Cross compilation support Several variables have been added and some commands have been extended for better cross compilation support:

- **BDEPEND** Build dependencies are divided into two classes: BDEPEND for native build (CBUILD); DEPEND for dependencies compatible with the system being built (HOST). See BDEPEND on page 34.
- **SYSROOT** The path to the root directory for DEPEND type dependencies. See SYSROOT on page 52.
- **ESYSROOT** The concatenation of the SYSROOT and EPREFIX paths, for convenience.
- **BROOT** The prefixed root directory path for DEPEND type dependencies, typically executable build tools. See BROOT on page 52.
- **econf** If supported, configure will be called with the --with-sysroot=$ESYSROOT option. See ECONF-OPTIONS on page 64.
- **has_version and best_version** These helpers support -b, -d or -r options, causing the query to apply to BDEPEND, DEPEND or RDEPEND (the default). This replaces the --host-root option. See PM-QUERY-OPTIONS on page 61.

Environment blacklist Any environment variable listed in the profile-defined ENV_UNSET variable will be unset by the package manager. See ENV-UNSET on page 55.

patch All inputs valid for GNU patch version 2.7 are supported. Especially, this includes support for git-formatted patches. See GNU-PATCH on page 59.

nonfatal In addition to its definition as a shell function, the nonfatal wrapper has now a fallback implementation as an external command. Thus, it can be called from other commands. See NONFATAL on page 60.

Output commands einfo and friends no longer use std-out, so inside of command substitution their output won’t be caught. See OUTPUT-NO-STDOUT on page 61.

eqawarn The eqawarn output command is supported in the package manager itself. See EQAWARN on page 61.

die in subshell The die command is guaranteed to work in a subshell context. See SUBSHELL-DIE on page 62.

domo destination domo installs the specified files under /usr/share/locale instead of $(DESTTREE)/share/locale. See DOMO-PATH on page 67.

Controllable stripping The dosstrip \(-x\) command can be used to add paths to an exclusion list for stripping of debug symbols, to allow more fine-grained control than with RESTRICT="strip". See DOSTRIP on page 70.

Version manipulation and comparison commands

- **ver_cut range [version]** Print the version substring specified by range. version defaults to PV.
- **ver_rs range repl ... [version]** Replace all version separators in range by string repl. Multiple range repl pairs are allowed. version defaults to PV.
- **ver_test [v1] op v2** Check if the relation v1 op v2 is true. v1 defaults to PV; op can be \(-eq\), \(-ne\), \(-gt\), \(-lt\) or \(-le\). See VER-COMMANDS on page 72.

Removals/Bans

- **package.provided** Deprecated since a long time and finally dropped. See PACKAGE-PROVIDED on page 24.
- **PORTDIR and ECLASSSDIR** No longer defined, because ebuilds should not directly access files in the repository. See PORTDIR on page 52 and ECLASSSDIR on page 52.
- **DESTTREE and INSDESTTREE** Not defined any more. Use the into and insinto commands instead. See DESTTREE on page 53 and INSDESTTREE on page 53.
- **dohtml** No longer allowed. doins \(-r\) can be used as a replacement. See BANNED-COMMANDS on page 60.
- **dolib and libopts** No longer allowed. The specific dolib.a or dolib.so commands should be used as replacement. See BANNED-COMMANDS on page 60.

EAPIs 0, 1, 2, 3, and 4

Omitted for lack of space. See version 5.0 of this document for differences between these previous EAPIs.

EAPI 5 (2012-09-20)

Additions/Changes

Sub-slots The SLOT variable and slot dependencies may contain an optional sub-slot part that follows the regular slot, delimited by a / character; for example 2/2.30. The sub-slot is used to represent cases in which an upgrade to a new version of a package with a different sub-slot may require dependent packages to be rebuilt. If the

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Abstract

An overview of the main EAPI changes in Gentoo, for ebuild authors. For full details, consult the Package Manager Specification found on the project page,¹ this is an incomplete summary only.

Official Gentoo EAPIs are consecutively numbered integers (0, 1, 2, ...). Except where otherwise noted, an EAPI is the same as the previous EAPI. All labels refer to the PMS document itself, built from the same checkout as this overview.

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¹https://wiki.gentoo.org/wiki/Project:Package_Manager_Specification
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