**NAME**

xil_histogram_get_by_name, xil_histogram_get_name, xil_histogram_set_name – get and set a histogram object name and get a handle to a histogram by specifying a name

**SYNOPSIS**

**#include <xil/xil.h>**

**XilHistogram xil_histogram_get_by_name (XilSystemState** *State*, **char** **name*);

**char* xil_histogram_get_name (XilHistogram** *histogram*);

**void xil_histogram_set_name (XilHistogram** *histogram*, **char** **name*);

**DESCRIPTION**

Use these functions to assign names to histogram objects, set a histogram's name, and to retrieve histogram objects by name.

**xil_histogram_get_by_name**() returns the handle to the histogram with the specified name *name.* If such a histogram does not exist, NULL is returned. **xil_histogram_get_by_name**() does not make a copy of the histogram.

**xil_histogram_get_name**() returns a copy of the specified *histogram's* name. A call to **free** (3) should be used to free the space allocated by **xil_histogram_get_name**(). If the specified histogram has no name, NULL is returned.

**xil_histogram_set_name**() sets the *name* of the specified *histogram* to the one provided.

**ERRORS**

For a complete list of XIL error messages by number, consult Appendix B of the *XIL Programmer's Guide.*

**EXAMPLES**

Create and name a histogram from a single-band byte reference image:

```
XilSystemState State;
XilImage ref_image;
XilHistogram histogram;

histogram = xil_histogram_create(State, 1, 256, 0.0, 255.0);
xil_histogram(ref_image, histogram, 1, 1);
xil_histogram_set_name(histogram, "reference");
```

Get a histogram named "reference" for comparison:

```
XilSystemState State;
XilHistogram histogram;

histogram = xil_histogram_get_by_name(State, "reference");
```

**NOTES**

If you give two histograms the same name, it is not defined which histogram will be retrieved by a call to **xil_get_by_name**().

**SEE ALSO** **xil_histogram_create**(3), **xil_histogram**(3).