

The Library SysLibShm.lib

This library provides functions for accessing a memory area which is used in common by several processes resp. referencing a physical address (Shared-Memory, shortcut ShM).

If the target system is supporting the functionality, the library functions can be used to open and to close the ShM and to read and write from it. The reading, writing and closing functions need the handle which is returned by the opening function. The execution is synchronous.

- SysShmOpen
- SysShmClose
- SysShmRead
- SysShmWrite

SysShmOpen

This function of type DWORD opens a Shared Memory.

It returns a handle for the ShM, which can be used as a pointer. The handle is required as input parameter for the other library functions.

Variable	Data type	Description
stName	STRING	Name of the Shared Memory, can be set as desired
dwPhysicalAddress	DWORD	Set here one of the following: - the desired physical address of the ShM; must be valid ! - 0, if the location of the ShM area can be arbitrary
pdwSize	DWORD	Pointer on size of the area for the ShM - If the ShM is already existing, the actual size will be returned. - If the ShM does not yet exist, it will be created according to the given size. If you enter "0" here, the function will fail. Thus the function also can be used to check whether the ShM already has been created.

SysShmClose

This function of type BOOL closes the Shared Memory, which is identified by the handle returned by SysShmOpen. TRUE will be returned after successful operation, otherwise FALSE.

Variable	Data type	Description
hShm	DWORD	Handle of the Shared Memory; was returned by SysShmOpen

SysShmRead

This function of type DWORD can be used to read a defined number of bytes from a Shared Memory, starting at a certain offset. It will return the number of actually read bytes.

Variable	Data type	Description
hShm	DWORD	Handle of the Shared Memory; was returned by SysShmOpen
dwOffset	DWORD	Offset in the data area, where reading should start
pData	DWORD	Address of data buffer to read
dwSize	DWORD	Number of bytes to be read

SysShmWrite

This function of type DWORD can be used to write a defined number of bytes to a Shared Memory. It will return the number of actually written bytes.

Variable	Data type	Description
hShm	DWORD	Handle of the Shared Memory; was returned by SysShmOpen
dwOffset	DWORD	Offset in the data area where the writing of the data should start
pData	DWORD	Address of data buffer to be written
dwSize	DWORD	Number of bytes to be written