

ISIS-Hello	ECT-ALGORITHM= 00-80-C2-11 (after .1aq's) B-VID = VID 0	If VID = 0 then no B-TAG else normal B-TAG. Only one ECT-ALGORITHM required and only one B-VID (or 0) required. Multiple B-VIDs may be used but only one ECT-ALGORITHM for Qbp now.
ISIS-LSP	ISID-ADDR-TLV B-VID (as above) Tx;Rx;Ts, SUB-ALG:4 , ISID:24 1 bit reserved	ISID in Qbp mode when B-VID matches ECT-ALGORITHM VID (above). Tx =(S,G) Transmitter, Rx =Receiver, Ts =(*,G) Transmitter Tie breaking/root selection based on XOR against MASK[SUB-ALG] (similar to the 802.1aq CIST algorithm but with MASK)
ISIS-LSP OPAQUE	Optional opaque data for Qbp ECT-ALG overrides BridgePriority	Opaque Data for ECT-ALGORITHM 00-80-C2-11 (.1Qbp) is: <SUB-ALG:8, BridgePriority:24> => Fine grained root control
Group DA Format	(* ,G) => 00-1e-83-xx-xx-xx (S,G) => SpSource-xx-xx-xx Head => B-DA	Shared TREE – Uses PBB OUI where xx-xx-xx is ISID. Source TREE uses SPBM format where xx-xx-xx is ISID. Head replication just uses normal unicast B-DA for each copy.
Compute	Unicast	Run SPF from self. On equal cost alternatives, “OR” ECMP sets of the two alternatives together to form ECMP set for this child (like OSPF/IP).
Compute	Multicast – Shared Tree 16 trees, one per SUB-ALG when at least one Ts bit is set (can grow to 32 trees).	Find node with lowest BridgIdentifier XOR MASK[SUB-ALG]. Run SPF with that node as root. When two equal cost choices, the child picks parent with lowest BridgIdentifier XOR MASK[SUB-ALG]. Then prune tree per ISID with Ts bit set. FIB DA is 00-1E-83-xx-xx-xx
Compute	Multicast – Source tree 16 per source, one per SUB-ALG when at least one Tx is set. (can grow to 32 trees)	Same as above except that source is the Bridge with the ISID Tx bit set. Then prune tree per ISID (same as AQ but <i>not symmetric</i>) because tie breaker only backtracks to parents to pick min masked BridgIdentifier.
Compute	Multicast – Head end replication	Head end builds replication over unicast tunnels to all ISID with Rx set.
Data Path	PBB + F-TAG [B-TAG optional]	F-TAG = <F-TAG-TYPE:16, PCP:3, DEI:1, RESV: 6, TTL :6, Flow-ID :16 >
Loop Mitigation	TTL Agreement protocol optional	Decrement. (RPFC dropped since strong loop prevention possible with AQ agreement, and RPFC would create two new L2 tables.)

802.1Qbp – single slide design - Peter Ashwood-Smith (peter.ashwoodsmith@huawei.com)
obviously OA&M not included