

NAME

selabel_open, selabel_close – userspace SELinux labeling interface

SYNOPSIS

```
#include <selinux/selinux.h>
#include <selinux/label.h>
```

```
struct selabel_handle *selabel_open(int backend,
                                   const struct selinux_opt *options,
                                   unsigned nopt);
```

```
void selabel_close(struct selabel_handle *hnd);
```

DESCRIPTION

selabel_open() is used to initialize a labeling handle to be used for lookup operations. The *backend* argument specifies which backend is to be opened; the list of current backends appears in **BACKENDS** below.

The *options* argument should be NULL or a pointer to an array of **selinux_opt** structures of length *nopt*:

```
struct selinux_opt {
    int      type;
    const char *value;
};
```

The available option types are described in **GLOBAL OPTIONS** below as well as in the documentation for each individual backend. The return value on success is a non-NULL value for use in subsequent label operations.

selabel_close() terminates use of a handle, freeing any internal resources associated with it. After this call has been made, the handle must not be used again.

GLOBAL OPTIONS

Global options which may be passed to **selabel_open()** include the following:

SELABEL_OPT_UNUSED

The option with a type code of zero is a no-op. Thus an array of options may be initialized to zero and any untouched elements will not cause an error.

SELABEL_OPT_VALIDATE

A non-null value for this option enables context validation. By default, **security_check_context(3)** is used; a custom validation function can be provided via **selinux_set_callback(3)**. Note that an invalid context may not be treated as an error unless it is actually encountered during a lookup operation.

SELABEL_OPT_DIGEST

A non-null value for this option enables the generation of an SHA1 digest of the spec files loaded as described in **selabel_digest(3)**

BACKENDS**SELABEL_CTX_FILE**

File contexts backend, described in **selabel_file(5)**.

SELABEL_CTX_MEDIA

Media contexts backend, described in **selabel_media(5)**.

SELABEL_CTX_X

X Windows contexts backend, described in **selabel_x(5)**.

SELABEL_CTX_DB

Database objects contexts backend, described in **selabel_db(5)**.

RETURN VALUE

A non-NULL handle value is returned on success. On error, NULL is returned and *errno* is set appropriately.

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SEE ALSO

selabel_lookup(3), **selabel_stats(3)**, **selinux_set_callback(3)**, **selinux(8)**