

# TPVIEWTOJSON(3)

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## Chapter 1

# SYNOPSIS

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

```
int tpviewtojson(char *cstruct, char *view, char *buffer, int bufsize, long flags);
```

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

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

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## Chapter 2

# DESCRIPTION

Function converts VIEW buffer in *cstruct*, described by *view* to JSON string stored in *buffer* string. The field *bufsize* must indicate the space in **buffer**. If the size is not enough, function will fail. *flags* current is used to define the function logic in case for *NULL* fields in view file.

For example, following buffer in *cstruct/view*:

```
VIEW MYVIEW2
#type      cname      fbname          count   flag    size    null
short     tshort1    -               1       -       -       2000
long      tlong1      -               1       -       -       5
char      tchar1     -               1       -       -       '\0'
float     tfloat1    -               1       -       -       1.1
double    tdouble1   -               1       -       -       0.0
string    tstring1   -               3       -       15      'HELLO WORLD'
carray    tcarray1   -               1       -       10      '- '
END
```

and structure initialized to (in C, no error handling for simplicity):

```
struct MYVIEW2 v2;
char buf_with_nulls[65000];
char buf_no_nulls[65000];

Bvsinit((char *)&v2, "MYVIEW2"); /* initialize to NULL values */

v2.tshort1=100;
strcpy(v2.tstring1[1], "Enduro/X");

/* by default null fields are exported */
tpviewtojson((char *)&v2, "MYVIEW2", buf_with_nulls, sizeof(buf_with_nulls), 0);

/* BVACCESS_NOTNULL makes to export only non NULL fields*/
tpviewtojson((char *)&v2, "MYVIEW2", buf_no_nulls, sizeof(buf_with_nulls), BVACCESS_NOTNULL ←
);
```

Buffer *buf\_with\_nulls* in this example will be filled with following message:

```
{
  "MYVIEW2":
  {
    "tshort1":100,
    "tlong1":5,
```

```
    "tchar1": "",
    "tfloat1": 1.10000,
    "tdouble1": 0.000000,
    "tstring1": ["HELLO WORLD", "Enduro/X", "HELLO WORLD"],
    "tcarray1": "LQ=="
  }
}
```

Buffer *buf\_no\_nulls* in this example will be filled with following message:

```
{
  "MYVIEW2":
  {
    "tshort1": 100,
    "tstring1": ["HELLO WORLD", "Enduro/X"]
  }
}
```

NOTE that "carray" typed view fields are exported as base64 strings.

## Chapter 3

# RETURN VALUE

On success, **tpacall()** return call descriptor (>0); on error, -1 is returned, with **tperrno** set to indicate the error.

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## Chapter 4

# ERRORS

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

**TPESYSTEM** System failure occurred during serving. See logs i.e. user log, or debugs for more info. Might be insufficient memory, JSON or UBF library failure. Enduro/X environment not configured.

**TPEOS** Not enough space in output *buffer*.

**TPEINVAL** *cstruct* is NULL, *view* is NULL or empty string, *buffer* is NULL.

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## Chapter 5

# EXAMPLE

See `atmitest/test040_typedview/atmict40.c` for sample code.

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## Chapter 6

# BUGS

Report bugs to [support@mavimax.com](mailto:support@mavimax.com)

## Chapter 7

## SEE ALSO

[ndrxdebug.conf\(5\)](#) [tpjsontoview\(3\)](#) [viewc\(8\)](#) [ex\\_env\(5\)](#)

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## **Chapter 8**

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