

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

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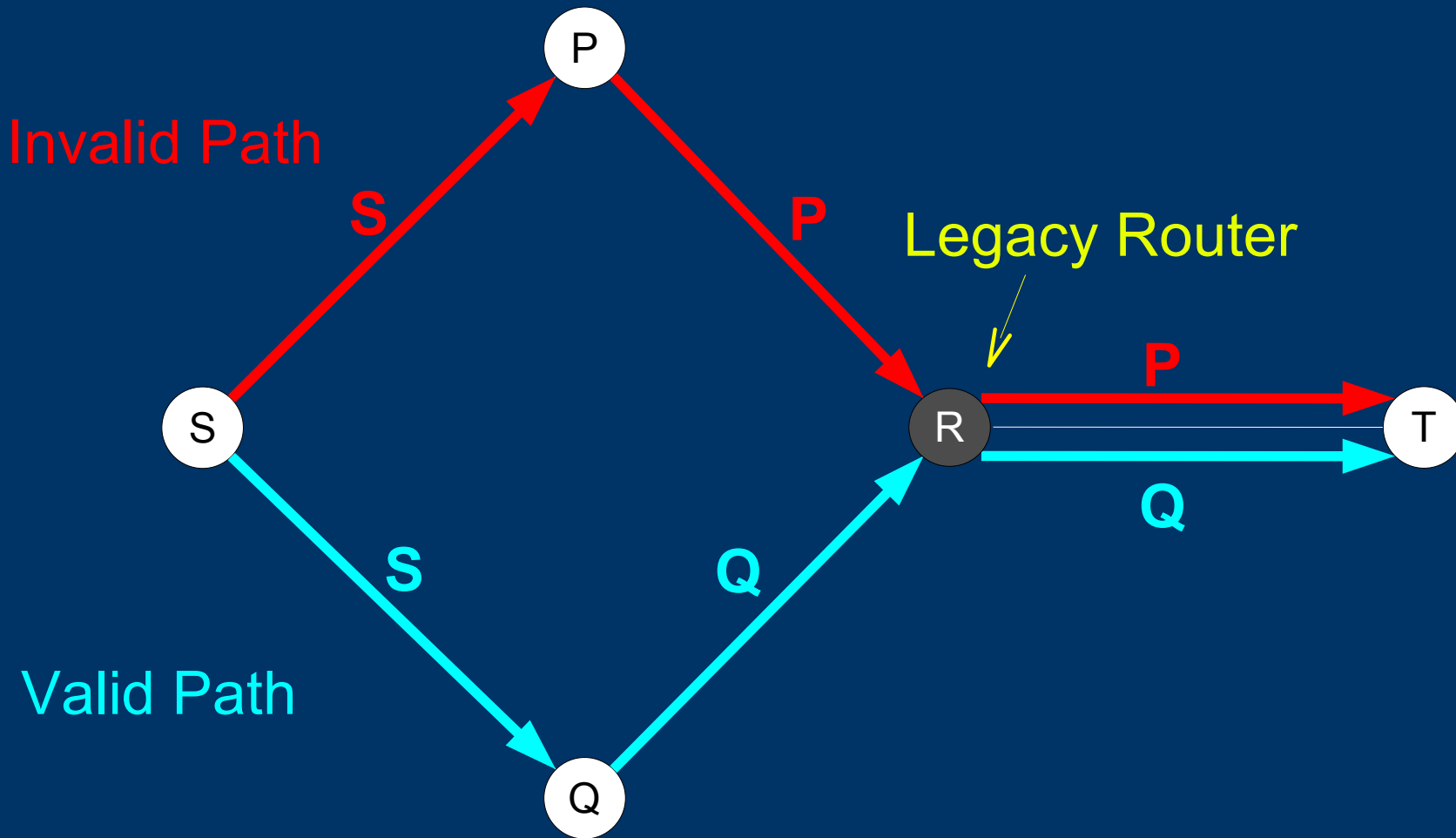
What's The Problem?

- 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!

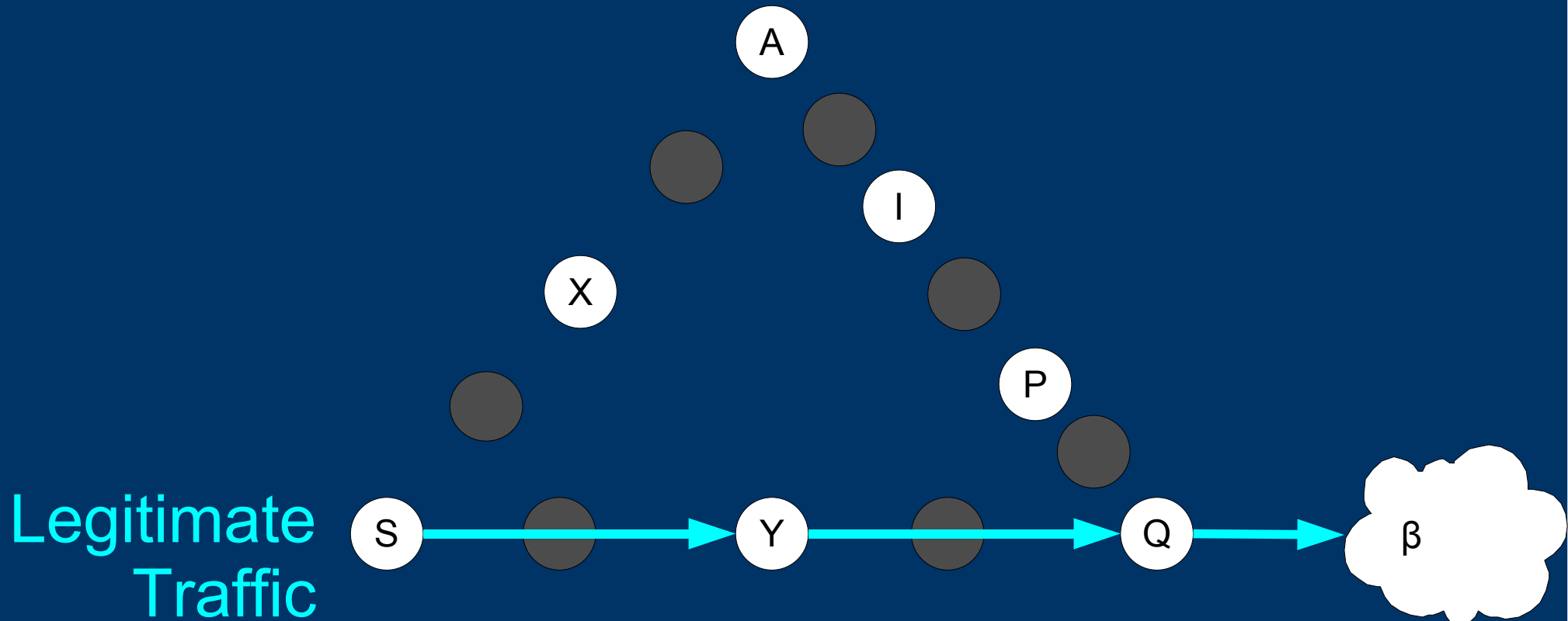
ID-SAVE Basics

- 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

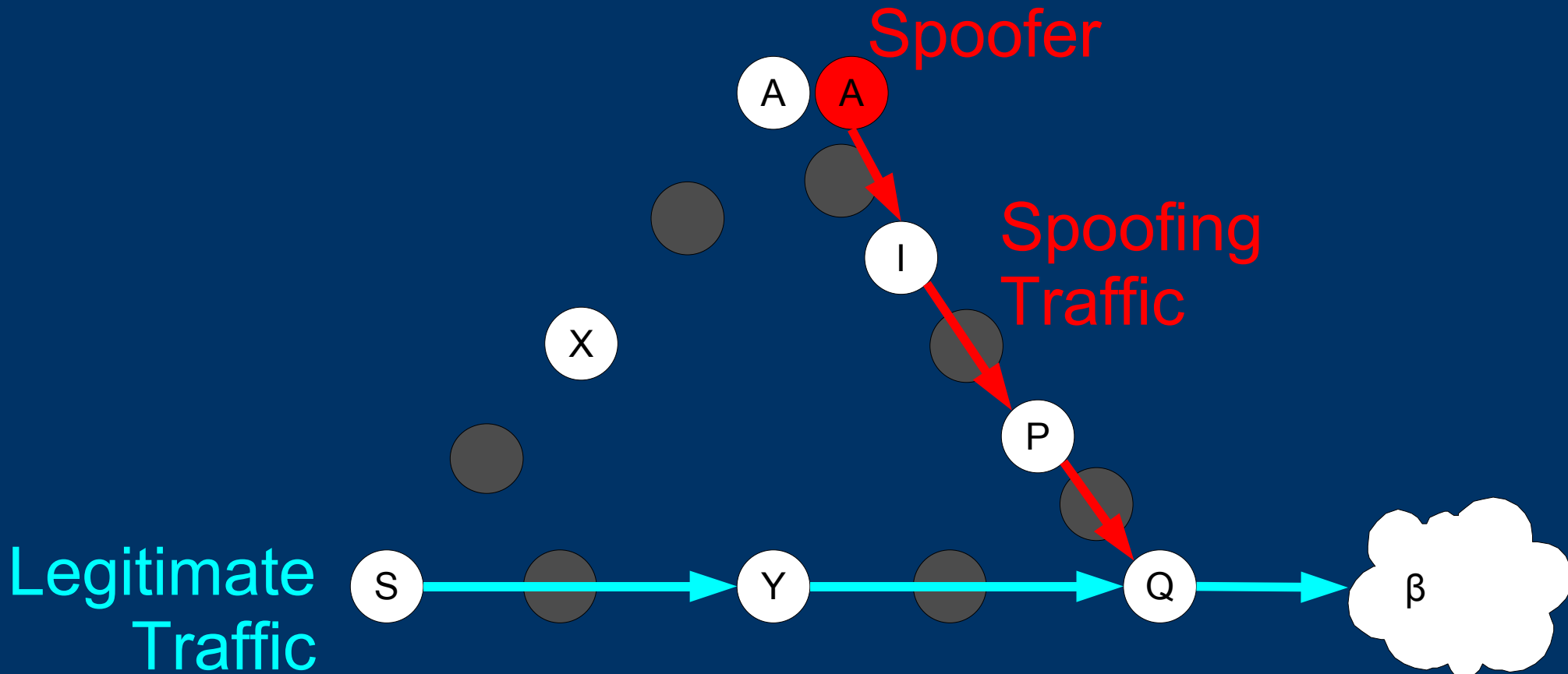
ID-SAVE Basics



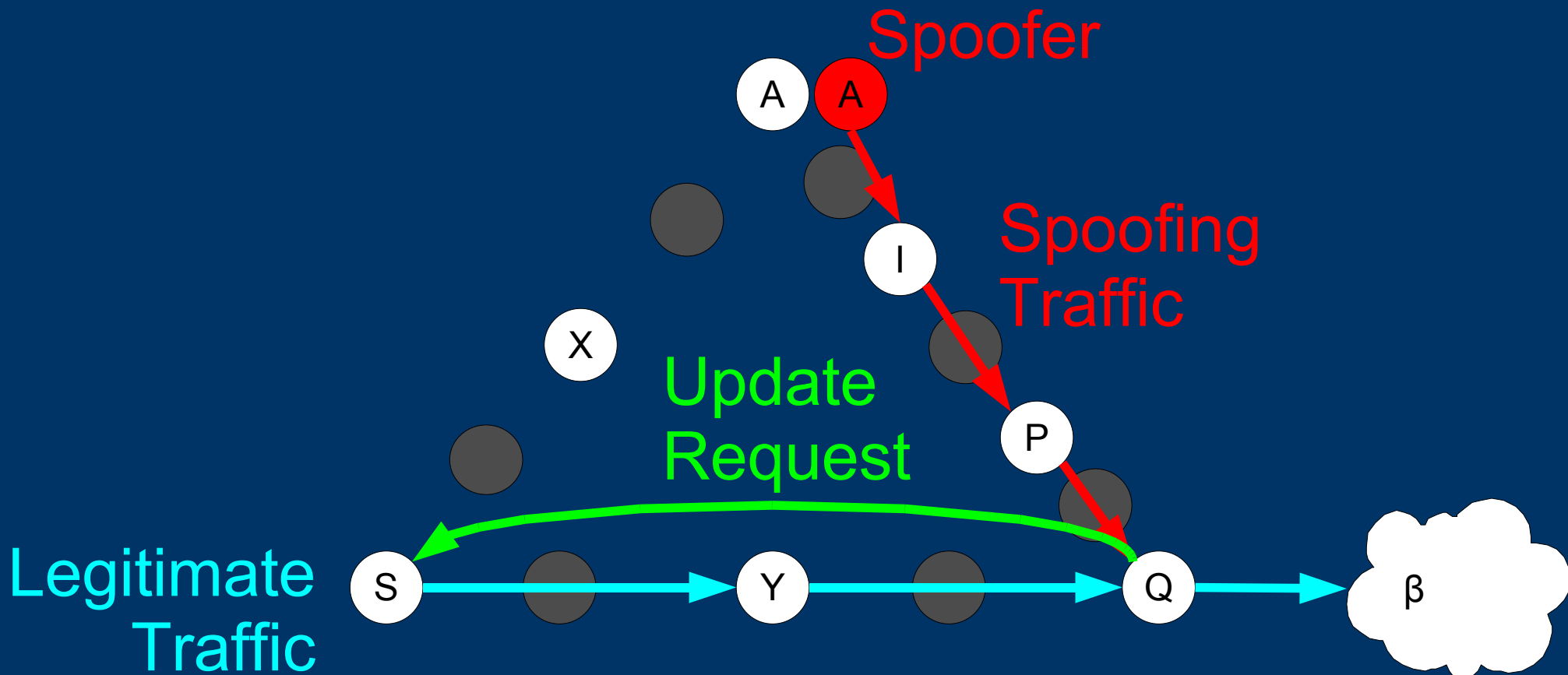
ID-SAVE In Action!



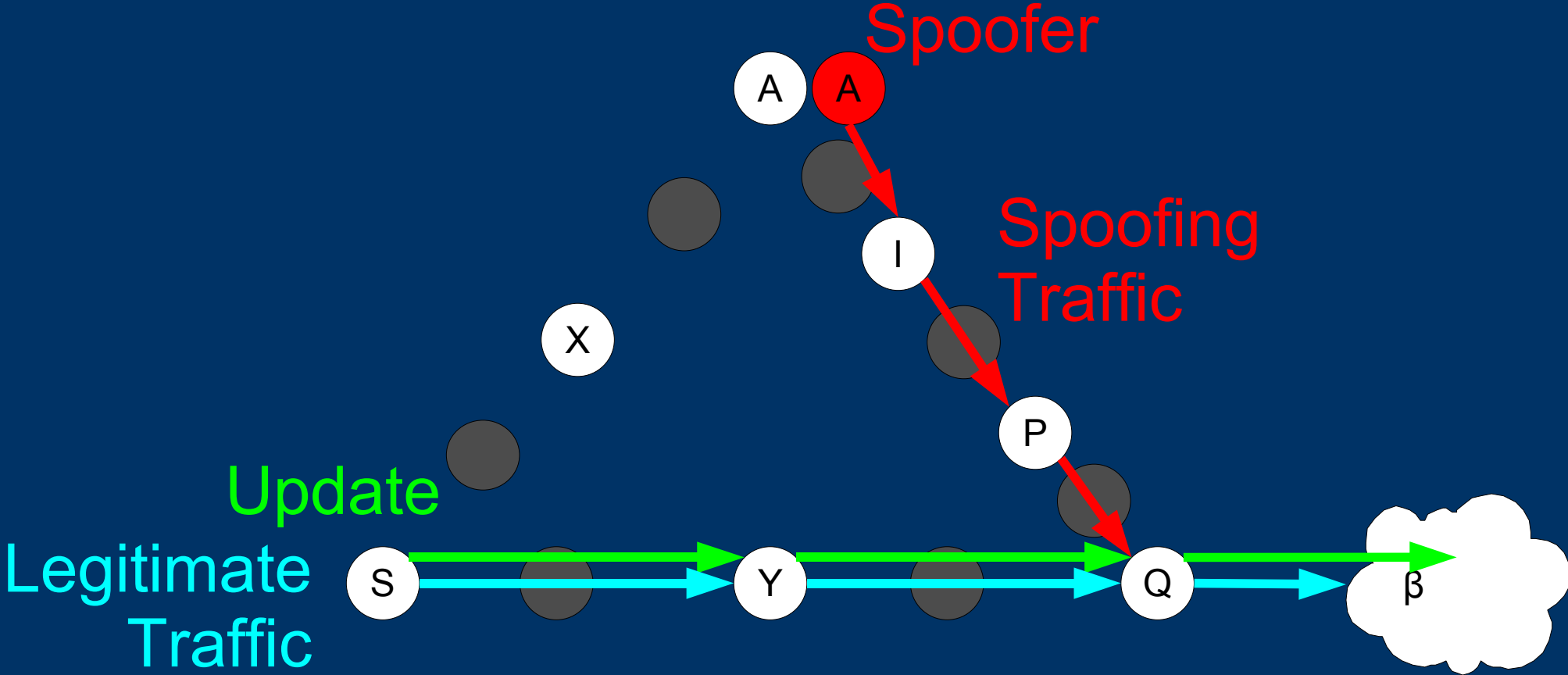
ID-SAVE In Action!



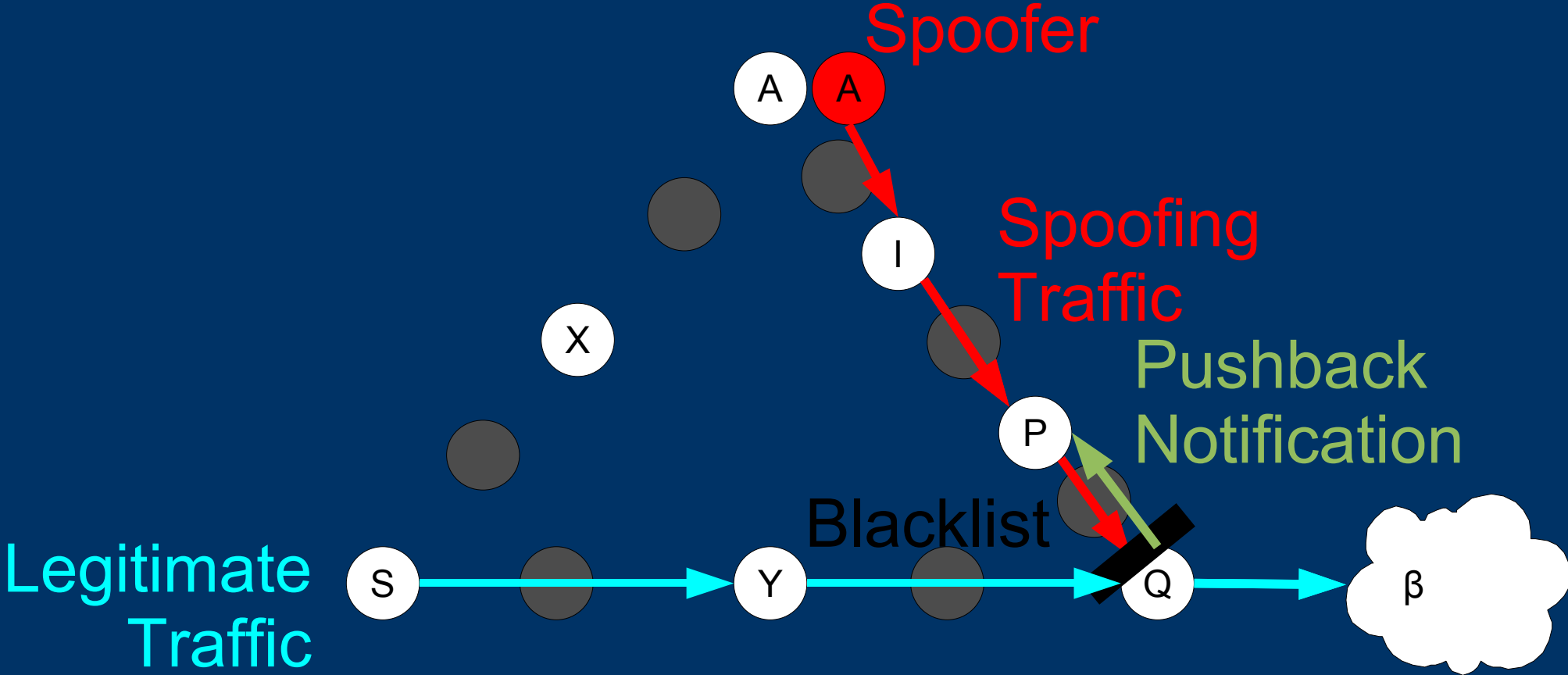
ID-SAVE In Action!



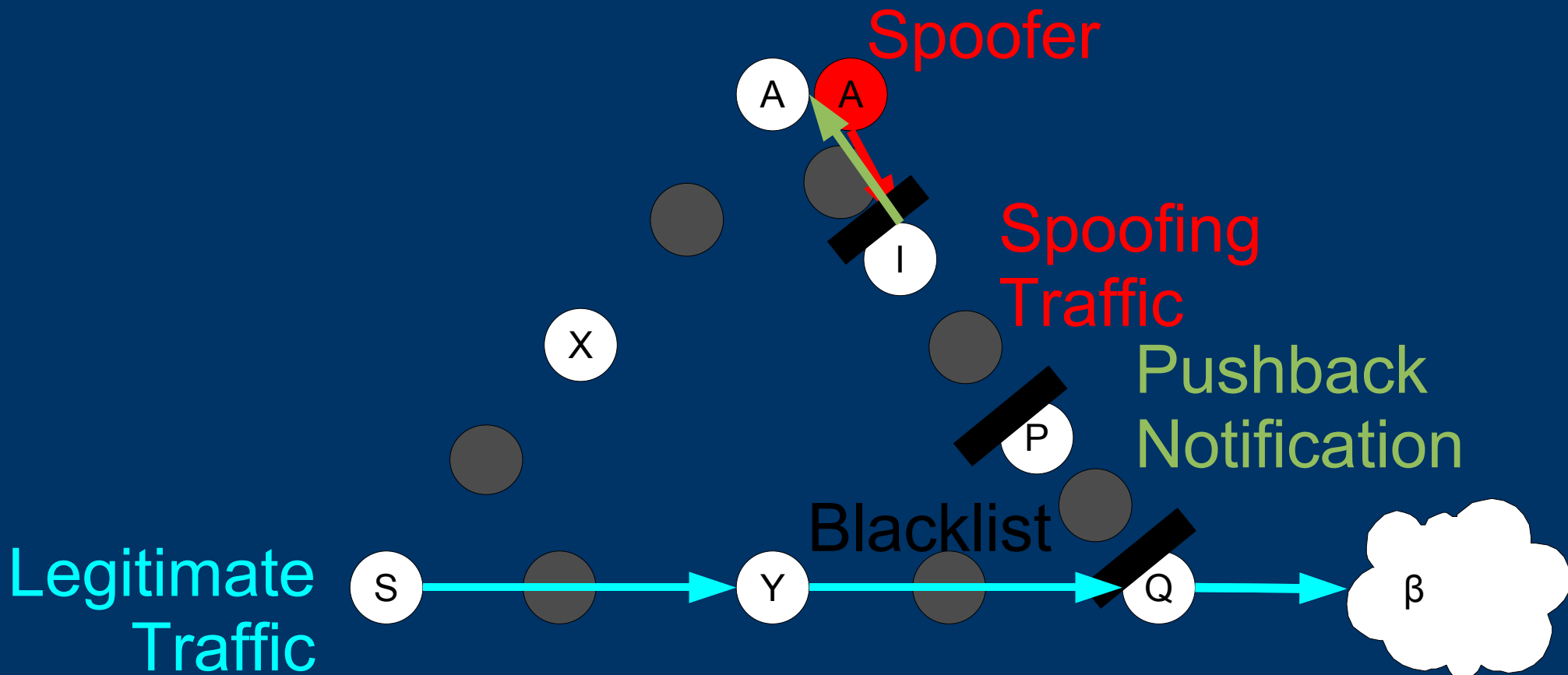
ID-SAVE In Action!



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ID-SAVE In Action!



Questions?

- Answers!
- Contact Toby now or at tehrenkr@cs.uoregon.edu