

Package ‘xptr’

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Type Package

Title Manipulating External Pointer

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URL <https://randy3k.github.io/xptr/>

Description There is limited native support for external pointers in the R interface.
This package provides some basic tools to verify, create and modify 'externalptr' objects.

Depends R (>= 3.4.0)

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`is_null_xptr`*Check if the external pointer is null.*

Description

Check if the external pointer is null.

Usage`is_null_xptr(s)`**Arguments**

`s` an externalptr object

Value

a boolean

`is_xpt`*Check if an object is an external pointer.*

Description

Check if an object is an external pointer.

Usage`is_xpt(s)`**Arguments**

`s` an externalptr object

Value

a boolean

new_xptr *Create an external pointer object.*

Description

Create an external pointer object.

Usage

```
new_xptr(address = "", tag = NULL, protected = NULL)
```

```
null_xptr(tag = NULL, protected = NULL)
```

Arguments

address	a string of pointer address
tag	an optional tag
protected	an object to be protected from gc within the lifetime of the external pointer

Value

an externalptr object

register_xtr_finalizer *Register a finalizer for external pointer.*

Description

Register a finalizer for external pointer.

Usage

```
register_xtr_finalizer(s, f, onexit = FALSE)
```

Arguments

s	an externalptr object
f	an R function
onexit	should the finalizer execute on exit?

See Also

[reg.finalizer](#)

set_xptr_address *Set the address of the external pointer.*

Description

Set the address of the external pointer.

Usage

```
set_xptr_address(s, p)
```

Arguments

s	an externalptr object
p	a string of pointer address

set_xptr_protected *Set a protected R object to the external pointer.*

Description

Set a protected R object to the external pointer.

Usage

```
set_xptr_protected(s, protected)
```

Arguments

s	an externalptr object
protected	an R object

set_xptr_tag *Set a tag to the external pointer.*

Description

Set a tag to the external pointer.

Usage

```
set_xptr_tag(s, tag)
```

Arguments

s	an externalptr object
tag	an R object

xptr	<i>Manipulating External Pointer</i>
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Description

There is limited native support for external pointers in the R interface. This package provides some basic tools to verify, create and modify 'externalptr' objects.

References

- <https://cran.r-project.org/doc/manuals/r-release/R-exts.html#External-pointers-and-weak-refere>

Examples

```
library(xptr)
a <- new_xptr("0x11a888090")
b <- new_xptr("0x11a888098")
is_xpt(a)
xptr_address(a)
xptr_clear(a)
is_null_xptr(a)
set_xptr_address(a, xptr_address(b))
xptr_address(a)
```

xptr_address	<i>External pointer address.</i>
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Description

External pointer address.

Usage

```
xptr_address(s)
```

Arguments

s an externalptr object

Value

a string of pointer address

xptr_clear	<i>Clear the pointer address of the external pointer.</i>
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Description

Clear the pointer address of the external pointer.

Usage

```
xptr_clear(s)
```

Arguments

s an externalptr object

xptr_protected	<i>Protected R object of the external pointer.</i>
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Description

Protected R object of the external pointer.

Usage

```
xptr_protected(s)
```

Arguments

s an externalptr object

Value

an R object

xptr_tag	<i>Tag of the external pointer.</i>
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Description

Tag of the external pointer.

Usage

xptr_tag(s)

Arguments

s an externalptr object

Value

an R object

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