

TPEXPORT(3)

REVISION HISTORY			
NUMBER	DATE	DESCRIPTION	NAME

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Chapter 1

SYNOPSIS

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

```
int tpexport(char *ibuf, long ilen, char *ostr, long *olen, long flags);
```

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

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

Chapter 2

DESCRIPTION

Function converts typed buffer to JSON formatted text buffer.

ibuf is XATMI buffer which will be exported to JSON formatted text buffer. *ilen* is used for buffer types such **CARRAY**, where buffer length is not described by type. *ostr* exported output JSON formatted text buffer. If **TPEX_STRING** flag is set, then JSON buffer will be converted to base64. *olen* define maximum size for *ostr*

JSON tags in the exported file:

- **buftype** - which type of buffer exported (STRING, UBF, VIEW, CARRAY, JSON)
- **version** - exported version of JSON text buffer
- **subtype** - contains name of VIEW buffer, used only for exported VIEWs
- **data** - contains JSON formatted data

For example 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
```

Will be exported to following JSON

```
{
  "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=="
  }
}
```

For example 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
```

Will be exported into following JSON

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

For example following text buffer

```
HELLO WORLD
```

Will be imported into following JSON

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

For example 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
```

Will be imported into following JSON

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

For example 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=="
}
```

Will be imported into following JSON

```
{
  "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==" }
}
```

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 `tpsterror()` returns generic error message plus custom message with debug info from last function call.

TPEINVAL Invalid JSON or invalid base64 encoding, *ibuf* is NULL or *ostr* 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/atmict56_ubf.c` - import UBF buffer
- `atmitest/test056_tpimpexp/atmict56_view.c` - import VIEW buffer
- `atmitest/test056_tpimpexp/atmict56_carray.c` - import CARRAY buffer
- `atmitest/test056_tpimpexp/atmict56_json.c` - import JSON buffer
- `atmitest/test056_tpimpexp/atmict56_string.c` - import STRING buffer

Chapter 6

BUGS

Report bugs to support@mavimax.com

Chapter 7

SEE ALSO

tpimport(3)

Chapter 8

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