

# **Service Extension for Config5**

**Stefan Walter**

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# Chapter 1. Introduction

## 1.1. Overview

The Service Extension is a simple wrapper around the **service** and **chkconfig** commands. It provides the `service` change to efficiently control system services with Config5.

## 1.2. Examples

Services can be added and removed, enabled and disabled on reboot and started and stopped as shown in the following example spec file:

```
RedHatEnterpriseServer:
    service add otrs
    service remove NetworkManager
    service enable network
    service disable httpd
    service start mysqld
    service stop httpd
```

---

# Chapter 2. Installation and Customization

## 2.1. Installation

This extension is contained in the archive `extensions/service.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/service.pl`
- `lib/perl/Config5/Change/Extensions/Service.pm`
- `lib/perl/Config5/Action/Extensions/Service.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 `service` change which can manipulate system services:

Synopsis	<code>service [-ntT] action service</code>
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The parameter `service` specifies the name of the service to manipulate. The parameter `action` specifies what to do:

<code>add</code>	Add the service to the list of existing services.
<code>remove</code>	Remove the service from the list of existing services.
<code>enable</code>	Set the service to automatically start when the system starts.
<code>disable</code>	Set the service to remain stopped when the system starts.
<code>start</code>	Immediately start the service if it is not running already.
<code>stop</code>	Immediately stop the service if it is running.

### Example 3.1. Service Manipulation

```
sample:
  service add httpd
  service enable httpd
  service start httpd
```

## 3.2. Configuration Application

### 3.2.1. Phase

The service changes are applied in the `configure` phase.

### 3.2.2. Order and Application

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

The extension caches service status information. Mixing `service` and `execute` changes to manipulate services is not supported.

### 3.2.3. Trigger Flag

The trigger flag for triggered changes is set when a service is effectively added, removed, enabled, disabled, started or stopped.

### 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. System Errors

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

Cannot get list of services

The list of enabled services could not be determined by running **chkconfig -L**.

## A.2. Configuration Data Errors

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

Invalid action '...' in ...

The action must be add, remove, enable, disable, start or stop.

## A.3. 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 ... service '*service*'

The named service could not be added, removed, enabled, disabled, started or stopped.