



P802.1Qbh Multicast Overview

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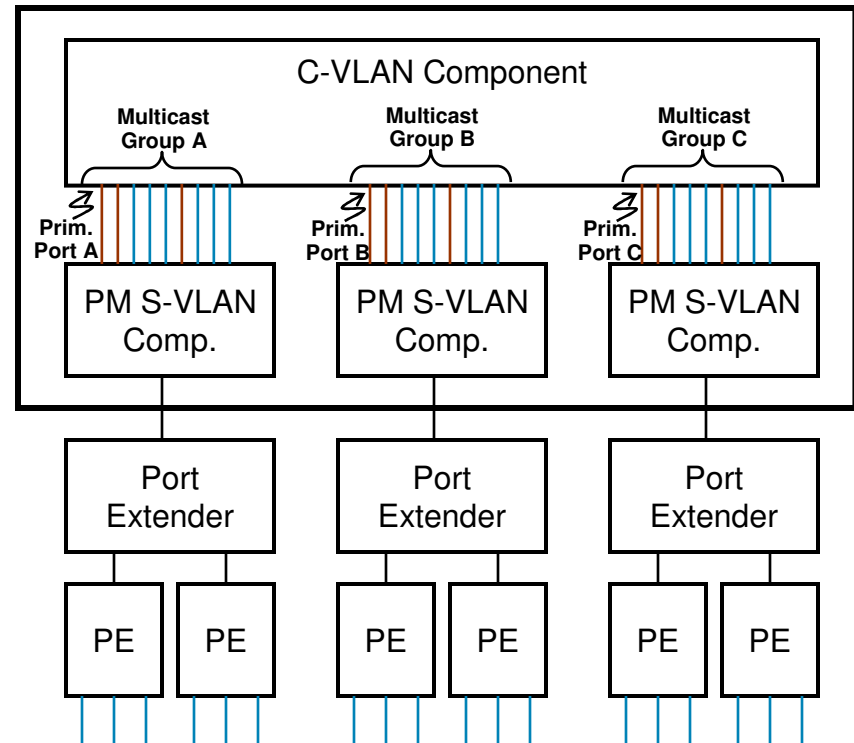
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Multicast Groups and Primary Ports

- Multicast Group: set of C-VLAN component ports connected to a given PM S-VLAN component
- Multicast Group Primary Port: the port within a multicast group over which communication with the top level Port Extender takes place. Traffic emitted on this port leaves the controlling bridge without an S-TAG
- Multicast traffic is forced to exit the primary port and filtered from all other ports in the Multicast Group.

Port extenders perform replication based on M-TAG



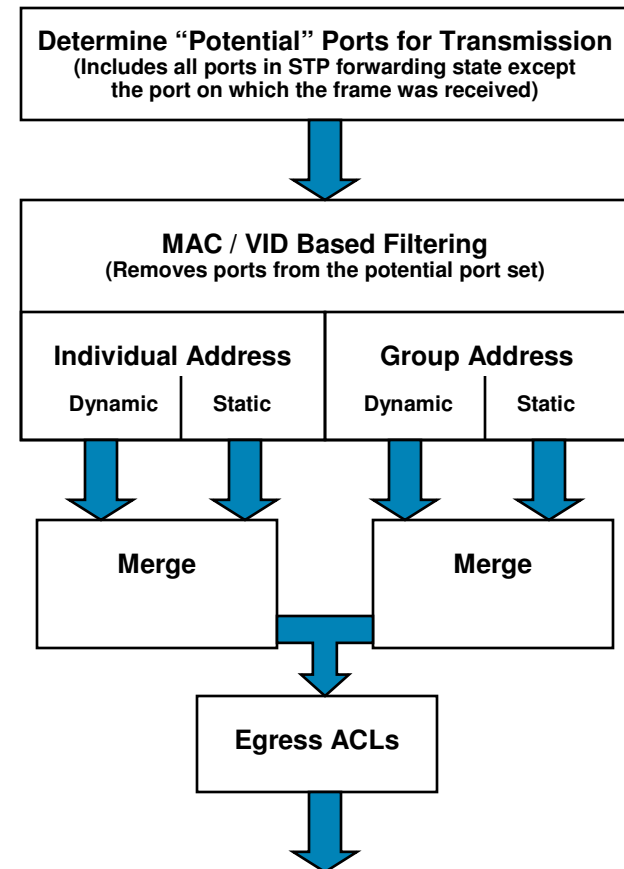
Overview of Filtering Specification

- A Port Map of potential ports is created
- Port map is reduced (i.e. filtered) based on entries in the Filtering Database indexed by MAC / VID

Separate rules apply based on whether the MAC is a group or individual address

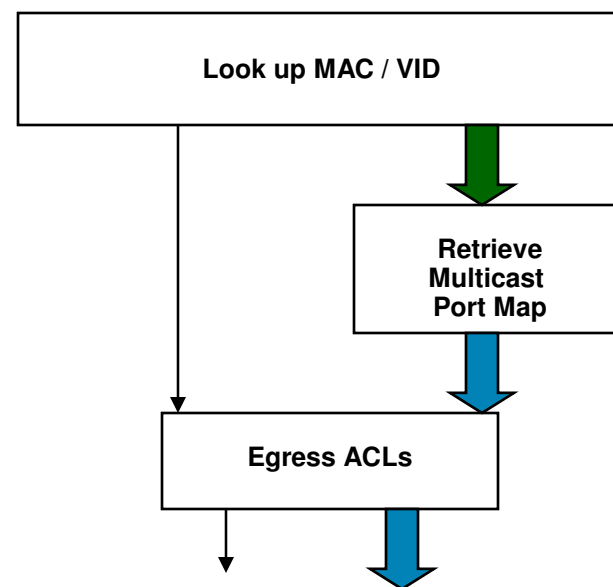
In either case, dynamic and static entries may apply

- The results of the static and dynamic entries is combined
- Egress ACLs are applied
- Final port map results



How Filtering is Typically Implemented

- Look up of MAC / VID produces either destination port or index into a list of port maps
- If index produced, port map is retrieved
- Egress ACL applied to either single destination port or to the set of ports in the Port Map
- Final destination port or port map results



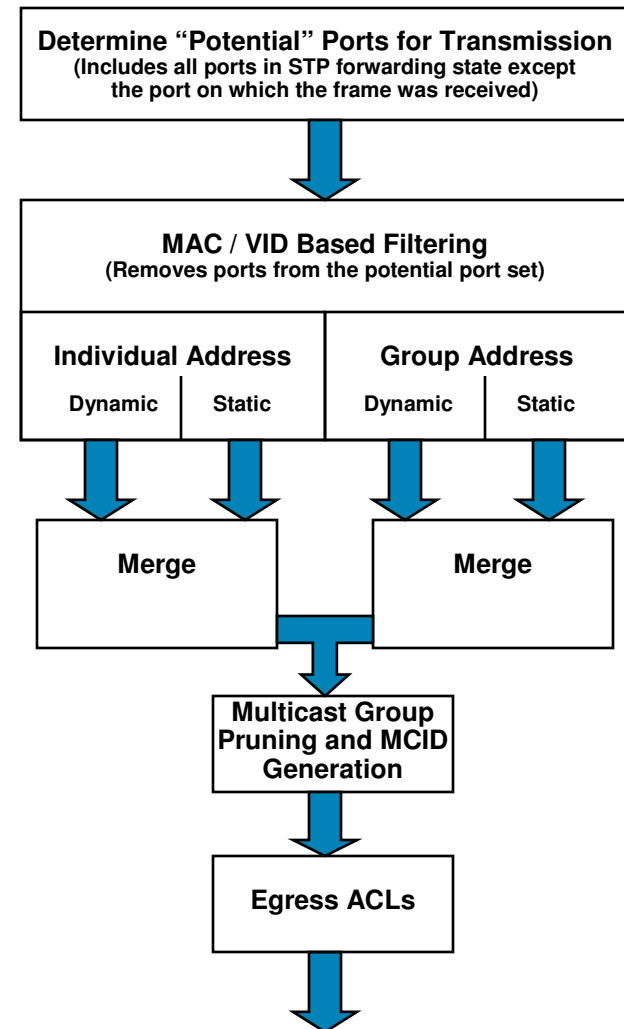
Overview of Filtering Specification with Remote Replication

- A Port Map of potential ports is created
- Port map is reduced (i.e. filtered) based on entries in the Filtering Database indexed by MAC / VID

Separate rules apply based on whether the MAC is a group or individual address

In either case, dynamic and static entries may apply

- The results of the static and dynamic entries is combined
- Egress ACLs are applied
- Final port map results



How Filtering is may be Implemented with Remote Replication

- Look up of MAC / VID produces either destination port or index (i.e. MCID) into a list of port maps
- If index produced, port map is retrieved
- Egress ACL applied to either single destination port or to the set of ports in the Port Map

MCID becomes part of ACL decision tree (transparent to user)

Further pruning of the Port Map by the ACL is accomplished by replacing the MCID

- Final destination port or MCID results

