

TPSUBSCRIBE(3)

REVISION HISTORY			
NUMBER	DATE	DESCRIPTION	NAME

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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

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

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