

# purl API Documentation

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## 1 purl

Parse and print *Uniform Resource Locators* as defined in *RFC 1738* (<http://tools.ietf.org/html/rfc1738>).

### 1.1 URL Designators

A *url designator* is a value accepted by the `url` function. E.g. a *url*, a *string* or a *pathname*.

## 1.2 make-url (Function)

**Syntax:**

— Function: **make-url** *scheme* &key *address user password host port path*

**Arguments and Values:**

*scheme*—a *keyword* denoting a URL scheme.

*address*—a *string* denoting a URL address for *scheme* or nil. The default is nil.

*user, password, host*—strings denoting a user name, password or host-name respectively or nil. The default is nil.

*path*—a *string* or a *pathname*.

*port*—a positive *integer* denoting a port number or nil . The default is nil.

**Description:**

`make-url` returns a fresh *url* of *scheme*. *Address* is used as the URL's address if supplied. Otherwise the URL's address will use *Common Internet Scheme Syntax*<sup>1</sup> and its address is composed of the *user, password, host, port* and *path* components.

**See Also:**

- 1. *Common Internet Scheme Syntax* (<http://tools.ietf.org/html/rfc1738#section-3.1>)

## 1.3 url (Function)

**Syntax:**

— Function: **url** *urlspec*

**Arguments and Values:**

*urlspec*—a *string*, a *pathname* or a *url*.

**Description:**

`url` returns the *url* denoted by *urlspec*. When *urlspec* is a string, `url` will attempt to parse *urlspec* as a URL. When *urlspec* is a *pathname*, `url` will return an equivalent *url* using the :file scheme.

**Exceptional Situations:**

An error of type `malformed-url` is signaled when *urlspec* is a *string* and can not be parsed as a URL.

An error of type `type-error` is signaled when *urlspec* is a *pathname* using a host component which is not a defined logical host.

## 1.4 url (Type)

A *url* is a structured *object* which represents a *Uniform Resource Locator* (URL).

## 1.5 url-address (Function)

**Syntax:**

— Function: **url-address** *url*

**Arguments and Values:**

*url*—a *url* designator.

**Description:**

`url-address` returns a *string* denoting the address part of *url*.

## 1.6 url-decode (Function)

**Syntax:**

— Function: **url-decode** *string*

**Arguments and Values:**

*string*—a *\_string*.

**Description:**

`url-decode` decodes encoded *string* using *Percent-Encoding*<sup>1</sup>.

**See Also:**

- 1. *Percent-Encoding* (<http://tools.ietf.org/html/rfc3986#section-2.1>)

## 1.7 url-encode (Function)

**Syntax:**

— Function: **url-encode** *string*

**Arguments and Values:**

*string*—a *\_string*.

**Description:**

`url-encode` encodes *string* using *Percent-Encoding*<sup>1</sup>.

**See Also:**

- 1. *Percent-Encoding* (<http://tools.ietf.org/html/rfc3986#section-2.1>)

## 1.8 url-host (Function)

**Syntax:**

— Function: **url-host** *url*

**Arguments and Values:**

*url*—a *url* designator.

**Description:**

`url-host` returns a *string* denoting the host part of *url*.

## 1.9 url-p (Function)

**Syntax:**

— Function: **url-p** *object*

**Arguments and Values:**

*object*—an *object*.

**Description:**

`url-p` returns *true* if *object* is of type `url`; otherwise, returns *false*.

## 1.10 url-password (Function)

**Syntax:**

— Function: **url-password** *url*

**Arguments and Values:**

*url*—a *url* designator.

**Description:**

`url-password` returns a *string* denoting the password part of *url*.

## 1.11 url-path (Function)

**Syntax:**

— Function: **url-path** *url*

**Arguments and Values:**

*url*—a *url* designator.

**Description:**

`url-path` returns a *string* denoting the path part of *url*.

## **1.12 url-port (Function)**

**Syntax:**

— Function: **url-port** *url*

**Arguments and Values:**

*url*—a *url* designator.

**Description:**

*url-port* returns a non-negative *integer* denoting the port part of *url*.

## **1.13 url-scheme (Function)**

**Syntax:**

— Function: **url-scheme** *url*

**Arguments and Values:**

*url*—a *url* designator.

**Description:**

*url-scheme* returns a *keyword* denoting the scheme part of *url*.

## **1.14 url-string (Function)**

**Syntax:**

— Function: **url-string** *url*

**Arguments and Values:**

*url*—a *url* designator.

**Description:**

*url-string* returns a *string* representation of *url*.

## **1.15 url-user (Function)**

**Syntax:**

— Function: **url-user** *url*

**Arguments and Values:**

*url*—a *url* designator.

**Description:**

`url-user` returns a *string* denoting the user part of *url*.

## **1.16 url= (Function)**

**Syntax:**

— Function: **url=** *url1* *url2*

**Arguments and Values:**

*url1*, *url2*—*urls*.

**Description:**

`url=` returns *true* if *url1* and *url2* are equal; otherwise, returns *false*.