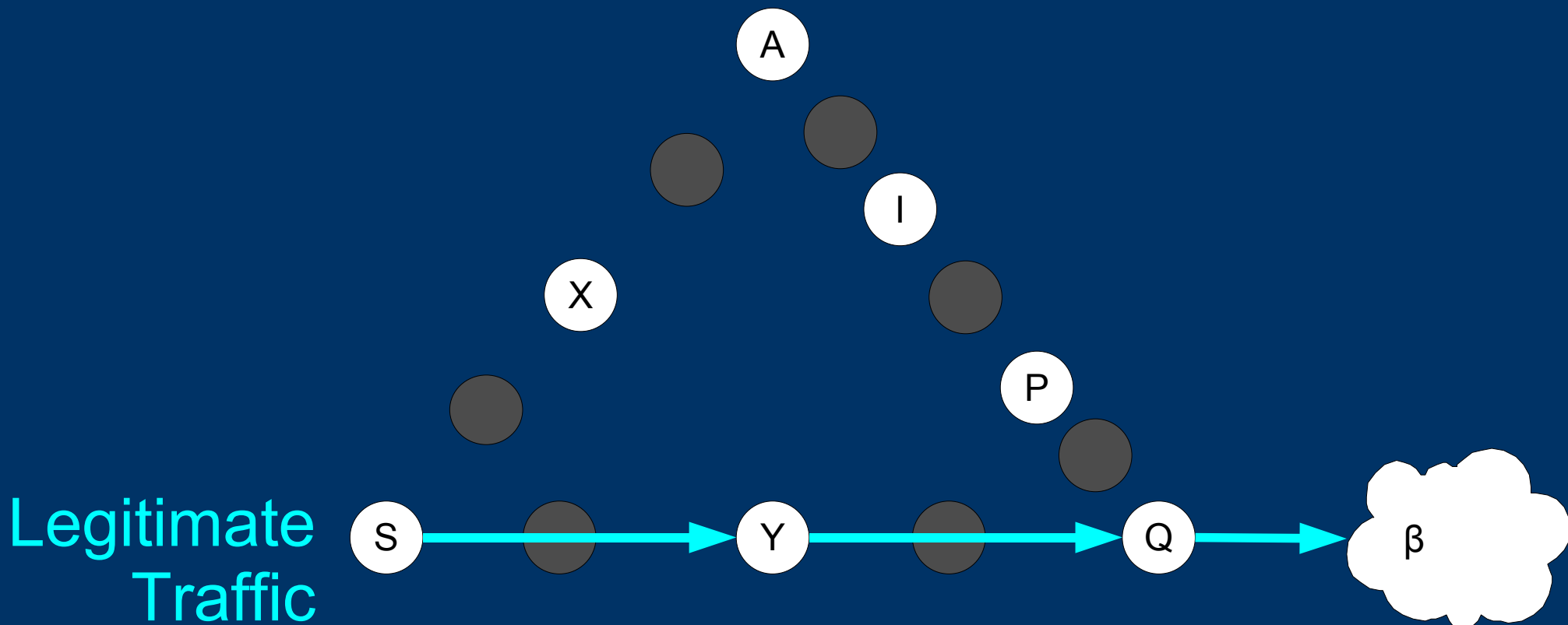
# *ID-SAVE Basics*

- Create and maintain an “Incoming Table” (IT)
  - Analagous to the traditional Forwarding Table
- Don't assume all routers run ID-SAVE
  - Use packet marking and neighbor discovery mechanism

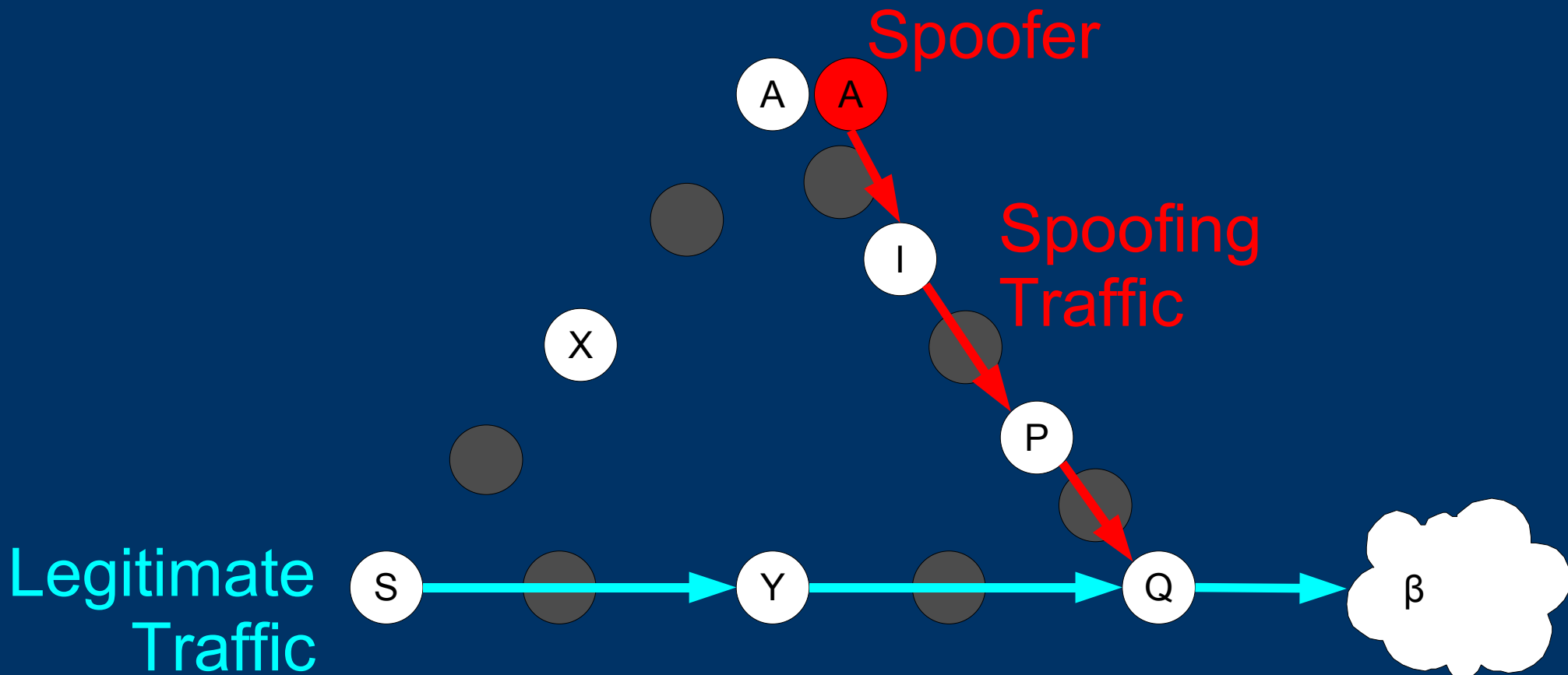
# ID-SAVE Basics



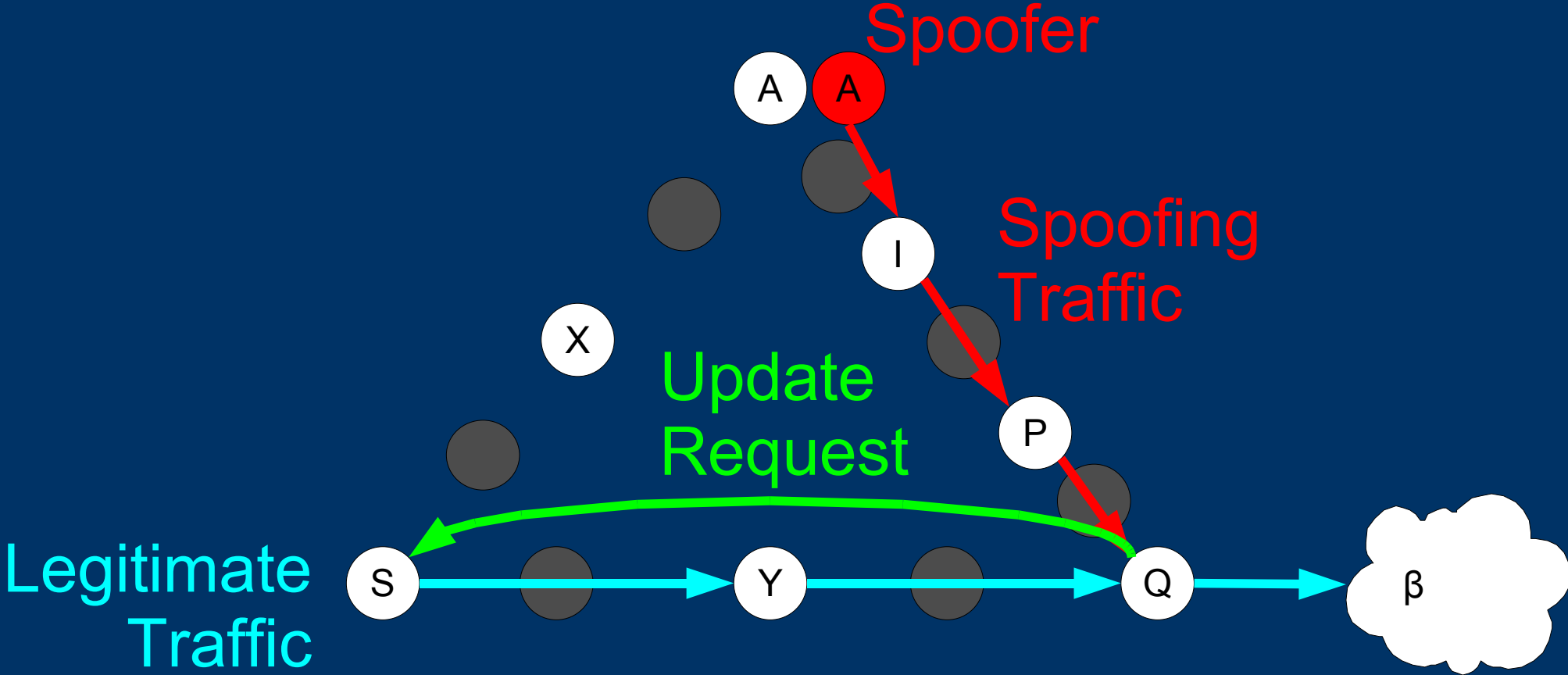
# *ID-SAVE In Action!*



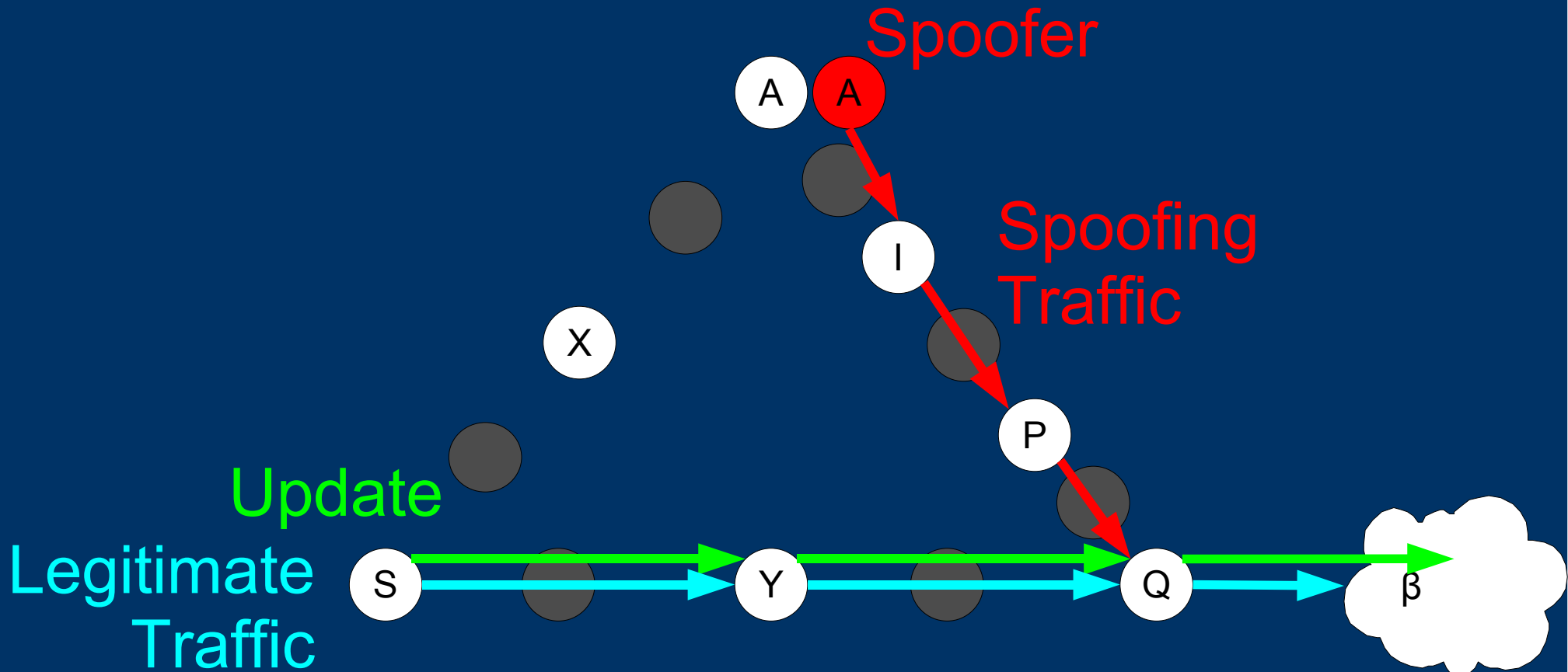
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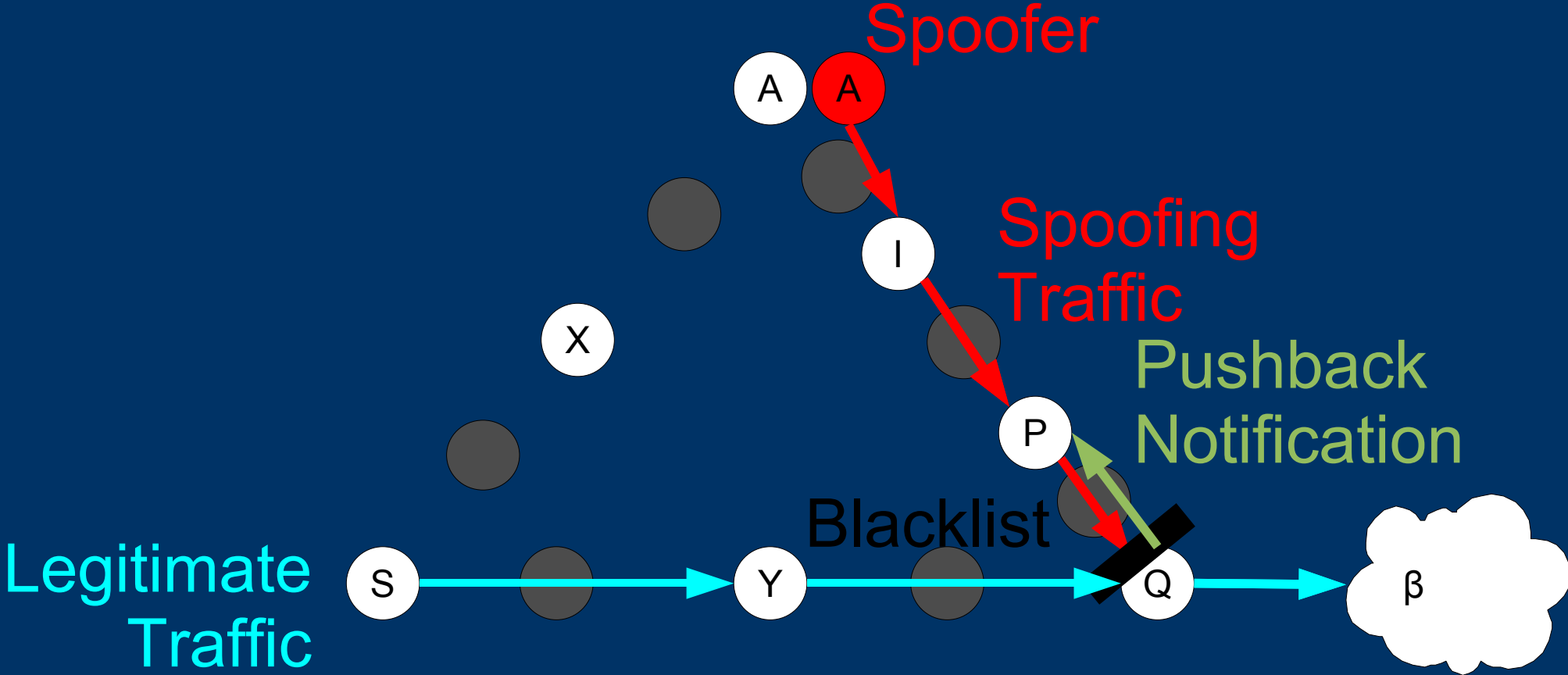
# ID-SAVE In Action!



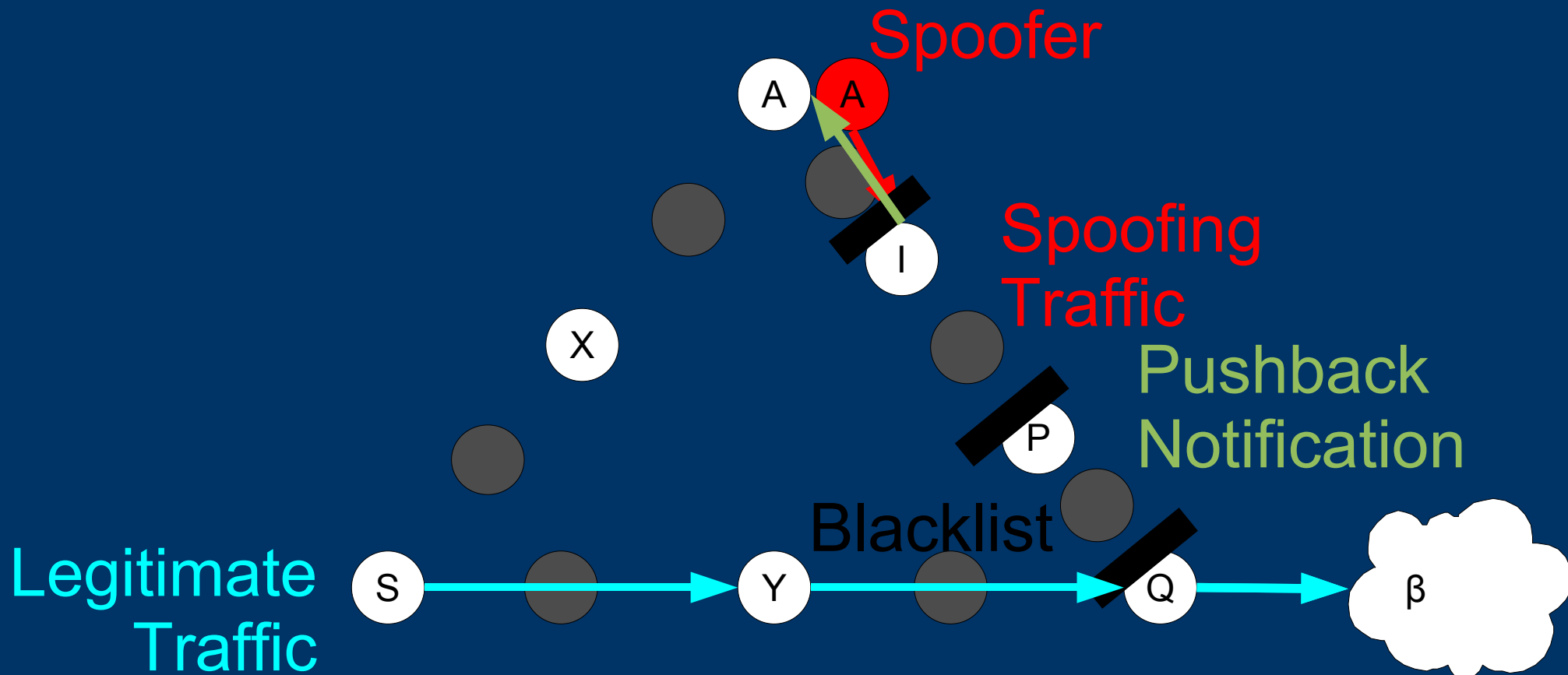
# ID-SAVE In Action!



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# ID-SAVE In Action!



# Questions?

- Answers!
- Contact Toby now or at [tehrenkr@cs.uoregon.edu](mailto:tehrenkr@cs.uoregon.edu)