TPIMPORT(3)

REVISION HISTORY

NUMBER	DATE	DESCRIPTION	NAME

Contents

Chapter 1

SYNOPSIS

#include <atmi.h>

int tpimport(char *istr, long *ilen*, char **obuf*, long *olen*, long *flags*);

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

For XATMI server link with *-latmisrv\-latmisrvnomain\-latmisrvinteg -latmi -lview -lnstd -lpthread -lrt -lm*

Chapter 2

DESCRIPTION

Function converts JSON formatted text buffer into typed message buffer.

istr is JSON formatted buffer to import. If *ilen* is 0, *istr* is assumed to point to a null-terminated string. *obuf* is output buffer should be allocated with **tpalloc()** call. If the allocated buffer size is shorter then received one, then Enduro/X will automatically realloc the buffer to new size. If *olen* not NULL there will be stored imported buffer length.

Valid flags

If **TPEX_STRING** flag is set then input JSON formatted buffer is in base64.

If **TPEX_NOCHANGE** then do not allow to change the reply buffer type. If flag is set and different buffer type is received than original, then error **TPEINVAL** is returned.

JSON tags in import file:

- **buftype** - determine which type of buffer will be imported (STRING, UBF, VIEW, CARRAY, JSON)

- **version** - version of JSON text buffer to import

- **subtype** - contains name of VIEW buffer, used only to import VIEW buffer

- **data** - contains JSON formated data

For example following JSON formated text

```
{
    "buftype":"UBF",
    "version":1,
    "data":
    {
        "T_SHORT_FLD:1765,
        "T_LONG_FLD":[3333111,2],
        "T_CHAR_FLD":"A",
        "T_FLOAT_FLD":1,
        "T_DOUBLE_FLD":[1111.220000,333,444],
        "T_STRING_FLD":"HELLO WORLD",
        "T_CARRAY_FLD":"AAECA0hFTExPIEJJTkFSWQQFAA=="
    }
}
```

Will be imported to following UBF buffer:

```
T_SHORT_FLD      1765
T_LONG_FLD       3333111
T_LONG_FLD       2
T_CHAR_FLD       A
```

```
T_FLOAT_FLD      1.00000
T_DOUBLE_FLD     1111.220000
T_DOUBLE_FLD     333.000000
T_DOUBLE_FLD     444.000000
T_STRING_FLD     HELLO WORLD
T_CARRAY_FLD     \00\01\02\03HELLO BINARY\04\05\00
```

For example following JSON formatted text

```
{
    "buftype\":\"VIEW\",
    "version\":1,
    "subtype\":\"MYVIEW56\",
    "data\":
    {
        "MYVIEW56\":
        {
            "tshort1":1,
            "tlong1":2,
            "tchar1":"A",
            "tfloat1":1,
            "tdouble1":21,
            "tstring1":"ABC",
            "tcarray1":"SEVMTE8AAAAAAA=="
        }
    }
}
```

Will be imported into following VIEW:

```
VIEW MYVIEW56
#type     cname    fbname            count  flag   size   null
short     tshort1  -                 1      -      -      -
long      tlong1   -                 1      -      -      -
char      tchar1   -                 1      -      -      -
float     tfloat1  -                 1      -      -      -
double    tdouble1 -                 1      -      -      -
string    tstring1 -                 1      -      15     -
carray    tcarray1 -                 1      -      10     -
END
```

For example following JSON formated text

```
{
    "buftype\":"STRING",
    "version":1,
    "data":"HELLO WORLD"
}
```

Will be imported into following STRING buffer

```
HELLO WORLD
```

For example following JSON formatted text

```
{
    "buftype":"CARRAY",
    "version":1,
    "data":"SEVMTE8gV09STEQgQ0FSUkFZ"
}
```

Will be imported into following CARRAY buffer

```
0000  48 45 4c 4c 4f 20 57 4f 52 4c 44 20 43 41 52 52   HELLO WORLD CARR
0010  41 59                                             AY
```

For example following JSON formatted text

```
{
    "buftype":"JSON",
    "version":1,
    "data":
        {"T_SHORT_FLD":1765,
        "T_LONG_FLD":[3333111,2],
        "T_CHAR_FLD":"A",
        "T_FLOAT_FLD":1,
        "T_DOUBLE_FLD":[1111.220000,333,444],
        "T_STRING_FLD":"HELLO WORLD",
        "T_CARRAY_FLD":"AAECA0hFTExPIEJJTkFSWQQFAA=="}
}
```

Will be imported into following JSON buffer

```
{
    "T_SHORT_FLD":1765,
    "T_LONG_FLD":[3333111,2],
    "T_CHAR_FLD":"A",
    "T_FLOAT_FLD":1,
    "T_DOUBLE_FLD":[1111.220000,333,444],
    "T_STRING_FLD":"HELLO WORLD",
    "T_CARRAY_FLD":"AAECA0hFTExPIEJJTkFSWQQFAA=="
}
```

Chapter 3

RETURN VALUE

On success, **tpacall**() return call descriptor (>0); 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. Either *istr* is NULL or flags does not allow to change the value.

TPEINVAL Invalid JSON or invalid base64 encoding, *istr* is NULL or *obuf* is NULL.

TPEOTYPE Invalid type specified to function. VIEW sub-type not found or environment is not configured.

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.

Chapter 5

EXAMPLE

Sample code see under:

- **atmitest/test056_tpimpexp/atmiclt56_ubf.c** - import UBF buffer

- **atmitest/test056_tpimpexp/atmiclt56_view.c** - import VIEW buffer

- **atmitest/test056_tpimpexp/atmiclt56_carray.c** - import CARRAY buffer

- **atmitest/test056_tpimpexp/atmiclt56_json.c** - import JSON buffer

- **atmitest/test056_tpimpexp/atmiclt56_string.c** - import STRING buffer

Chapter 6

BUGS

Report bugs to support@mavimax.com

Chapter 7

SEE ALSO

tpexport(3)

Chapter 8

COPYING

© Mavimax, Ltd