

Unless otherwise noted, all MVS options documented in the following IBM manual are implemented by the BSI EZA interfaces:

IBM TCP/IP for MVS
 Application Programming Interface Reference
 Version 3 Release 2
 Document Number SC31-7187-03

The use of "n/a" indicates that the item is not applicable to the interface as documented by IBM in the above manual.

General ECB rules:

The MVS Implementation requires a work area of 104 bytes after every ECB fullword.

The VSE 2.5 Implementation requires a work area of 156 bytes after every ECB fullword.

The BSI Implementation requires a work area of 28 bytes after every ECB fullword.

Function	Option	Suboption	EZASOKET	EZASMI	BSI Implementation Notes	VSE 2.5 EZA Implementation
ACCEPT	S					
	NAME					
	ERRNO					
	RETCODE					
	NS		n/a			Ignored
	ECB		n/a			
	ERROR		n/a			
BIND	TASK		n/a			
	S					
	NAME					
	ERRNO					
	RETCODE					
	ECB		n/a			
	ERROR		n/a			
CANCEL	TASK		n/a			
	CALAREA		n/a			
	ECB		n/a			
	ERRNO		n/a			
	RETCODE		n/a			
	ERROR		n/a			
	TASK		n/a			

CLOSE						
	S					
	ERRNO					
	RETCODE					
	ECB		n/a			
	ERROR		n/a			
	TASK		n/a			
CONNECT						
	S					
	NAME				See note 6	
	ERRNO					
	RETCODE					
	ECB		n/a			
	ERROR		n/a			
	TASK		n/a			
FCNTL						
	S					
	COMMAND					
	REQARG					
	ERRNO					
	RETCODE					
	ECB		n/a			
	ERROR		n/a			
	TASK		n/a			
GETCLIENTID						
	CLIENT				See note 5	Different Defaults
	ERRNO					
	RETCODE					
	ECB		n/a			
	ERROR		n/a			
	TASK		n/a			
GETHOSTBYADDR						
	HOSTADR					
	HOSTENT				See note 7	Limited - See VSE doc
	RETCODE					
	ERROR		n/a			
	TASK		n/a			

GETHOSTBYNAME						
	NAMELEN					
	NAME					
	HOSTENT				See note 7	Limited - See VSE doc
	RETCODE					
	ERROR		n/a			
	TASK		n/a			
GETHOSTID						
	RETCODE					
	ECB		n/a			
	ERROR		n/a			
	TASK		n/a			
GETHOSTNAME						
	NAMELEN					
	NAME				A limit of 128 bytes will be returned.	Limited to 64 bytes
	ERRNO					
	RETCODE					
	ECB		n/a			
	ERROR		n/a			
	TASK		n/a			
GETIBMOPT			n/a			Function not implemented
	COMMAND		n/a			
		1	n/a		Only BSI TCP/IP stacks identified	
	BUF		n/a			
	ERRNO		n/a			
	RETCODE		n/a			
	ERROR		n/a			
	TASK		n/a			
GETPEERNAME						
	S					
	NAME					
	ERRNO					
	RETCODE					
	ECB		n/a			
	ERROR		n/a			
	TASK		n/a			

GETSOCKNAME						
	S					
	NAME					
	ERRNO					
	RETCODE					
	ECB		n/a			
	ERROR		n/a			
	TASK		n/a			
GETSOCKOPT						
	S					
	OPTNAME					
		so_reuseadd			always on	Supported
		so_broadcast	Not Supported	Not Supported		Not Supported
		so_keepalive				Supported
		so_linger			always on	Supported
		so_oobinline	Not Supported	Not Supported		Not Supported
		so_sndbuf				Not Supported
		so_error				Not Supported
		so_type				Not Supported
	OPTVAL					
	OPTLEN					
	ERRNO					
	RETCODE					
	ECB		n/a			
	ERROR		n/a			
	TASK		n/a			
GIVESOCKET					Can only give to another BSI EZA client	Can only give to another IBM client
	S					
	CLIENT					
	ERRNO					
	RETCODE					
	ECB		n/a			
	ERROR		n/a			
	TASK		n/a			
GLOBAL			n/a	IGNORED	Not required in VSE	

INITAPI						
	MAXSOC				See note 4	Different - See VSE doc
	SUBTASK				See note 1	
	IDENT					
		TCPNAME			See note 2	Ignored
		ADSNAME			See note 3	Ignored
	MAXSNO				See note 4	Different - See VSE doc
	ERRNO					
	RETCODE					
	APITYPE	1	n/a	Not Supported		
		2	n/a			
		3	n/a			Not Supported
	UEEXIT		n/a	Not Supported	VSE has not equivalent system service	Not Supported
	ASYNC		n/a		ASYNC=EXIT See note 8	Not Supported
	ERROR		n/a			
	TASK		n/a			
IOCTL						
	S					
	COMMAND					
		fionbio				
		fionread				Not Supported
		siocaddr		Not Supported	MVS doc states: "For IBM use only"	Not Supported
		siocatmark		Not Supported		Not Supported
		siocdelrt		Not Supported	MVS doc states: "For IBM use only"	Not Supported
		siocgifaddr		Not Supported		Not Supported
		siocgifbrdaddr		Not Supported		Not Supported
		siocgifconf		Not Supported		Not Supported
		siocgifdstaddr		Not Supported		Not Supported
		siocgifflags		Not Supported		Not Supported
		siocgifmetric		Not Supported		Not Supported
		siogifnnetmask		Not Supported		Not Supported
		siocsifmetric		Not Supported		Not Supported
	REQARG					
	RETARG					
	ERRNO					
	RETCODE					
	ECB		n/a			
	ERROR		n/a			
	TASK		n/a			

LISTEN						Requires BIND first
	S					
	BACKLOG		Ignored	Ignored	Always set to 5 by stack	
	ERRNO					
	RETCODE					
	ECB		n/a			
	ERROR		n/a			
	TASK		n/a			
READ						
	S					
	NBYTE					
	BUF					
	ERRNO					
	RETCODE					
	ALET		n/a	Not Supported		Not Supported
	ECB		n/a			
	ERROR		n/a			
	TASK		n/a			
READV			n/a		Function not implemented	Function not implemented
RECV						
	S					
	FLAGS					Restricted
		msg_oob	Not Supported	Not Supported		Not Supported
		msg_peek				Not Supported
	NBYTE					
	BUF					
	ERRNO					
	RETCODE					
	ALET		n/a	Not Supported		Not Supported
	ECB		n/a			
	ERROR		n/a			
	TASK		n/a			

RECVFROM						
	S					
	FLAGS					Restricted
		msg_oob	Not Supported	Not Supported		Not Supported
		msg_peek				Not Supported
	NBYTE					
	BUF					
	NAME					
	ERRNO					
	RETCODE					
	ALET		n/a	Not Supported		
	ECB		n/a			
	ERROR		n/a			
	TASK		n/a			
RCVMSG			n/a		Function not implemented	Function not implemented
SELECT						
	MAXSOC					
	TIMEOUT					
	RSNDMSK					
	RRETMSK					
	WSNDMSK					
	WRETMSK					
	ESNDMSK					
	ERETMSK					
	ERRNO					
	RETCODE					
	ECB		n/a			
	ERROR		n/a			
	TASK		n/a			
SELECTEX						
	MAXSOC					
	TIMEOUT					
	RSNDMSK					
	RRETMSK					
	WSNDMSK					
	WRETMSK					
	ESNDMSK					
	ERETMSK					
	SELECB				255 ECBs allowed	254 ECBs allowed
	ERRNO					
	RETCODE					
	ERROR		n/a			
	TASK		n/a			

SEND						
	S					
	FLAGS					
		msg_oob	Not Supported	Not Supported		Not Supported
		msg_dontroute	Not Supported	Not Supported		Not Supported
	NBYTE					
	BUF					
	ERRNO					
	RETCODE					
	ALET		n/a	Not Supported		Not Supported
	ECB		n/a			
	ERROR		n/a			
	TASK		n/a			
SENDMSG			n/a		Function not implemented	Function not implemented
SENDTO						
	S					
	FLAGS					
		msg_oob	Not Supported	Not Supported		Not Supported
		msg_dontroute	Not Supported	Not Supported		Not Supported
	NBYTE					
	BUF					
	NAME					
	ERRNO					
	RETCODE					
	ALET		n/a	Not Supported		
	ECB		n/a			Not Supported
	ERROR		n/a			
	TASK		n/a			
SETSOCKOPT						
	S					
	OPTNAME					
		so_broadcast	Not Supported	Not Supported		Not Supported
		so_keepalive				
		so_linger			not settable, always on	
		so_oobinline	Not Supported	Not Supported		Not Supported
		so_reusaddr			not settable, always on	
	OPTVAL					
	OPTLEN					
	ERRNO					
	RETCODE					
	ECB		n/a			
	ERROR		n/a			
	TASK		n/a			

SHUTDOWN						
	S					
	HOW					
		0	Not Supported	Not Supported		Not Supported
		1	Not Supported	Not Supported		Not Supported
		2				
	ERRNO					
	RETCODE					
	ECB		n/a			
	ERROR		n/a			
	TASK		n/a			
SOCKET						
	AF					
	SOCTYPE					
		stream				
		datagram				
		raw	Not Supported	Not Supported		Not Supported
	PROTO					
	ERRNO					
	RETCODE					
	NS		n/a			Ignored
	ECB		n/a			
	ERROR		n/a			
	TASK		n/a			
TAKESOCKET					Can only take from another BSI EZA client	Can only take from another IBM client
	SOCRECV					
	CLIENT					
	ERRNO					
	RETCODE					
	NS		n/a			Ignored
	ECB		n/a			
	ERROR		n/a			
	TASK		n/a			
TASK			n/a			
TERMAPI						
	TASK		n/a			

WRITE						
	S					
	NBYTE					
	BUF					
	ERRNO					
	RETCODE					
	ALET		n/a	Not Supported		Not Supported
	ECB		n/a			
	ERROR		n/a			
	TASK		n/a			
WRITEV						Function not implemented
	S					
	IOV				Alets are not supported	
	IOVCNT				Only 42 vectors allowed (MVS has 120)	
	ERRNO					
	RETCODE					
	ECB		n/a			
	ERROR		n/a			
	TASK		n/a			

NOTES:

1 The SUBTASK parameter defaults as follows:

Batch	VSE Task Identifier (IJBTIK) converted to display format
CICS	CICS Task number

2 The TCPNAME parameter format is 'SOCKETnn' where nn is the TCP/IP stack ID. If TCPNAME is spaces, it will default to 'SOCKETyy' where yy is the extracted from the job SYSPARM value. If the SYSPARM value is not a valid stack ID, 'SOCKET00' will be used.

3 The ADSNAME will default to the VSE syslog ID.

4 The MAXSNO value is limited to 256 in CICS and 2000 in batch. The default value is 64.

5 The returned CLIENTID includes the ADSNAME and SUBTASK values specified on the INITAPI function. Review the INITAPI function as to the defaults in not specified. BSI also returns the address of the token in positions 21-24 of the CLIENT structure. This token can then be used by the 'shared socket' option of the CONNECT call (note 6).

6 In addition to the normal use of the CONNECT call, BSI supports a 'shared socket' extension. The extension allows multiple tasks within a single partition perform read and writes against the same connected socket. The original task is responsible for the final CLOSE of the socket. For this function, the NAME_FAMILY must be set to the characters 'SS'. NAME_PORT must be set to the original socket number. NAME_IPADDRESS must be set to the token value returned from the GETCLIENTID call. (See note 5.) Contact BSI support for more information on this extension.

7 The returned HOSTENT struction does not return any ALIAS information. Host names can be up to 128 characters.

8 BSI has implimneted the ASYNC=EXIT in a fasion not compatable with MVS. When the INITAPI ASYNC=EXIT option is present, the routine address specified is used as a WAIT routine. All WAITS within the EZA interface will be passed to the exit routine. When the exit routine is involked, the registers are as follows:

R1 - Pointer to the parameter list
R13 - Pointer to save area
R14 - Return address
R15 - Address of the Exit routine

Parameter List:

Four byte Token from INITAPI EXIT= parameter

Address of wait ecb (if high order bit on) or the Address of a list of wait ecb's. The last ecb will have the high order bit on.

Upon return, if R15 is not 0 then ERRNO will be set to 10333

The exit needs to be 'CICS aware'.

The exit is involked with a BASSM so if the routine is 31 bit enabled, then the address passes on the INITAPI call should have the high order bit on.