**CXv4, a Modular Control System**

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**CX**

- Developed in BINP since late 1990s
- Runs on Linux and *NIX
- Supported hardware includes CAMAC, PCI/cPCI, VME, CAN, RS485
- Used at VEPP-5, LIA-2 and several smaller facilities

VEPP-5 will supply e+ and e- to BINP e+/e- colliders VEPP-4 and VEPP-2000. Thus, communication with their diverse control systems is required in CX. **HOW?**

**Solution:** make everything modular.
- Drivers, network protocol implementation (at both client and server sides) are plugins.
- Server is a library.

**Conventional 3-layer control system layout**

![Conventional 3-layer control system layout](image)

**CXv4 modular structure**

![CXv4 modular structure](image)

**Possible combinations of CX modules**

- **GUI / Logic**: Drivers + server + drivers combined into a single simple application with no network
- **GUI / Logic**: Drivers + server + drivers combined into a single simple application with remote access
- **Existing application**: Network-access-enabled existing application

Drivers can access channels from neighbor drivers like clients. Unified API for local and remote.