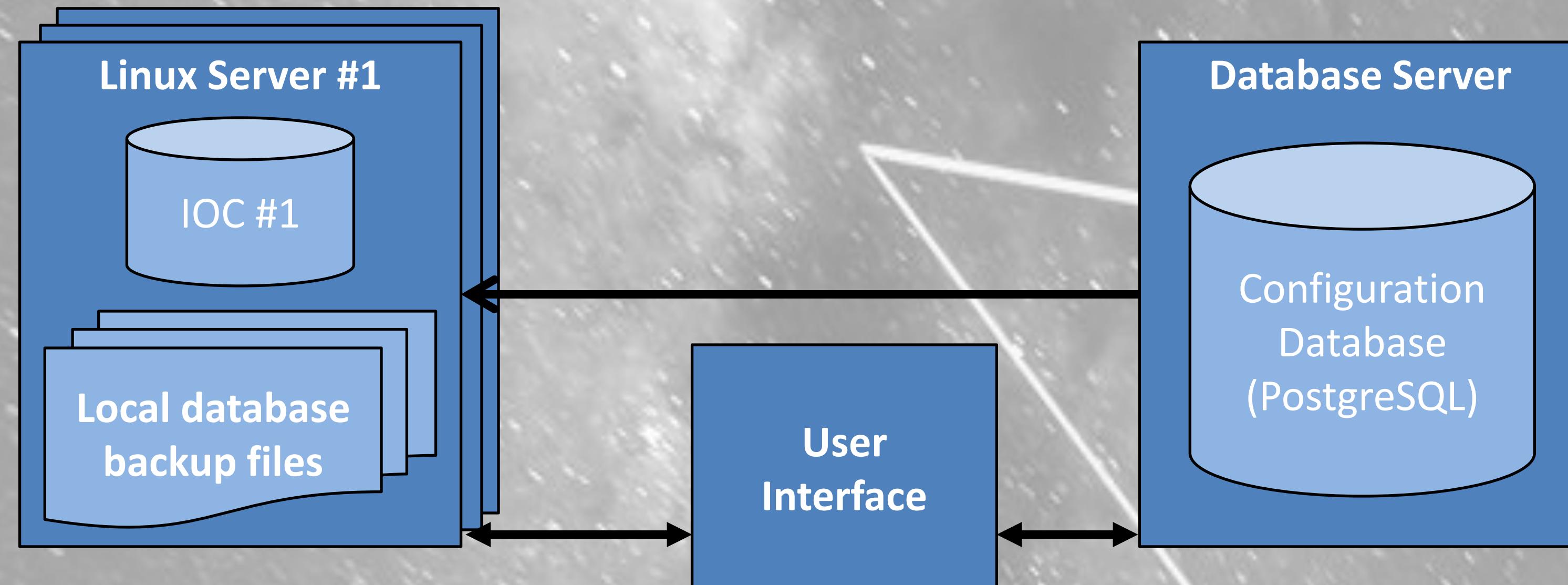




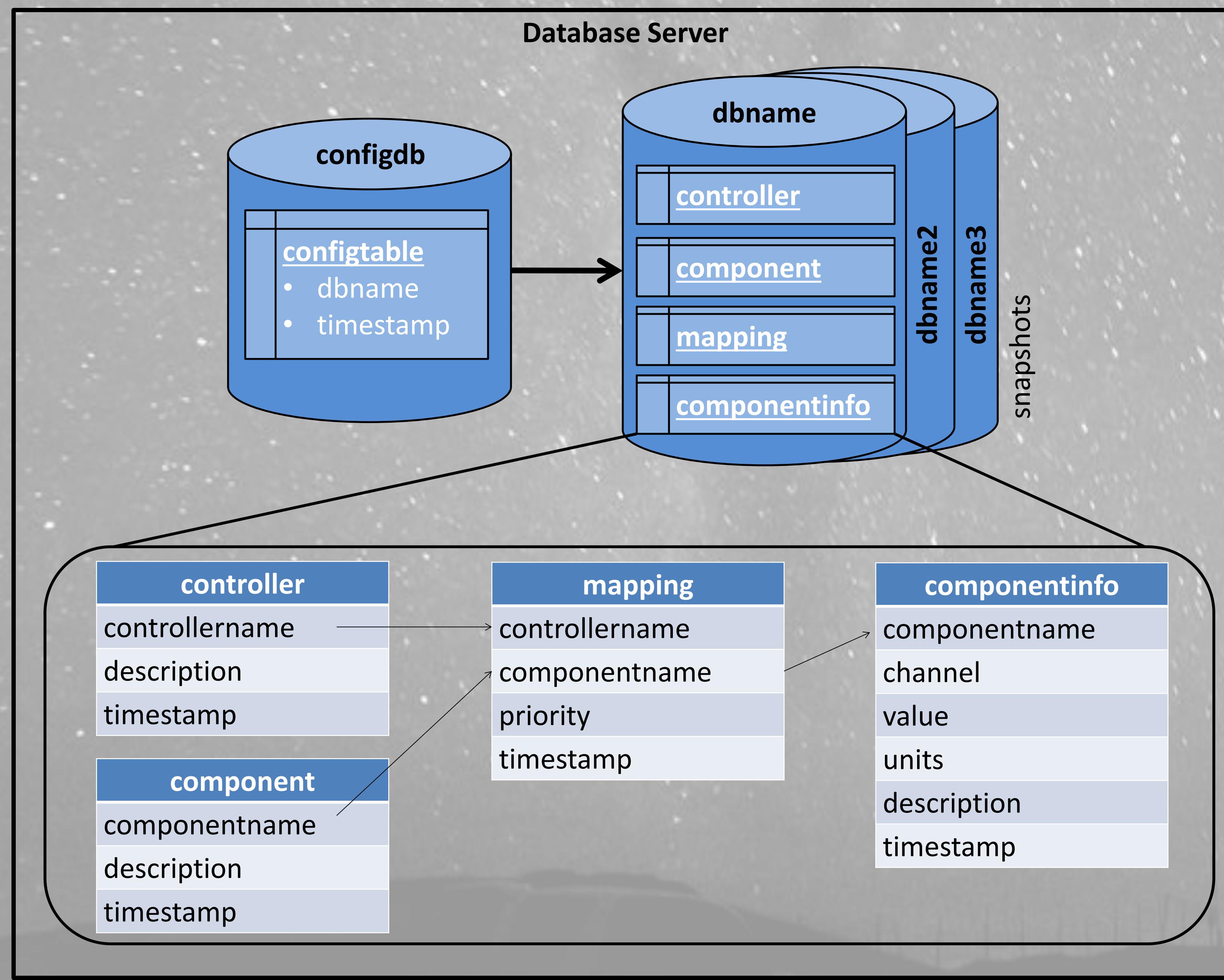
## Overview

- Manages persistent configuration data through a database-backed solution with a simple API and user interface
- Supports fail-safe operations when the database server is down or there is a network glitch



## Database

- Allows easy hierarchical configuration with a controller/component relational schema
- Allows prioritization of component load order
- Uses triggers to provides change history, timestamping and “house cleaning”
- Ability to create and load snapshots



## IOC

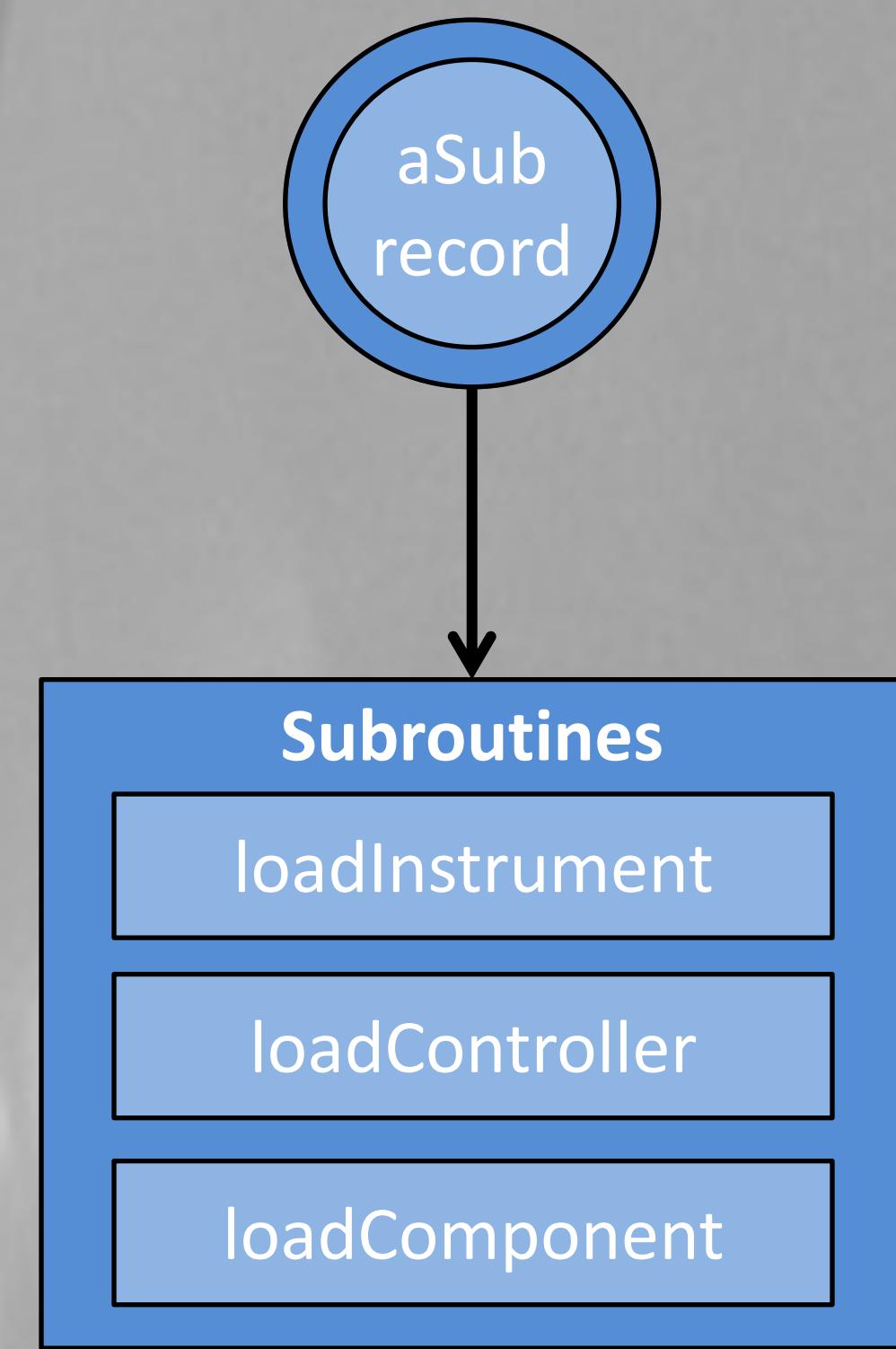
- Configuration support calls can be initiated from within the iocsh or dynamically using EPICS record support

**IOC**

```

k0:ioc> loadController(k0, supHIRES)
csTool: Connecting to configdata database
csTool: 1 components returned for supHIRES
csTool: Component = tcsHIRES
csTool: 39 channels loaded for tcsHIRES
k0:ioc>

```



## User Interface

- Written in C++ using the Qt framework
- System level view
- IOC comparison with unit conversion
- Ability to add, update and delete items

Controller	controllername	description	timestamp
axe	axe	Telescope axes	2/14/13 12:26 PM
axe	axeEncCoeff		4/1/13 2:49 PM
axe	axeEncAz		
axe	axeFilter100hz		
axe	axeLoad		
axe	axeProto		
axe	axeServo		
axe	axeShape		
axe	axeTraj		
axe	timDat		
axe	timOut		
axe	timPol		
axe	axeTest		
dom			
hq			
pnt			
pntHIRES			
proto			
rot			
rot	rotHIRES		
rot	rotK1		6/3/13 3:01 PM
rot	rotK2		6/3/13 3:01 PM
rot	rotOld		6/18/13 9:42 AM
rot	rotTraj		
sec	sec	Secondary	2/14/13 4:03 PM
sec	secHIRES	HRIES secondary configuration	2/14/13 4:02 PM

Controller	controllername	componentname	priority	timestamp
axe	axe	axeElCoeff	1	4/1/13 4:26 PM
axe	axe	axeEncAz	1	4/1/13 4:54 PM
axe	axe	axeFilter100hz	1	5/20/13 4:32 PM
axe	axe	axeLoad	5	5/20/13 5:08 PM
axe	axe	axeProto	1	8/27/13 1:34 PM
axe	axe	axeServo	1	2/14/13 3:58 PM
axe	axe	axeShape	1	2/14/13 3:58 PM
axe	axe	axeTraj	1	3/25/13 11:16 AM
axe	axe	timDat	1	2/14/13 3:58 PM
axe	axe	timOut	1	2/14/13 3:58 PM
axe	axe	timPol	1	2/14/13 3:58 PM
axe	axe	axeTest	*	
dom			*	
hq			*	
pnt			*	
pnt	pntHIRES		*	
proto			*	
rot			*	
rot	rot		*	
rot	rotHIRES		*	
rot	rotK1		*	
rot	rotK2		*	
rot	rotOld		*	
rot	rotTraj		*	

Controller	componentname	channel	value	units	description	ioc value
axe	axeTraj	\$tel.dcs:\$sub traj.CCF	-125.3			-125.30000000
axe	axeTraj	\$tel.dcs:\$sub traj.CCV	-1211			-121.10000000
axe	axeTraj	\$tel.dcs:\$sub traj.CF	324.6			324.60000000
axe	axeTraj	\$tel.dcs:\$sub traj.CV	321.2			321.20000000
axe	axeTraj	\$tel.dcs:\$sub traj.ERTH	5.0	arcsec		4.99986
axe	axeTraj	\$tel.dcs:\$sub traj.GRD	0.4			0.40000000
axe	axeTraj	\$tel.dcs:\$sub traj.HOLD	1			1
axe	axeTraj	\$tel.dcs:\$sub traj.HOR	15.0			15.00000000
axe	axeTraj	\$tel.dcs:\$sub traj.KERB	0.9			0.90000000
axe	axeTraj	\$tel.dcs:\$sub traj.LOF	-0.5			-0.50000000
axe	axeTraj	\$tel.dcs:\$sub traj.LOV	0.2			0.20000000
axe	axeTraj	\$tel.dcs:\$sub traj.NCCF	-27.6			-27.60000000
axe	axeTraj	\$tel.dcs:\$sub traj.NCCV	-24.1			-24.10000000
axe	axeTraj	\$tel.dcs:\$sub traj.NCF	185.7			185.70000000