

How to Revive Micronix MMC-100 Controllers

We are having the repeated issue where serial communication is lost to the MMC-100 controller and a power cycle is needed to revive it. I have also found that often if the IOC already running prior to booting up the controller, it will remain in an error state. We thus have the following procedure to revive the Micronix MMC-100 controllers. For a more permanent solution, further investigation is needed to understand underlying issues with the serial cabling currently in place.

Procedure:

1. Stop MMC-100 IOC.
 - a. Run `$ iocmanager` from a tmo control room machine, i.e `tmo-console`
 - b. Stop IOC for the controller having issues (use the findPV option in the IOCmanager described [here](#) for this)
 - i. Double click on the `State` field for the IOC in question.
 - ii. Single click on the drop down icon that appears, and set this field to `OFF`
 - iii. Click `Configuration > Apply` and wait for the dialogue menu that open (this can take a few moments)
 - iv. Select the checkbox to stop the IOC in question, and hit `OK`. The IOC is now off.
2. Power cycle the controller having issues
 - a. The power cable is on the opposite side of the controllers as the motor/encoder cables
3. Confirm serial communication restored
 - a. *(to be done: write little blurb on how to figure out which serial port is used.)*
 - b. One can thus confirm serial communication following this pattern:
 - i.

```
[sheppard@tmo-console tmo]$ telnet ser-tmo-04 4001
Trying 172.21.132.55...
Connected to ser-tmo-04.
Escape character is '^]'.
1VER?
#MMC-100.X3 V1.4.60
2VER?
#MMC-100.X3 V1.4.60
3VER?
#MMC-100.X3 V1.4.60
4VER?
#MMC-100.X3 V1.4.60
```
4. Restart the IOC for the controller in question
 - a. These steps are identical to those needed to stop the IOC, but instead simply set the `State` field back to `DEV/PROD`
5. Launch control screens to confirm successful revival