

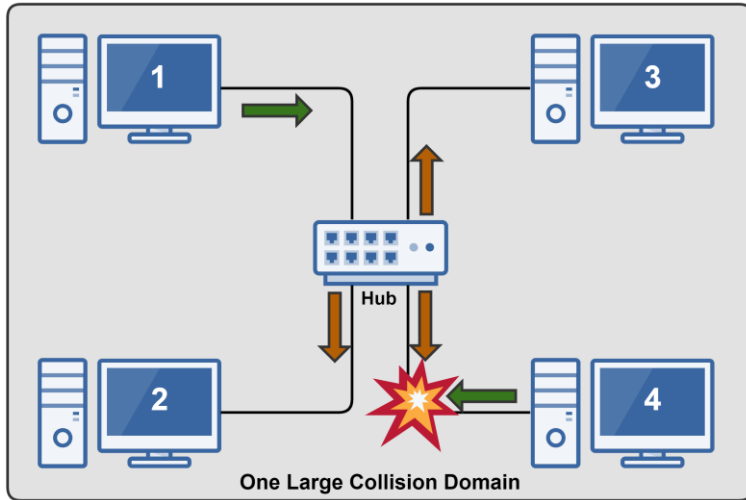
# *Understanding Collision Domains*

- A collision domain is simply a network segment in which data collisions can occur.
- Collisions can occur on ethernet networks using:
  - Hubs
  - Switches in Half-Duplex Mode
- We utilize CSMA/CD to help minimize collisions
  - Carrier Sense Multiple Access with Collision Detection

# Understanding Collision Domains

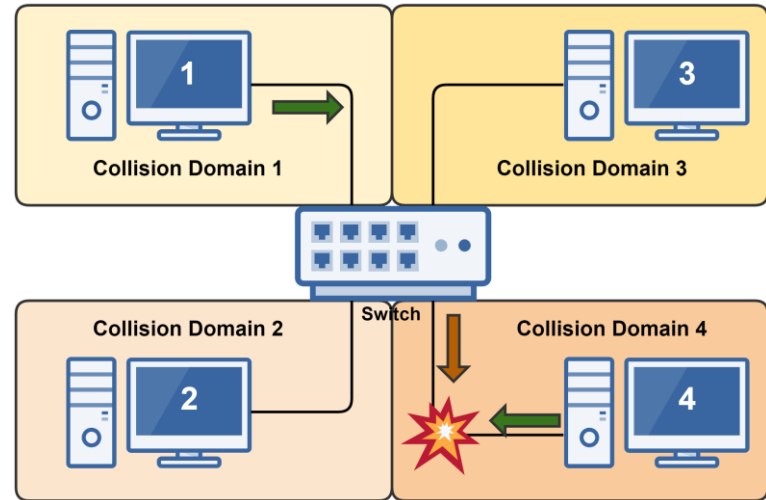
## Hubs

- Create one large collision domain.



## Switches (Half-Duplex)

- Break collision domains up into smaller ones.



# Full Duplex Switches Eliminate Collisions

- Collisions don't occur on switches utilizing full duplex mode:
  - There's a dedicated channel for concurrent sending and receiving data.

