# **NAME**

Net::DBus::Binding::Message - Base class for messages

## **SYNOPSIS**

Sending a message

```
my $msg = new Net::DBus::Binding::Message::Signal;
my $iterator = $msg->iterator;

$iterator->append_byte(132);
$iterator->append_int32(14241);

$connection->send($msg);
```

## **DESCRIPTION**

Provides a base class for the different kinds of message that can be sent/received. Instances of this class are never instantiated directly, rather one of the four sub-types Net::DBus::Binding::Message::Signal, Net::DBus::Binding::Message::MethodCall, Net::DBus::Binding::Message::MethodReturn, Net::DBus::Binding::Message::Error should be used.

#### **CONSTANTS**

The following constants are defined in this module. They are not exported into the caller's namespace & thus must be referenced with their fully qualified package names

TYPE\_ARRAY

Constant representing the signature value associated with the array data type.

#### TYPE BOOLEAN

Constant representing the signature value associated with the boolean data type.

#### TYPE BYTE

Constant representing the signature value associated with the byte data type.

### TYPE\_DICT\_ENTRY

Constant representing the signature value associated with the dictionary entry data type.

#### TYPE DOUBLE

Constant representing the signature value associated with the IEEE double precision floating point data type.

# TYPE\_INT16

Constant representing the signature value associated with the signed 16 bit integer data type.

# $TYPE\_INT32$

Constant representing the signature value associated with the signed 32 bit integer data type.

### TYPE INT64

Constant representing the signature value associated with the signed 64 bit integer data type.

#### TYPE\_OBJECT\_PATH

Constant representing the signature value associated with the object path data type.

# TYPE\_STRING

Constant representing the signature value associated with the UTF-8 string data type.

# TYPE\_SIGNATURE

Constant representing the signature value associated with the signature data type.

### TYPE STRUCT

Constant representing the signature value associated with the struct data type.

#### TYPE\_UINT16

Constant representing the signature value associated with the unsigned 16 bit integer data type.

#### TYPE\_UINT32

Constant representing the signature value associated with the unsigned 32 bit integer data type.

#### TYPE UINT64

Constant representing the signature value associated with the unsigned 64 bit integer data type.

#### TYPE VARIANT

Constant representing the signature value associated with the variant data type.

#### TYPE\_UNIX\_FD

Constant representing the signature value associated with the unix file descriptor data type.

#### **METHODS**

my \$msg = Net::DBus::Binding::Message->new(message => \$rawmessage);

Creates a new message object, initializing it with the underlying C message object given by the message object. This constructor is intended for internal use only, instead refer to one of the four sub-types for this class for specific message types

### my \$type = \$msg->get\_type

Retrieves the type code for this message. The returned value corresponds to one of the four Net::DBus::Binding::Message::MESSAGE\_TYPE\_\* constants.

# my \$interface = \$msg->get\_interface

Retrieves the name of the interface targeted by this message, possibly an empty string if there is no applicable interface for this message.

# my \$path = \$msg->get\_path

Retrieves the object path associated with the message, possibly an empty string if there is no applicable object for this message.

## my \$name = \$msg->get\_destination

Retrieves the unique or well-known bus name for client intended to be the recipient of the message. Possibly returns an empty string if the message is being broadcast to all clients.

## my \$name = \$msq->get\_sender

Retireves the unique name of the client sending the message

# my \$serial = \$msg->get\_serial

Retrieves the unique serial number of this message. The number is guaranteed unique for as long as the connection over which the message was sent remains open. May return zero, if the message is yet to be sent.

# my \$name = \$msg->get\_member

For method calls, retrieves the name of the method to be invoked, while for signals, retrieves the name of the signal.

# my \$sig = \$msg->get\_signature

Retrieves a string representing the type signature of the values packed into the body of the message.

### \$msg->set\_sender(\$name)

Set the name of the client sending the message. The name must be the unique name of the client.

# \$msg->set\_destination(\$name)

Set the name of the intended recipient of the message. This is typically used for signals to switch them from broadcast to unicast.

### my \$iterator = \$msq->iterator;

Retrieves an iterator which can be used for reading or writing fields of the message. The returned object is an instance of the Net::DBus::Binding::Iterator class.

# \$boolean = \$msg->get\_no\_reply()

Gets the flag indicating whether the message is expecting a reply to be sent.

# \$msg->set\_no\_reply(\$boolean)

Toggles the flag indicating whether the message is expecting a reply to be sent. All method call messages expect a reply by default. By toggling this flag the communication latency is reduced by removing the need for the client to wait

# my @values = \$msg->get\_args\_list

De-marshall all the values in the body of the message, using the message signature to identify data types. The values are returned as a list.

# \$msg->append\_args\_list(@values)

Append a set of values to the body of the message. Values will be encoded as either a string, list or dictionary as appropriate to their Perl data type. For more specific data typing needs, the Net::DBus::Binding::Iterator object should be used instead.

# **AUTHOR**

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# **SEE ALSO**

Net::DBus::Binding::Message::MethodCall,

Net::DBus::Binding::Message::MethodReturn,

Net::DBus::Binding::Message::Error