

# **Version: Racket Version Checking**

Version 5.0

June 6, 2010

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)

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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)`

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`(check-version) → (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 parenthesized, 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 version 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? 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?
```

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?
```

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.

---

```
(version->integer str) → (or/c integer? false/c)  
  str : string?
```

Converts the version string into an integer. For version "X.YY.ZZZ.WWW", the result will be `XYZZZZWWW`. This function works also for legacy Racket versions, by translating "XY.Y.ZZZ" to `XYZZZZ000`. The resulting integer can therefore 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.