EPICS Progress and Plans

IOCs, Gateway, & Applications Launcher

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Outline

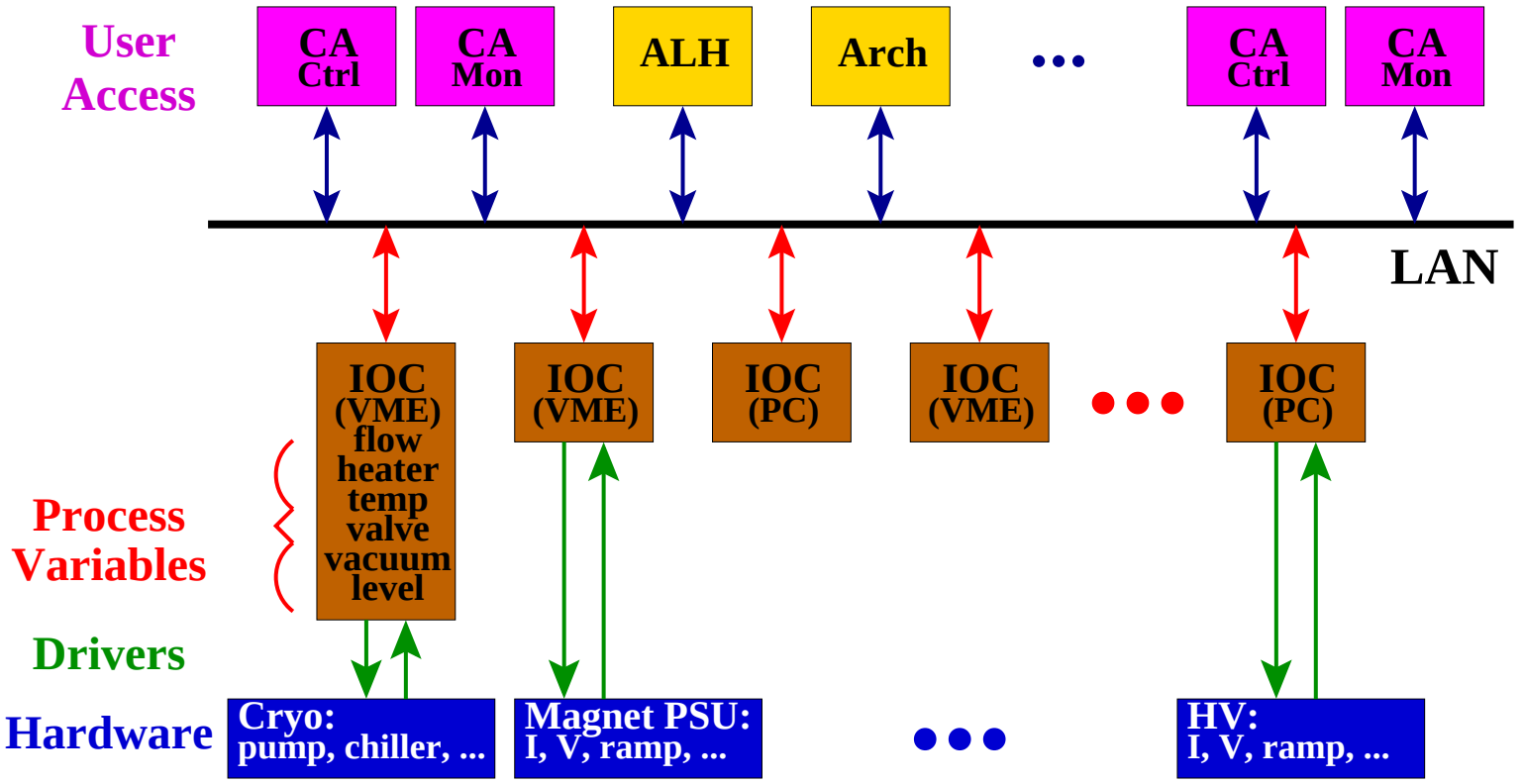
- Progress since CM27
- Gateway
- Applications Launcher
- To Do List
- Long Range To Do List
- Summary

Progress Since CM27

- Updated all CAM machines to proper configuration and software versions
- Implemented proton absorber monitoring
- Environment monitoring
  - AC units monitored for airflow and water sensing
  - temperature probes along south wall under mezzanine
  - leak detection in trench
- Found that network configuration allowed our PVs to be viewed and controlled from the PPD network machines – fixed this
- Reorganized application launcher (more later)
- Proper configuration of PVs on micenet
- Integrate with DAQ

- Implementaion of gateway (more later)
- Expert notification of alarms via mobile phone

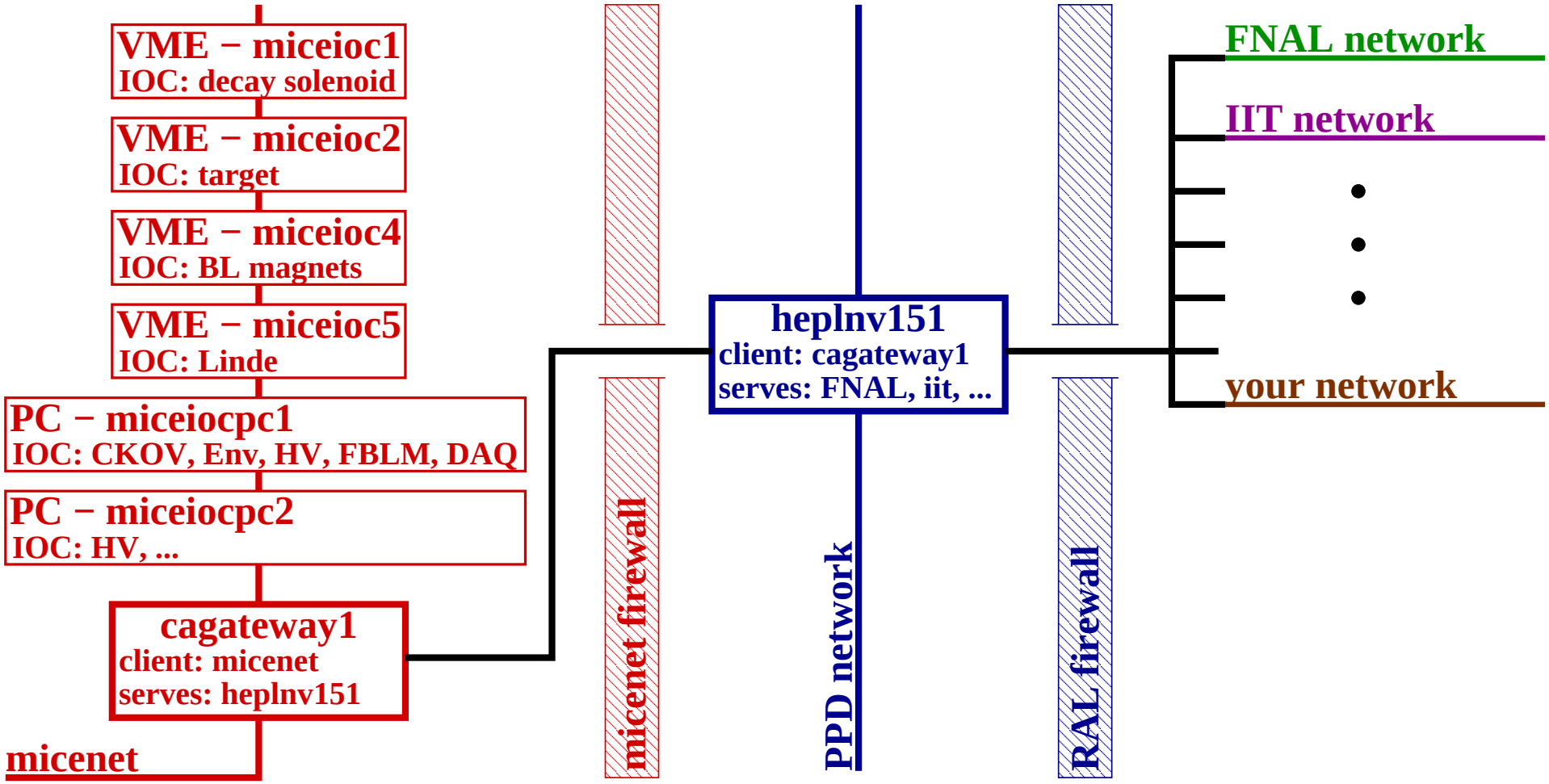
A reminder of how epics works:



Gateway

- X-forwarding graphics over the network can be slow
- forwarding only values does not take much bandwidth
- gateway *copies* data from client and serves other machine(s)
- out gateways are set to be *read only*
- micenet gateway:
  - PVs *NOT* written to cagateway1
  - cagateway1 runs a gateway
  - micenet iocs are clients
  - gateway serves as host to heplnv151
- heplnv151 gateway – (virtual machine on PPD network):
  - PVs *ARE* written to heplnv151 from cagateway1
  - heplnv151 runs gateway
  - localhost is the only client
  - gateway serves as host to limited IP addresses specified to RAL networks

Gateway

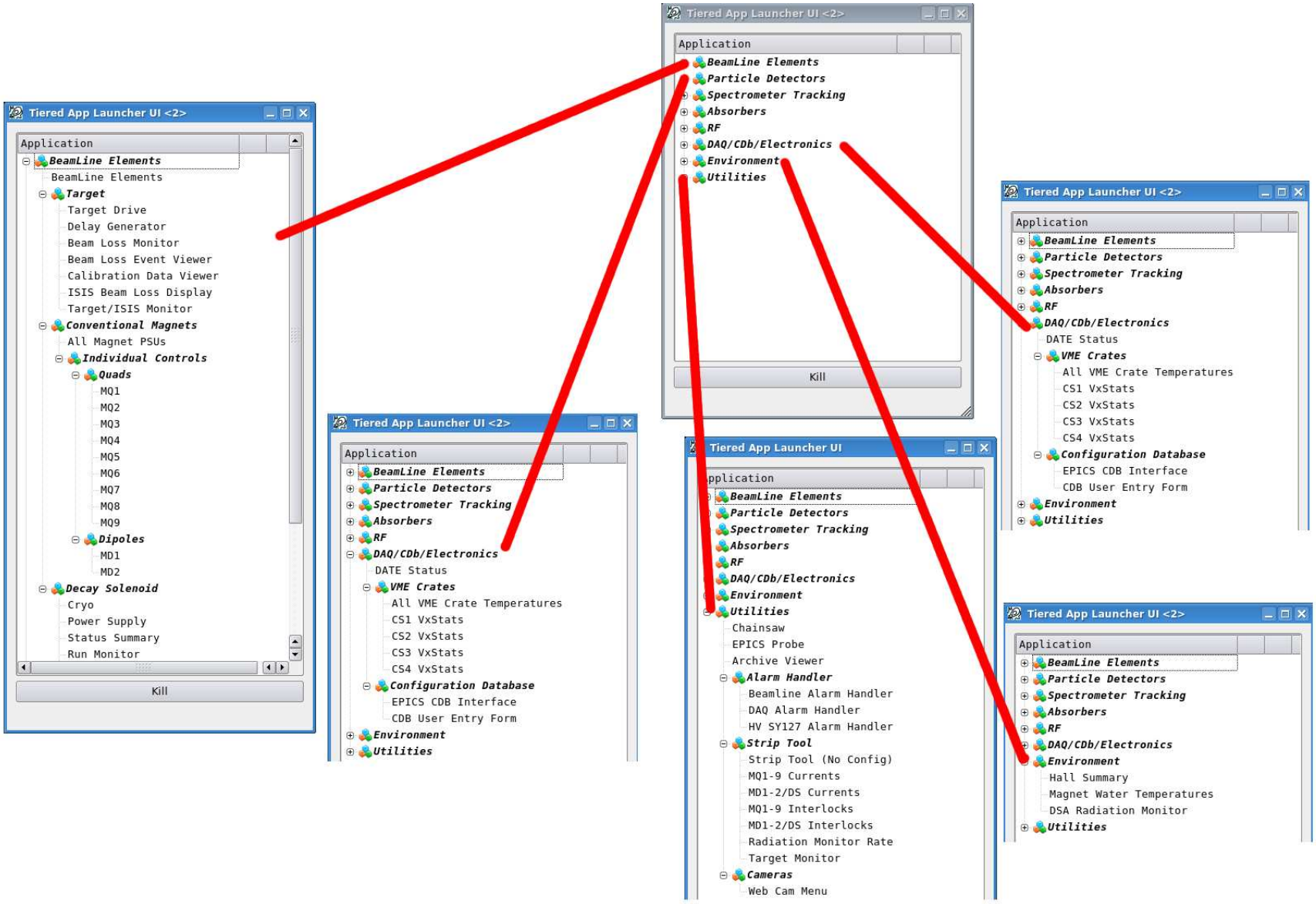


My view of the gateway

Application Launcher

A reminder of how epics works:

Application Launcher



Will do the same for Online Monitoring!

To Do List - Short Term

- Now
  - Complete gateway
  - Complete CAEN SY527 HV control
  - Update Archiver
    - incomplete system – failed for ToF
    - define deadbands
    - autostart or link to servers

- December
  - Core dump from James
  - Determine list and move some processes to autostart
  - Complete magnet polarity monitoring
  - Complete environment monitoring installation
  - Test beamstop and proton absorber limit switches
  - Implement PV write control with security access files

To Do List - Long Term

- Long Term
  - Complete updates to CAEN SY127 HV control
  - Continue/complete mobile alarm notification
  - Interface with DL to implement/integrate new IOCs
  - Help develop and test SS control system with magnet mapping
  - Diffuser interface
  - RF tuner control

Summary and Conclusions

- Lots done – new controllers, alh, ...
- Even more to do
- We're going to miss our "Super Hero" James