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 tools (**CBUILD**); **DEPEND** for dependencies compatible with the system being built (**CHOST**). See **BDEPEND** on page 34.

**SYSROOT** The path to the root directory for **DEPEND** type dependencies. See **SYSROOT** on page 53.

**ESYSROOT** The concatenation of the **SYSROOT** and **EPREFIX** paths, for convenience.

**BROOT** The prefixed root directory path for **BDEPEND** type dependencies, typically executable build tools. See **BROOT** on page 53.

**econf** Option --with-sysroot=${ESYSROOT} is passed to configure, if this option is supported. See **ECONF-OPTIONS** on page 68.

**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 62.

**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 56.

**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 60.

**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 61.

**Output commands** **einfo** and **friends** no longer use stdout, so inside of command substitution their output won’t be caught. See **OUTPUT-NO-STDOUT** on page 62.

**eqawarn** The **eqawarn** output command is supported in the package manager itself. See **EQAWARN** on page 63.

**die in subshell** The **die** command is guaranteed to work in a subshell context. See **SUBSHELL-DIE** on page 63.

domo destination  domo installs the specified files under /usr/share/locale instead of ${DESTTREE}/share/locale. See **DOMO-PATH** on page 68.

**Controllable stripping** The **dostrip** -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 72.

**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 [vr] op v2** Check if the relation v1 op v2 is true. v1 defaults to **PVR**; op can be --eq, --ne, --gt, --ge, --lt or --le.

See **VER-COMMANDS** on page 73.

**Removals/Bans**

- **package.provided** Deprecated since a long time and finally dropped. See **PACKAGE-PROVIDED** on page 25.
- **PORTDIR and ECLASSSDIR** No longer defined, because ebuilds should not directly access files in the repository. See **PORTDIR** on page 53 and **ECLASSSDIR** on page 53.
- **DESTTREE and INSDESTTREE** Not defined any more. Use the into and insinto commands instead. See **DESTTREE** on page 54 and **INSDESTTREE** on page 54.
- **dohtml** No longer allowed. **doins** -r can be used as a replacement. See **BANNED-COMMANDS** on page 61.
- **dolib and libopts** No longer allowed. The specific **dolib.a** or **dolib.so** commands should be used as replacement. See **BANNED-COMMANDS** on page 61.

**EAPI** Cheat Sheet

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Version 7.0
30th April 2018

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;
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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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

1https://wiki.gentoo.org/wiki/Package_EAPI
2http://creativecommons.org/licenses/by-sa/3.0/