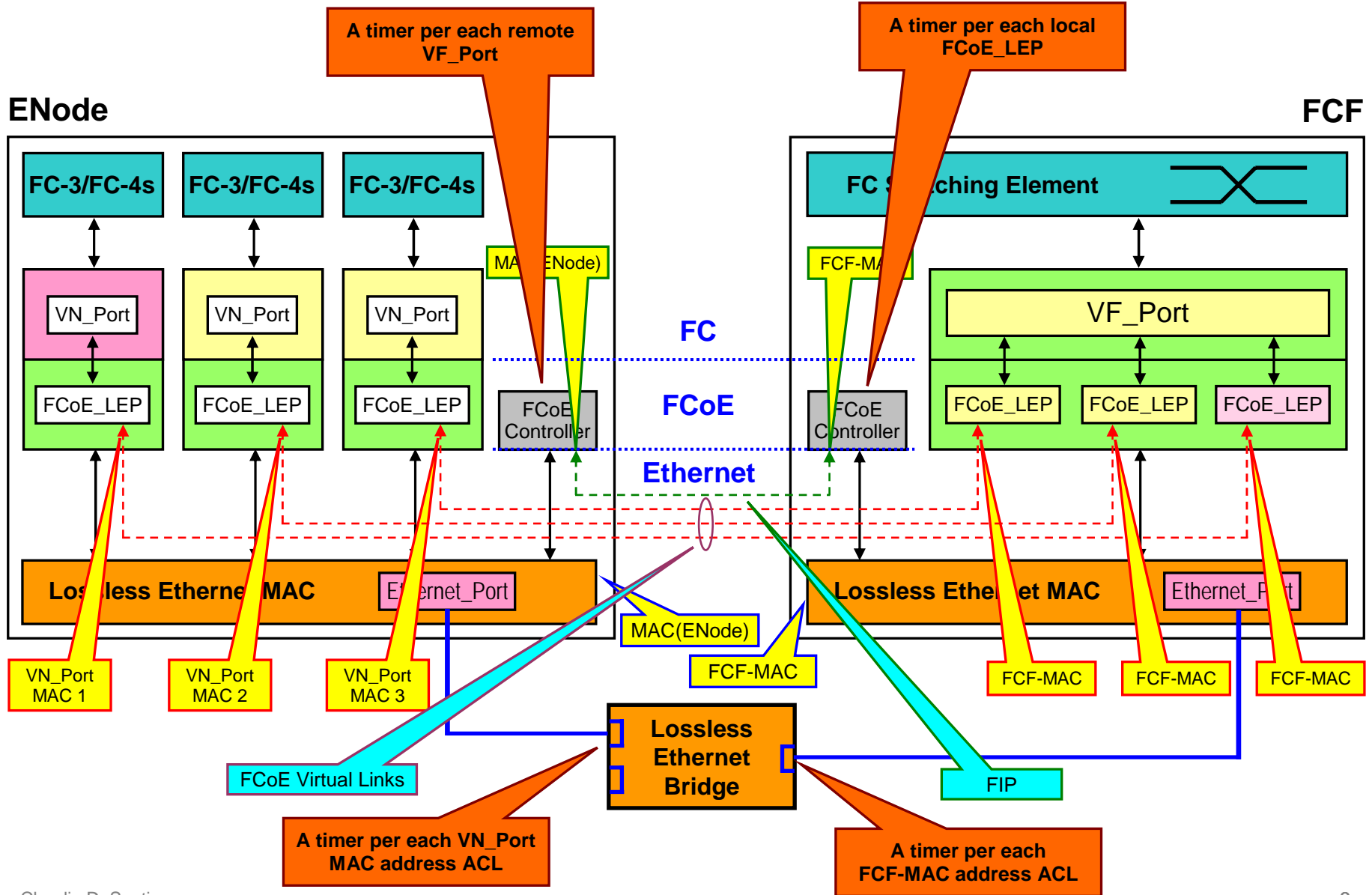


FKA Optimization

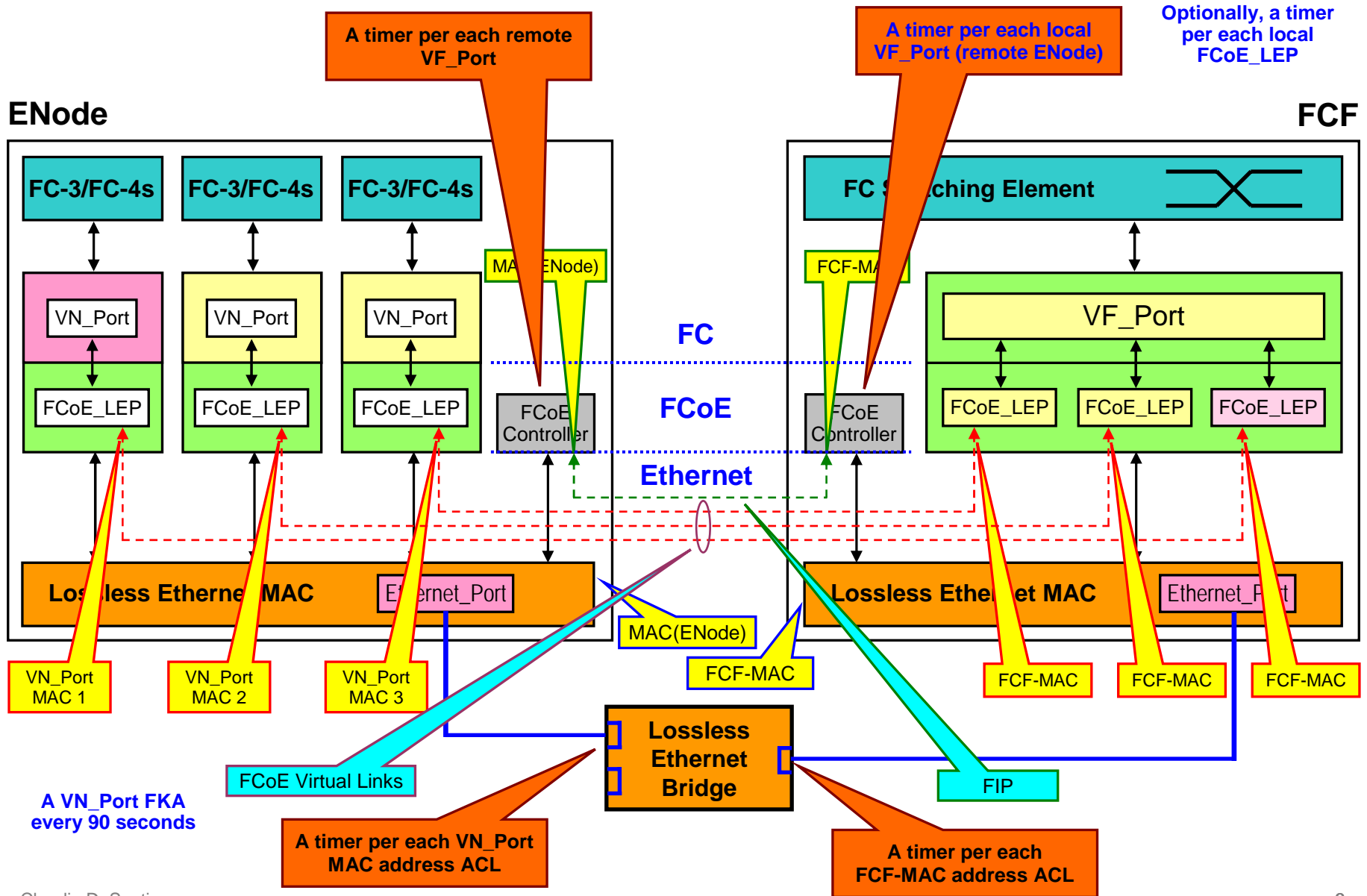
T11/08-544v0, September 2008

Claudio DeSanti

FIP and FCoE Virtual Links (before!)



FIP and FCoE Virtual Links (now!)



Keep Alive: ENode's MAC View

- **Per each FCF-MAC, there is a single VF_Port to which the set of ENode's VN_Ports instantiated through NPIV are logged in**
- **The MAC address of that VF_Port is the FCF-MAC**
 - Receiving a periodic FIP message from that FCF-MAC is a good enough indication of the health of that VF_Port
 - Periodic Advertisements already provide this function
 - After a certain number of missing Advertisements (e.g., 3) the VF_Port is considered unreachable and the associated VN_Ports de-instantiated (i.e., implicitly logged out)
- **Each VN_Port may be associated with a different MAC address**
 - Generating a periodic FIP message from each MAC address is needed to indicate the corresponding VN_Port is operational
 - Every 90 seconds
 - Generate a periodic FIP message from the ENode's MAC address to indicate the FCoE Controller is operational
 - Every FKA_ADV_PERIOD
 - A periodic unicast and unidirectional FIP Keep Alive message

Keep Alive: VF_Port capable FCF's View

- Per each ENode, there is a single VF_Port to which the set of ENode's VN_Ports instantiated through NPIV are logged in
- Each VN_Port may be associated with a different MAC address

Receiving a periodic FIP message from each MAC address is a good enough indication of the health of that VN_Port

A periodic unicast and unidirectional FIP Keep Alive message

Every 90 seconds

After a certain number of missing FIP Keep Alive messages (e.g., 3) the VN_Port is considered unreachable (i.e., implicitly logged out) and the associated FCoE_LEP de-instantiated

a FIP Clear Virtual Link removing that VN_Port should be generated

Receiving a periodic FIP message from the ENode's MAC address indicates the FCoE Controller is operational

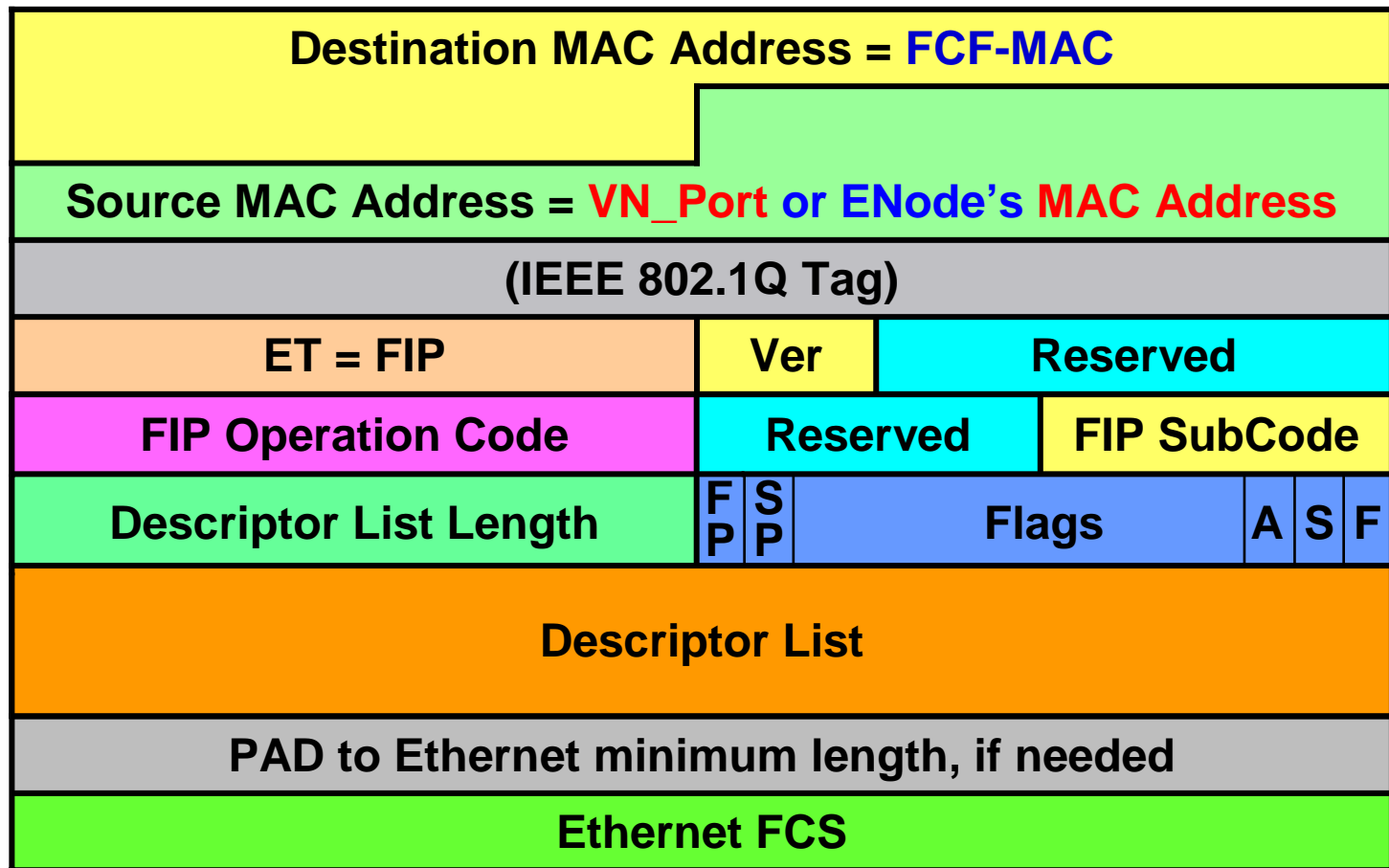
Every FKA_ADV_PERIOD

- The MAC address of that VF_Port is the FCF-MAC

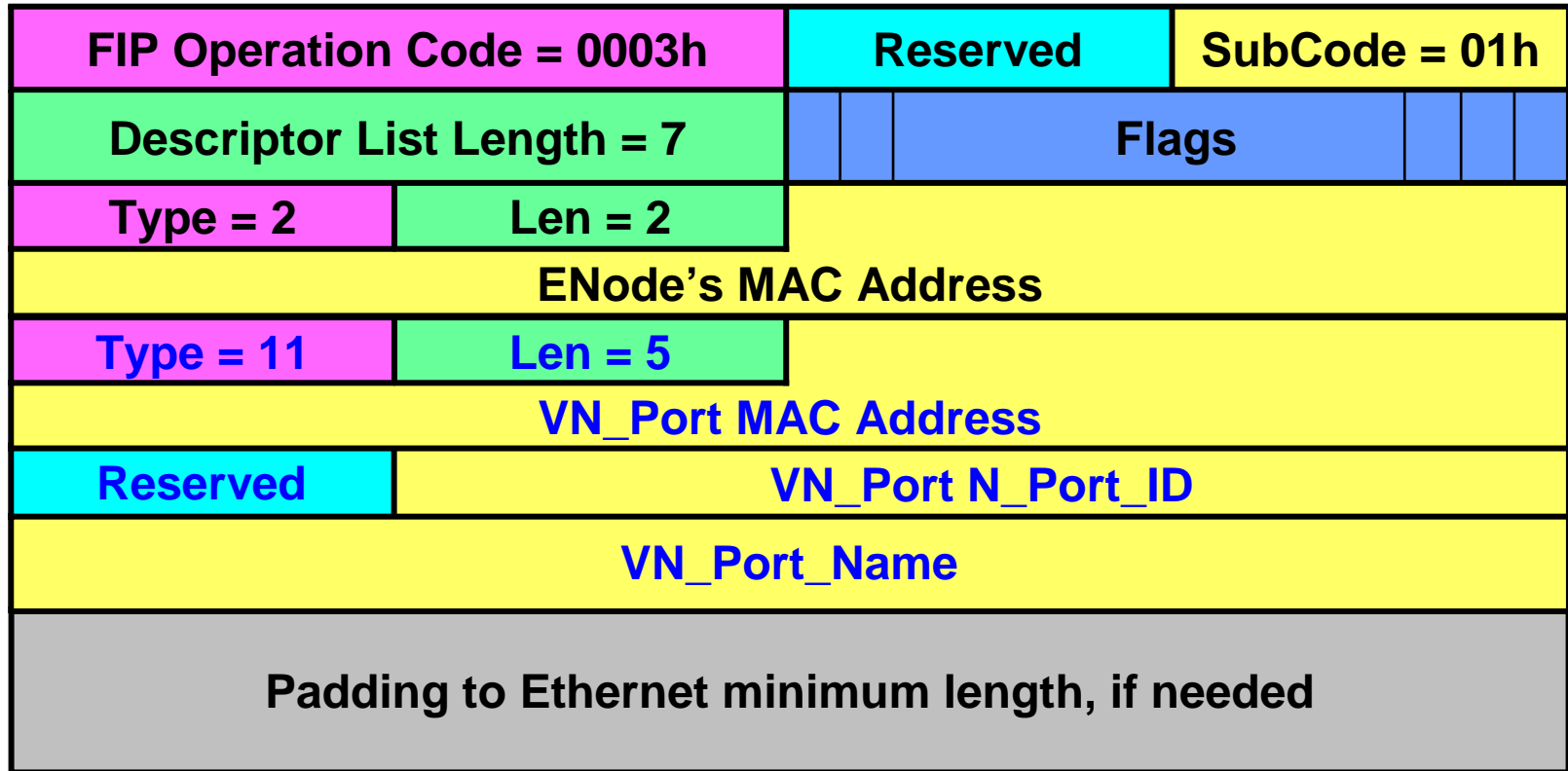
Generating a periodic FIP message from that FCF-MAC is needed to indicate the VF_Port is operational

Periodic Advertisements already provide this function

FIP Keep Alive (1)



FIP Keep Alive (2)



A minimum length Ethernet frame
(low overhead)

Thank You