Package 'b32'

May 7, 2026

Title Fast and Vectorized Base32 Encoding

Version 0.1.0

Description Fast, dependency free, and vectorized base32 encoding and decoding. 'b32' supports the Crockford, Z, RFC 4648 lower, hex, and lower hex alphabets.

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URL https://github.com/extendr/b32, http://extendr.rs/b32/

Depends R (>= 4.2)

Suggests blob, testthat (>= 3.0.0)

Config/rextendr/version 0.4.2.9000

Config/testthat/edition 3

Encoding UTF-8

Language en

RoxygenNote 7.3.3

SystemRequirements Cargo (Rust's package manager), rustc >= 1.65.0, xz

NeedsCompilation yes

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Repository CRAN

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Description

Base32 Encode and Decode

Usage

```
encode(x, alphabet = "crockford", padded = TRUE)

decode(x, alphabet = "crockford", padded = TRUE)

decode_as_string(x, alphabet = "crockford", padded = TRUE)
```

Arguments

x	for `encode()`, must be either a character or raw vector. For `decode()`, a character vector.
alphabet	default '"crockford". The base32 encoding alphabet to use. Must be one of "crockford", "rfc4648", "rfc4648lower", "rfc4648hex", "rfc4648hexlower", or "z".
padded	default TRUE. Appends = to ensure that the final encoded chunk is 8 blocks of characters.

Details

`decode()` returns a `blob` object which is a list of raw vectors. If an error is encountered in `decode()` the result will be an NA.

Value

`decode()` returns a `blob` object. `encode()` returns a character vector. `decode_as_string()` returns a character vector.

Examples

```
encode("hello")
encode("hello", padded = FALSE)
encode("hello", alphabet = "rfc4648")

# Decode base32 string
decode("NBSWY3DPEBLW64TMMQ======")
decode_as_string("NBSWY3DPEBLW64TMMQ======")
decode("NBSWY3DPEBLW64TMMQ", padded = FALSE)
```

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