

**TPSUBSCRIBE(3)**

REVISION HISTORY			
NUMBER	DATE	DESCRIPTION	NAME

# Contents

<b>1</b>	<b>SYNOPSIS</b>	<b>1</b>
<b>2</b>	<b>DESCRIPTION</b>	<b>2</b>
<b>3</b>	<b>RETURN VALUE</b>	<b>3</b>
<b>4</b>	<b>ERRORS</b>	<b>4</b>
<b>5</b>	<b>BUGS</b>	<b>5</b>
<b>6</b>	<b>EXAMPLE</b>	<b>6</b>
<b>7</b>	<b>SEE ALSO</b>	<b>7</b>
<b>8</b>	<b>COPYING</b>	<b>8</b>

## Chapter 1

# SYNOPSIS

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

```
long tpsubscribe (char *eventexpr, char *filter, TPEVCTL *ctl, long flags);
```

```
Link with -latmisrv|-latmisrvnomain|-latmisrvinteg -latmi -lubf -lnstd -lpthread -lrt -lm
```

---

## Chapter 2

# DESCRIPTION

Subscribe to event. This is API function for Enduro/X event broker services. In order to get the functionality working, then event server must be started and configured. See **tpevsrv(8)** manpage. *eventexpr* is regular expression syntax based expression which is registered into event broker, so that if it is matched then event is posted to service, written in *ctl→name1* field. Note that many servers with the same service can subscribe to same event. All server's services will receive the event. *filter* is boolean expression for **UBF** or regular expression for **STRING** buffer which are extra expression to be tested, when event name matched. If *filter* is true or **NULL**, then event is posted to service.

The **TPEVCTL** structure is following:

```
struct tpevctl_t
{
    long flags;
    char name1[XATMI_SERVICE_NAME_LENGTH];
    char name2[XATMI_SERVICE_NAME_LENGTH];
};
typedef struct tpevctl_t TPEVCTL;
```

*ctl→name2* is reserved for future use.

### Valid flags

**TPNOTRAN** Do not call service in transaction mode. This is effective in case if caller process is running in transaction mode, but destination process shall not run in the same global transaction

**TPSIGRSTRT** Restart the system call in progress if interrupted by signal handler. This affects only underlaying mq\_\* function calls.

**TPNOTIME** Ignore timeout setting (**NDRX\_TOUT** env variable). Wait for reply for infinitely.

### Valid *ctl→flags*

**TPEVSERVICE** Call the service. Note that service will be called with flags which are present at *ctl→flags* | **TPNOREPLY**.

**TPEVPERSIST** Do not remove service for event brokers registry, if service is not available any more (detected at point **tpcall()** to service failed).

This function is available only for XATMI servers.

## Chapter 3

# RETURN VALUE

On success, **tpsubscribe()** return subscription id; 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 parameter is given to function. Event expression is **NULL** or empty. Event expression is longer than 255 bytes, *ctl* is **NULL**, or *ctl*→*name1* is empty or filter is set and longer than 255 bytes.

**TPENOENT** Event server is not available.

**TPETIME** Service did not reply in given time (*NDRX\_TOUT*).

**TPESVCFAIL** Service returned *TPFAIL*. This is application level failure.

**TPESVCERR** System level service failure. Server died during the message presence in service queue.

**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.

---

## Chapter 5

# BUGS

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



## Chapter 6

# EXAMPLE

See `atmitest/test004_basicevent/atmisv4_1ST.c` for sample code.

## Chapter 7

## SEE ALSO

**tpesrv(8) tpunsubscribe(3) tppost(3)**

## **Chapter 8**

# **COPYING**

© Mavimax, Ltd