

Action	Cable plugged in(to switch or to host)
Message Type	Port Status
Port StatusMessage Type	PORT_MOD
Port Config	all 0
Port Current	only 1000 full mode is 1 , medium support, auto negotiation and pause support are 1
Port Advertised	mode are all 1 except 1000 half, pause support is 1,all other flags are 0
Port Supported	mode are all 1 except 1000 half, pause support, autoneg, asymmetric pause are 1, medium are all 0
Port Peer	mode are all 1 except 10 half, 100 full and 1000 half,pause support is 1, all other flags are 0
notes	For Peer state, it is not necessarily always these flags here, looks like it changes for different ethernet card

Action	Cable pulled out(from switch or from host)
Message Type	Port Status
Port Status	PORT_MOD
Port Config	all 0
Port State	No physical link
Port Current	mode are all 0 , medium support, auto negotiation and pause support are 1
Port Advertised	the same as the message in (1)
Port Supported	the same as the message in (1)
Port Peer	all 0
notes	when the cable is pulled out, all changes to the port on switch do not trigger any message

Action	While cable is plugged in, change settings at the host end: set autoneg to off , speed changed from 1000 to 100, duplex changed from full to half	
Message#	Message 1	Message2
Message Type	Port Status	Port Status
Port Status	PORT_MOD	PORT_MOD
Port Config	all 0	all 0
Port State	No physical link	
Port Current	mode are all 0 , medium support, auto negotiation and pause support are 1	only mode 100 half is 1, medium support and autoneg are 1
Port Advertised	the same as the message in (1)	the same as the message in (1)

Port Supported	the same as the message in (1)	the same as the message in (1)
Port Peer	all 0	mode has 10 half and 100 half and 1000 full be 1,all other flags are 0
notes	The first message has exactly the same flags as when cable is pulled out, changing settings on host will cause link to go down and up again.	

Action	While cable is plugged in, change settings at the host end: set autoneg back to on , speed changed back to 1000, duplex changed back to full	
Message#	Message1	Message2
Message Type	Port Status	Port Status
Port Status	PORT_MOD	PORT_MOD
Port Config	all 0	all 0
Port State	No physical link	
Port Current	mode are all 0 , medium support, auto negotiation are 1,	only mode 1000 full is 1, medium support, autoneg and pause support are 1
Port Advertised	the same as the message in (1)	the same as the message in (1)
Port Supported	the same as the message in (1)	the same as the message in (1)
Port Peer	all 0	mode has 10 half and 100 half and 1000 full be 1,all other flags are 0,pause support is 1
notes	From these two actions, we can see that when a message coming and reports that a port is down, all flags are the same as it is up, only except that all current modes are set to 0.	

Action	While cable is plugged in, change settings on the switch, set autoneg to off
Message Type	Port Status
Port Status	PORT_MOD
Port Config	all 0
Port State	No physical link
Port Current	mode only has the current mode set, medium support, pause support are 1, autoneg is 0
Port Advertised	the same as the message in (1)
Port Supported	the same as the message in (1)
Port Peer	all 0
notes	Disable the autoneg will simply make the port down, then other changes do not trigger messages, until autoneg is reset.

	Changing speed causes the autoneg to become 0 as well and then becomes the same situation. When the autoneg is reset to 1, the following message is created
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Action	set autoneg on switch port to 1
Message Type	Port Status
Port Status	PORT_MOD
Port Config	all 0
Port State	
Port Current	mode only has the current mode set, medium support, pause support and autoneg are 1
Port Advertised	the same as the message in (1)
Port Supported	the same as the message in (1)
Port Peer	mode has 10 half and 100 half and 1000 full be 1,all other flags are 0,pause support is 1

Action	set the port on the host to down(using ifconfig down)	
Message#	Message1	Message2
Message Type	Port Status	Port Status
Port Status	PORT_MOD	PORT_MOD
Port Config	all 0	all 0
Port State	No physical link	
Port Current	mode are all 0 , medium support, auto negotiation and pause support are 1	only mode 1000 full is 1, medium support, autoneg and pause support are 1
Port Advertised	the same as the message in (1)	the same as the message in (1)
Port Supported	the same as the message in (1)	the same as the message in (1)
Port Peer	all 0	mode has 10 half and 100 half and 1000 full be 1,all other flags are 0,pause support is 1

Action	disable the port on the switch
Message Type	Port Status
Port Status	PORT_MOD
Port Config	admin down is 1, all others are 0
Port State	No physical link
Port Current	mode only has the current mode set, medium support, pause support and autoneg are 1
Port Advertised	the same as the message in (1)
Port Supported	the same as the message in (1)

Port Peer	mode has 10 half and 100 half and 1000 full be 1,all other flags are 0,pause support is 1
notes	When the port is enabled again, 1 message is generated, the differences between messages about disabling and enabling the port is administratively down flag, and, "<i>No physical link</i>" flag is not set

Action	change mtu on switch port
No message is created at all	

Action	Controller starts talking with switch	
Message Type	Feature Reply (Hello messages, Feature Request and Stats Request/Reply messages are ignored, as they don't carry any interesting information)	
Port Definition	# of Ports: 54	
Stats for Port without Cable	Port Config	all 0
	Port State	No physical link present
	Port Current	modes are all 0, medium support, autoneg and pause support are 1
	Port Advertised	the same as the message in (1)
	Port Supported	the same as the message in (1)
	Port Peer	all 0
	notes	Just like when cable is pulled
Stats for Port with Cable	Port Config	all 0
	Port State	
	Port Current	only 1000 full mode is 1, medium support, auto negotiation and pause support are 1
	Port Advertised	the same as the message in (1)
	Port Supported	the same as the message in (1)
	Port Peer	mode are all 1 except 10 half, 100 full and 1000 half,pause support is 1, all other flags are 0
	notes	Just like when cable is

		plugged in
Tap Port (All 54 ports are 53 regular ports numbered 1~53, plus one special port that has name tap0 and port number "Local".)	Port Config	all 0
	Port State	
	Port Current	mode 10 full and copper medium support are 1, all else are 0
	Port Advertised	all 0
	Port Support	all 0
	Port Peer	all 0

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