

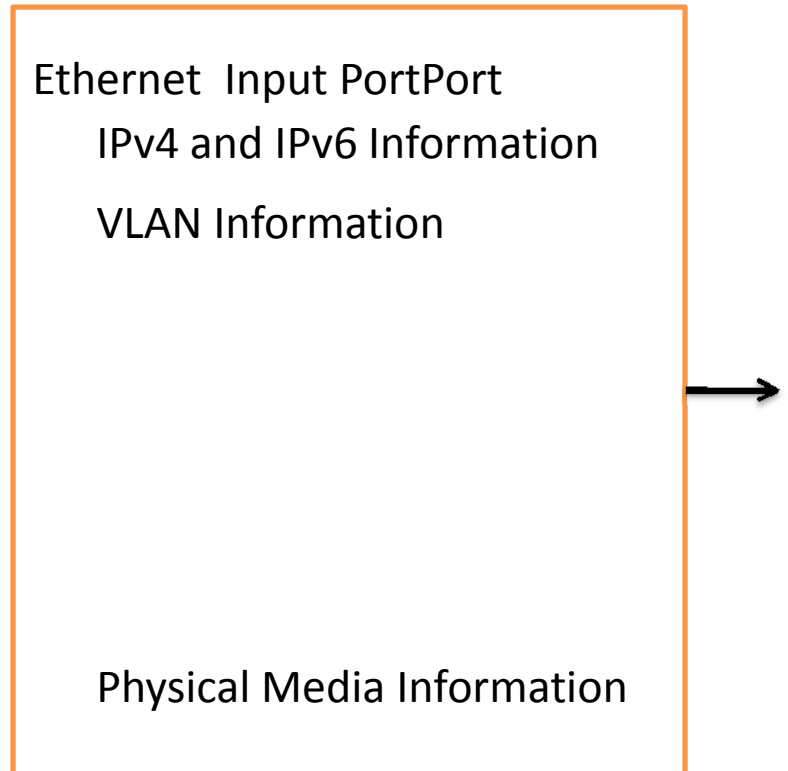
Ethernet Port Evolution

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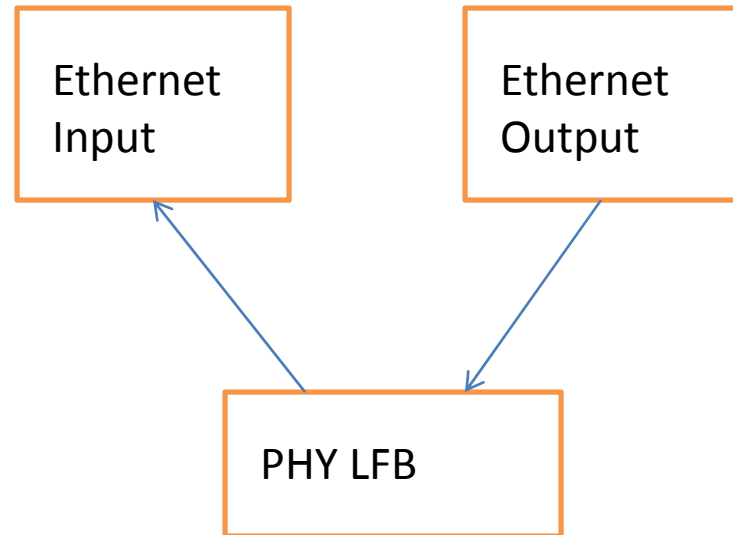
First though

- An Input Ethernet Port and and Output Ethernet Port
- Put all the “interface” information in one place
- Seems simple...



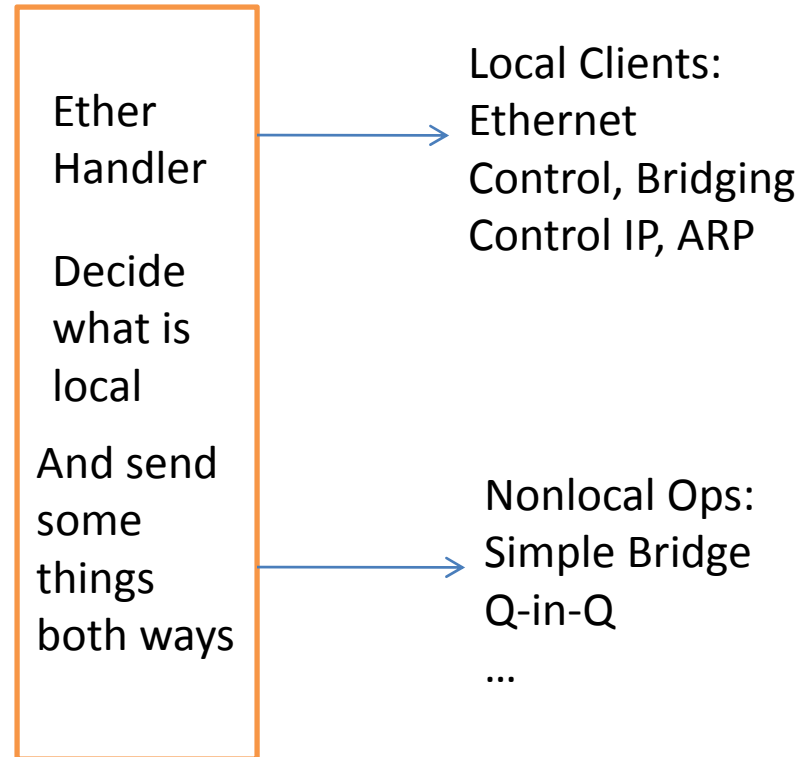
But there are multiple physicals

- So separate that into a distinct LFB
- Different LFB for 10/100/1000 vs high speed optical
- Because they have different properties
- Represents the real physical connection



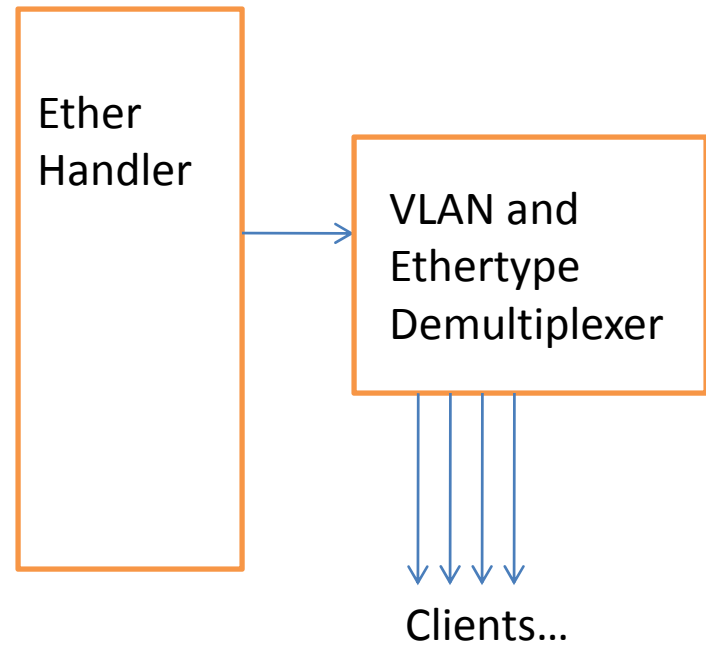
Reusability and separation

- We need to separate bridging handling from local operations and ethernet clients
- So that we can defer bridging until later
 - But pay attention to what it is likely to require



But what goes where

- Functionality to look at Ethertype and VLAN to decide which client gets a message
- This may needs to be re-used
 - MAC-in-MAC decides the inner dest is local
- So need a separate LFB



Still more to be spelled out

- Exactly what is the corresponding output decomposition
- Where does input packet validation get done
 - Some special devices want extra functionality after “valid Ethernet Frame” and before “is it for me.”
- What are the components of the PHY LFB
 - What statistics do the PHY and validation (MAC?) LFBs need