Scope Service

Release 1.0.0

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Contents

A example pvaccess java server for emulating oscilloscope data The scope server produces a set of example signals {square, sawtooth, sine, noise, gaussian}. The complete structure is described in the Data Structure section.

The can be references as follows:

pvget square

CHAPTER 1

Users Guide

1.1 Building

```
mvn clean package
```

1.2 Running

To run the example scope server you can run the jar built with all the binaries as follows.

```
java -jar scope-server-0.0.1-SNAPSHOT-jar-with-dependencies.jar
```

1.3 Data Structure

The data structure is as follows

```
sawtooth = structure
    epics:nt/NTScalarArray:1.0[] signal
        epics:nt/NTScalarArray:1.0
            double[] value [0.0,1.0,2.0,3.0,4.0,5.0,6.0,7.0,8.0,9.0]
            string descriptor count
        epics:nt/NTScalarArray:1.0
            double[] value [-1.0,-0.98,-0.96,-0.94,-0.92,-0.9,-0.88,-0.86,-0.84,-0.
↪8200000000000001]
            string descriptor sawtooth
    structure[] axis
        structure
            string dir x
            string side
            string label T/D
```

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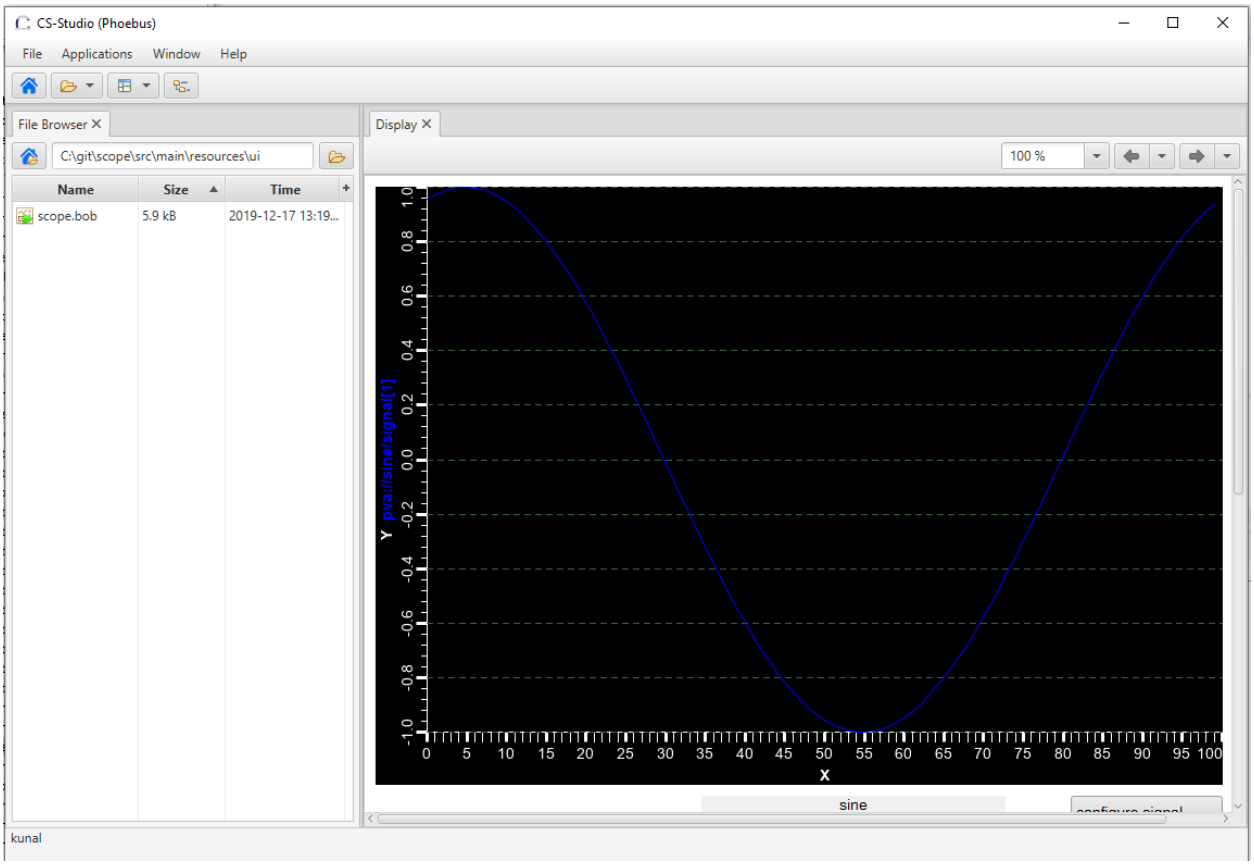
```
        structure
            string dir y
            string side
            string label Voltage
    structure[] trace
        structure
            string x count
            string y sawtooth
            string xaxis x
            string yaxis y
            string label
            string xerr
            string yerr
            string color
            string marker
    time_t timeStamp
        long secondsPastEpoch 1561647684
        int nanoseconds 617000000
        int userTag 0
```

1.4 User Interface

An example Diaply builder screen has been included in the repo under

/src/main/resources/ui/scope.bob



CHAPTER 2

Developers Guide: