

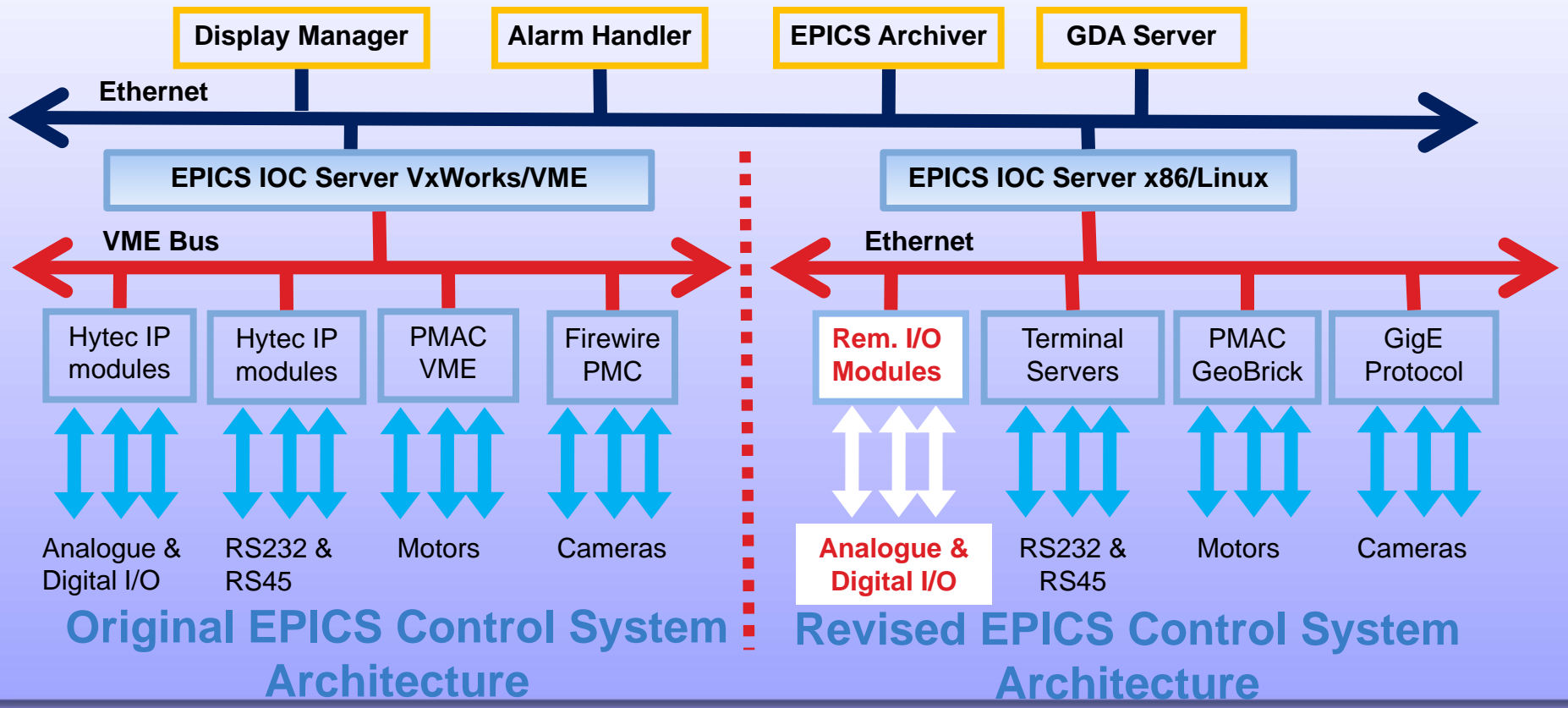
Integrating EtherCAT based I/O into EPICS at Diamond

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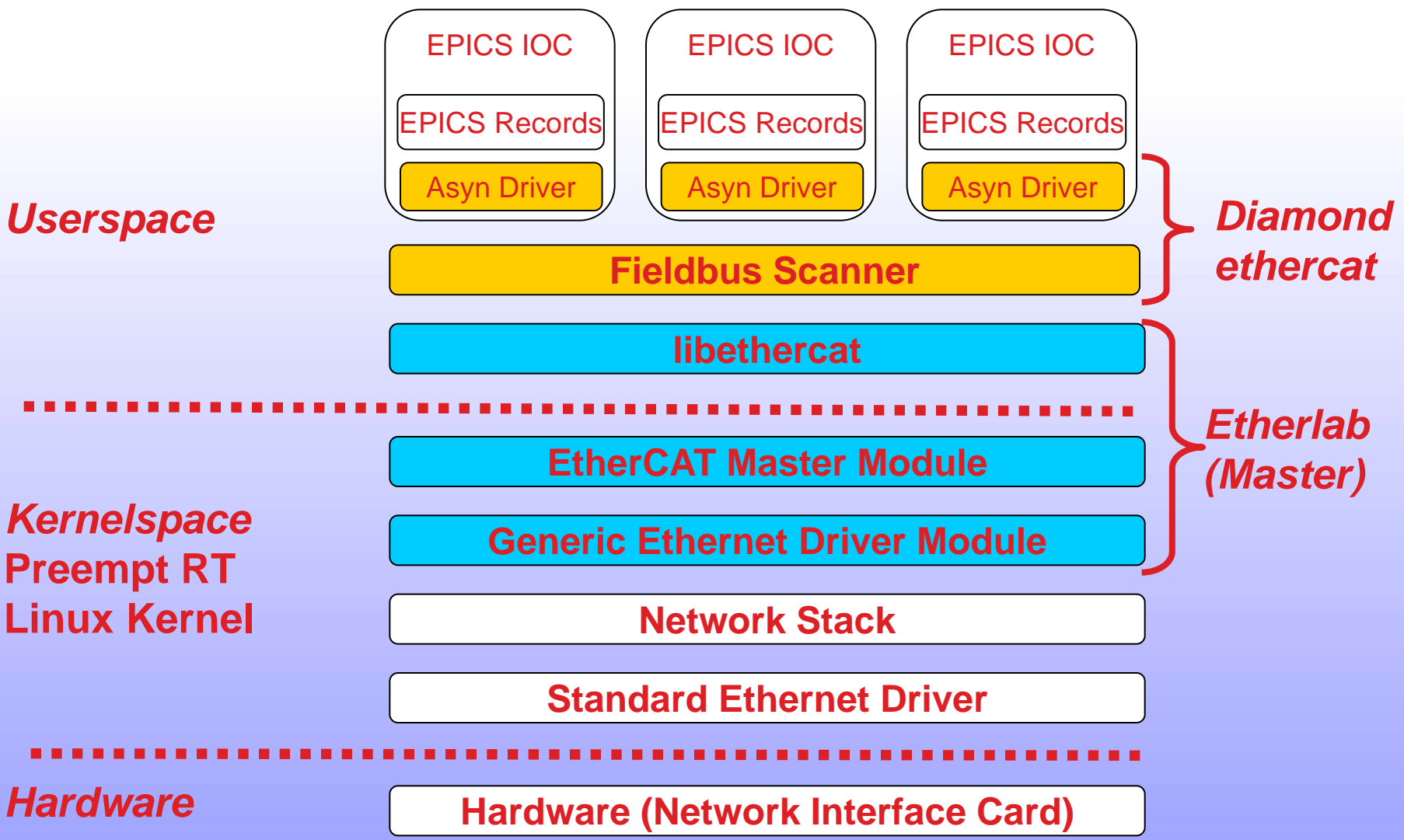
Poster Reference WEMAU004

Project Goal

- Diamond Phase III of beamline construction – Transition of Diamond Control System



Solution Outline



Conclusion

- EtherCAT integrated into EPICS. Uses
 - PREEMPT_RT Linux
 - Etherlab Ethercat Master for Linux
 - Asyn
- Scanner broadcast bus data to several Soft IOCs for segregation of areas. Automatic Asyn port creation
 - One port per slave
 - One port for master status
- Implementation tested with slaves from 3 manufacturers
- Transition from VME based IOCs running vxWorks to Linux x86 PC IOCs running EtherCAT is relatively straightforward