

# Exercise



# EPICS Database Messages Datalog

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# EPICS Databases Exercises

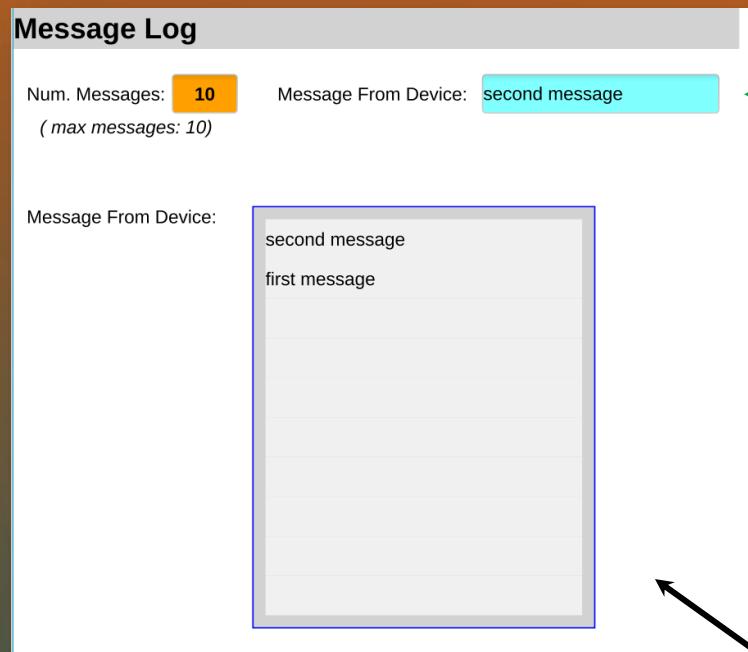
## Objectives:

- ▶ Create a simple EPICS application to manage a datalog
- ▶ The set of records keeps the last 10 messages provided by the field
- ▶ (optional) manage the number of messages displayed in the GUI

# EPICS Databases Exercises

## Final Objective:

Number of messages shown



Graphical User Interface

Device Log Output  
second message

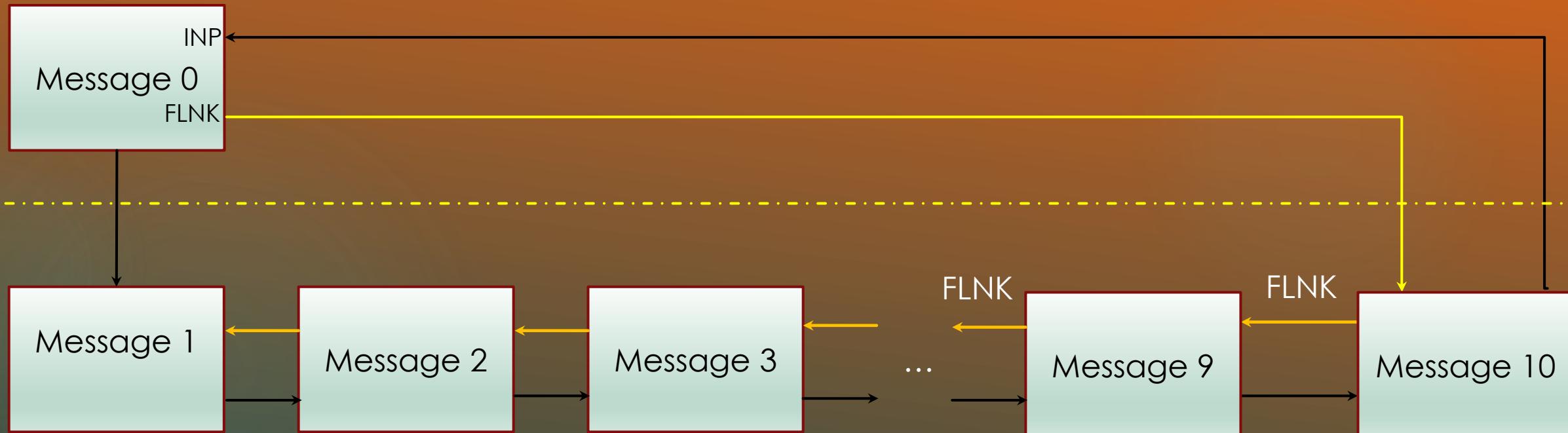
Message

*List of messages*

# EPICS Databases Exercises

**Final Objective:**

Legend: FLNK field  
 INP field



GUI Datalog

# EPICS Databases Exercises

## Create an empty EPICS application

- ▶ Go to your home directory and create a folder for this exercise there:

```
$ cd  
$ mkdir ExerciseDatalog  
$ cd ExerciseDatalog
```

- ▶ Use the EPICS Base script to create a new application of type IOC called datalog

```
$ makeBaseApp.pl -t ioc datalog
```

- ▶ Now create an IOC to run the application

```
$ makeBaseApp.pl -i -t ioc datalog
```

# EPICS Databases Exercises

## Datalog Application

- ▶ Records:

```
record(stringin, "$(P)$(Num) "){  
    field(DESC, "Message $(Num) ")  
    field(INP,  "$(Source)")  
    field(FLNK, "$(Flnk)") }
```

- ▶ Substitution file:

```
pattern {P, Num, Source, Flnk}  
{ "message", "0", "", "message10" }  
{ "message", "1", "message0", "message0" }  
..  
{ "message", "9", "message8", "message8" }  
{ "message", "10", "message9", "message9" }  
}
```