

**TPALLOC(3)**

REVISION HISTORY			
NUMBER	DATE	DESCRIPTION	NAME

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## Chapter 1

# SYNOPSIS

```
#include <atmi.h>
```

```
char *tpalloc(char *type, char *subtype, long size);
```

For XATMI client link with *-latmiclt -latmi -lubf -lnstd -lpthread -lrt -lm*

For XATMI server link with *-latmisrvl -latmisrvnomainl -latmisrvinteg -latmi -lubf -lnstd -lpthread -lrt -lm*

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## Chapter 2

# DESCRIPTION

Function allocates XATMI buffer by given *type* and *subtype*. The buffer size is indicated by *size* argument, if it set to 0 and buffer type is *UBF*, then system allocates 1024 for new buffer. Currently subtype is not used, and it can be leaved NULL or empty string. If function succeeds, then Enduro/X registers buffer in internal registry. If user allocates the buffer, it is up to user to free it with **tpfree()**, only exception is with auto buffers which are allocated at point when when service receives request, and Enduro/X will free the buffer after doing **tpreturn()** or **tpforward()**.

### Valid type

**UBF** Unified Buffer Format. Which is type key-value storage with extensive API. See **ubf.h** for list of functions.

**UBF32** The same as **UBF**.

**FML** Compatibility mode with Tuxedo. Same as **UBF**.

**FML32** Compatibility mode with Tuxedo. Same as **UBF**.

**STRING** String buffer. It can store any ASCII character except 0x00, which will indicate the end of the data i.e. zero terminated string.

**JSON** This is also string format, can hold ASCII chars, 0x00 is used for string termination. The difference between this format and **STRING**, is that JSON buffer can be used for converting it automatically to **UBF** and vice versa, either by service request or by issuing **tpjsontoubf()**, **tpubftojson()**.

**CARRAY** Byte array buffer. Can hold 0x00 byte.

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## Chapter 3

# RETURN VALUE

On success, **tpcall()** return zero; on error, -1 is returned, with **tperrno** set to indicate the error.

## Chapter 4

# ERRORS

Note that **tpstrerror()** returns generic error message plus custom message with debug info from last function call.

**TPEINVAL** Invalid type parameters are given to function, possibly NULL. This error also can be generated in case if the environment is not configured for Enduro/X properly.

**TPEOTYPE** Invalid type specified to function.

**TPESYSTEM** System failure occurred during serving. See logs i.e. user log, or debugs for more info.

**TPEOS** System failure occurred during serving. See logs i.e. user log, or debugs for more info. In case of insufficient memory this error will be generated too.

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## Chapter 5

# EXAMPLE

See `atmitest/test001_basiccall/atmiclt1.c` for sample code.



## Chapter 6

# BUGS

Report bugs to [madars.vitolins@gmail.com](mailto:madars.vitolins@gmail.com)

## Chapter 7

## SEE ALSO

`tpfree(3)`

## Chapter 8

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