ISU KLM Meeting

July 18

Noah Brenny

Update

- Updated code to retrieve flow rates from last line of the .csv file that is updated periodically with count rates (from bubbler in lab) and broadcast the values as PVs
- Installed Phoebus on the lab computer
- Confirmed that PV broadcast and reception works as expected over the ethernet network (Fig. 1)

Value Saved V

Fig. 1: PVs on Phoebus on lab computer

- First look at a basic time series plot on Phoebus with simulated data (Fig. 2)
 - Simulated because there is a small bug: Phoebus believes that the PVs are of integer data type, and the range of our count rate is ~1 Hz, so there would never be variation without simulated data at this point with this bug

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Fig. 2: time series plot on Phoebus

Pi code development summary

- Updated code to retrieve flow rates from the .csv file that is updated periodically with count rates (from bubbler in lab) and broadcast the values as PVs
- Installed Phoebus on the lab computer
- Confirmed that PV broadcast and reception works as expected over the ethernet network (Fig. 1)
- First look at a basic time series plot on Phoebus with simulated data (Fig. 2)
 - Simulated because there is a small bug regarding data type

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7	KLM:Channel-00:FlowRate		2023-07-18 18:43:22.223364000	68 l/min		
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Fig. 1: PVs on Phoebus on lab computer



Fig. 2: time series plot on Phoebus