

NAME

UI_STRING, UI_string_types, UI_get_string_type, UI_get_input_flags, UI_get0_output_string, UI_get0_action_string, UI_get0_result_string, UI_get_result_string_length, UI_get0_test_string, UI_get_result_minsize, UI_get_result_maxsize, UI_set_result, UI_set_result_ex - User interface string parsing

SYNOPSIS

```
#include <openssl/ui.h>
```

```
typedef struct ui_string_st UI_STRING;
```

```
enum UI_string_types {
    UIT_NONE = 0,
    UIT_PROMPT,           /* Prompt for a string */
    UIT_VERIFY,          /* Prompt for a string and verify */
    UIT_BOOLEAN,         /* Prompt for a yes/no response */
    UIT_INFO,            /* Send info to the user */
    UIT_ERROR            /* Send an error message to the user */
};
```

```
enum UI_string_types UI_get_string_type(UI_STRING *uis);
int UI_get_input_flags(UI_STRING *uis);
const char *UI_get0_output_string(UI_STRING *uis);
const char *UI_get0_action_string(UI_STRING *uis);
const char *UI_get0_result_string(UI_STRING *uis);
int UI_get_result_string_length(UI_STRING *uis);
const char *UI_get0_test_string(UI_STRING *uis);
int UI_get_result_minsize(UI_STRING *uis);
int UI_get_result_maxsize(UI_STRING *uis);
int UI_set_result(UI *ui, UI_STRING *uis, const char *result);
int UI_set_result_ex(UI *ui, UI_STRING *uis, const char *result, int len);
```

DESCRIPTION

The **UI_STRING** gets created internally and added to a **UI** whenever one of the functions **UI_add_input_string()**, **UI_dup_input_string()**, **UI_add_verify_string()**, **UI_dup_verify_string()**, **UI_add_input_boolean()**, **UI_dup_input_boolean()**, **UI_add_info_string()**, **UI_dup_info_string()**, **UI_add_error_string()** or **UI_dup_error_string()** is called. For a **UI_METHOD** user, there's no need to know more. For a **UI_METHOD** creator, it is of interest to fetch text from these **UI_STRING** objects as well as adding results to some of them.

UI_get_string_type() is used to retrieve the type of the given **UI_STRING**.

UI_get_input_flags() is used to retrieve the flags associated with the given **UI_STRING**.

UI_get0_output_string() is used to retrieve the actual string to output (prompt, info, error, ...).

UI_get0_action_string() is used to retrieve the action description associated with a **UIT_BOOLEAN** type **UI_STRING**. For all other **UI_STRING** types, NULL is returned. See **UI_add_input_boolean(3)**.

UI_get0_result_string() and **UI_get_result_string_length()** are used to retrieve the result of a prompt and its length. This is only useful for **UIT_PROMPT** and **UIT_VERIFY** type strings. For all other **UI_STRING** types, **UI_get0_result_string()** returns NULL and **UI_get_result_string_length()** returns -1.

UI_get0_test_string() is used to retrieve the string to compare the prompt result with. This is only useful for **UIT_VERIFY** type strings. For all other **UI_STRING** types, NULL is returned.

UI_get_result_minsize() and **UI_get_result_maxsize()** are used to retrieve the minimum and maximum required size of the result. This is only useful for **UIT_PROMPT** and **UIT_VERIFY** type strings. For all other **UI_STRING** types, -1 is returned.

UI_set_result_ex() is used to set the result value of a prompt and its length. For **UIT_PROMPT** and **UIT_VERIFY** type UI strings, this sets the result retrievable with **UI_get0_result_string()** by copying the contents of **result** if its length fits the minimum and maximum size requirements. For **UIT_BOOLEAN** type UI strings, this sets the first character of the result retrievable with **UI_get0_result_string()** to the first **ok_char** given with **UI_add_input_boolean()** or **UI_dup_input_boolean()** if the **result** matched any of them, or the first of the **cancel_chars** if the **result** matched any of them, otherwise it's set to the NUL char "\0". See **UI_add_input_boolean(3)** for more information on **ok_chars** and **cancel_chars**.

UI_set_result() does the same thing as **UI_set_result_ex()**, but calculates its length internally. It expects the string to be terminated with a NUL byte, and is therefore only useful with normal C strings.

RETURN VALUES

UI_get_string_type() returns the UI string type.

UI_get_input_flags() returns the UI string flags.

UI_get0_output_string() returns the UI string output string.

UI_get0_action_string() returns the UI string action description string for **UIT_BOOLEAN** type UI strings, NULL for any other type.

UI_get0_result_string() returns the UI string result buffer for **UIT_PROMPT** and **UIT_VERIFY** type UI strings, NULL for any other type.

UI_get_result_string_length() returns the UI string result buffer's content length for **UIT_PROMPT** and **UIT_VERIFY** type UI strings, -1 for any other type.

UI_get0_test_string() returns the UI string action description string for **UIT_VERIFY** type UI strings, NULL for any other type.

UI_get_result_minsize() returns the minimum allowed result size for the UI string for **UIT_PROMPT** and **UIT_VERIFY** type strings, -1 for any other type.

UI_get_result_maxsize() returns the minimum allowed result size for the UI string for **UIT_PROMPT** and **UIT_VERIFY** type strings, -1 for any other type.

UI_set_result() returns 0 on success or when the UI string is of any type other than **UIT_PROMPT**, **UIT_VERIFY** or **UIT_BOOLEAN**, -1 on error.

SEE ALSO

UI(3)

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