Proxy IOC
&
CA NameServer Update

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Nameserver Update

- Currently in use at JLab for all client applications except those few which haven't been rebuilt with EPICS 3.13
- Handles more than 250,000 pvs and all control room hosts
- Reduces load on IOCs and reduces client connection time

Nameserver Update

- Although updates to hashtable are automatic when IOCs are rebooted, if pvs are moved from one IOC to another, the IOC which loses the pvs must be rebooted before the IOC which gains them.
- The nameserver has twice gone into a mode in which it takes 100% of cpu time.Gateway, Netscape, medm also do this. HPUX problem?

Proxy IOC (PIOC)

- A server based on PCAS
- A sponsor API which allows application programmers to create and delete pvs from within code or scripts
- Purpose:
  - Integration of high level application's process variables into EPICS.
  - System simulation and offline testing of applications which normally access IOC pvs.

PIOC Scope

- Supports all CA datatypes and CAS pv types
- channel access security
- pv attributes:
  - hopr, lopr, drvh, drvl, alarms, precision
  - units, status and severity

- Ready for beta testing

PIOC API

- **C++ shared library:**
- **make_pv()**
- **modify_default_attributes**
- **delete_pv()**
- **show()**

Example C++ code

```
Sponsor s;   //creates default pv;

s.set_alarm_limits(-10, -5, 5, 10);
s.set_egu("uA");
ret = s.make_pv(name, host_name);
if(ret) cout << pioc_error(ret);
```

Example tcl/tk code

```
package require PIOC

# default double, scalar, non-persistant pv
create_pv(mypv,  myPgm, piocHost, 0)

# enum type persistant pv
create_enum_pv(mypv2, myPgm, piocHost, “on
   off”, 1)
```