

NAME

`security_class_to_string`, `security_av_perm_to_string`, `string_to_security_class`, `string_to_av_perm`, `security_av_string`, `mode_to_security_class` – convert between SELinux class and permission values and string names. `print_access_vector` – display an access vector in human-readable form.

SYNOPSIS

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

```
const char *security_class_to_string(security_class_t tclass);
```

```
const char *security_av_perm_to_string(security_class_t tclass, access_vector_t av);
```

```
int security_av_string(security_class_t tclass, access_vector_t av, char **result);
```

```
security_class_t string_to_security_class(const char *name);
```

```
security_class_t mode_to_security_class(mode_t mode);
```

```
access_vector_t string_to_av_perm(security_class_t tclass, const char *name);
```

```
void print_access_vector(security_class_t tclass, access_vector_t av);
```

DESCRIPTION

`security_class_to_string()` returns a string name for class *tclass*, or NULL if the class is invalid. The returned string must not be modified or freed.

`security_av_perm_to_string()` returns a string name for the access vector bit *av* of class *tclass*, or NULL if either argument is invalid. The returned string must not be modified or freed.

`security_av_string()` computes a full access vector string representation using *tclass* and *av*, which may have multiple bits set. The string is returned in the memory pointed to by *result*, and should be freed by the caller using `free(3)`.

`string_to_security_class()` returns the class value corresponding to the string name *name*, or zero if no such class exists.

`mode_to_security_class()` returns the class value corresponding to the specified *mode*, or zero if no such class exists.

`string_to_av_perm()` returns the access vector bit corresponding to the string name *name* and security class *tclass*, or zero if no such value exists.

`print_access_vector()` displays an access vector in human-readable form on the standard output stream.

RETURN VALUE

`security_av_string()` returns zero on success or `-1` on error with *errno* set appropriately. `print_access_vector()` does not return a value. All other functions return zero or NULL on error.

ERRORS**EINVAL**

A class or access vector argument is not recognized by the currently loaded policy.

ENOMEM

An attempt to allocate memory failed.

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SEE ALSO

selinux(8), getcon(3), getfilecon(3) stat(3)