

# Preventing host discovery and port-scanning

**Host discovery** uses ICMP ping echo message

- ➡ ICMP can be disabled or reserved to hosts on the same network

**Port Scanning** uses TCP-syn messages

- ➡ TCP connections can be rejected if a source attempts to initiate multiple connections on multiple ports simultaneously
- ➡ **Packet filtering** can prevent these two scanning techniques

# Limitation of a host-by-host packet filtering solution

How to enable packet filtering on every host on the network?

1. Each host needs to have **packet filtering capability** across different hardware, OS and versions
2. The admin needs to have **administrative privilege on every host** to push the packet filtering policy

➡ Impossible in practice