

**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(3)`, 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(3), unw\_create\_addr\_space(3), unw\_set\_cache\_size(3), unw\_flush\_cache(3)

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