

# **Apt Extension for Config5**

**Stefan Walter**

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# Chapter 1. Introduction

## 1.1. Overview

The Apt Extension is a simple wrapper around the **apt-get** command. It provides the `apt` change to efficiently install and uninstall packages from Apt repositories with Config5.

## 1.2. Examples

Packages can be installed and uninstalled as shown in the following example spec file:

```
Ubuntu:
  apt install gcc
  apt uninstall sane
```

---

# Chapter 2. Installation and Customization

## 2.1. Installation

This extension is contained in the archive `extensions/apt.tgz` which is part of the Config5 distribution. Simply extract this archive in the `deploy` directory.

### 2.1.1. Files

The following files are included in the archive:

- `etc/extensions.d/apt.pl`
- `lib/perl/Config5/Change/Extensions/Apt.pm`
- `lib/perl/Config5/Action/Extensions/Apt.pm`

## 2.2. Settings

This extension does not have any configurable settings.

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# Chapter 3. Changes

## 3.1. Changes

This extension provides the `apt` change which has two actions: `install` and `uninstall`.

### 3.1.1. apt install

The `install` action of the `apt` change will install a single RPM package.

Synopsis	<code>apt [-ntT] install package</code>
----------	---

The parameter *package* is the package name without version numbers.

#### Example 3.1. Install

```
sample:
    apt install gcc
```

### 3.1.2. apt uninstall

The `uninstall` action of the `apt` change will uninstall the specified package.

Synopsis	<code>apt [-ntT] uninstall package</code>
----------	---

The parameter *package* is the package to uninstall.

#### Example 3.2. Uninstall

```
sample:
    apt uninstall cups
```

## 3.2. Configuration Application

### 3.2.1. Phase

The `apt` changes are applied in the `packages` phase.

### 3.2.2. Order and Application

All `apt` changes of a pass are applied in the order the changes are encountered during the parsing of the `spec` files.

The extension caches package information when checking for packages that have to be installed or uninstalled. Mixing `apt` and `execute` changes to install or uninstall packages is not supported.

### 3.2.3. Trigger Flag

The trigger flag for triggered changes is set when package is installed or uninstalled.

### 3.2.4. Root Directory

Changes of this extension are only applied if the root system information item is equal to `/`.

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# Appendix A. Error Messages

## A.1. Configuration Data Errors

Configuration data errors are fatal, no changes will be done to the system.

Invalid action '...' in ...

The action must be `install` or `uninstall`.

## A.2. Configuration Application Errors

The following errors are reported for changes as they are applied but do not interrupt the application of other changes.

Failed to ... package '*package*'

The named package could not be installed or uninstalled. Typically the package does not exist or there was an error with the **apt-get** command.