

Module

Process::GID

Provides a higher-level (and more portable) interface to the underlying operating system's concepts of real, effective, and saved group IDs. Discussing of the semantics of these IDs is well beyond the scope of this book: readers who want to know more should consult POSIX documentation or read the `intro(2)` man pages on a recent Unix platform. All these methods throw `NotImplementedError` if the host operating does not support a sufficient set of calls. The descriptions that follow are based on notes in `ruby-talk:76218` by Hidetoshi Nagai.

Module methods

change_privilege Process::GID.change_privilege(*gid*) → *gid*

Sets the real, effective, and saved group IDs to *gid*, raising an exception on failure (in which case the state of the IDs is not known).

This method is not compatible with `Process.gid=`.

eid Process::GID.eid → *egid*

Returns the effective group ID for this process. Synonym for `Process.egid`.

eid= Process::GID.eid = *egid*

Synonym for `Process::GID.grant_privilege`.

grant_privilege Process::GID.grant_privilege(*egid*) → *egid*

Sets the effective group ID to *egid*, raising an exception on failure. One some environments this may also change the saved group ID (see `re_exchangeable?`).

re_exchange Process::GID.re_exchange → *egid*

Exchanges the real and effective group IDs, setting the saved group ID to the new effective group ID. Returns the new effective group ID.

re_exchangeable? Process::GID.re_exchangeable → true or false

Returns true if real and effective group IDs can be exchanged on the host operating system and returns false otherwise.

rid Process::GID.rid → *gid*

Returns the real group ID for this process. Synonym for `Process.gid`.

sid_available? Process::GID.sid_available? → true or false

Returns true if the underlying platform supports saved group IDs and returns false otherwise. Currently, Ruby assumes support if the operating system has `setresgid(2)` or `setegid(2)` calls or if the configuration includes the `POSIX_SAVED_IDS` flag.

switchProcess::GID.switch → *egid*Process::GID.switch { *block* } → *obj*

Handles the toggling of group privilege. In the block form, automatically toggles the IDs back when the block terminates (but only if the block doesn't use other calls into Process::GID calls, which would interfere). Without a block, returns the original effective group ID.