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advent of PV gateways, reverse PV gateways, and liberal use of EPICS_CA_ADDR_LIST, the “isolated-subnet” assumption is no longer valid.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