NAME

smiRenderOID, smiRenderValue, smiRenderNode, smiRenderType − SMI data and MIB data rendering routines

SYNOPSIS

#include <smi.h>

char *smiRenderOID(unsigned int *oidlen***, SmiSubid *** *oid***, int** *flags***);**

char *smiRenderValue(SmiValue * *smiValuePtr***, SmiType *** *smiTypePtr***, int** *flags***);**

char *smiRenderNode(SmiNode * *smiNodePtr***, int** *flags***);**

char *smiRenderType(SmiType * *smiTypePtr***, int** *flags***);**

DESCRIPTION

These functions provide can be used to render OIDs, values of MIB data, or names of MIB nodes or types.

The **smiRenderOID()** function renders an OID given by its length *oidlen* and its array of sub-identifiers *oid**. The *flags* can be used to control the resulting format, see FORMATS below.

The **smiRenderValue()** function renders a MIB data value given by *smiValuePtr*. An underlying type *smiTypePtr* may be supplied to support a more human friendly rendering. The *flags* can be used to control the resulting format, see FORMATS below.

The **smiRenderNode()** function renders the name of a node given by *smiNodePtr*. The *flags* can be used to control the resulting format, see FORMATS below.

The **smiRenderType()** function renders the name of a type given by *smiTypePtr*. The *flags* can be used to control the resulting format, see FORMATS below.

FORMATS

Each of these functions gets a last argument named *flags*. This is a logcially or-ed set of flags that can be used to control the format of the rendered items:

SMI_RENDER_NUMERIC
: Allow numeric representation (default).

SMI_RENDER_NAME
: Allow a representation by name(s) if possible.

SMI_RENDER_QUALIFIED
: In case of a name representation, force a module prefix, e.g. IF-MIB::ifIndex instead of just ifIndex.

SMI_RENDER_FORMAT
: In case of *smiRenderValue()*, force the application of a format specification (e.g. an SMIv2 DISPLAY-HINT) of an underlying type if the *smiTypePtr* argument is not NULL and this type contains such a format specification.

SMI_RENDER_PRINTABLE
: In case of octet string value rendering, force a printable representation if all octets of the octet string are printable.

SMI_RENDER_UNKNOWN
: Force the return of a string containing SMI_LABEL_UNKNOWN ("<unknown>"), if the rendering would fail. This way, the only condition where NULL can be returned is the lack of memory.

SMI_RENDER_ALL
: Apply a combination of all these flags. This supports the (hopefully) most human friendly representations.

RETURN VALUE

All of these functions return a string, if successful, or NULL in case of a rendering failure. See also the **SMI_RENDER_UNKNOWN** flag above.



SEE ALSO

libsmi(3), **smi.h**

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