

BVSTOF(3)

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Chapter 1

SYNOPSIS

```
#include <ubf.h>
```

```
int Bvstof(UBFH *p_ub, char *cstruct, int mode, char *view);
```

Link with *-lubf -lnstd -lm -lpthread*

Chapter 2

DESCRIPTION

Function is used to transfer data from view C structure (*cstruct*) to UBF buffer (*p_ub*). The view type is passed into *view* variable which must correspond to the actual C structure behind *cstruct* pointer. The *mode* flag indicates the data merge mode into UBF buffer (because UBF may already contain some fields).

For *mode* have defined following constants:

1. BUPDATE - Uses **Bupdate(3)** mechanism to merge the data into *p_ub*. In this mode if field in C structure corresponds to NULL value defined in view, then data is not transferred to UBF.
2. BOJOIN - Uses Bojoin() mechanism to merge data into *p_ub*. Bojoin() is not yet supported, thus it is reserved for future use. And this mode will not change the target UBF buffer.
3. BJOIN - Uses Bjoin() function to merge structure data to UBF buffer. Bjoin() is not yet implemented, thus this mode will not add/change any data in target UBF buffer.
4. BCONCAT - Uses **Bconcat(3)** function to merge data into target UBF. In this mode even if field corresponds to NULL value in view, the NULL value is copied to target UBF.

The mode functions are supported thanks to approach that firstly structure data is loaded into temporary UBF buffer, and then this temp buffer is merged with target *p_ub* buffer.

If **C** (count indicator) was set for the field, then during data transfer this number of elements are copied to UBF. If **C** flag was not used, then all elements are staged to copy. If count field is greater than count defined in VIEW, the operation will be terminated with error **TPEINVAL**

If **L** flag was set, then for **carray** buffers this will indicate number of bytes to copy to UBF field.

Chapter 3

RETURN VALUE

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

Chapter 4

ERRORS

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

BALIGNERR Corrupted buffer or pointing to not aligned memory area.

BEINVAL Invalid value passed to function. Count indicator is greater than count specified in view or length indicator is greater than size specified for field in view.

BNOTFLD Buffer not fielded, not correctly allocated or corrupted.

BBADFLD Invalid field id passed.

BBADVIEW View is not found, object file is defective or system error.

BVFSYNTAX Defective object file, cannot load.

BMALLOC Malloc failed, out of memory.

BNOSPACE Not enough space in target buffer (pointed by *p_ub*).

Chapter 5

EXAMPLE

See `atmitest/test040_typedview/viewunit1.c` for sample code.

Chapter 6

BUGS

Report bugs to support@mavimax.com

Chapter 7

SEE ALSO

viewc(8) Bvstof(3) Bvsinit(3) Bvselinit(3) Bvnull(3) Bvopt(3) ex_env(5) Bupdate(3) Bconcat(3)

Chapter 8

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