

IPsec MIF Problem Statement

Daniel Migault, Carl Williams

draft-mglt-mif-security-requirements-03.txt - IETF85

Goal of the Document

The document describes IPsec in a Multiple Interface environment:

- IPsec Architecture for Multiple Interfaces
- What IKEv2 already does or misses for MIF:
 - ▶ Initial IPsec setup
 - ▶ Mobility
 - ▶ Multihoming
 - ▶ Addition / Removal of an Interface

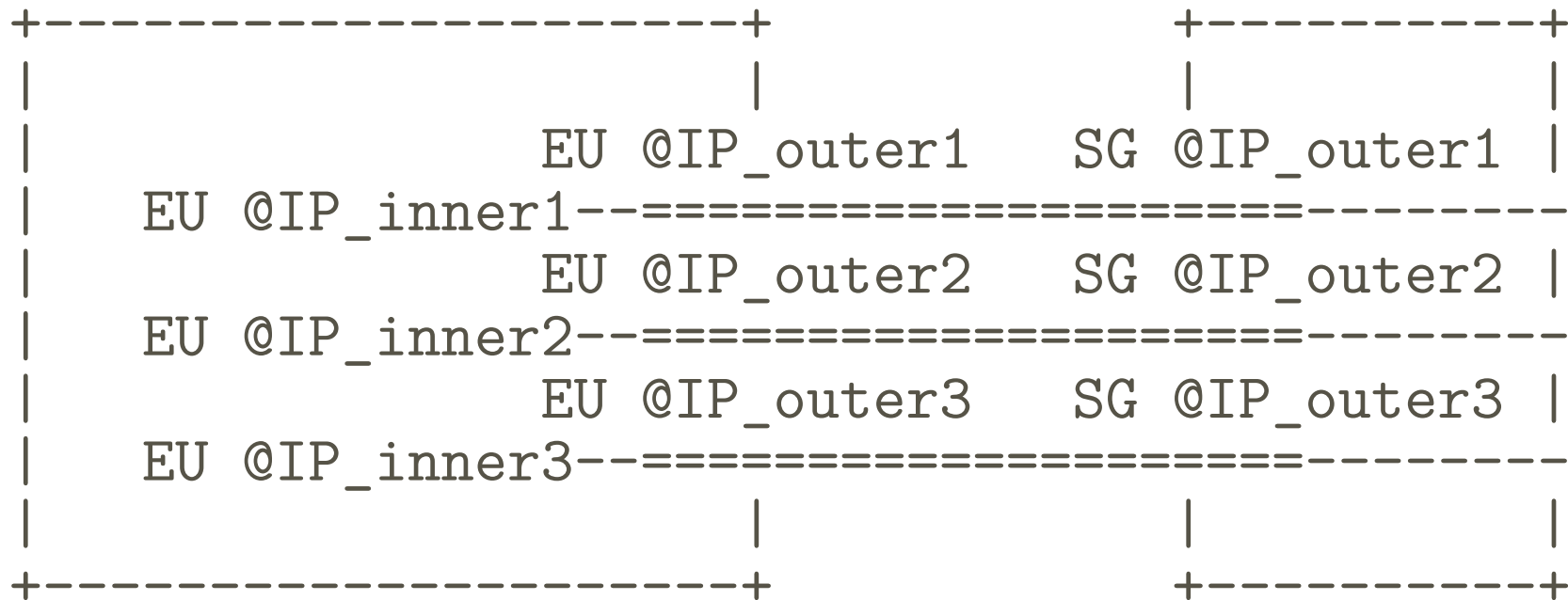
Currently interaction between IPsec and Multiple Interfaces is considered for

- VPNs
- Offload of services from RAN to WLAN
- Cloud

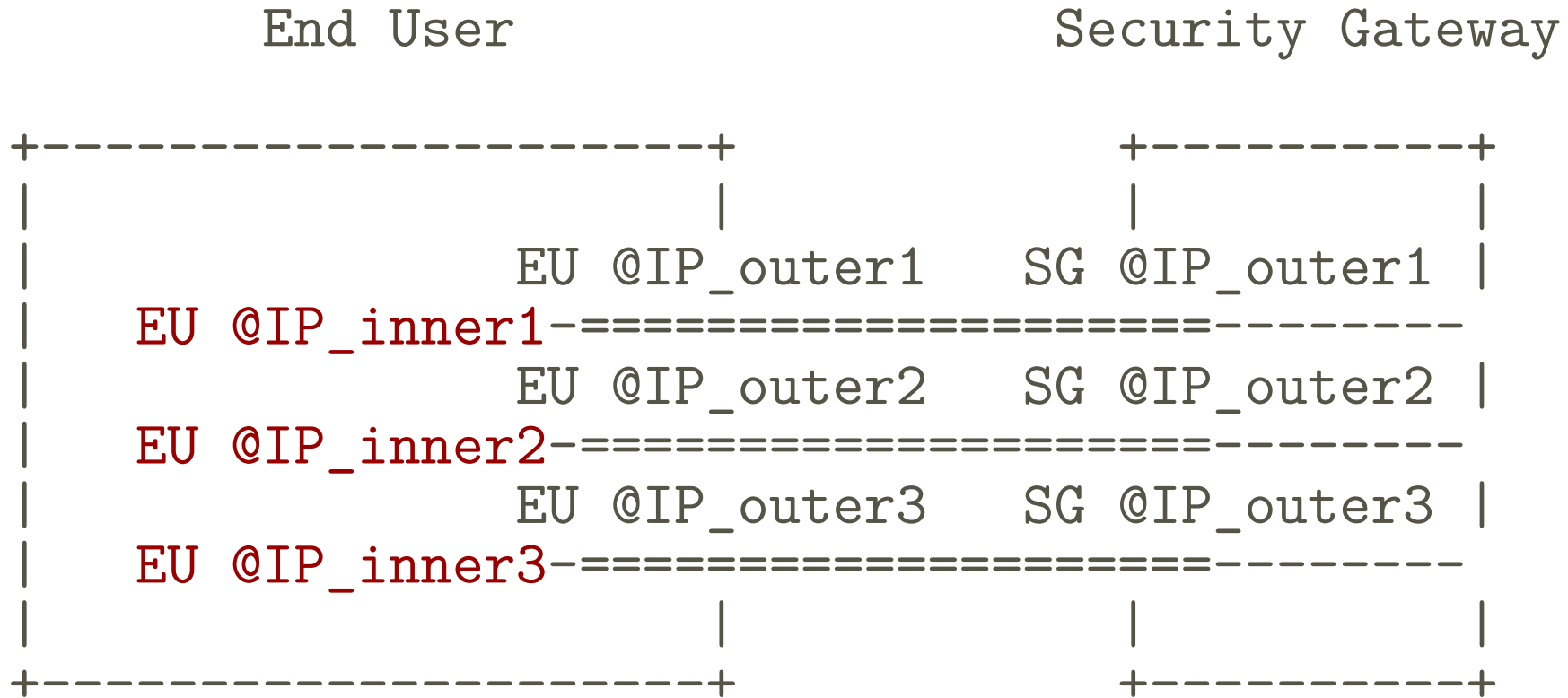
VPN Use Case

End User

Security Gateway



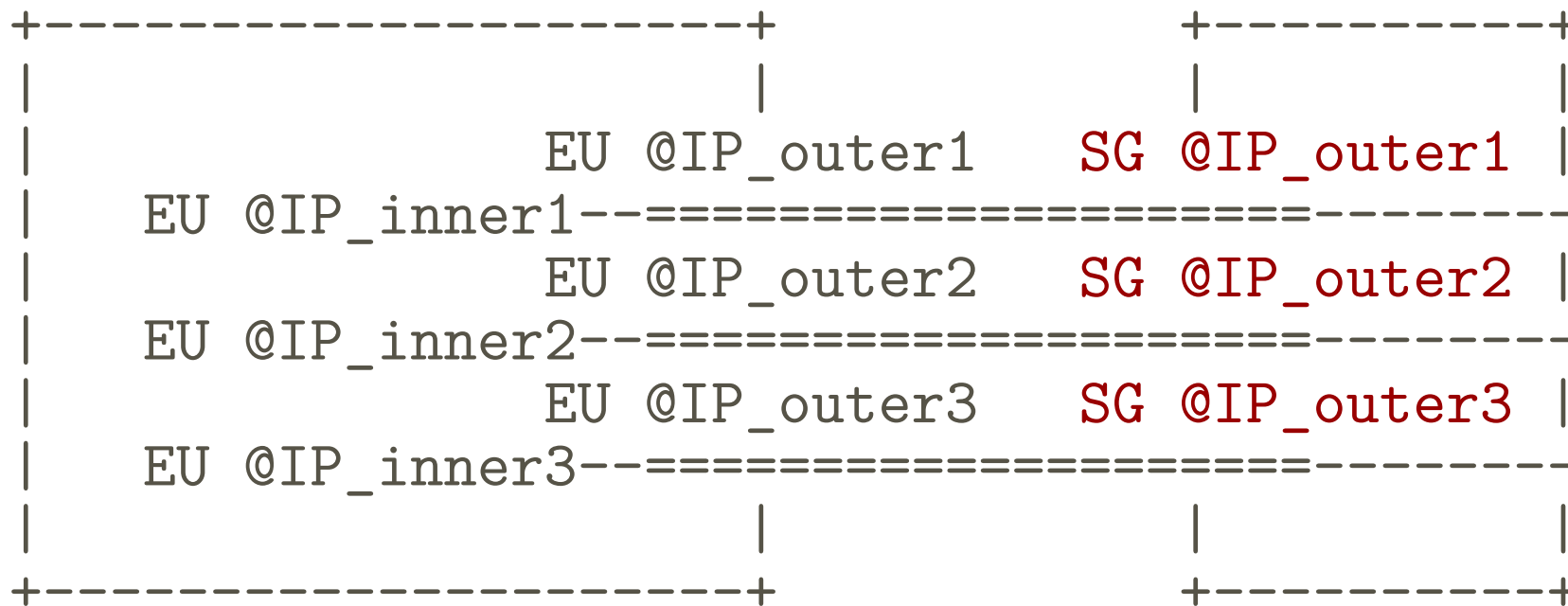
Requesting inner IP addresses



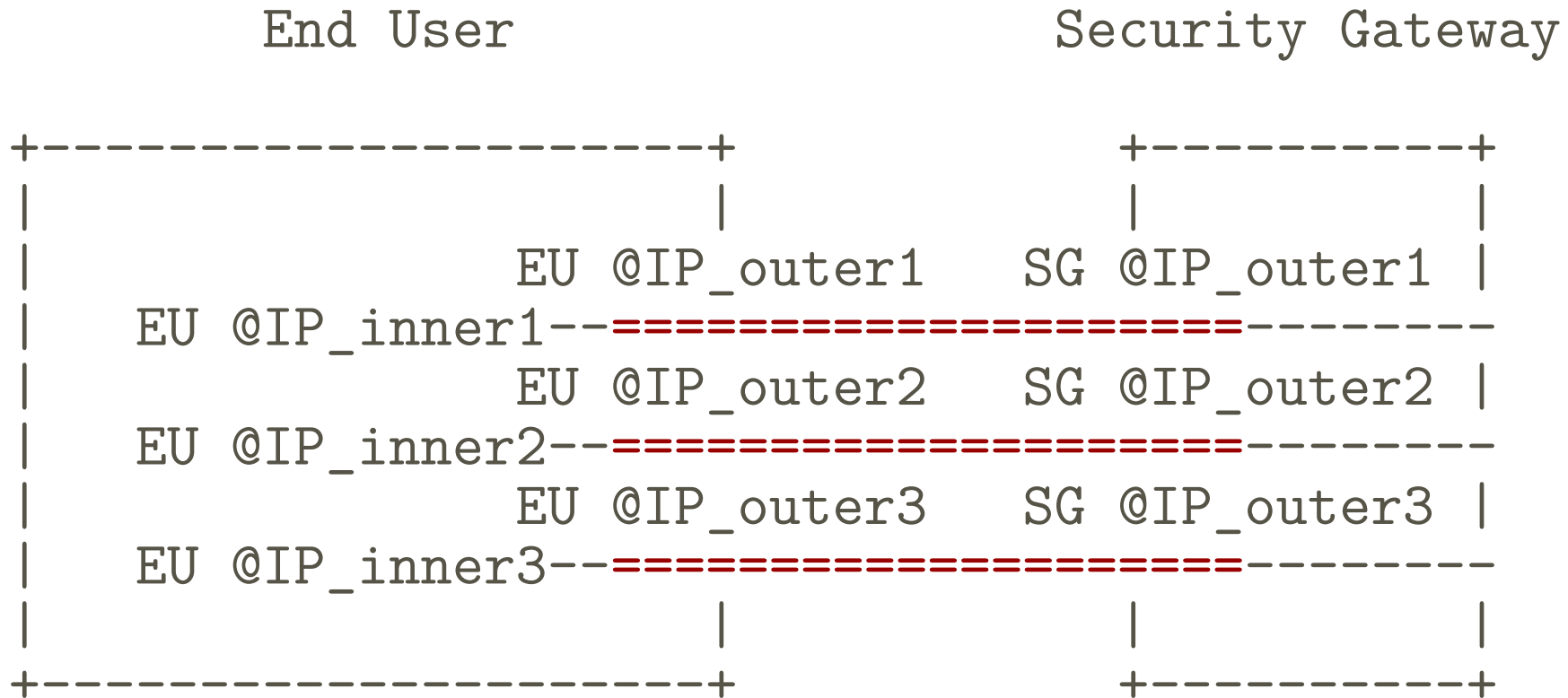
Announcing the Multiple Interfaces

End User

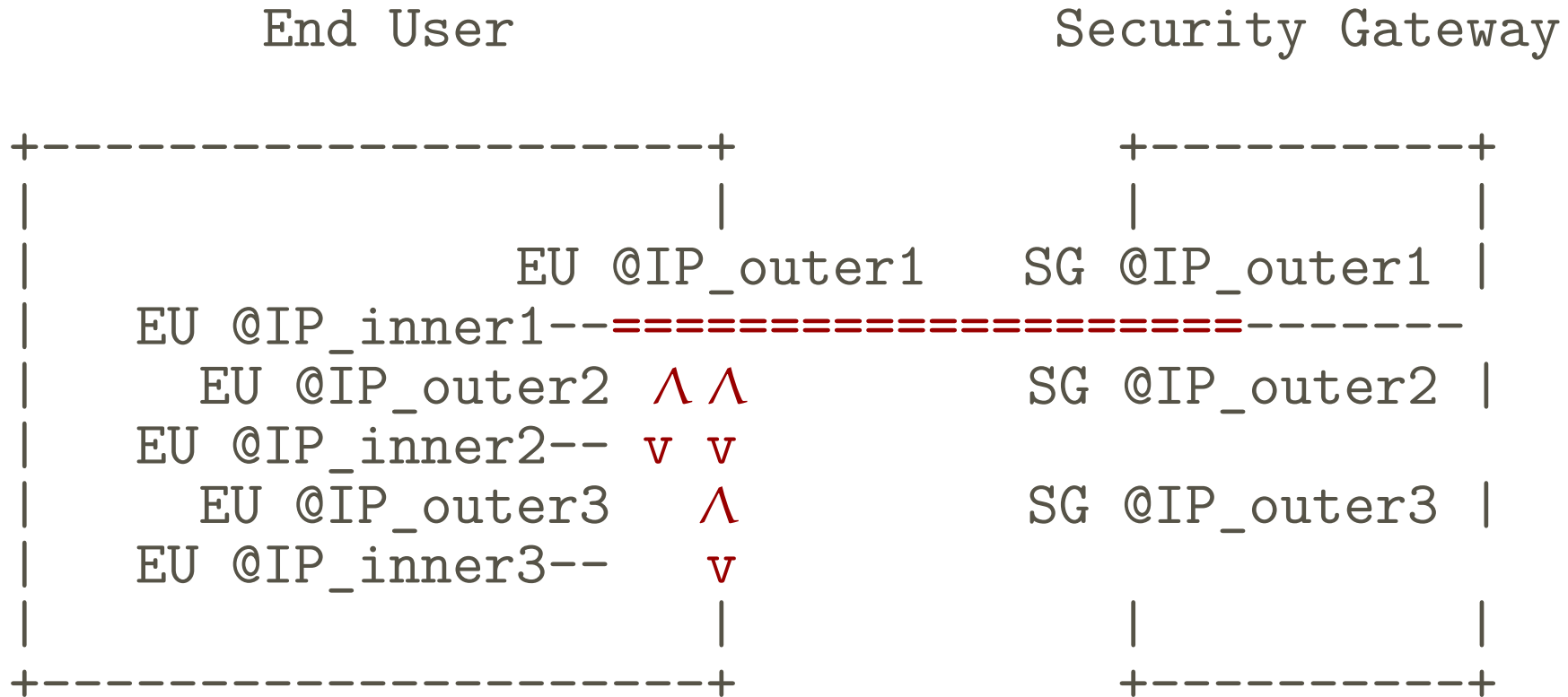
Security Gateway



Setting Tunnel on MIF



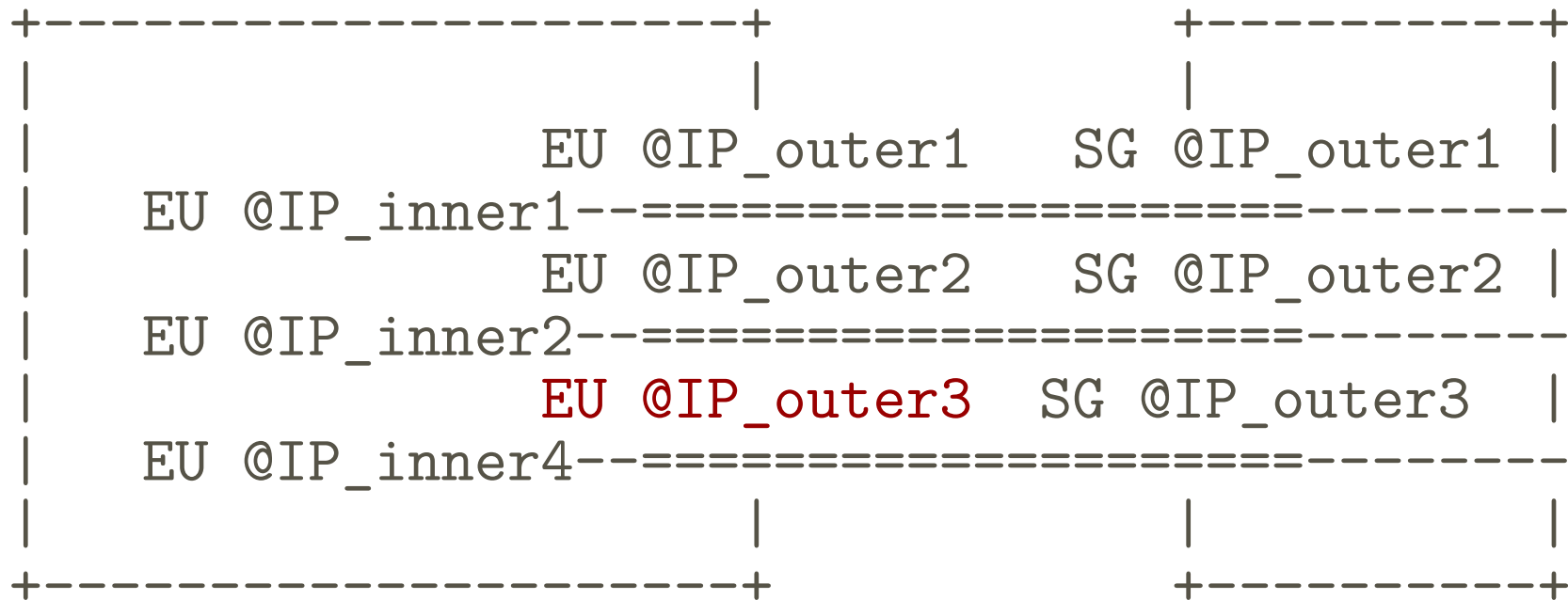
Current IKEv2 with Multiple Interfaces



Mobility

End User

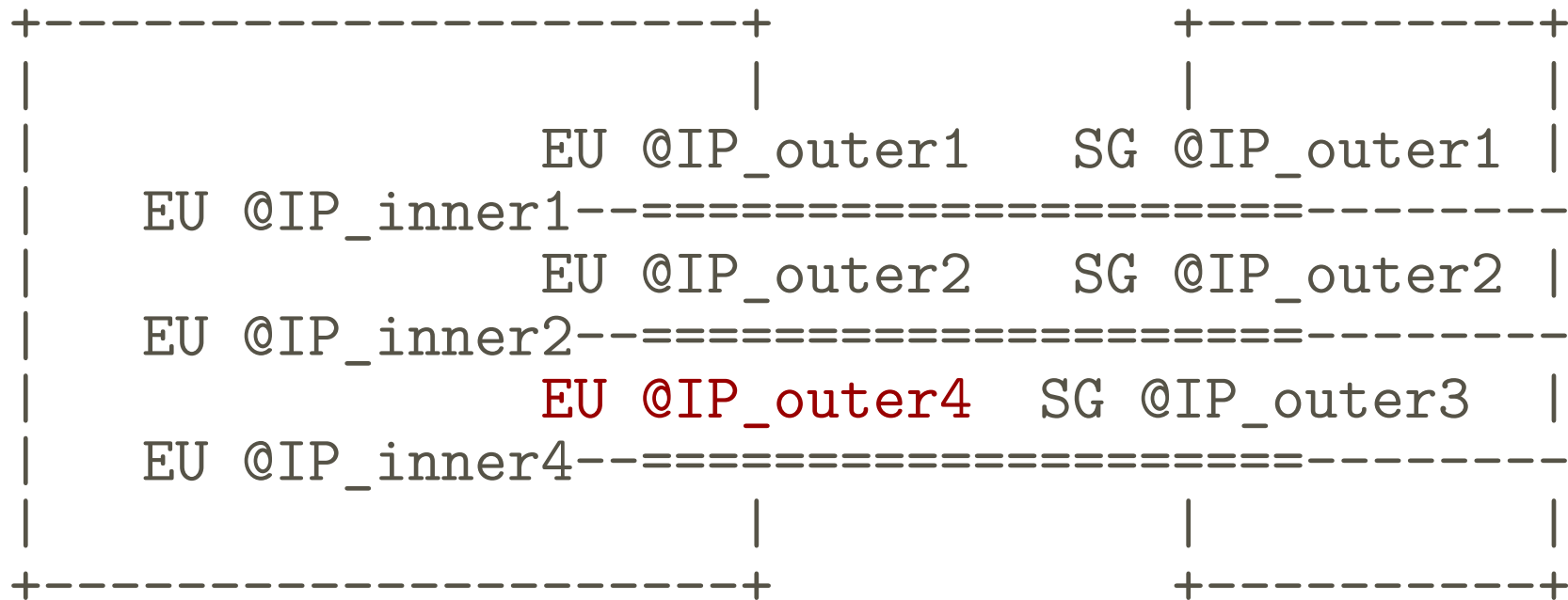
Security Gateway



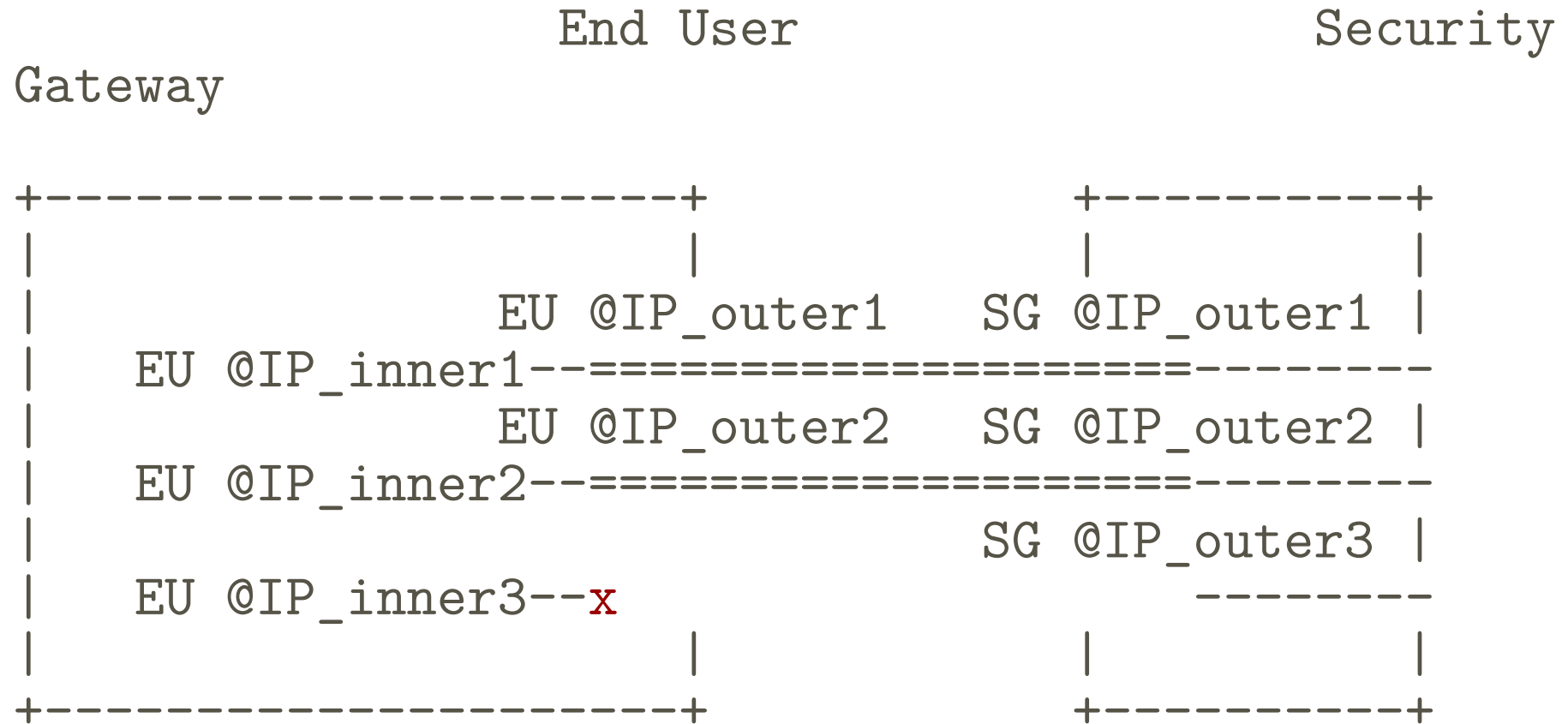
Mobility

End User

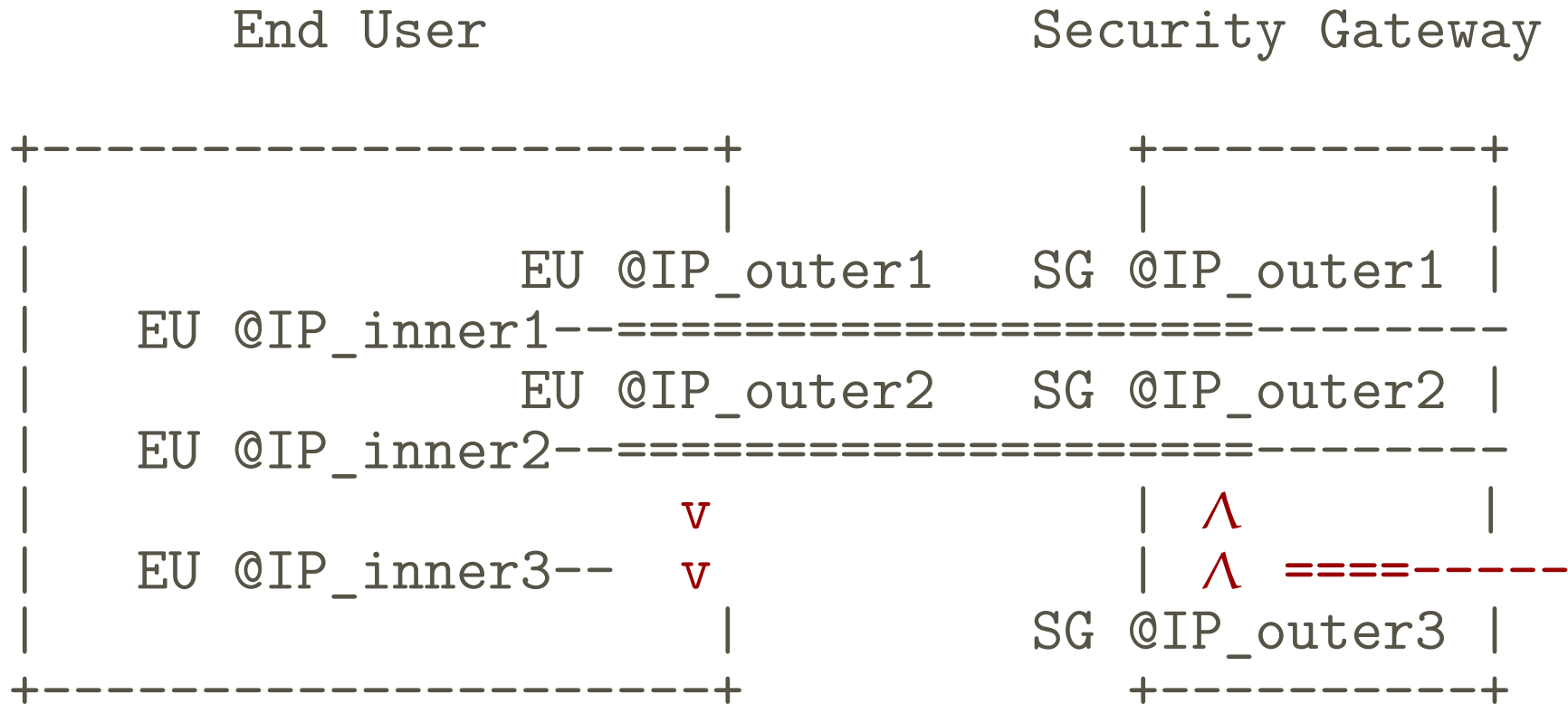
Security Gateway



Multihoming



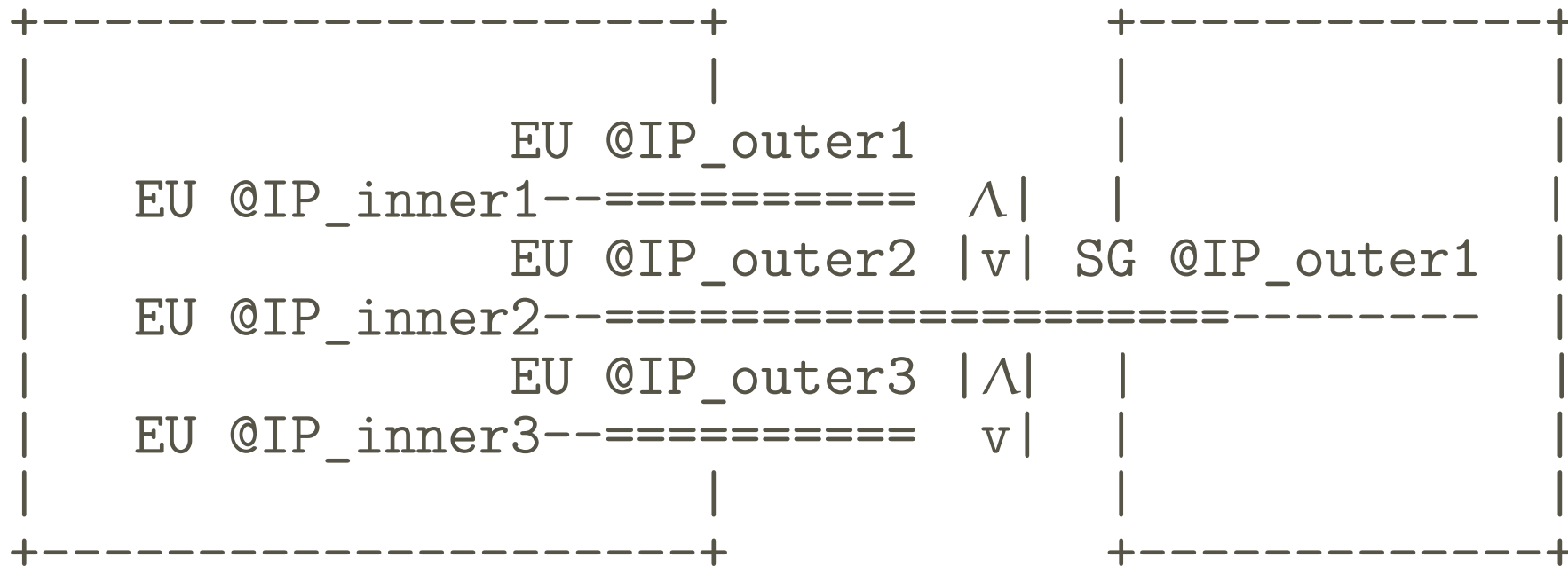
Multihoming



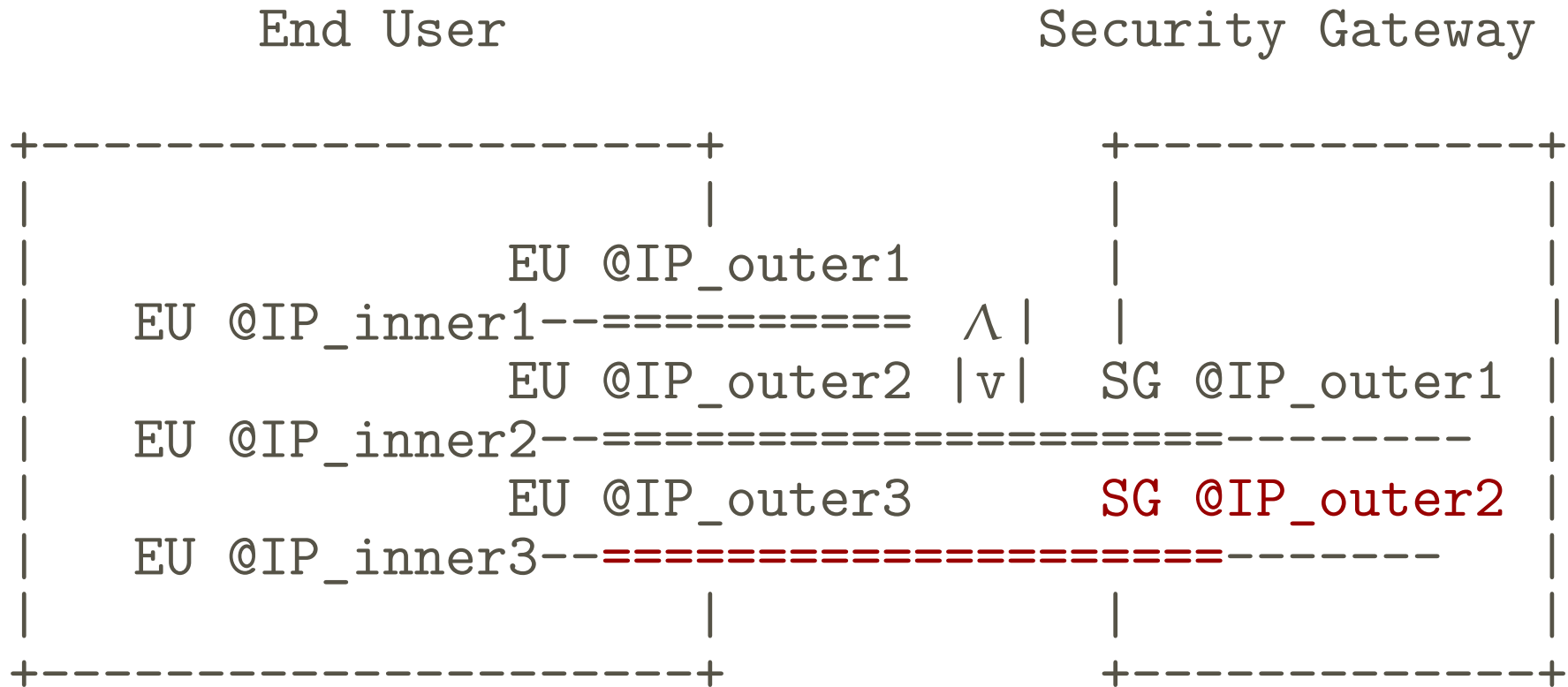
Adding an Interface (Security Gateway)

End User

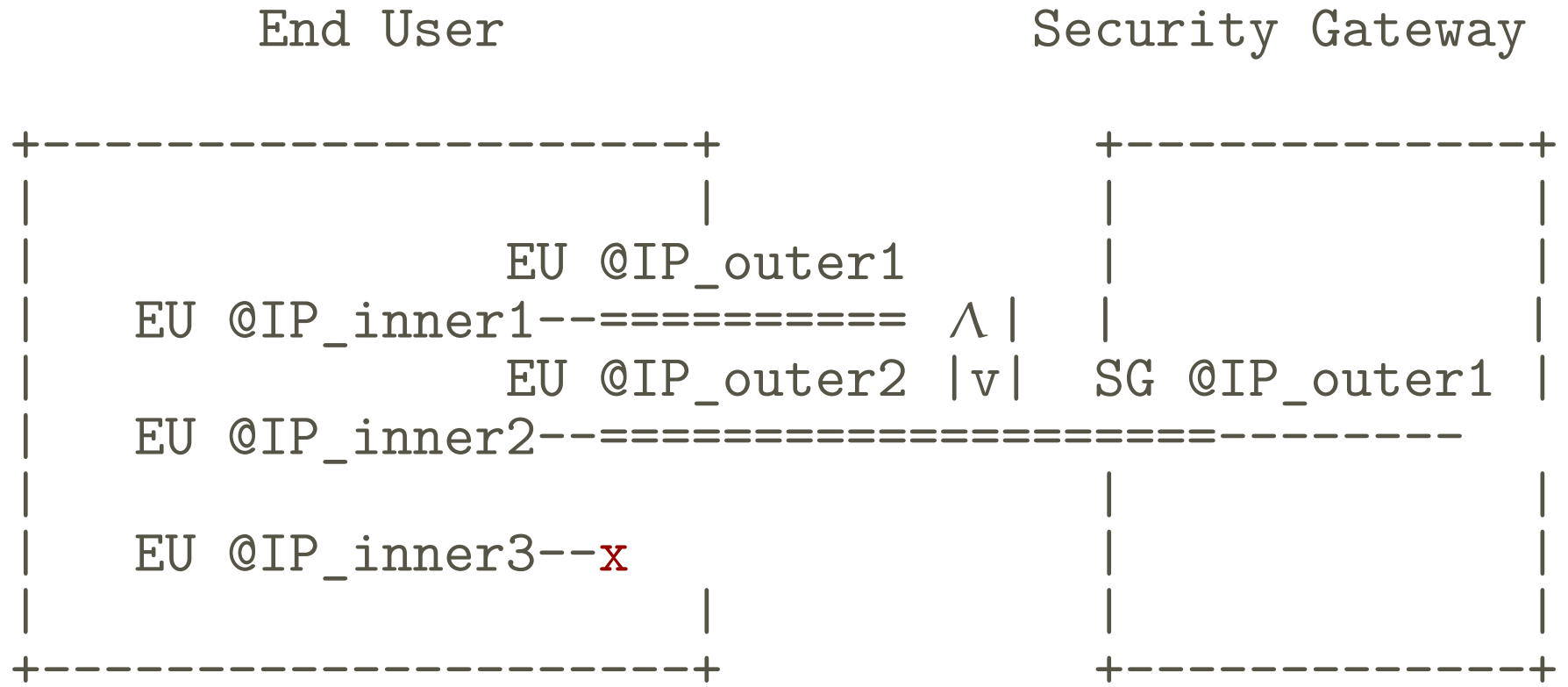
Security Gateway



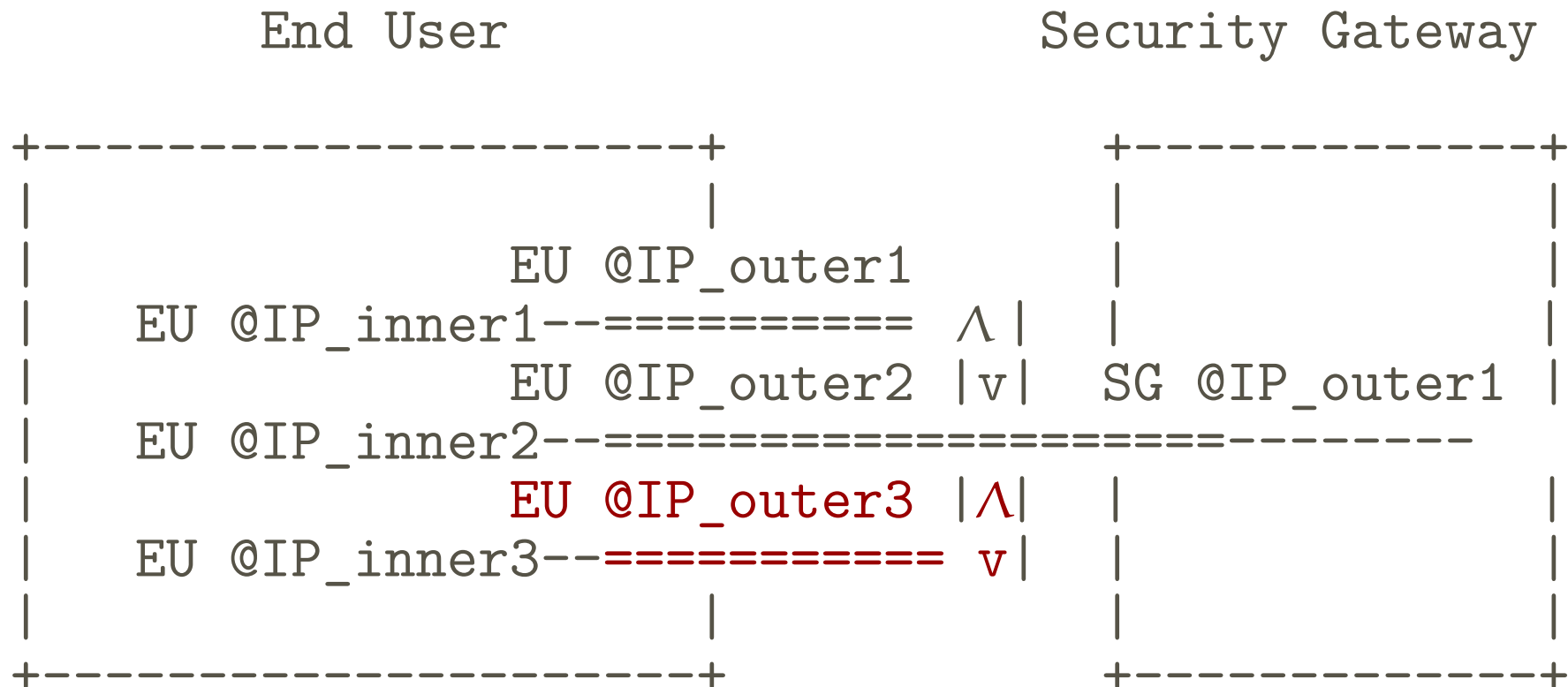
Adding an Interface (Security Gateway)



Adding an Interface (End User)



Adding an Interface (End User)



End-to-End Use Case

