

# Package ‘Rip46’

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**Type** Package

**Title** Utils for IP4 and IP6 Addresses

**Version** 1.0.2

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**URL** <https://github.com/nfultz/Rip46>

**Description** Utility functions and S3 classes for IPv4 and IPv6 addresses, including conversion to and from binary representation.

**License** GPL-3

**Imports** Rcpp (>= 0.11.6), methods

**LinkingTo** Rcpp

**OS\_type** unix

**NeedsCompilation** yes

**Repository** CRAN

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ip4

*IPv4 Conversion Functions*

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### Description

Functions to manipulate objects of class "ip4" representing IP version 4 addresses.

### Usage

```
as.ip4(x)

## S3 method for class 'numeric'
as.ip4(x)

## S3 method for class 'character'
as.ip4(x)

## S3 method for class 'ip4'
as.character(x, ...)
```

### Arguments

x                    An object to be converted.  
...                   further arguments passed to or from other methods.

### Examples

```
as.ip4("192.168.0.1")
```

---

ip6

*IPv6 Conversion Functions*

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### Description

Functions to manipulate objects of class "ip6" representing IP version 6 addresses.

### Usage

```
as.ip6(x)

## S3 method for class 'character'
as.ip6(x)

## S3 method for class 'ip6'
as.character(x, ...)
```

**Arguments**

x                    An object to be converted.  
 ...                  further arguments passed to or from other methods.

**Examples**

```
as.ip6("DE:AD:BE:EF:01:23:45:67")
```

---

 mask

*Extract Networks from IP addresses*


---

**Description**

Extract Networks from IP addresses

**Usage**

```
mask(x, m)
```

```
classA(x)
```

```
classB(x)
```

```
classC(x)
```

**Arguments**

x                    an ip4 object  
 m                    a bit mask

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 mySqlToIp4

*Convert MySQL ATONs to Rip4*


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**Description**

When you query a MySQL db, you should use INET\_ATON(ip\_field) to convert a string IP to an (unsigned) int.

**Usage**

```
mySqlToIp4(x)
```

**Arguments**

x                    input numeric vector

**Details**

Unfortunately, the RMySQL driver will convert these to doubles because not all unsigned ints are representable as ints. Because doubles get normalized, we can't mask subnets directly.

Instead, we can map the top half of unsigned integers to the negative half of signed ints using 2s-complement.

**Value**

integer format IP addresses

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Rip46

*R utils for IP4 and IP6 addresses*

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**Description**

R utils for IP4 and IP6 addresses

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