

NAME

unw_init_local -- initialize cursor for local unwinding

SYNOPSIS

```
#include <libunwind.h>
```

```
int unw_init_local(unw_cursor_t *c, unw_context_t *ctxt);  
int unw_init_local2(unw_cursor_t *c, unw_context_t *ctxt, int flag);
```

DESCRIPTION

The `unw_init_local()` routine initializes the unwind cursor pointed to by `c` with the machine state in the context structure pointed to by `ctxt`. As such, the machine state pointed to by `ctxt` identifies the initial stack frame at which unwinding starts. The machine state is expected to be one provided by a call to `unw_getcontext()`; as such, the instruction pointer may point to the instruction after the last instruction of a function, and `libunwind` will back-up the instruction pointer before beginning a walk up the call stack. The machine state must remain valid for the duration for which the cursor `c` is in use.

The `unw_init_local()` routine can be used only for unwinding in the address space of the current process (i.e., for local unwinding). For all other cases, `unw_init_remote()` must be used instead. However, unwind performance may be better when using `unw_init_local()`. Also, `unw_init_local()` is available even when `UNW_LOCAL_ONLY` has been defined before including `<libunwind.h>`, whereas `unw_init_remote()` is not.

If the `unw_context_t` is known to be a signal frame (i.e., from the third argument in a signal handler on linux), `unw_init_local2()` should be used for correct initialization on some platforms, passing the `UNW_INIT_SIGNAL_FRAME` flag.

RETURN VALUE

On successful completion, `unw_init_local()` returns 0. Otherwise the negative value of one of the error codes below is returned.

THREAD AND SIGNAL SAFETY

`unw_init_local()` is thread safe as well as safe to use from a signal handler.

ERRORS

`UNW_EINVAL`

`unw_init_local()` was called in a version of `libunwind` which supports remote unwinding only (this normally happens when calling `unw_init_local()` for a cross-platform version of `libunwind`).

`UNW_EUNSPEC`

An unspecified error occurred.

UNW_EBADREG

A register needed by `unw_init_local()` wasn't accessible.

SEE ALSO

`libunwind(3libunwind)`, `unw_init_remote(3libunwind)`

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