# Version: Racket Version Checking

Version 5.1

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The version collection contains several version-related pieces that are used by Racket. See also version from scheme/base.

## 1 Installed Patch Level

(require version/patchlevel)

patchlevel : exact-nonnegative-integer?

Indicates the current installed patch level, which is normally zero, but may be updated by patches to DrRacket.

#### 2 Checking Available Versions

(require version/check)

```
(check-version) \rightarrow (or/c symbol? list?)
```

Checks the currently available version on the PLT website (http://download.racket-lang.org) and returns a value that indicates the current state of the current installation:

- 'ok You're fine.
- '(ok-but , version) You have a fine stable version, but note that there is a newer alpha version available numbered version.
- '(newer , version) You have an old version. Please upgrade to version.
- '(newer , version , alpha) You have an old-but-stable version, please upgrade to version; you may consider also the newer alpha version numbered alpha.
- '(error ,message) An error occurred, and message is a string that indicates the error.
- '(error ,message ,additional-info) An error occurred; message is a string that indicates the error, and additional-info is a string containing a system error. The additional-info content is always parenthesizes, so message is a short error and (string-append message " " additional-info) is a verbose one.

### 3 DrRacket Version Tool

(require version/tool)

The version/tool library implements a DrRacket tool that

- makes the patchlevel display as a version  $p\langle N\rangle$  suffix in DrRacket (though the base verion reported by (version) is not changed);
- if enabled by the user, periodically checks whether a new Racket distribution is available for download.

#### 4 Version Utilities

```
(require version/utils)
```

The version/utils library provides a few of convenient utilities for dealing with version strings. Unless explicitly noted, these functions do not handle legacy versions of Racket.

```
(valid-version? str) → boolean?
  str : string?
```

Returns #t if str is a valid Racket version string, #f otherwise.

```
(version->list str)
  → (list integer? integer? integer?)
  str : valid-version?
```

Returns a list of four numbers that the given version string represent. str is assumed to be a valid version.

```
(version<? str1 str2) → boolean?
  str1 : valid-version?
  str2 : valid-version?</pre>
```

Returns #t if str1 represents a version that is strictly smaller than str2, #f otherwise. str1 and str2 are assumed to be valid versions.

```
(version<=? str1 str2) → boolean?
  str1 : valid-version?
  str2 : valid-version?</pre>
```

Returns #t if str1 represents a version that is smaller than or equal to str2, #f otherwise. str1 and str2 are assumed to be valid versions.

```
(alpha-version? str) → boolean?
str : valid-version?
```

Returns #t if the version that str represents is an alpha version. str is assumed to be a valid version.

Converts the version string into an integer. For version "X.YY.ZZZ.WWW", the result will be XYYZZZWWW. This function works also for legacy Racket versions, by translating "XYY.ZZZ" to XYYZZZ000. The resulting integer can thefore be used to conveniently compare any two (valid) version strings. If the version string is invalid the resulting value is #f.

Note that this is the only function that deals with legacy version strings.