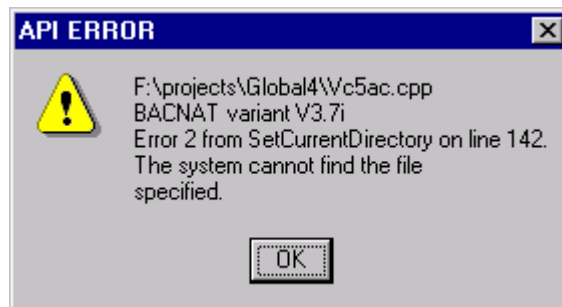# GSM (Windows) DiagnosticDisplays

The following GSM (Windows) registry setting:

    HKEY_LOCAL_MACHINE\Software\Global\Client\Diagnostics\DiagnosticDisplays

can be extremely useful in diagnosing a wide range of possible GSM (Windows) problems. When this option is enabled, any call to a Windows API function that returns an unexpected error will result in the display of a dialogue box of the following format on the GLOBAL.EXE fat-client screen:

Important Note: On a multi-user configurations with GSMWIN32.EXE or GX.EXE thin-clients (or serial screens) attached to the GLOBAL.EXE client the system will appear to freeze, until the OK button in the API ERROR dialogue box is clicked.

The message in the dialogue box always consists of the following lines:

F:\projects\Global4*module_name*

"F:\projects\Global4\" is merely the folder on the development PC that is used to build the GLOBAL.EXE executable. This folder may change from time-to-time.

The *module_name*, in this example **vc5ac.cpp**, can give an important clue in which area the problem lies. The possible *module_name* values are:

SPBT.C	RPC interface to Speedbase Gateway
VC0F.C	RPC interface to Global Server
VC0SK.C	Debug log file creation
VC5AA.C	Diskette
VC5AB.C	IDF controller
VC5AC.cpp	DDF controller
VC5AE.C	Open files controller
VC5BB.C	Serial screen interface
VC5BC.C	Network screen interface
VC5CA.C	Tape controller
VC5EA.C	DOSPrint printer

VC5EB.C	WinPrint printer
VC5ED.C	DOS.PRI printer
VC5GB.C	RPC interface in GLSERVER.EXE to Global Client
VC5GC.C	SVC 61 interface
VC5GE.C	SHM interface in GLSERVER.EXE to Global Client
VC5GI.C	Interface to Speedbase Gateway
VC5NC.C	Background timer
VC5PA.C	SPD interface
VC5TA.C	Timer handler
VC5UA.C	GSM loader

BACNAT variant V*n.nn*

The BACNAT variant must be quoted when logging all problems with GSM (Windows).

Error *x* from *windows_function_call* on line *nnnn*

The error code, in this example **2**, is the numeric error code returned by the Windows API function. The *windows_function_call*, in this example **SetCurrentDirectory**, may give a clue to the nature of the problem. The example problem is "directory related". The line number, in this example **142**, is generally only of interest to the GSM Development Team.

verbose_error_description

The verbose error message is generated by Windows (so blame Bill Gates if it is too cryptic). However, this can often be a strong clue as to the nature of the problem.