

# Package: wickrabacktest (via r-universe)

October 7, 2026

**Type** Package

**Title** Wickra Backtest Engine (R Binding)

**Version** 0.2.0

**Description** R binding for the wickra-backtest engine. It calls the engine's stable C ABI from compiled C glue via .Call, returning the backtest report as a JSON string that is byte-identical to the Rust, Python, Node.js, WASM, C#, Java and Go bindings.

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**Suggests** jsonlite

**URL** <https://github.com/wickra-lib/wickra-backtest>,  
<https://backtest.wickra.org>, <https://wickra-lib.r-universe.dev>

**BugReports** <https://github.com/wickra-lib/wickra-backtest/issues>

**Depends** R (>= 4.1)

**Encoding** UTF-8

**Roxygen** list(markdown = TRUE)

**NeedsCompilation** yes

**SystemRequirements** the wickra-backtest C ABI shared library.  
`configure` downloads the prebuilt library for this package's Version from the project's GitHub releases and bundles it, so an ordinary install needs nothing extra. To build against a local checkout instead, set WKBT\_INC to bindings/c/include and WKBT\_LIB to the directory holding a library you built yourself with `cargo build -p wickra-backtest-c --release`.

**Config/roxygen2/version** 8.0.0

**Config/pak/sysreqs** libclang-dev

**Repository** <https://wickra-lib.r-universe.dev>

**Date/Publication** 2026-10-05 23:22:54 UTC

**RemoteUrl** <https://github.com/wickra-lib/wickra-backtest>

**RemoteRef** v0.2.0

**RemoteSha** 1083604d70a3b120efb86687631ed18576d64221

**RemoteSubdir** bindings/r

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|              |                                             |
|--------------|---------------------------------------------|
| backtest_run | <i>Run a strategy spec over OHLCV data.</i> |
|--------------|---------------------------------------------|

---

Description

Calls the wickra-backtest engine through its C ABI and returns the report as a JSON string, byte-identical to the other language bindings.

Usage

```
backtest_run(  
  open,  
  high,  
  low,  
  close,  
  volume = NULL,  
  time = NULL,  
  spec,  
  capital = 10000  
)
```

Arguments

- open, high, low, close  
Numeric price vectors of equal length.
- volume  
Optional numeric volume vector (defaults to zeros).
- time  
Optional numeric timestamp vector (defaults to 0..n-1).
- spec  
The strategy spec as a JSON string.
- capital  
Starting capital (default 10000).

**Value**

The backtest report as a JSON string.

---

|                   |                                                     |
|-------------------|-----------------------------------------------------|
| backtest_run_json | <i>Run a backtest from a single request bundle.</i> |
|-------------------|-----------------------------------------------------|

---

**Description**

The request is a JSON document carrying the candles, the spec, the starting capital and any optional feeds. Returns the report as a JSON string, byte-identical to the other language bindings.

**Usage**

```
backtest_run_json(request)
```

**Arguments**

|         |                                      |
|---------|--------------------------------------|
| request | The request bundle as a JSON string. |
|---------|--------------------------------------|

**Value**

The backtest report as a JSON string.

---

|                             |                                                                          |
|-----------------------------|--------------------------------------------------------------------------|
| backtest_stream_equity_json | <i>The equity curve of a streaming backtest so far, as a JSON array.</i> |
|-----------------------------|--------------------------------------------------------------------------|

---

**Description**

The equity curve of a streaming backtest so far, as a JSON array.

**Usage**

```
backtest_stream_equity_json(bt)
```

**Arguments**

|    |                         |
|----|-------------------------|
| bt | A wickra_stream handle. |
|----|-------------------------|

**Value**

A length-one character vector.

backtest\_stream\_finish\_json

*Close any open position and return the streaming backtest report.*

---

### **Description**

Ends the run: the handle is released, and further use raises an error.

### **Usage**

```
backtest_stream_finish_json(bt)
```

### **Arguments**

bt                      A wickra\_stream handle.

### **Value**

The backtest report as a JSON string.

---

backtest\_stream\_free    *Release a streaming backtest without producing a report.*

---

### **Description**

Idempotent, so it is safe to call alongside backtest\_stream\_finish\_json().

### **Usage**

```
backtest_stream_free(bt)
```

### **Arguments**

bt                      A wickra\_stream handle.

### **Value**

NULL, invisibly.

---

`backtest_stream_latest_equity_json`*The most recent equity point of a streaming backtest.*

---

**Description**

The most recent equity point of a streaming backtest.

**Usage**

```
backtest_stream_latest_equity_json(bt)
```

**Arguments**

`bt`                      A `wickra_stream` handle.

**Value**

A length-one character vector; the JSON literal `null` before the first bar.

---

`backtest_stream_new`      *Start a streaming backtest.*

---

**Description**

Start a streaming backtest.

**Usage**

```
backtest_stream_new(spec, capital = 10000)
```

**Arguments**

`spec`                      The strategy spec as a JSON string.  
`capital`                   Starting capital (default 10000).

**Value**

A `wickra_stream` handle.

---

backtest\_stream\_num\_trades

*The number of closed trades in a streaming backtest so far.*


---

### Description

The number of closed trades in a streaming backtest so far.

### Usage

```
backtest_stream_num_trades(bt)
```

### Arguments

bt                    A wickra\_stream handle.

### Value

A length-one numeric vector.

---

backtest\_stream\_step    *Advance a streaming backtest by one OHLCV bar.*


---

### Description

Advance a streaming backtest by one OHLCV bar.

### Usage

```
backtest_stream_step(bt, open, high, low, close, volume = 0, time = NULL)
```

### Arguments

bt                    A wickra\_stream handle.  
open, high, low, close    Numeric bar prices.  
volume                Bar volume (default 0).  
time                  Bar timestamp; defaults to the number of bars fed so far.

### Value

The handle, invisibly.

---

`backtest_stream_step_json`*Advance a streaming backtest by one bar given as a request document.*

---

**Description**

The document is {"candle": {...}, "feeds": {...}}, where feeds optionally carries this bar's reference, derivatives, order-book, trade or cross-section input. This is the only form that can drive a strategy reading a side feed.

**Usage**

```
backtest_stream_step_json(bt, step)
```

**Arguments**

|                   |                                     |
|-------------------|-------------------------------------|
| <code>bt</code>   | A wickra_stream handle.             |
| <code>step</code> | The step document as a JSON string. |

**Value**

The handle, invisibly.

---

`backtest_version`*The native wickra-backtest library version.*

---

**Description**

The native wickra-backtest library version.

**Usage**

```
backtest_version()
```

**Value**

A length-one character vector.

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