

**NAME**

**au\_bsm\_to\_domain**, **au\_domain\_to\_bsm** - convert between BSM and local protocol domains

**LIBRARY**

Basic Security Module Library (libbsm, -lbsm)

**SYNOPSIS**

```
#include <bsm/libbsm.h>
```

*int*

```
au_bsm_to_domain(u_short bsm_domain, int *local_domainp);
```

*u\_short*

```
au_domain_to_bsm(int local_domain);
```

**DESCRIPTION**

These interfaces may be used to convert between the local and BSM protocol domains. The **au\_bsm\_to\_domain()** function accepts a BSM domain, *bsm\_domain*, and converts it to a local domain, such as those passed to `socket(2)`, that will be stored in the integer pointed to by *local\_domainp* if successful. This call will fail if the BSM domain cannot be mapped into a local domain, which may occur if the socket token was generated on another operating system.

The **au\_domain\_to\_bsm()** function accepts a local domain, and returns the BSM domain for it. This call cannot fail, and instead returns a BSM domain indicating to a later decoder that the domain could not be encoded.

**RETURN VALUES**

On success, **au\_bsm\_to\_domain()** returns 0 and a converted domain; on failure, it returns -1 but does not set `errno(2)`.

**SEE ALSO**

`au_bsm_to_socket_type(3)`, `au_socket_type_to_bsm(3)`, `au_to_socket_ex(3)`, `libbsm(3)`

**HISTORY**

**au\_bsm\_to\_domain()** and **au\_domain\_to\_bsm()** were introduced in OpenBSM 1.1.

**AUTHORS**

These functions were implemented by Robert Watson under contract to Apple Inc.

The Basic Security Module (BSM) interface to audit records and audit event stream format were defined

by Sun Microsystems.