

AES Controls

Andrew Johnson

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EPICS 7 Restructuring

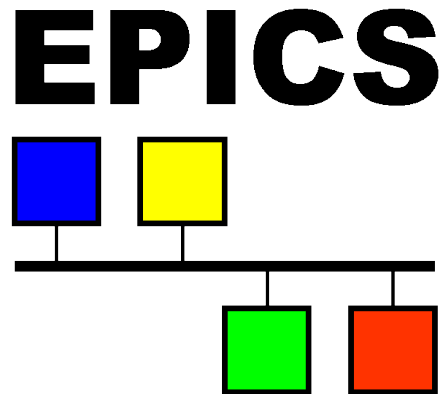
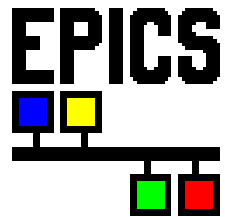
Logo Restructuring

EPICS 7 Marketing

Logo History

The first EPICS Logo was created by Ken Evans as a 64x64 pixel GIF file for use with MEDM. When I started at APS I redrew it in PowerPoint to make it available in other formats and sizes.

The new logo retains the stylized representation of an EPICS distributed control system, but is more compact and simpler.



Code Restructuring

EPICS 7 Component Modules

Modularization of Base-3.16

The EPICS 3.16 code has been split into 4 separate modules:

- core — build system, build-related Perl scripts
- libCom — OS independence and common library APIs
- ca — Channel Access client library, catools and Perl bindings
- database — IOC code, record types, soft device support, filters, link support

PVA modules added:

- pvData, pvAccess — V4 structured data, network protocol
- pva2pva — qsrv (replaces pvaSrv), PV Access Gateway (for testing)
- normativeTypes — standard structured data types
- pvaClient, pvDatabase — simplified synchronous client and server APIs

EPICS 7 Bundle

Configuring support modules and IOC applications has not changed

1. Edit the configure/RELEASE file
2. Set EPICS_BASE to the EPICS 7 install path
3. Build

Applications that use PVA are simpler to configure than against V4, all EPICS 7 PVA modules are covered by the EPICS_BASE variable in configure/RELEASE instead of having to have entries for each PVA module.

Sites can even add other modules under the modules directory

4. Edit modules/Makefile
5. Add new module directory names to SUBMODULES variable
6. Set related *_DEPEND_DIRS variable to dependent modules
7. Build

Changes to Base Modules

Enhancements, Extractions

Changes to Base Modules

As usual we continue to fix bugs, add features and make other changes:

- JSON parser in libCom is being updated, will support 64-bit integer values.
- An upgraded server API makes it easier to add new types of server on top of the IOC and for servers to run simultaneously; compiled-in servers can also be disabled at initialization.
 - IOCs can be built without the CA server (rsrv), for isolated IOCs or where only a PVA server is wanted. Local CA links still connect though, so an SNL sequencer program built into the IOC should still work properly.
- PCAS and GDD have been unbundled and published as a separate module on GitHub as `epics-cas` under the `epics-modules` project; this code will no longer be included in the EPICS 7 source bundle.

Changes to PVA Modules

Cleaning up shutdowns

Changes to PVA Modules

This part will be covered more completely by Michael Davidsaver in his talk.

- Cleanup of object ownership rules inside pvData and pvAccess, changes also affect applications which will need to be modified
- pva2pva module supports user-configurable grouping of IOC record fields into pvAccess structures with atomic access to the data
- ...

Questions?

