# Dos16SysTrace

## Brief

Writes a trace record to the system trace buffer. It provides a high speed event recording mechanism which may be used by PM and non-PM threads in ring 3 and ring 2 and by detached processes.

## Syntax

```
APIRET16 APIENTRY16 Dos16SysTrace
       (USHORT major, USHORT cBuffer, USHORT minor, PCHAR pBuffer)
```

## Parameters

- major (USHORT) input : Major code which identifies the trace record. Range reserved for user is 245-255. Valid range 0-255
- cBuffer (USHORT) input : Length of optional buffer. Valid range
  - 0 - 512 (before 4.0 FP 10 and 3.0 FP 35)
  - 0 - 4099 (from 3.0 FP35 and 4.0 FP10 onwards).
- minor (USHORT) input : Minor code which identifies the trace record. Major-minor code pair should uniquely identify the trace record. Valid range 1 - 255
- pBuffer (PCHAR) input : Pointer to optional buffer. If cBuffer is 0, then pBuffer is ignored.

## Return Code

ulrc (APIRET) returns

Dos16SysTrace returns one of the following values

- 0 NO_ERROR
- 150 ERROR_SYSTEM_TRACE

## Remarks

DosSysTrace creates a trace record that includes the following items:

- Header Major code, minor code, time stamp, PID of logging process
- Optional System Data Controlled by the TRACE command
- Optional User Data Specified by the pBuffer parameter

# Example Code

```
int main(int argc, char *argv[], char *envp[]){
   APIRET16 rc=0;           /* default return code */
   USHORT major=255;        /* default major code */
   USHORT minor=1;          /* default minor code */
   USHORT cBuffer=0;        /* default buffer length */
   PCHAR  pBuffer=NULL;     /* default buffer address */

   if (argc>1)
   {
      pBuffer = argv[1];
      cBuffer = strlen(argv[1]);
   }

   if (argc>2) major = atol(argv[2]);
   if (argc>3) minor = atol(argv[3]);

   rc = Dos16SysTrace(major, cBuffer, minor, pBuffer);

   if (rc) printf("DosSysTrace retuned rc=%u\n", rc);

   return rc;
}
```

# Related Functions

- DosDumpProcess
- DosForceSystemDump

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