



FRIB

retools: Create PV aliases and info tags based on regular expressions

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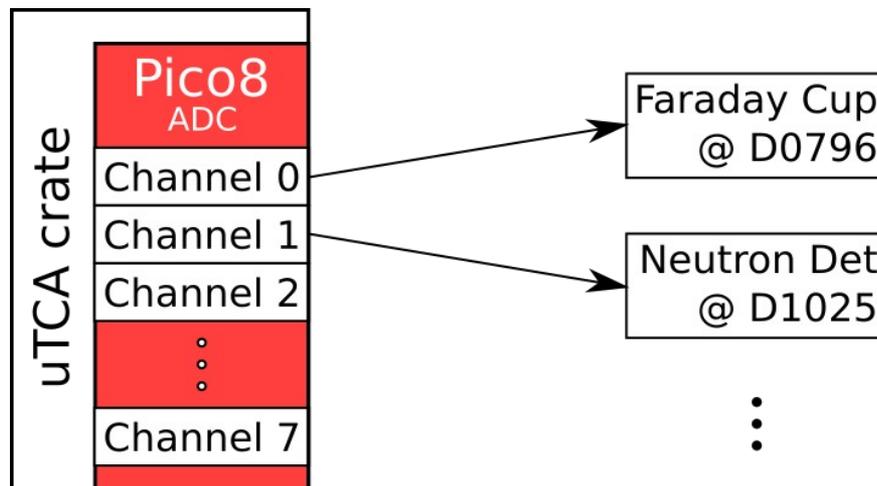


U.S. DEPARTMENT OF
ENERGY

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Science

Problem Statement

Some device PVs need aliases to describe what they are connected to



Base PVs

```
epics> dbgrep DIAG_MTCA01:PICO8_CH0:*  
DIAG_MTCA01:PICO8_CH0:DESC_RD  
DIAG_MTCA01:PICO8_CH0:TOF_CSET  
DIAG_MTCA01:PICO8_CH0:TRIP_EN_CMD  
DIAG_MTCA01:PICO8_CH0:LAVGNSAMP_CSET  
...
```

Desired Aliases

```
epics> dbgrep FE_LEBT:FC_D0796:*  
FE_LEBT:FC_D0796:DESC_RD  
FE_LEBT:FC_D0796:TOF_CSET  
FE_LEBT:FC_D0796:TRIP_EN_CMD  
FE_LEBT:FC_D0796:LAVGNSAMP_CSET  
...
```

retools Solution

Some device PVs need aliases to describe what they are connected to

```
reAddAlias "DIAG_MTCA01:PIC08_CH0:(.*)" "FE_LEBT:FC_D0796:$1"
```

Base PVs

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DIAG_MTCA01:PIC08_CH0:DESC_RD  
DIAG_MTCA01:PIC08_CH0:TOF_CSET  
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DIAG_MTCA01:PIC08_CH0:LAVGNSAMP_CSET  
...
```

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...
```



Problem Statement

- At FRIB, the Archiver is configured via *info* tags placed on PVs:
 - `info("archive", "monitor:1.0,retention:3mo")`
- Archiver policies depend on the *aliased* PV:
 - For instance, Faraday Cup readouts have different Archiver Requirements than Neutron Detectors (even though they are both read by Pico8 cards)

retools Solution

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 - `info("archive", "monitor:1.0,retention:3mo")`
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```
reAddInfo "^.*:FC_D.*:AVG_RD$" "archive" "monitor:1.0,retention:3mo"
```

```
reAddInfo "^.*:ND_D.*:AVG_RD$" "archive" "monitor:1.0,retention:12mo"
```

retools

- Available at:
 - <https://github.com/brunoseivam/retools>

Questions?

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Thanks!



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