

# FHIR Package Cache

## Package Cache

Each system has a global package cache that stores the packages known to that system. This cache is shared between tools for efficiency. Authors of tools that work with FHIR packages are encouraged to follow this specification for the convenience of users.

The package cache keeps the uncompressed content of all installed packages. Different versions of a package are installed side-by-side, and are individually resolvable. A Fhir package client should use the global package cache, but may keep a local cache in a working folder instead. The global package cache makes sure that each packages is installed only once on the computer

## Location

The location differs per operating system.

Location of the global package cache:

- Windows: c:\users\\.fhir\packages
- Unix/Linux: ~/.fhir/packages

For system services (daemons):

- Windows: c:\ProgramData\.fhir\packages
- Unix/Linux: /var/lib/.fhir/packages

The package cache root folder contains a folder per package where the folder name is the package name, a dash and the package version.

```
hl7.fhir.us.core#0.1.1
```

Note: package names are not allowed to contain the character "#"

## Folder contents

In each package folder the package is unzipped as it is. The contents of the folder are the unpacked version of the GZipped tarball and SHALL otherwise conform to the requirements for the [FHIR NPM Package Spec](#).

There is at least one folder called "package", in which all the content of the package is found, including the package manifest. Other folders with other uses may exist if found in the source package.

## Recursion

A package client must resolve package dependencies recursively, but keep the package cache flat. An installed package should itself not contain any dependencies. All packages are installed on the same level.

## Package .index.json files

Tools that extract and populate the package cache are responsible for ensuring that the .index.json files exist. If the package comes with a .index.json file, the tool does not need to rebuild it, though it may choose to do so.