Nectarcam remote control

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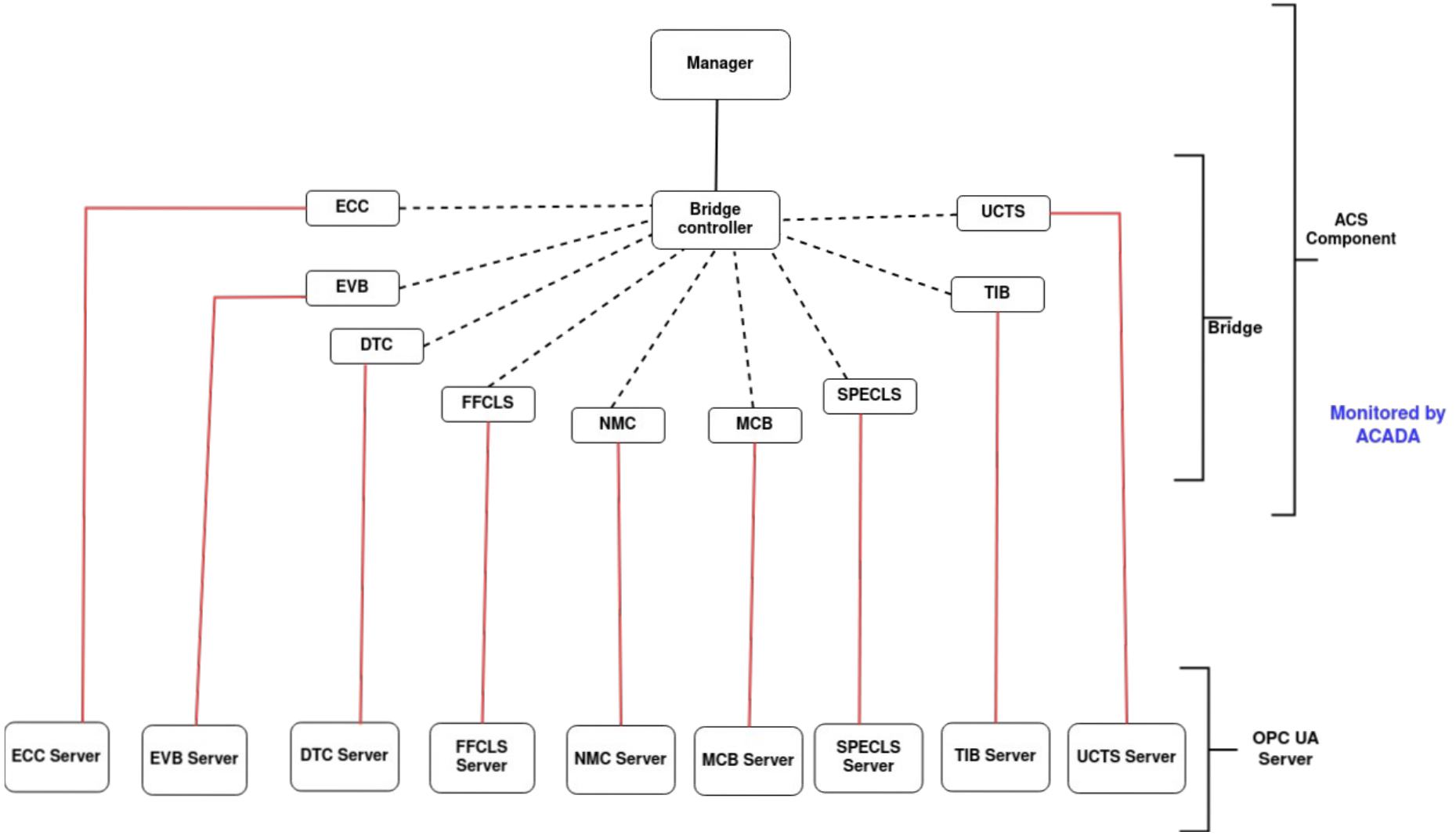
Summary

1. System architecture
2. Manager

1. System architecture



1.1. Handling connexion issue ?

If the link breaks or the server is shutdown during monitoring

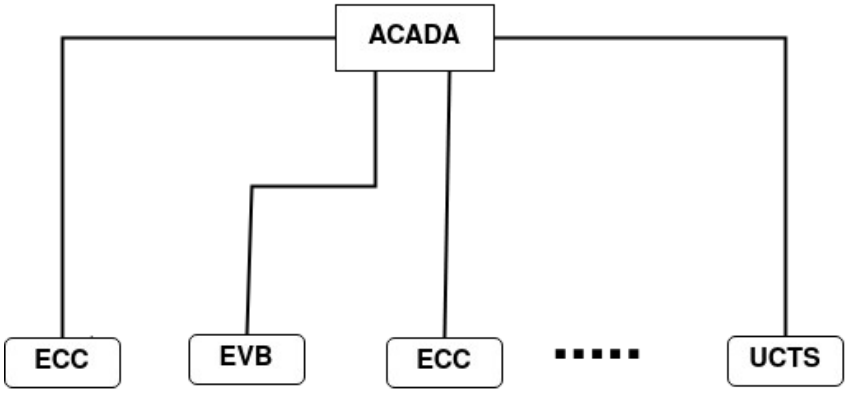
→ **Deactivate the bridge**

→ **Return a corresponding Completion code**

→ **Return default value**

> In order to avoid sending ACADA irrelevant monitoring information when the corresponding subsystem or device is offline, the corresponding ACS Component or OPC UA server shall be deactivated. In those cases when already existing hardware or software characteristics do not make the deactivation possible, the exposed monitoring values shall encode an exception in their completion (ACS), or node value (OPC UA).

1.2. How to expose components to ACADA ?



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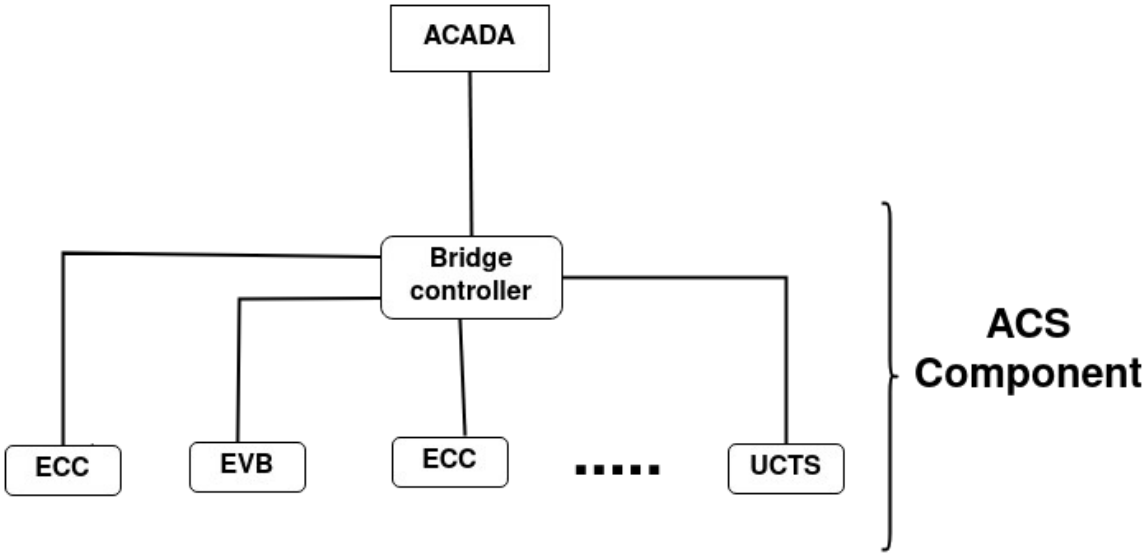
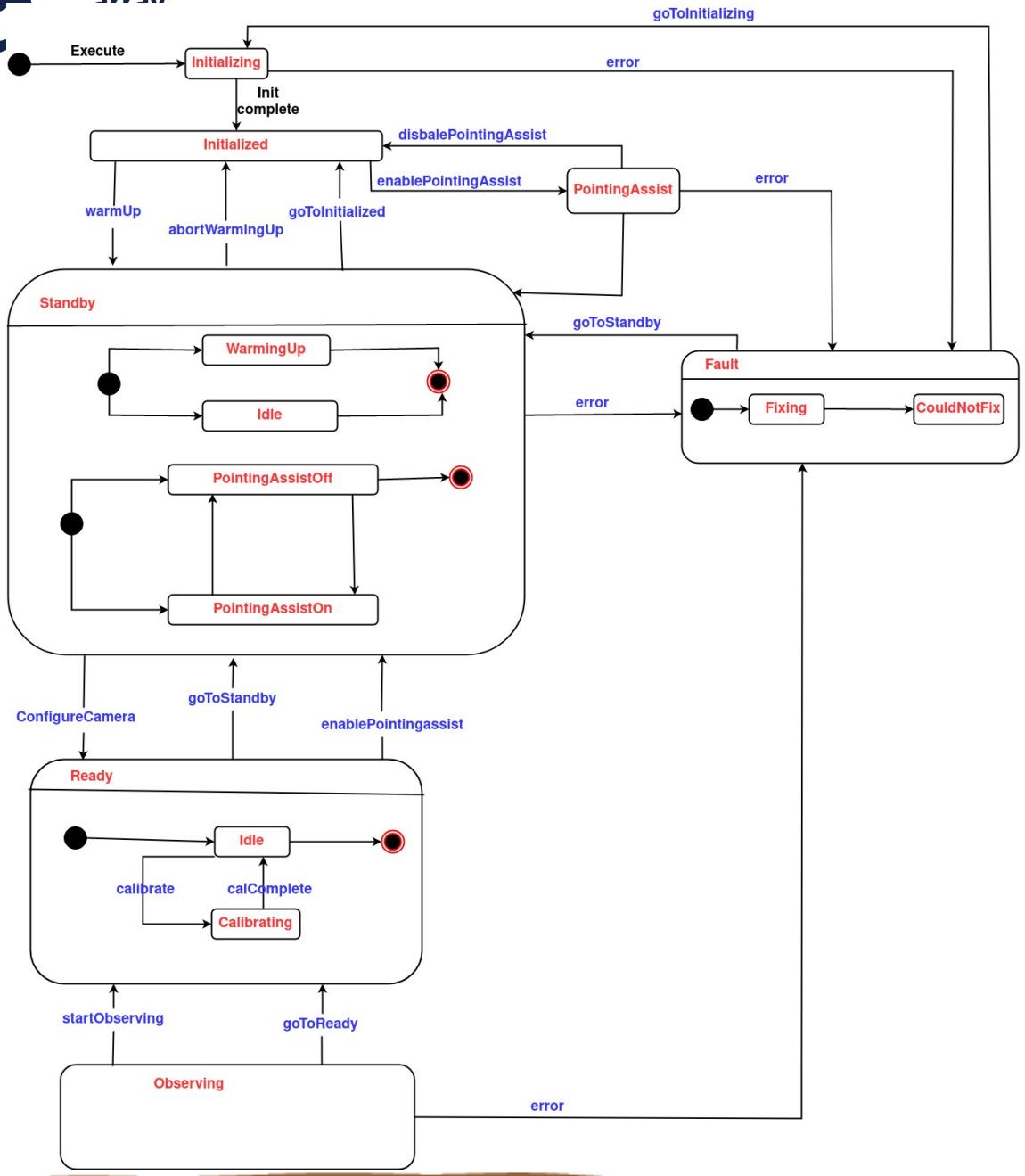


2

2. Manager

State machine



WarmUp

- ECC to Ready mode
- Power on DTC modules and make sure all modules are powered on
- Check if Level 1 and Level 2 switches are aivalable and we get their required number (in manger config file)
- Configure NMC (needs config file)

EnablePointingAssist

- Put the reflective target of X-Y table in the center
- Switch on positioning LEDs
- Open shutter

DisablePointingAssist

- Park the reflective target
- Switch off positioning LEDs
- Close shutter

ConfigureCamera

- NMC : switch high voltages
- Configure FFCLS (needs config file)
- Configure EVB
- Configure UCTS and reset counters
- Configure TIB (needs config file)
- Setting L1 Trigger Mask
- Opening shutter

startObserving

- Start NMC (Start Data Acquisition process for all the FrontEndBoard)
- Start EVB (Observing state)
- Reset UCTS counters
- Connect TIB to EVB
- Disable PPS distribution if not already done
- Reset TIB counters
- start UCTS TDC counters and ask UCTS to send external trigger to TIB
- Enable triggers

Raising questions

- Storage of configuration files ?