The ‘myData’ User’s Guide

Version 1.0; by Chris Slominski

Introduction

The *myData* command line utility extracts archived data from *Mya* for a set of user requested channels. It creates a time slice table of channel history in the same format as the commonly used *mySampler* utility. Users of *myData* provide a date span of interest and a list of channel names. The utility will generate a time slice sampling of each channel at each time where there is a value change for at least one of the specified channels. This potentially provides a very significant reduction in output compared to *mySampler*; especially in the case where the time span is long and the channels of interest do not change often.

```
myData -b 2012-01-18 -e 2012-01-20 R123GSET R124GSET
Date                R123GSET R124GSET
2012-01-18 00:00:00  6.97574  7.62933
2012-01-18 02:34:04  6.97574  7.69819
2012-01-18 02:34:04  7.02424  7.69819
2012-01-18 07:05:41  7.08258      7.7
```

Usage

Enter “myData -h” to get a brief description of the command line syntax. The dates may be entered as “YYYY-MM-DD[HH:MM[:SS]]” or “HH:MM[:SS]”, where the square brackets denote optional fields. The second format assumes “today”. Like all *Mya* utilities that accept a date/time string, relative times are also accepted. The relative time format is “<number>[<units>]” and is interpreted relative to now. For example -10h means ten hours ago. The various unit characters are ‘s’, ‘m’, ‘h’, ‘d’, and ‘w’ for seconds, minutes, hours, days, and weeks respectively. Seconds are assumed when no units are provided in a relative time. The relative time format can also be interpreted as relative to the other supplied time, by entering the ‘^’ character. For example; “-b 2012-01-01 -e ^+1d” specifies a span of one day starting at the beginning of the year 2012 and “-b ^-1w -e -1d” means one week leading up to a day ago.

By default, when the value of a channel transitions between known and unknown, a time slice row will be generated. The value column will show ‘<undefined>’. This can happen when an IOC goes down. You can change the default behavior using a command line switch. When used, a known/unknown transition will not cause a time slice to be included in the output. Note however, that a ‘<undefined>’ may still appear in a time slice row when the command line switch is used. This will happen when a real value change occurs for one channel in the set, and the value of another channel is unknown at that time.

By default, any change in a channel’s value is considered significant and will cause a time slice row to be added to the output. Users may provide a threshold that defines the magnitude of change that they consider significant. To define a value change threshold append a threshold value to the channel name

on the command line, separating the two by a ‘,’ character. For example, “R123GSET,0.1” means the value of the channel R123GSET must change by at least 0.1 to be merit a time slice row in the output.