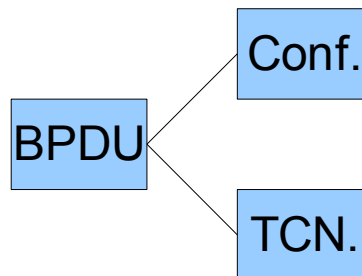


STP (Not used)	RSTP (default)	PVST	PVST+	MSTP
802.1D	802.1W 802.1D-2004			802.1s

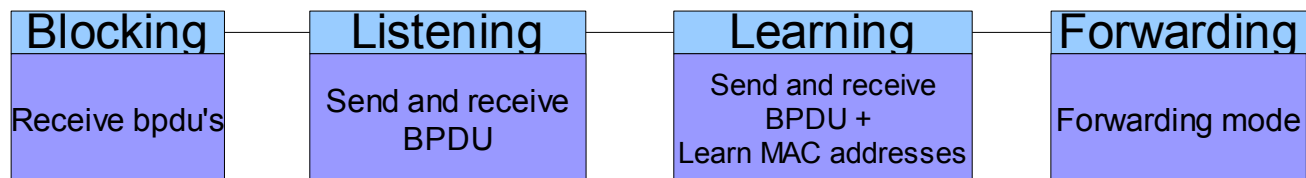
Bridging loop = destination unicast
broadcast loop = destination broadcast

BPDU (**B**ridge **P**rotocol **D**ata **U**nit)
Bridge ID = prio + MAC <== better



Manual STP:

1	Identify path costs on links
2	Identify root bridge (only 1, lowest bridge ID)
3	Select root ports (only one per switch, lowest cost to root bridge)
4	Select designated ports (only 1 per segment, lowest cost to root is designated, same cost = lowest mac)
5	all other ports are blocked



Name	Action	Place
Portfast	Port goes straight to forwarding mode. Doesn't trigger TCN BPDU's.	Access switch – access port
Uplinkfast	Second uplink to root bridge comes active right away. Sends spoofed frames to uplink switch for quick mac table convergence.	Access switch – trunk port to root bridge
Backbone fast		All switches
Root Guard	Port only forwards and relays BPDU's. Port can't become root.	Access switch port that you don't want to be root
BPDU Guard	If a BPDU is received on this port then the port goes in disabled mode.	Access switch Port where no switch may be connected
Loop Guard	Listens for BPDU drops on nondesignated ports. If no BPDU's received port goes blocking. If BPDU is received again port goes in to forwarding.	
UDLD Guard	Detects unidirectional link failure (Fiber ports). Sends UDLD and waits for echo. No response is error disabled (aggressive mode) or syslog (normal).	On fiber ports.