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: `No`, `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.

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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