ReadConsole function

Reads character input from the console input buffer and removes it from the buffer.

Syntax

C++

```
BOOL WINAPI ReadConsole(
  _In_     HANDLE  hConsoleInput,
  _Out_    LPVOID  lpBuffer,
  _In_     DWORD   nNumberOfCharsToRead,
  _Out_    LPDWORD lpNumberOfCharsRead,
  _In_opt_ LPVOID  pInputControl
);
```

Parameters

hConsoleInput [in]
A handle to the console input buffer. The handle must have the **GENERIC_READ** access right. For more information, see **Console Buffer Security and Access Rights**.

lpBuffer [out]
A pointer to a buffer that receives the data read from the console input buffer.

The storage for this buffer is allocated from a shared heap for the process that is 64 KB in size. The maximum size of the buffer will depend on heap usage.

nNumberOfCharsToRead [in]
The number of characters to be read. The size of the buffer pointed to by the *lpBuffer* parameter should be at least `nNumberOfCharsToRead * sizeof(TCHAR)` bytes.

lpNumberOfCharsRead [out]
A pointer to a variable that receives the number of characters actually read.

pInputControl [in, optional]
A pointer to a **CONSOLE_READCONSOLE_CONTROL** structure that specifies a control character to signal the end of the read operation. This parameter can be **NULL**.

This parameter requires Unicode input by default. For ANSI mode, set this parameter to **NULL**.

Return value

If the function succeeds, the return value is nonzero.

If the function fails, the return value is zero. To get extended error information, call **GetLastError**.

Remarks

ReadConsole reads keyboard input from a console's input buffer. It behaves like the **ReadFile** function, except that it can read in either Unicode (wide-character) or ANSI mode. To have applications that maintain a single set of sources compatible with both modes, use **ReadConsole** rather than **ReadFile**. Although **ReadConsole** can only be used with a console input buffer handle, **ReadFile** can be used with other handles (such as files or pipes). **ReadConsole** fails if used with a standard handle that has been redirected to be something other than a console handle.

All of the input modes that affect the behavior of **ReadFile** have the same effect on **ReadConsole**. To retrieve and set the input modes of a console input buffer, use the **GetConsoleMode** and **SetConsoleMode** functions.

If the input buffer contains input events other than keyboard events (such as mouse events or window-resizing events), they are discarded. Those events can only be read by using the **ReadConsoleInput** function.

This function uses either Unicode characters or 8-bit characters from the console's current code page. The console's code page defaults initially to the system's OEM code page. To change the console's code page, use the **SetConsoleCP** or **SetConsoleOutputCP** functions, or use the **chcp** or **mode con cp select=** commands.

The *pInputControl* parameter can be used to enable intermediate wakeups from the read in response to a file-completion control character specified in a **CONSOLE_READCONSOLE_CONTROL** structure. This feature requires command extensions to be enabled, the standard output handle to be a console output handle, and input to be Unicode.

Windows Server 2003 and Windows XP/2000: The intermediate read feature is not supported.

Requirements

Minimum supported client	Windows 2000 Professional [desktop apps only]
Minimum supported server	Windows 2000 Server [desktop apps only]
Header	Wincon.h (include Windows.h)
Library	Kernel32.lib
DLL	Kernel32.dll
Unicode and ANSI names	**ReadConsoleW** (Unicode) and **ReadConsoleA** (ANSI)

See also

Console Functions

CONSOLE_READCONSOLE_CONTROL
GetConsoleMode
Input and Output Methods
ReadConsoleInput
ReadFile
SetConsoleCP
SetConsoleMode
SetConsoleOutputCP
WriteConsole