

**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 logically 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.



smi\_render(3)

SMI Management Information Library

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**SEE ALSO**

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

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