

NAME

unw_set_caching_policy -- set unwind caching policy

SYNOPSIS

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

```
int unw_set_caching_policy(unw_addr_space_t as, unw_caching_policy_t policy);
```

DESCRIPTION

The `unw_set_caching_policy()` routine sets the caching policy of address space as to the policy specified by argument `policy`. The `policy` argument can take one of three possible values:

UNW_CACHE_NONE

Turns off caching completely. This also implicitly flushes the contents of all caches as if `unw_flush_cache()` had been called.

UNW_CACHE_GLOBAL

Enables caching using a global cache that is shared by all threads. If global caching is unavailable or unsupported, `libunwind` may fall back on using a per-thread cache, as if `UNW_CACHE_PER_THREAD` had been specified.

UNW_CACHE_PER_THREAD

Enables caching using thread-local caches. If a thread-local caching are unavailable or unsupported, `libunwind` may fall back on using a global cache, as if `UNW_CACHE_GLOBAL` had been specified.

If caching is enabled, an application must be prepared to make appropriate calls to `unw_flush_cache()` whenever the target changes in a way that could affect the validity of cached information. For example, after unloading (removing) a shared library, `unw_flush_cache()` would have to be called (at least) for the address-range that was covered by the shared library.

For address spaces created via `unw_create_addr_space(3libunwind)`, caching is turned off by default. For the local address space `unw_local_addr_space`, caching is turned on by default.

RETURN VALUE

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

THREAD AND SIGNAL SAFETY

`unw_set_caching_policy()` is thread-safe but *not* safe to use from a signal handler.

ERRORS

UNW_ENOMEM

The desired caching policy could not be established because the application is out of memory.

SEE ALSO

libunwind(3libunwind), unw_create_addr_space(3libunwind), unw_set_cache_size(3libunwind),
unw_flush_cache(3libunwind)

AUTHOR

David Mosberger-Tang

Email: dmosberger@gmail.com

WWW: <http://www.nongnu.org/libunwind/>.