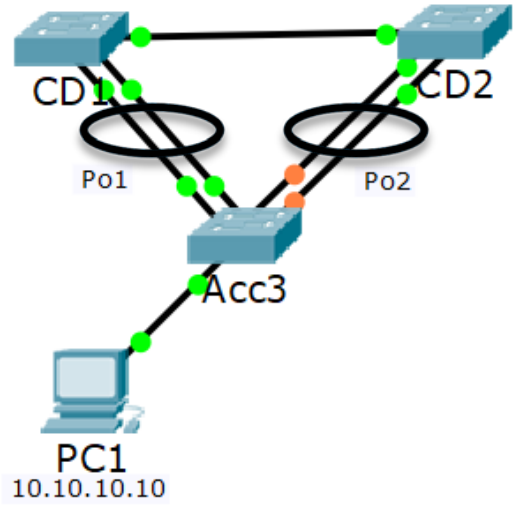
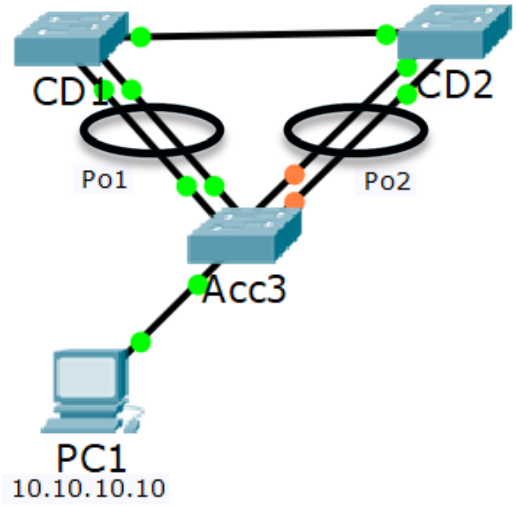
EtherChannel across Redundant Switches

- Matching EtherChannel settings have to be configured on the switches on both sides of the link
- You can configure separate port channels from a switch to redundant upstream switches

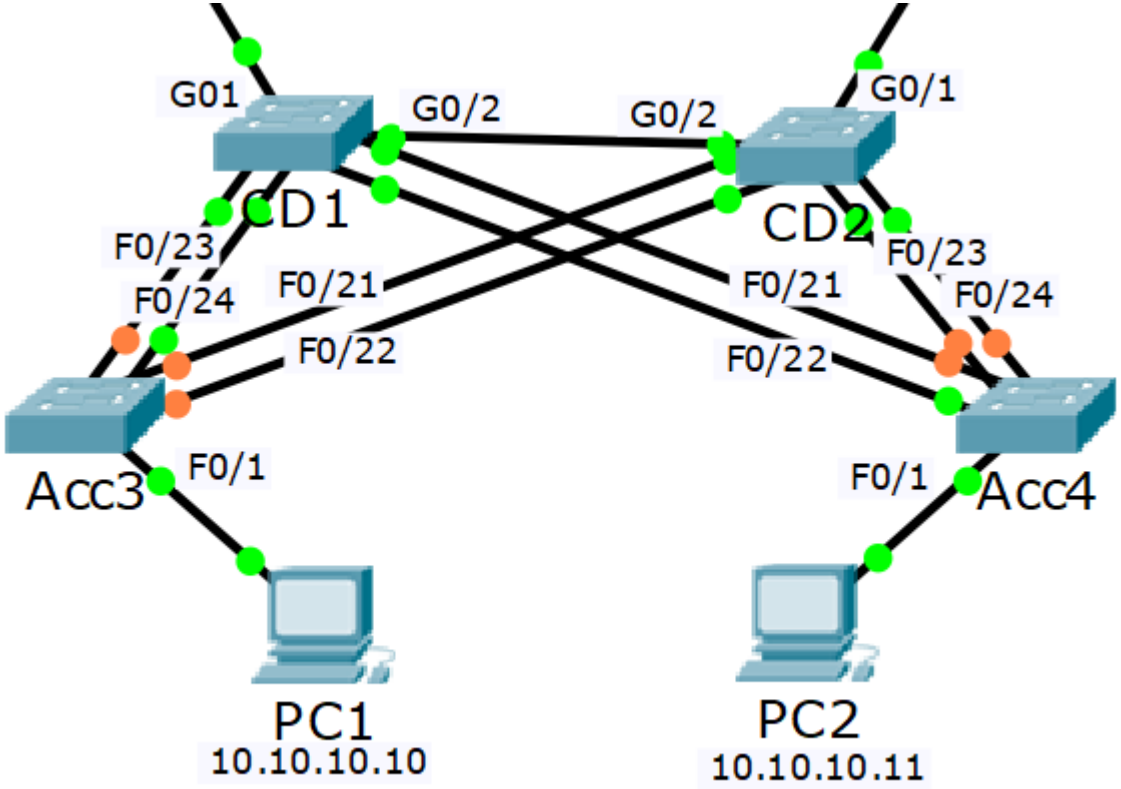


EtherChannel across Redundant Switches

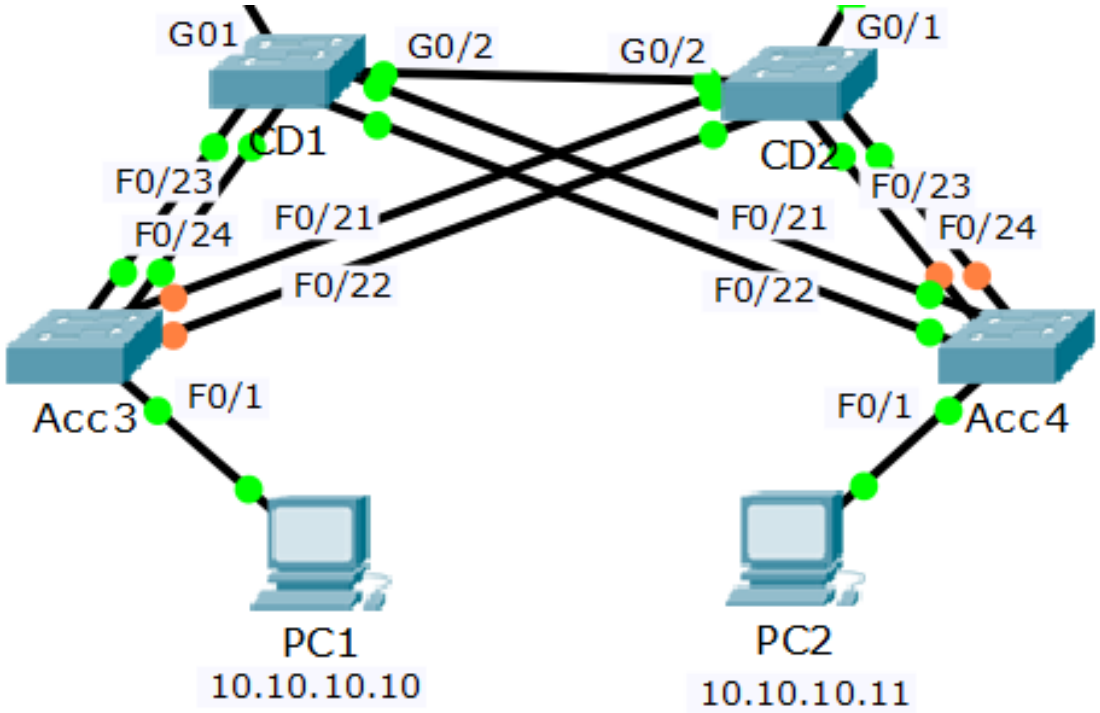
- Spanning Tree will see the port channels as two separate interfaces and block one path if a loop is formed
- This brings us back to the problem of only using half our available physical bandwidth



Before EtherChannel Configured

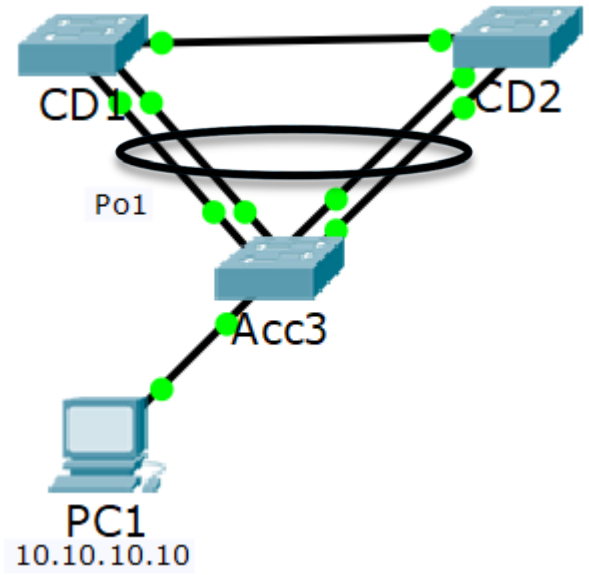


After EtherChannel Configured



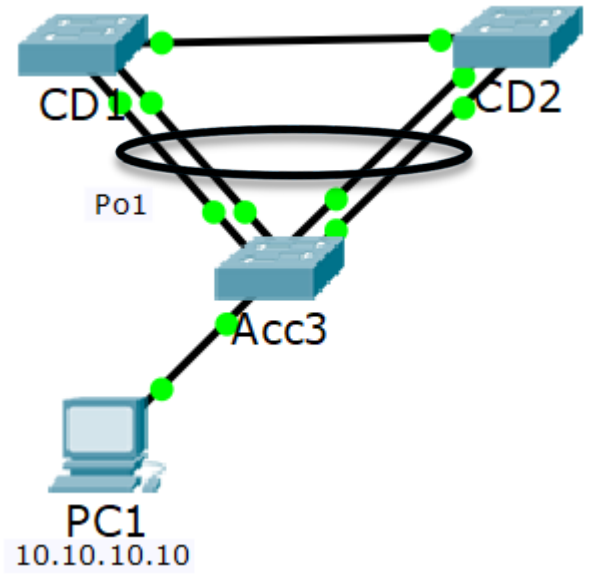
Multi-chassis EtherChannel

- Cisco support Multi-chassis EtherChannel technologies on some switches
- These switches support a shared EtherChannel from different switches
- The switches must be configured with matching settings



Multi-chassis EtherChannel

- Spanning Tree is still enabled but it does not detect any loops
- This supports full load balancing and redundancy across all interfaces



StackWise, VSS and vPC

- Multi-chassis EtherChannel is supported with these technologies:
- StackWise on selected Catalyst switch platforms including the Catalyst 3750, 3850 and 9000 families
- VSS Virtual Switching System on other selected Catalyst switch platforms including the Catalyst 4500 and 6500 families
- vPC Virtual Port Channel on the Nexus switch family