

NAME

matchpathcon, matchpathcon_index – get the default SELinux security context for the specified path from the file contexts configuration

SYNOPSIS

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

```
int matchpathcon_init(const char *path);
```

```
int matchpathcon_init_prefix(const char *path, const char *prefix);
```

```
int matchpathcon_fini(void);
```

```
int matchpathcon(const char *path, mode_t mode, char **con);
```

```
int matchpathcon_index(const char *name, mode_t mode, char **con);
```

DESCRIPTION

This family of functions is deprecated. For new code, please use **selabel_open(3)** with the **SELABEL_CTX_FILE** backend in place of **matchpathcon_init()**, use **selabel_close(3)** in place of **matchpathcon_fini()**, and use **selabel_lookup(3)** in place of **matchpathcon()**.

The remaining description below is for the legacy interface.

matchpathcon_init() loads the file contexts configuration specified by *path* into memory for use by subsequent **matchpathcon()** calls. If *path* is NULL, then the active file contexts configuration is loaded by default, i.e. the path returned by **selinux_file_context_path(3)**. Unless the **MA_TCHPATHCON_BASEONLY** flag has been set via **set_matchpathcon_flags(3)**, files with the same path prefix but a **.homedirs** and **.local** suffix are also looked up and loaded if present. These files provide dynamically generated entries for user home directories and for local customizations.

matchpathcon_init_prefix() is the same as **matchpathcon_init()** but only loads entries with regular expressions whose first pathname component is a prefix of *prefix*, e.g. pass **"/dev"** if you only intend to call **matchpathcon()** with pathnames beginning with **/dev**. However, this optimization is no longer necessary due to the use of *file_contexts.bin* files with precompiled regular expressions, so use of this interface is deprecated.

matchpathcon_fini() frees the memory allocated by a prior call to **matchpathcon_init()**. This function can be used to free and reset the internal state between multiple **matchpathcon_init()** calls, or to free memory when finished using **matchpathcon()**.

matchpathcon() matches the specified *pathname*, after transformation via **realpath(3)** excepting any final symbolic link component if **S_IFLNK** was specified as the *mode*, and *mode* against the *file contexts* configuration and sets the security context *con* to refer to the resulting context. The caller must free the returned security context *con* using **freecon(3)** when finished using it. *mode* can be 0 to disable mode matching, but should be provided whenever possible, as it may affect the matching. Only the file format bits (i.e. the file type) of the *mode* are used. If **matchpathcon_init()** has not already been called, then this function will call it upon its first invocation with a NULL *path*, defaulting to the active file contexts configuration.

matchpathcon_index() is the same as **matchpathcon()** but returns a specification index that can later be used in a **matchpathcon_filespec_add(3)** call.

RETURN VALUE

Returns zero on success or **-1** otherwise.

SEE ALSO

selinux(8), set_matchpathcon_flags(3), set_matchpathcon_invalidcon(3), set_matchpathcon_printf(3), matchpathcon_filespec_add(3), matchpathcon_checkmatches(3), freecon(3), setfilecon(3), setfscreatecon(3)