

EE: List of In-house Developed Software Applications

Sr No	Name	ID	Description	Status	VIP	VID	LE	Technologies	Platforms	Users	Nol	Comments
1	Channel Logger	ChannelLog		Production			Priller	Qt, C++	Win32, OSX, Linux			
2	Device Dialogs	DeviceDialogs	Pop-up dialog boxes to provide device-specific control and monitoring	Production			Davis, Priller	Qt, C++	Win32, OSX, Linux	Ops, EE		
3	Device Manager	DevMgr	Application for monitoring and maintaining embedded controllers	Production			Davis	Qt, C++	Win32, OSX, Linux	EE		
4	ECRTune	ecrTune		Production			Priller					
5	IOC utilities	iocutils	Collection of development, diagnostic, and maintenance utilities.	Production			Priller	Qt, C++	Win32, OSX, Linux	EE		
6	LabView Interface	LabView	Plugin for Labview that allows LabView to access EPICS channels	test			Priller	Qt, C++	Win32, OSX, Linux	Ops, EE		
7	ProbeApp	ProbeApp		Production			Priller	Qt, C++	Win32, OSX, Linux			
8	Main Magnet App	MagnetControl		Production			Priller		Win32, OSX, Linux			
9	NSCL plugins	NSCLplugins	Plugins used by several of the NSCL Qt applications.	Production			Davis, Priller	Qt, C++	Win32, OSX, Linux	EE		
10	Operating System utilities	osutils	Several utilities for use in development, maintenance, diagnostics	Production			Priller	Qt, C++	Win32, OSX, Linux	EE		
11	PanelMate	PanelMate	Multi-page interface where privileged users can select, arrange, and configure the controls	test			Davis	Qt, C++	Win32, OSX, Linux	Ops, EE		Current Qt implementation slow to start up and comprised of rather unwieldy code. Work being done to simplify and streamline the code and make it manageable.
12	ProbeApp	ProbeApp		Production			Priller	Qt, C++	Win32, OSX, Linux	Ops		
13	Boot Report	QtBootRep	Shows list of IOCs and when they were last rebooted	Production			Priller	Qt, C++	Win32, OSX, Linux	Ops, EE		Primarily a diagnostic tool for doing a quick check on the status of each IOC.
14	QtChan	QtChan	Basic Set/Read control of 1 or more EPICS channels.	Production			Davis	Qt, C++	Win32, OSX, Linux	Ops, EE		Can launch the device-specific pop-up dialogs.
15	Chart Recorder	QtChart	Strip-recorder for 1 to 8 data channels. Can also save data to a log for use in a spreadsheet, etc.	Production			Davis	Qt, C++	Win32, OSX, Linux	Ops, EE		Can also be used to show data streamed in real-time from a DEBROS-based controller, which is very useful for software development and diagnostics.
16	Debug Window	QtDbgWn	Display diagnsotic messages sent by application code.	Production			Priller, Davis	Qt, C++	Win32, OSX, Linux	EE		Enhancements allow mnemonic names to be assigned to a group of diagnostic messages and each group to be enabled or disabled at run time.
17	Knob Meter	QtKM	Interface to monitor several EPICS channels and control up to 4 at once via physical knobs.	Production			Priller	Qt, C++	Win32, OSX, Linux	Ops		Can launch the device-specific pop-up dialogs.
18	QtParam	QtParam	Monitor 1 or more EPICS channels in a spreadsheet-like grid, one row per channel.				Priller	Qt, C++	Win32, OSX, Linux	Ops, EE		Can launch the device-specific pop-up dialogs.
19	Time Check	QtTimeChk	Shows current time reported by each IOC.	Production			Priller	Qt, C++	Win32, OSX, Linux	Ops, EE		Primarily a diagnostic tool for doing a quick check on the status of each IOC.
20	RF Monitor App	RFMonitor		Production			Priller		Win32, OSX, Linux			
21	RF Phase Controller	RFPhaseCtrl	Monitor and control new digital RF Phase controller module.	test			Priller	Qt, C++	Win32, OSX, Linux	Ops, EE		New devices being installed during Summer/Fall maintenance shutdown.
22	Stager	Stager	??				Priller	Qt, C++	Win32, OSX, Linux			
23	Voice Alarm Server	VoiceAlarm		Production			Priller	Qt, C++	Win32, OSX, Linux	Ops		
24	Open Office Spreadsheet Interface			??			Priller	Qt, C++	Win32, OSX, Linux			

	Video Multiplexor	VideoMX		Production			Priller	Delphi Pascal	Win32			
25	Video Monitor	Vmonitor		Production			Priller	Delphi Pascal	Win32			
26	VME Calibration	vmecalib	Compute new calibration values for EPICS records that handle conversion to device-level values.	Production			Davis	Delphi Pascal	Win32	EE		This is becoming obsolete as we continue to replace VME crates with Linux IOCs and DEBROS-based controllers.
27	BCM test	BCM_test	Tool for calibrating and testing Beam Current Monitor devices.	Production			Davis, Priller	Delphi Pascal	Win32	EE		This should either be ported to Qt or replaced with a command-line process in the BCM itself after the BCM code is ported to DEBROS.
28	Sequencer	Sequencer	Procoess a sequence of setting and monitor commands for EPICS channels and log the results.	Production			Davis	Delphi Pascal	Win32	Experime nters, EE		As far as I know, this has not been used for several years, although it could be very useful for development and regression testing.
29	Document Manager	DocumentManager	Manage documents related to equipment and software the EE department is responsible for.	Production			Vincent	Visual Basic	Win32	EE		Should we consider porting this to Qt?
30	ActiveX interface	EpicsActiveX	ActiveX interface for accessing EPICS channels	Production			Priller	Delphi Pascal	Win32	EE		Not needed for Qt applications
31	DEBROS	DEBROS	Davis Embedded Baby Realtime OS	Production			Davis	C	Rabbit	EE		Platform used for all new controllers based on one of the Rabbit Core Modules.
32	EPICS records		Many custom EPICS records that provide the link between EPICS and the numerous NSCL and 3rd party devices.	Production			Davis, Priller	C, C++	VxWorks, Linux	EE		
	SRFS server	srfsd	Simple Remote File Service daemon. Provides remote file access to DEBROS-based controllers.	Production			Davis	C	Linux, Unix	EE		
	Auto Config	autoConfig	Older (unreliable) version of automatic configuration service. Used with pre-DEBROS Dynamic-C based controllers.	Production			Davis	C	Linux, VxWorks	EE		
	Smart Configuration	SmartConfig	Newer (more capable and reliable) version of automatic discovery and configuration service. Used by DEBROS-based controllers.	Production			Davis	C	Linux, Unix, VxWorks	EE		
	BCM	BCM	Beam Current Monitor	Production			Davis	Dynamic-C	Rabbit	EE	30+	Skeleton vers created years ago to test NSCL serial protocol on DEBROS. No recent work done on porting the rest of the code
	DVR	DVR	Dee Voltage Regulator	Production			Davis	C	DEBROS	EE	8	Code is stable, but this device has significantly higher unexplained reboots which seem to coincide with restarting after a maintenance period (i.e. I am currently leaning toward this being a hardware issue)
	ECROven	ECROven	ECR Oven controller	Production			Davis	C	DEBROS	EE	1	First completed port of Dynamic-C appl to DEBROS platform. Includes improvements to address long-standing issues with original design
	LLRFTURNON	LLRFTURNON	LL RF Turn On: Monitor and count spark events, quickly turns off RF	Production			Davis	C	DEBROS	EE	15	First devices being installed during summer 2009 shutdown
	ModularPS	ModularPS	Reversing switch for 1 or more combined supplies using an SCR-bridge to switch polarity	Production			Davis	C	DEBROS	EE	24+	First devices being installed during summer 2009 shutdown. Somewhat improved version of ModularPS-FET controller. but still does not provide means to smoothly switch polarity
	ModularPS-FET	ModularPS-FET	Reversing switch for 1 or more combined supplies using a FET-bridge to switch polarity	Production			Davis	C	DEBROS	EE	3	Software stable, but hardware lacks features needed for smooth control
	Phase Controller	PhaseCtrl	Digital Phase Controller	Production			Davis	C	DEBROS	EE	15	First devices being installed during summer 2009 shutdown
	psBrack	psBrack	Controls up to 8 independent power supplies.	Production			Davis	C	DEBROS	EE	41	First controller to use DEBROS. Several enhancments made since original version
	RevSwitch	RevSwitch	Reversing Switch for K500 Trim Coil Power Supplies	Production			Davis	Dynamic-C	Rabbit	EE	17	shares code with Dynamic-C vers of TCPS which has been ported
	rfMonitor	rfMonitor	Simple device to monitor 8 analog inputs	Development			Davis	C	DEBROS	EE	0	not currently installed
	RFServo	RFServo	Control DC or BB Servo positioned devices using software control loop	Production			Davis	Dynamic-C	Rabbit	EE	54	DEBROS port started (required to add needed improvements)

[illegible]