



## Using OO at BESSY

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## CA Proxy Gateway Status and Plans

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**EPICS** 





- Overview
- Caveats
- Status
- Possible Improvements
- Roadmap





**EPICS** 



- As well CA server as CA client
- Usually runs on workstation with multiple network interfaces
- Connects and separates networks in terms of CA connections
- May use channel aliases (e.g. prefixes)
- Caches data
- Keeps connections alive
- Watchdog mode restarts on core dump



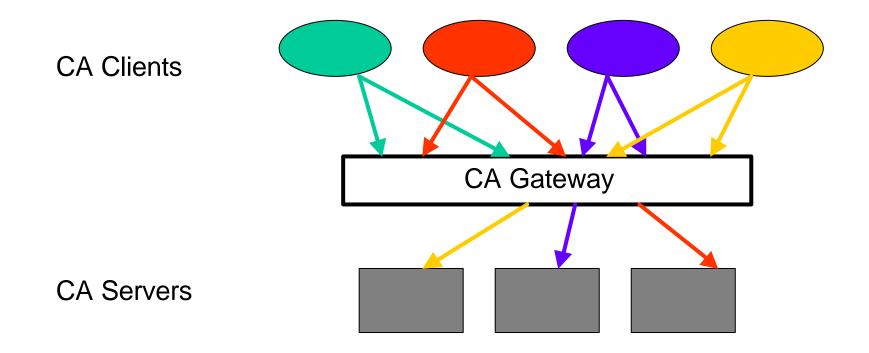


EPICS

## CA Proxy Gateway



Allows CA between networks - configurable through regular expression filters and CA access security.



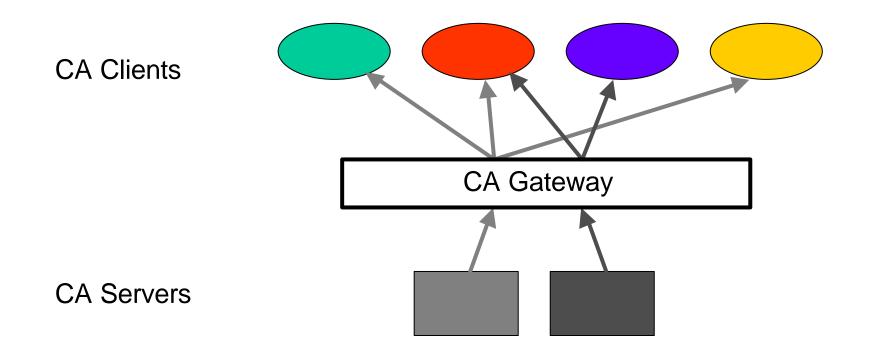




## CA Proxy Gateway



Clients point to one proxy that distributes the data with minimal impact on the private parts.











- The Gateway always introduces a nonscalable bottleneck.
- A heavily loaded Gateway is a CPU and memory consuming application that usually will add overhead to the system.
- Bad configuration (too loose) may put more load on the precious side instead of shielding the IOCs.



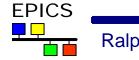






Stable (i.e. basically unchanged):

- Compiles against R 3.13.2 with patches (mostly CAS statistics)
- Known to run on Solaris, HP-UX, Linux, VMS
- Integral part of controls at a growing number of laboratories (APS, SLAC, JLab, BESSY)
- Runs stable for read access
- Occasional crashes seen with write access callbacks - investigation continues asap
- Documentation is still nonexistent









- New configuration file format (regexp hierarchies with options)
- New configurable watchdog to replace unusual process interface
- More statistics
- Code documentation (Doxygen?)
- User manual
- CMLOG interface
- ?? OO interface on top ?? Adds buzzword compliance but definitely needs more thought









- Find and fix bugs that lead to crashes
- Finally get 3.14 running on HP-UX 11
- Add server statistics to CAS and have Jeff approve
- Get existing code running with 3.14
- Add priorities to improvement options how? Suggestion: two-step process Send mail to join the first-level club <*Ralph.Lange@mail.bessy.de>* Results will be posted for review on tech talk



