ActAPI

Feedback Actuator API Discussion

The Feedback Actuator Application is responsible for accepting actuator commands from the fast feedback network and applying those settings to the actuator devices. It also monitors the commanded actuator devices and returns the readback value for each device with a new setting, as it becomes available.

Design Goals:

Feedback Actuator IOC Application

Proposal:

- The Actuator app on the actuator IOCs accept commands from the FF Network and apply the settings to those actuators it controls.
- Information in the command data: device name, setpoint value, quality, timeslot
- The actuator setpoint is applied in the timeslot indicated in the command
- the quality can indicate that the actuator should not really set the actuator, but still update it's diagnostics - this can be helpful for COMPUTE or error conditions...
- the actuator readback is returned to the FF Network within the next pulse interval, or as soon as it can...?
- Readbacks are sent on ff network only for commanded actuators (not all actuators in the IOC)
- information in the readback data: device, readback value, quality measure

Feedback Actuator IOC <-> FF Network Interface API

- network layer calls ActuatorApp.setActuators(actDevices,data)
- Actuator app. calls Network.putData(actDevices,readbackdata)