

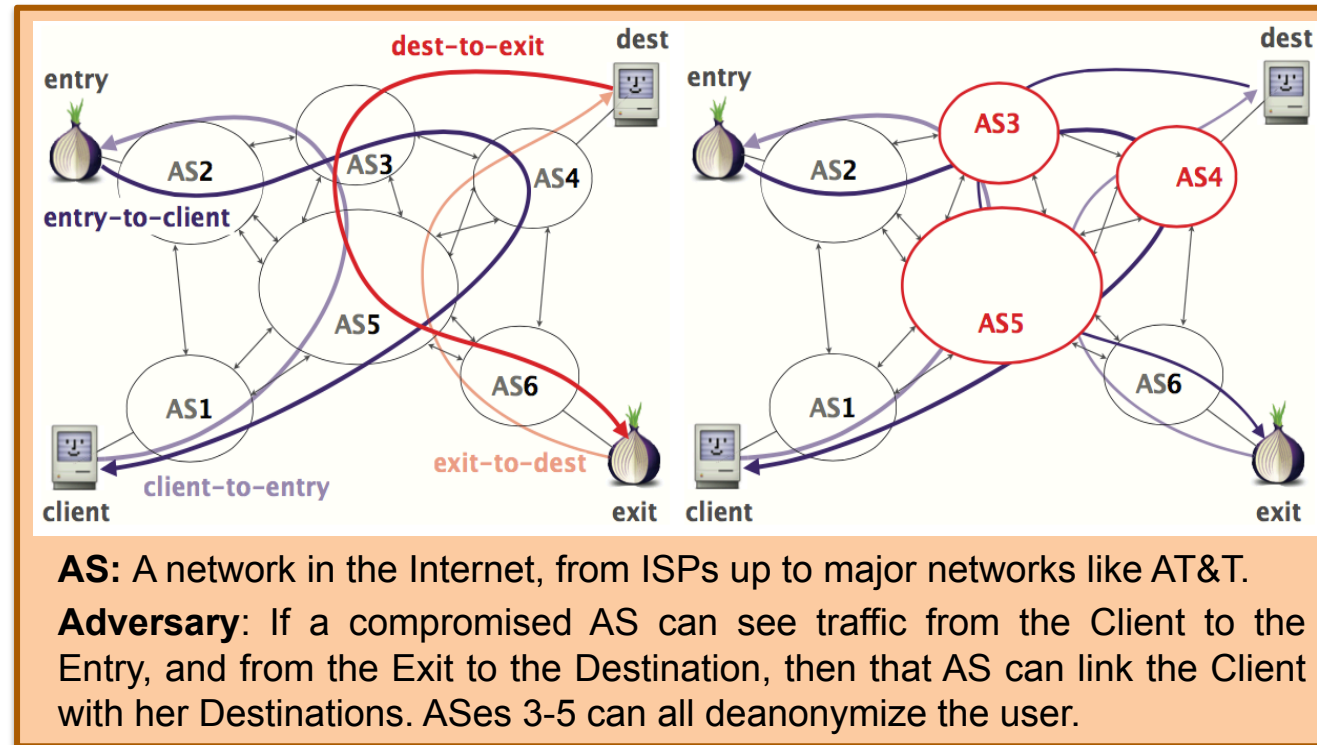
# Anonymity Against AS-level Adversaries

## The Challenge:

- Anonymity systems like Tor can be attacked by adversaries who control an AS.
- This AS-level adversary may attack Internet routing to see more traffic.

## Our Studies:

- **RAPTOR**: a set of routing-based attacks called that show how much damage can be done (USENIX Sec.'15).
- **DeNASA**: IDs which ASes pose the most risk to users and avoids them. (PETS '16)
- New defenses against RAPTOR attacks are coming.
- Exploring cover traffic (ESORICS '16)



## Scientific Impact:

- Understanding a new threat to anonymity.
- Exploring new approaches to defend against these threats.

## Broader Impact:

- **Stronger privacy:** Activists, whistleblowers, journalists, businesses, military, law enforcement, regular users.
- Outreach: Summer Camps and 1-day events
- Education: New materials, Videos forthcoming

