

TPADVERTISE(3)

| REVISION HISTORY | | | |
|------------------|------|-------------|------|
| NUMBER | DATE | DESCRIPTION | NAME |
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Chapter 1

SYNOPSIS

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

```
#define tpadvertise(_SVCNM, _FNADDR) tpadvertise_full(_SVCNM, _FNADDR, #_FNADDR)
```

```
int tpadvertise_full (char *svcnm, void (*)(TPSVCINFO *) func, char *funcname);
```

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

Chapter 2

DESCRIPTION

Advertise service is done by function *tpadvertise_full*. *svcnm* is service name, services cannot start with reserved symbol @, which are intended for Enduro/X system use. Service name cannot contain symbols , and /. Max service name length is defined by **MAXTIDENT** constant. If length is longer, it will be truncated. *func* is a pointer to service function. *funcname* is name of the function that will be shown in **xadmin psc** listings. For compatibility with other systems C macro *tpadvertise* is provided which consumes *_SVCNM* as service name, and *_FNADDR* as pointer to function. The function name is automatically generated by precompiler.

Function can be called during the server initialization phase (i.e. **tpsvrinit()** function) and during the runtime (i.e. for service function).

This function is available only for XATMI servers.

Function logic in case if shared memory is full (no more space for new services defined by **NDRX_SVCMAX** env variable) differs between static mode (when done within the **tpsvrinit(3)** and dynamic mode when done from booted server during the XATMI service call.

During the **static** mode, the real advertise to shared memory is done only after the **tpsvrinit(3)** function is finished. Thus during the *tpadvertise()* calls, the function does not know about SHM space available. And the only limit here is **48** services per server process. If in shared memory there are fewer slots available, then server boot process will ignore that fact, will do following:

- Ignore the SHM error, and do not add record to SHM.
- Will log corresponding message in ULOG.
- Report to **ndrxd(8)** full list of services.
- As result xadmin psc will show the ignored
- xadmin psvc will not show ignored services (as these are SHM scans).

The logic of static service advertise might change in future Enduro/X releases.

During the **dynamic** mode advertise, SHM space checks are performed and **TPELIMIT** error is reported correctly.

Chapter 3

RETURN VALUE

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

Chapter 4

ERRORS

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

TPELIMIT Service count limit reached. This can be **48** services per server binary which is implied limit by Enduro/X.

TPEMATCH Service with given name is already advertised, and pointer to function is different. If pointer matches, that it is not an error.

TPEOS System failure occurred during serving. See logs i.e. user log, or debugs for more info. That could insufficient memory or other error.

Chapter 5

EXAMPLE

See `atmitest/test001_basiccall/atmisv1.c` for sample code.

Chapter 6

BUGS

Report bugs to support@mavimax.com

Chapter 7

SEE ALSO

`tpunadvertise(3)` `ex_env(5)` `ndrxd(8)` `xadmin(8)`

Chapter 8

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