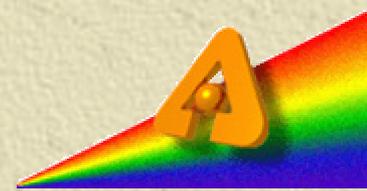
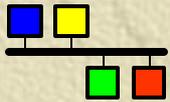


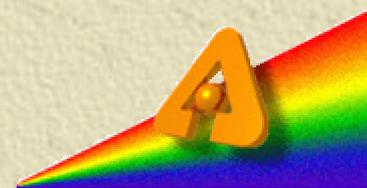
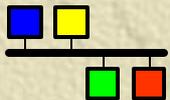
EPICS Process Variables

-
- ✦ One of the convenient features of EPICS is that you do not have to “register” the name of your process variables in a central registry.
 - ✦ One of the potentially vulnerable features of EPICS is that you do not have to “register” the name of your process variables in a central registry.



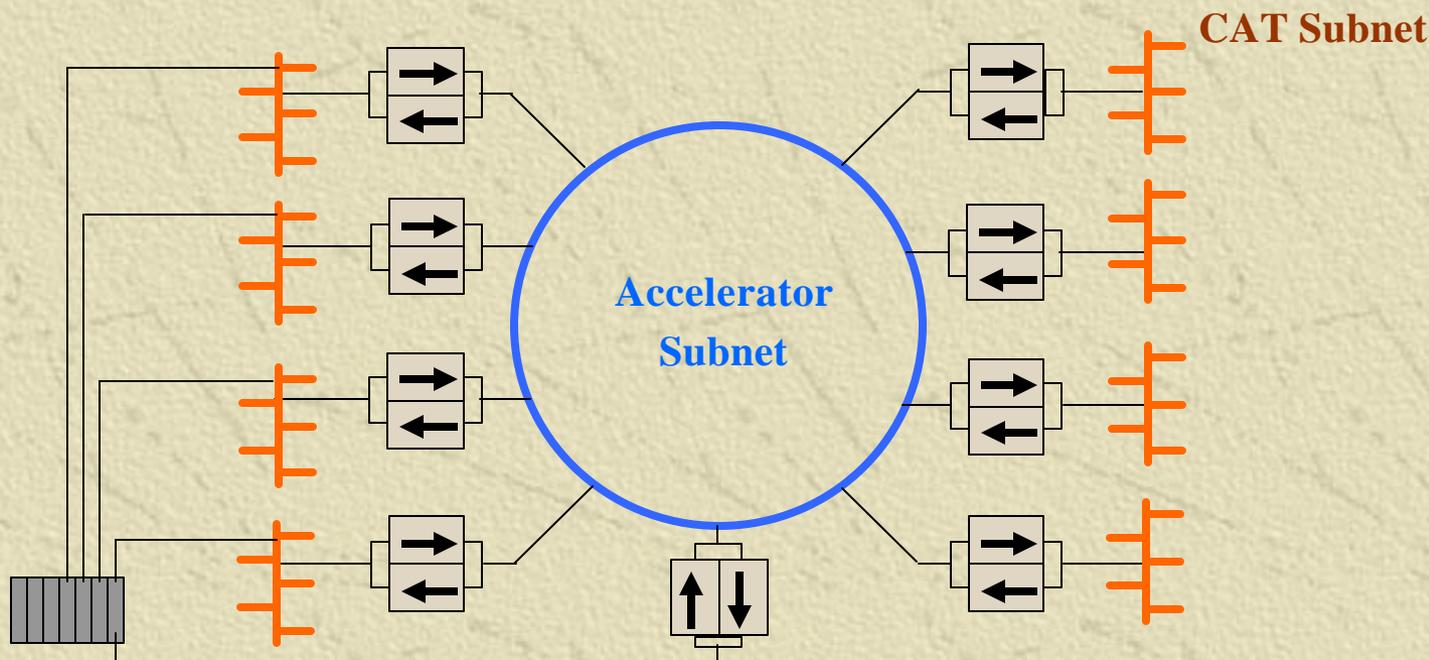
PV Names at the APS

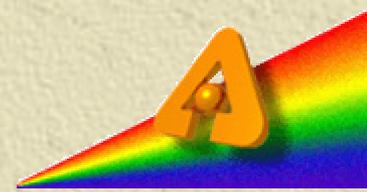
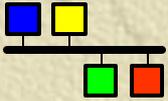
-
- ✦ There has never been an attempt to implement a site-wide PV naming convention at APS.
 - ✦ Historically, there was little need for such a convention since PV broadcasts were <by default> constrained to a local subnet.
 - ✦ This was short-sighted ...



What's the Problem?

-
- ✦ With the advent of PV gateways, reverse PV gateways, and liberal use of EPICS_CA_ADDR_LIST, the “isolated-subnet” assumption is no longer valid.

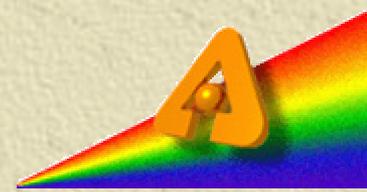
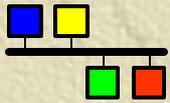




What's the Problem?

-
- ✦ Separate PV name-spaces have essentially been shorted together into a global APS PV name-space.
 - ✦ There is nothing to prevent duplicate PV names from being used.
 - ✦ It will become increasingly difficult to determine the origin of a PV.

e.g. S1:resetAll.



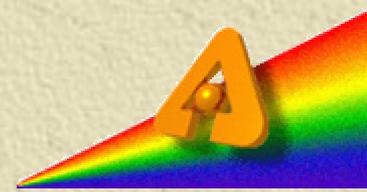
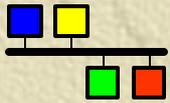
What's the Problem?

✦ If left unaddressed, where might this lead in 2-3 years?

✦ Potential Problems

- ◆ Your application might break because someone else defined a PV with the same name
- ◆ Configuring the PV gateways to filter PV names will become increasingly complex and error prone, resulting in frustration for everyone.

✦ Should we be proactive or reactive?



What's the Solution?

✦ Need

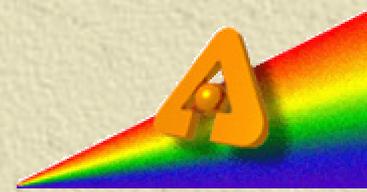
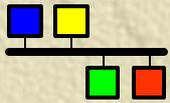
- ✦ Survey of naming conventions <formal and/or default> currently in use

✦ Good Solution

- ✦ Adjust naming conventions as necessary to eliminate conflicts
- ✦ Adhere to these “adjusted conventions” in the future

✦ Better Solution

- ✦ Define a naming convention that we would like to live with for the next 20 years.
- ✦ Evolve to that convention over the next 1-2 years



What's Next?

✦ BCDA will initiate a survey of PV prefixes in use

◆ Sources:

- Naming Conventions
- List of PVs from iocs (does not require rebooting)
 - ◆ Script to identify unique prefixes
- List of PVs sourced from Portable Channel Access Server applications

✦ Results of survey will be presented at the next TWG meeting