

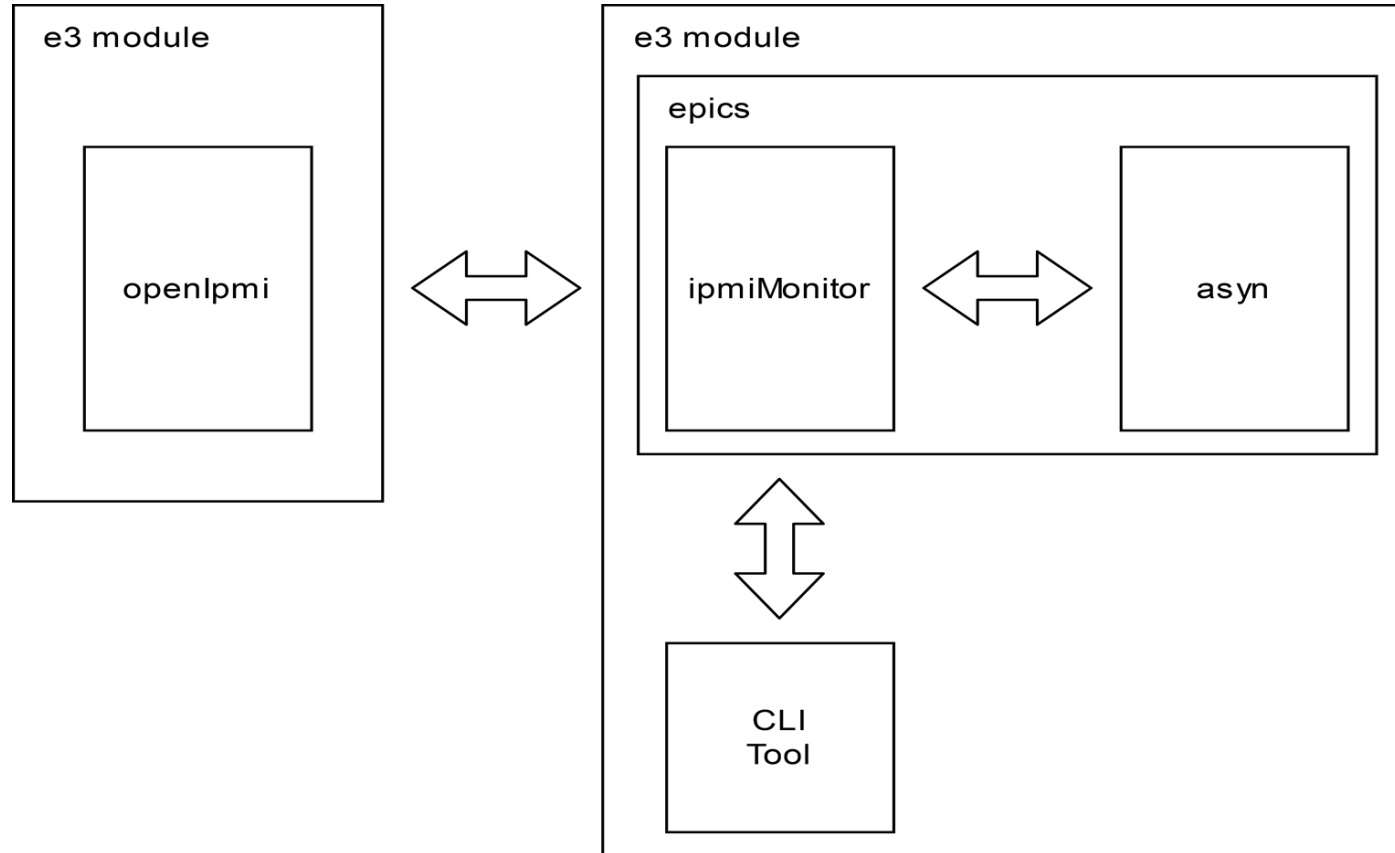


# WU3 - IPMI EPICS integration – Realization status and open tasks

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Piotr Perek



# General Architecture

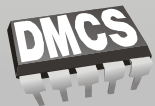




# General Architecture - openIpmi

C callback based openIpmi library:

- Encapsulated into E3
- Patch required to disable ATCA functions
- Additional plugin for utca specific features

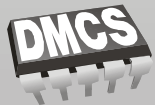




# General Architecture - ipmiMonitor

C++ wrapper for C callback based openIpmi library:

- Connect to MCH
- Enumerate system
- Resynchronize internal state to MCH
- Provide interface to the outside (asyn,CLI)





# General Architecture - IOC/asyn

IOC:

- Start thread for ipmiMonitor
- Start Thread for general refresh process
- epicsEvent based execution
- Startup and shutdown handling

Standard ASYN driver:

- Create internal params for all properties to be monitored via CA
- Share parameters in Pvs



# Supported Features

## Monitor devices:

- AMC slots
- RTM slots
- Power Modules
- Cooling Units
- PCIe board
- CLK board

## • Monitor parameters:

- All FRU info
- All Sensor Info
- Read Sensor Values and Flags
- Read Sensor Thresholds
- Set Threshold Values
- Read Hot Plug State
- Tuning of readout speed





# Required Features

Monitor devices:

- MCH (CM/ShM) ?

Additional:

- Internal Archiver ?

- IOC not in sync flag

- Unification and clean-up of cmd files

Monitor parameters:

- React on Events (sensor and hot plug to M0)

Some more bugs:

- Telnet Crash

- Wrong report of some Hot Swap States

## NAMING CONVENTIONS (we will help to deploy solution at ESS)

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# Steps

- How to make repository global ? (gitlab/wojciechjalmuzna for now)
- We use gitlab for short term issue management – need to solve all !
- Testing needed !

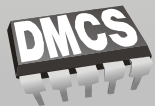






# OPIs

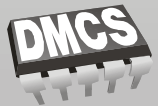
- Available in opi/ folder in e3-ipmimanager repository
- Can be used for any crate configuration
- Layout consulted with @Dirk Nordt and @Anders Lindh Olsson
- Possible changes when naming convention fixed





# OPIs

Time for demonstration!



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