NAME

selinux_raw_context_to_color − Return RGB color string for an SELinux security context

SYNOPSIS

#include <selinux/selinux.h>

int selinux_raw_context_to_color(char *_raw_,
char **_color_str_);**

DESCRIPTION

selinux_raw_context_to_color() returns a *color_str* associated to the raw context *raw* provided that the **mcstransd**(8) daemon is running, the policy is an MLS type policy (MCS or MLS) and there is a color configuration file **secolor.conf**(5) (see the **FILES** section).

The *color_str* string is a space separated list of eight hexadecimal RGB triples, each prefixed by a hash character (#). These represent the user:role:type:range components of the foreground and background colors. An example string is shown in the **EXAMPLE** section.

The returned *color_str* string must be freed with **free**(3).

If a color has not been configured for a specific user, role, type and/or range component of context *raw*, then **selinux_raw_context_to_color**() will select the color returned in *color_str* in order of precedence as follows:

role, type, range
user, type, range
user, role, range
user, role, type

If there are no entries in the **secolor.conf**(5) file for any of the components of context *raw* (or the file is not present), then the default string returned in *color_str* is:

----- user ---- ---- role ---- ---- type ---- ---- range ----
#000000 #ffffff #000000 #ffffff #000000 #ffffff #000000 #ffffff

RETURN VALUE

On success, zero is returned.
On failure, −1 is returned with *errno* set appropriately.

ERRORS

ENOENT If the **mcstransd**(8) daemon is not running.

FILES

selinux_raw_context_to_color() obtains the translated entry from the active policy **secolor.conf**(5) file as returned by **selinux_colors_path**(3). The file format is described in**secolor .conf**(5).

NOTES

1. The primary use of **selinux_raw_context_to_color**() is to return a color that corresponds to a range, that can then be used to highlight information at different MLS levels.

2. The **mcstransd**(8) daemon process security level must dominate the *raw* security level passed to it by the **selinux_raw_context_to_color**() function. If not, the range color selected will be as defined by the order of precedence.

EXAMPLE

selinux_raw_context_to_color() returns the foreground and background colors of the context string components (user:role:type:range) as RGB triples as follows:

```
    user    :     role    :     type    :     range
  fg      bg :  fg      bg  : fg      bg  : fg      bg
#000000 #ffffff  #ffffff #000000  #d2b48c #ffa500  #000000 #008000
 black   white :  white   black  : tan    orange  : black   green
```

SEE ALSO

selinux(8), **selinux_colors_path**(3), **mcstransd**(8), **secolor.conf**(5), **selinux_raw_to_trans_context**(3), **selinux_trans_to_raw_context**(3), **free**(3)