AptPkg::Cache(3pm)

NAME

AptPkg::Cache - APT package cache interface

SYNOPSIS

use AptPkg::Cache;

DESCRIPTION

The AptPkg::Cache module provides an interface to **APT**'s package cache.

AptPkg::Cache

The AptPkg::Cache package implements the **APT** pkgCacheFile class as a hash reference (inherits from AptPkg::hash). The hash keys are the names of packages in the cache, and the values are AptPkg::Cache::Package objects (which in turn appear as hash references, see below).

Constructor

new([LOCK]) Instantiation of the object uses configuration from the $AptPkg::Config::_config and $AptPkg::System::_system objects (automatically initialised if not done explicitly).

The cache initialisation can be quite verbose–controlled by the value of $_config->{quiet}, which is set to "2" (quiet) if the $_config object is auto-initialised.

The cache directory is locked if LOCK is true.

It is important to note that the structure of the returned object contains self-referential elements, so some care must be taken if attempting to traverse it recursively.

Methods

files Return a list of AptPkg::Cache::PkgFile objects describing the package files.

packages Return an AptPkg::PkgRecords object which may be used to retrieve additional information about packages.

get, exists, keys These methods are used to implement the hashref abstraction: $obj->get($pack) and $obj->{$pack} are equivalent.

is_multi_arch Cache is multi-arch enabled.

native_arch Native architecture.

AptPkg::Cache::Package

Implements the **APT** pkgCache::PkgIterator class as a hash reference.

Keys

Name

Section

Arch Package name, section and architecture.

FullName Fully qualified name, including architecture.

ShortName The shortest unambiguous package name: the same as "Name" for native packages, and "FullName" for non-native.

SelectedState

InstState

CurrentState Package state from the status file.

SelectedState may be “Unknown”, “Install”, “Hold”, “DeInstall” or “Purge”.

InstState may be “Ok”, “ReInstReq”, “HoldInst” or “HoldReInstReq”.

CurrentState may be “NotInstalled”, “UnPacked”, “HalfConfigured”, “HalfInstalled”, “ConfigFiles” or “Installed”.

In a numeric context, SelectedState, InstState and CurrentState evaluate to an AptPkg::State:: constant.

VersionList A reference to an array of AptPkg::Cache::Version objects describing available versions of the package.

CurrentVer An AptPkg::Cache::Version object describing the currently installed version (if any) of the package.

RevDependsList A reference to an array of AptPkg::Cache::Depends objects describing packages which depend upon the current package.

ProvidesList For virtual packages, this is a reference to an array of AptPkg::Cache::Provides objects describing packages which provide the current package.

Flags A comma separated list if flags: “Auto”, “Essential” or “Important”.

In a numeric context, evaluates to a combination of AptPkg::Flag:: constants.

[Note: the only one of these you need worry about is “Essential”, which is set based on the package’s header of the same name. “Auto” seems to be used internally by **APT**, and “Important” seems to only be set on the apt package.]

Index Internal **APT** unique reference for the package record.

AptPkg::Cache::Version

Implements the **APT** pkgCache::VerIterator class as a hash reference.

Keys

VerStr

Section

Arch The package version, section and architecture.

MultiArch Multi-arch state: “None”, “All”, “Foreign”, “Same”, “Allowed”, “AllForeign” or “AllAllowed”.

In a numeric context, evaluates to an AptPkg::Version:: constant.

ParentPkg An AptPkg::Cache::Package objct describing the package providing this version.

DescriptionList A list of AptCache::Cache::Description objects describing the files which descrie a package version. The list includes both Package files and Translation files, which contain translated Description fields.

TranslatedDescription An AptCache::Cache::Description object for the current locale, which will generally be a Translation file.

DependsList A reference to an array of AptPkg::Cache::Depends objects describing packages which the current package depends upon.

ProvidesList A reference to an array of AptPkg::Cache::Provides objects describing virtual packages provided by this version.

FileList A reference to an array of AptPkg::Cache::VerFile objects describing the packages files which include the current version.

Size The .deb file size, in bytes.

InstalledSize The disk space used when installed, in bytes.

Index Internal **APT** unique reference for the version record.

Priority Package priority: “important”, “required”, “standard”, “optional” or “extra”.

In a numeric context, evaluates to an AptPkg::VerPriority:: constant.

AptPkg::Cache::Depends

Implements the **APT** pkgCache::DepIterator class as a hash reference.

Keys

DepType Type of dependency: “Depends”, “PreDepends”, “Suggests”, “Recommends”, “Conflicts”, “Replaces” or “Obsoletes”.

In a numeric context, evaluates to an AptPkg::Dep:: constant.

ParentPkg

ParentVer AptPkg::Cache::Package and AptPkg::Cache::Version objects describing the package declaring the dependency.

TargetPkg AptPkg::Cache::Package object describing the depended package.

TargetVer For versioned dependencies, TargetVer is a string giving the version of the target package required.

CompType

CompTypeDeb CompType gives a normalised comparison operator (>, >=, etc) describing the relationship to TargetVer (“” if none).

CompTypeDeb returns Debian-style operators (>> rather than >).

In a numeric context, both CompType and CompTypeDeb evaluate to an AptPkg::Dep:: constant.

Alternative dependencies (Depends: a | b) are identified by all but the last having the AptPkg::Dep::Or bit set in the numeric representation of CompType (and CompTypeDeb).

Index Internal **APT** unique reference for the dependency record.

AptPkg::Cache::Provides

Implements the **APT** pkgCache::PrvIterator class as a hash reference.

Keys

Name Name of virtual package.

OwnerPkg

OwnerVer AptPkg::Cache::Package and AptPkg::Cache::Version objects describing the providing package.

ProvideVersion Version of the virtual package. [Not currently supported by dpkg]

Index Internal **APT** unique reference for the provides record.

AptPkg::Cache::VerFile

Implements the **APT** pkgCache::VerFileIterator class as a hash reference.

Keys

File An AptPkg::Cache::PkgFile object describing the packages file.

Offset

Size The byte offset and length of the entry in the file.

Index Internal **APT** unique reference for the version file record.

AptPkg::Cache::PkgFile

Implements the **APT** pkgCache::PkgFileIterator class as a hash reference.

Keys

FileName Packages file path.

IndexType File type: “Debian Package Index”, “Debian dpkg status file”.

Archive

Component

Version

Origin

Label

Site Fields from the Release file.

IsOk True if the cache is in sync with this file.

Index Internal **APT** unique reference for the package file record.

AptPkg::Cache::DescFile

Implements the **APT** pkgCache::DescFileIterator class as a hash reference.

Keys

File An AptPkg::Cache::PkgFile object describing the packages file.

SEE ALSO

AptPkg::Config(3pm), AptPkg::System(3pm), AptPkg(3pm), AptPkg::hash(3pm), AptPkg::PkgRecords(3pm), AptPkg::Policy(3pm).

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