

# Package ‘urlparse’

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**Type** Package

**Title** Fast Simple URL Parser

**Version** 0.1.0

**Description** A fast and simple 'URL' parser package for 'R'. This package provides functions to parse 'URLs' into their components, such as scheme, user, password, host, port, path, query, and fragment.

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**URL** <https://github.com/dyfanjones/urlparse>,  
<https://dyfanjones.r-universe.dev/urlparse>

**BugReports** <https://github.com/dyfanjones/urlparse/issues>

**Encoding** UTF-8

**LinkingTo** Rcpp

**Imports** Rcpp

**RoxygenNote** 7.3.2

**Suggests** testthat (>= 3.0.0)

**Config/testthat/edition** 3

**NeedsCompilation** yes

**Author** Dyfan Jones [aut, cre]

**Maintainer** Dyfan Jones <dyfan.r.jones@gmail.com>

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encoding	<i>Escape characters for use in URLs.</i>
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### Description

This function encodes a character vector for use in URLs, escaping all special characters except for those specified in the `safe` parameter.

### Usage

```
url_encoder(urls, safe = "")
```

```
url_decoder(urls)
```

### Arguments

<code>urls</code>	A character vector to be encoded/decoded.
<code>safe</code>	A character vector of extra characters that should not be encoded.

### Value

A character vector with the encoded URLs.

### Examples

```
library(urlparse)

# Example 1:
url_encoder("foo = bar + 5")

# Example 2:
# prevent special characters being encoded:
url <- "https://example.com/path?query= 1+2"
url_encoder(url, " :/?=")

# Example 3:
url_decoder(url_encoder("foo = bar + 5"))
```

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url_build	<i>Builds a URL string from its components.</i>
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### Description

Builds a URL string from its components.

### Usage

```
url_build(url_components)
```

### Arguments

- `url_components` A list containing the components of the URL: scheme, host, port, path, query, and fragment.
- **scheme** A character string for the new scheme (e.g., "http" or "https") or NULL to keep it unchanged.
  - **host** A character string for the new host or NULL to keep it unchanged.
  - **port** A character string for the new port or NULL to keep it unchanged.
  - **path** A character string for the new path or NULL to keep it unchanged.
  - **query** A list or character of new query parameters or NULL to keep it unchanged.
  - **fragment** A character string for the new fragment or NULL to keep it unchanged.

### Value

A URL string constructed from the provided components

### Examples

```
library(urlparse)
url_build(list(
  scheme = "https",
  user = "",
  password = "",
  host = "host.com",
  port = 8000,
  path = "/path",
  query = "query",
  fragment = "fragment"
))
```

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url_modify	<i>Modifies a URL string by updating its components.</i>
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### Description

This function modifies a URL string by updating its components such as scheme, user, password, host, port, query, raw query, and fragment. If any of these components are not provided (i.e., NULL), the existing components of the URL are retained.

### Usage

```
url_modify(  
    url,  
    scheme = NULL,  
    user = NULL,  
    password = NULL,  
    host = NULL,  
    port = NULL,  
    path = NULL,  
    query = NULL,  
    fragment = NULL  
)  
  
set_scheme(url, scheme)  
  
set_user(url, user)  
  
set_password(url, password)  
  
set_host(url, host)  
  
set_port(url, port)  
  
set_path(url, path)  
  
set_query(url, query)  
  
set_fragment(url, fragment)
```

### Arguments

url	A character string representing the original URL.
scheme	A character string for the new scheme (e.g., "http" or "https") or NULL to keep it unchanged.
user	A character string for the username or NULL to keep it unchanged.
password	A character string for the new password or NULL to keep it unchanged.

host	A character string for the new host or NULL to keep it unchanged.
port	A character string for the new port or NULL to keep it unchanged.
path	A character string for the new path or NULL to keep it unchanged.
query	A list or character of new query parameters or NULL to keep it unchanged.
fragment	A character string for the new fragment or NULL to keep it unchanged.

**Value**

A character string representing the modified URL.

**Examples**

```
library(urlparse)

# Example 1: Modify the scheme and host of a URL
url_modify(
  "https://user:pass@host.com/path?query#fragment",
  scheme = "http",
  host = "example.com"
)

# Example 2: Add a query parameter to a URL
url_modify(
  "https://host.com/path", query = list(key1 = "value1", key2 = "value2")
)

# Example 3: Change the fragment of a URL
url_modify("https://host.com/path#old_fragment", fragment = "new_fragment")
```

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url_parse	<i>Parses a URL string into its components.</i>
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**Description**

Parses a URL string into its components.

**Usage**

```
url_parse(url)
```

**Arguments**

url                    The URL string to parse.

**Value**

A list containing the components of the URL: scheme, user, password, host, path, raw\_path, query, raw\_query, and fragment.

**Examples**

```
library(urlparse)
url_parse("https://host.com/path?query#fragment")
```

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