

Software

Control System Software

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Software Releases

- [Software Test Day](#)
- [Release Software Procedure](#)
- [Software Electronic Logbook](#)

References

- [Controls Systems Team Home Page](#)
- [Development DHCP Config File](#)
- [LCLS and FACET DHCP Config File](#)
- [LCLS and FACET Emergency DHCP Config File Change script](#) (EOIC Desk Account)
- [How-to setup auto-archiving](#)
- [Alarms,IRMIS and EPICS Builder Scripts](#)
- [LCLS Beam Synchronous Datastore User Guide](#)
- [Controls Deputy Guidelines](#)
- [Controls Deputy Schedule](#)
- [PV Validations](#)

General

Computer architecture, platforms, operating systems.

- [Tutorials](#)
 - [PyDm tutorial](#)
 - [Beginners How-to presentation](#) by Tasha Summers
- [LCLS Unix Systems](#)
- [LCLS Control System Production Systems](#)
- [EPICS Soft IOC List for LCLS Controls System](#)
- [IOC Configuration Report](#)
- [LCLS Dictionary](#)
- [Aida online search tool - aidaget](#)
- [eget Examples](#)
- [EtherCAT Overview](#)
- [MAD to Controls](#)
 - [MAD & Oracle to Control System Block Diagram](#) (by Greg White)
 - [MAD to Oracle to Control System Process](#) (by Greg White)

Documentation

Documentation and access to online databases used in the construction and operation of LCLS.

- [CATER \(Artemis\)](#)
- [CAPTAR](#)
- [Cable Search](#)
- [SLC Databases](#)
- [SLAC's Oracle HTMLDB](#) (aka "Application Express")
- [IRMIS](#)
- [LCLS Project Database](#) (Oracle)

- [SLC CA Server](#)
- [LCLS Naming Conventions](#)
- [Archived EPICS PVs](#)
- [List of IOC parameters](#)
- [SCORE Developer's Guide](#)
- [SC TPR Timing Triggers User Guide](#)
- [IOC Console Access User's Guide](#)

Software Development

Documentation and References for the software development process.

- [CVSWEB Repository Browser](#)
- [LCLS Code Management](#)
- [LCLS Development Environment](#)
- [LCLS PLC Development Environment](#)
- [LCLS Software Standards](#)
- [LCLS EPICS Modules and Extensions Downloads](#)
- [LCLS EED CA Security Standards](#)
- [EED EPICS Modules](#)
- [EPICS Archiving Guidelines](#)
- [EPICS Archiving Policy](#)
- [An IOC Is Born](#)
- [CRAM Migration Guide](#)
- [Developing IOCS with CRAM](#)
- [Git/CVS module checkout utility](#)
- [LinuxRT Real-Time Performance Issues](#)
- [LinuxRT IOC diagram \(Alisha\)](#)
- [IPMI Libraries](#)
- [New Build System](#)

How-to Documentation

- [How-to created a Unix Cron Job](#)
- [How-to convert an application from CVS to GIT and retain history](#)
- [How-to GIT basics \(please fell free to update me\)](#)
- [How-to Git Module Workflow](#)
- [How-to Add a New SLAC Application into GIT](#)
- [How-to setup SecureCRT to bring up an LCLS Home Screen](#)
- [How-to Start the LCLS Home Screen](#)
- [How-to Start the LCLS Home Screen from a CUD](#)
- [How-to Connect to an IOC serial port](#)
- [How-to Download PLC Ladder Logic](#)
- [How-to Configure PLC Ethernet Communications](#)
- [How-to Retrieve AFS Backups from the last 24-hours](#)
- [How-to Identify a Run-Away Process on Linux](#)
- [How-to Develop EPICS Software - Software Standards](#)
- [How-to Add PCIe TPR Software](#)
- [How-to Upgrade EPICS Version](#)
 - [R3.15.5](#)
 - [Migrating to EPICS V7 - R7.0.2-1.1](#)
 - [Add QSrv EPICS Modules](#)
 - [Recommended ATCA EPICS modules and Packages](#)
- [How-to Program an ATCA Carrier firmware](#)
- [How-to Boot and EPICS IOC](#)
 - [How-to Reboot an IOC from the Facility Home Display](#)
 - [How-to IOC Console Access](#)
 - [How-To Setup an RTEMS IOC](#)
 - [How-To Setup a ColdFire uC5282 to run EPICS and RTEMS](#)
 - [How-To Setup a Linux IOC \(Quick Start\)](#)
 - [How-To Setup a LinuxRT or Centos7 CPU and IOC diskless boot \(Quick Start\)](#)
 - [How-To Setup an RTEMS IOC \(Quick Start\)](#)
 - [How-to Setup a uTCA System --](#)
 - [Presentation on CCI EPICS IOC Boot Scripts](#)
 - [Presentation on CCI EPICS CPU Boot Scripts](#)
 - [Proposal to upgrade CCI EPICS CPU Boot Scripts](#)
 - [LinuxRT CCI Boot Flow Chart](#)
- [How-To Release Software Process](#)
 - [How-to Submit a Software Mini-Test Plan \(obsolete doc, submit CATER job\)](#)
 - [How-To Release a Linux \(Soft\) IOC](#)
 - [How-To Use cram to release a new IOC \(iocIsBorn\)](#)

Tool Documentation

Development tools, middleware, IDEs, compilers, build systems, frameworks etc.

- [Aida](#)

- [EPICS at LCLS](#)
- [Software Licenses](#)
- [LCLS EPICS Module Dependencies](#)
- [Getting started with Eclipse for IOC development](#)
- [EPICS Auto-build Procedure](#)

Tool Configuration for LCLS

The configuration of development tools for LCLS specifically.

- [How-to use the Alarm Handler](#)
- [Archive PV List Web Application](#)
- [How-to use Autosave](#)
- [How-to use the Channel Watcher](#)
- [LCLS's CMLOG](#)
- [LCLS CVS](#)
- [How-to use of Matlab](#)
- [How-to use of Oracle](#)
- [SLC Channnel Access \(pdf\)](#)
- [LCLS's use of XAL](#)

IOC Software Development

EPICS Input/Output Controller software development resources.

- [Getting Started](#)
- [Subsystem IOC Applications](#)
- [SLC-Aware IOC](#)
- [LCLS EPICS IOC Processors](#)
- [How-To Setup an RTEMS IOC](#)
- [LCLS How-To Boot an EPICS IOC](#)
- [Beam-Synchronous-Acquisition \(BSA\) Comments for IOC Engineers](#)
- [Channel Access Security](#)

Model Based and "High Level" Applications

- [Accelerator Software \(Confluence Wiki\)](#)
- [LCLS High Level Applications](#)

Temporary and in-development

Links to temporary pages.

- [LinuxRT EVR and BPM testing configurations](#)
- [NFS Server Change IOC Recovery Checklist](#)
- [IOC Dependency Chart - v2.xlsx](#)
- [Sample Software Launch Screens](#)
- [Deprecated previous version of this wiki page](#)