

PfcWdOrch

doTask (consumer: Consumer & 1; void

process t.id consumer.m.toSync.end();

m.toSync: SyncMapo

msg < string, sayOpFieldsValuesTuple >

"Ethernet0"

SET-COMMAND

std::vector<FieldValueTuple>

CreateEntry

PfcWdSwOrch

startWdOnPort (port, detectionTime, restorationTime, action)

registerInWdDb (port, detectionTime, restorationTime, action)

swi-port-ops -> get-port-attribute (port.m.port_id, 1, & attr)

attr.value_of returns the TC mask under PFC
(attr.id = SAI_PORT_ATTR_PRIORITY_FLOW_CONTROL)

PortOrch

- m-portList: msg < string, Port >

first

second

PHY

CAG

VCAN

m_type

m-alias, c-star

"Ethernet0"

m-port-id

"Ethernet32" swi-object-id.t

^

getPort (alias: string, port: Port & 1)

m-queue-ids

action: PfcWdAction

—— PfcWdAction::PFC_WD_ACTION_DROP

"action" "drop"

"detection_time" "200" —— detectionTime: uint32_t

"restoration_time" "1200" —— restorationTime: uint32_t

↓

losslessTC : set < uint_t >

3
4

generate key from port.inport.id — "pfc_wid: 0: 0: 0x10000000 0000xx"

Serialize entries in C-portStatIds to string, separated by ","

for each entry, read serialize-port-stat() → serialize_enum() (counter; sai-port-stat,
sai-port-stat

{sai-metadata-enum-sai-port-stat-t})
→ valuescount — total #

Do linear search on the metadata for counter

values[i] — SAI-PORT-STAT-PFC-3-RX-PKTS
↑
valuesnames[i] — "SAI-PORT-STAT-PFC-3-RX-PKTS"

Filter out non-lossless TCs by checking against losslessTC.count(tc)

"PORT-COUNTER-ID-LIST"
Field Values

m-flexCounterTable → set (key)

"SAI-PORT-STAT-PFC-3-RX-PKTS, SAI-PORT-STAT-PFC-4-RX-PKTS, ..."