Diagnostics Registry Settings

1. Introduction

This document describes the various Global registry settings under the following registry key:

HKEY_LOCAL_MACHINE\Software\Global\Client\Diagnostics

Although some of these settings are documented elsewhere in the Global Operating Manual (Windows) V8.1 Manual, various global *nn*. doc Release Notes and IN*nnn*. doc Technical Notes, this note only refers to 3 other documents:

GOMW	Global Operating Manual (Windows) V8.1 (man81gsmwindows.doc)
IN181	Removing Config. File Technical Note (in181-removingconfigfile.doc)
CFM81	Global Configurator Manual V8.1 (man81configurator.doc)

Unless otherwise stated, a change to a registry setting only becomes effective when the Global Client (GLOBAL.EXE) is reloaded.

1.1 Table of Contents

The following registry settings are described in this document:

Diagnostics\AcceptPollLogInputCharacters	2.1	
Diagnostics\AcceptThreadLogInputCharacters	2.2	
Diagnostics\ActivateTimeSlicingDiags	2.3	
Diagnostics\ArchiveLogFilesBeforeOverwrite	2.4	
Diagnostics\AuxPrintDiagnostics	2.5	
Diagnostics\ConsoleDiagnostics	2.6	
Diagnostics\ConsoleLogging	2.7	
Diagnostics\DiagnosticDisplays	2.8	
Diagnostics\Enable\$BYEDiagnostics	2.9	
Diagnostics\EnableAllocMemoryDiagnostics	2.10	
Diagnostics\EnableGXResendDiags		2.11
Diagnostics\EnableSpecialAttachDiags	2.12	
Diagnostics\EnableSpecialNetworkDiags		2.13
Diagnostics\FileExecDiagnostics	2.14	
Diagnostics\FileExecLockDiagnostics	2.15	
Diagnostics\GlobalErrorLog		2.16
Diagnostics\GlobalLoadDiagnostics	2.17	
Diagnostics\GlobalRegistryDump	2.18	
Diagnostics\GXFileDownLoadDiagnostics		2.19
Diagnostics\GXFileDownLoadlogging	2.20	
Diagnostics\LANExecutiveDiagnostics	2.21	
Diagnostics\LogConfigurationSynthesis	2.22	
Diagnostics\LogExceptionLevel	2.23	

Diagnostics Registry Settings

Diagnostics\LogExternalPointerUseForJackDuijf		2.24
Diagnostics\LogHardResumeErrors		2.25
Diagnostics\LogKeystrokes		2.26
Diagnostics\LogNetworkConnections	2.27	
Diagnostics\LogNetworkDisConnections	2.28	
Diagnostics\LogRawKeystrokes	2.29	
Diagnostics\LogRawKeystrokesBufferSize		2.30
Diagnostics\LogRPCConnectionTime	2.31	
Diagnostics\LogServiceMessages		2.32
Diagnostics\LogSoftResumeErrors		2.33
Diagnostics\LogStackUnderOverFlow	2.34	
Diagnostics\LogZeroResumeErrors		2.35
Diagnostics\MultiUserPrinterDiagnostics	2.36	
Diagnostics\PregemDiagnosticDisplays	2.37	
Diagnostics\PregemLogFile		2.38
Diagnostics\PrinterTranslationDiagnostics		2.39
Diagnostics\PurgeLogFileDiagnostics	2.40	
Diagnostics\SeparateConnectionLogFiles		2.41
Diagnostics\SVC61Diagnostics	2.42	
Diagnostics\SVC61DiagUserNumber	2.43	
Diagnostics\SVC61DiagShortOpcode	2.44	
Diagnostics\SVC61FindFileDiagnostics	2.45	
Diagnostics\SVC61SpeedbaseDiagnostics		2.46
Diagnostics\SVC61SpeedbaseDiagMaxLineCount		2.47
Diagnostics\SVC61SpeedbaseDiagUserNumber		2.48
Diagnostics\SVC79Diagnostics	2.49	
Diagnostics\SVC79DiagLevel	2.50	
Diagnostics\SVC79LoaderDiagnostics	2.51	
Diagnostics\SVC79Opcode5758Diagnostics	2.52	
Diagnostics\SVC79ValueTrapDiagnostics		2.53
Diagnostics\SVC86Diagnostics	2.54	
Diagnostics\SVC86LogExceptions		2.55
Diagnostics\SVC86InputDiagnostics	2.56	
Diagnostics\SVC86OutputDiagnostics	2.57	
Diagnostics\SVC90FileName	2.58	
Diagnostics\SVC90Count	2.59	
Diagnostics\SVC90Length1		2.60
Diagnostics\SVC90Length2		2.61
Diagnostics\SVC90Length3		2.62
Diagnostics\SVC90Length4		2.63
Diagnostics\SVC90Length5		2.64
Diagnostics\SVC90Length6		2.65
Diagnostics\SVC90Length7		2.66
Diagnostics\SVC90Padding		2.67
=		

Diagnostics\TimeSlicingDiagnostics	2.68
Diagnostics\WinPrintDiagnostics	2.69
Diagnostics\AllowCtrlVToToggleDiags	2.70

2. Registry Settings under Diagnostics

Most of the registry settings under the Diagnostics key are simple "On" or "Off" string settings that, when enabled, result in the creation of a log file within the Global "log" directory. The names of the various log files, where appropriate, are documented each of the following sections.

Some of the registry settings under the Diagnostics key modify the action of related "On/Off" settings while others, when enabled, result in the display of Diagnostic Message boxes on the main console.

Important Note-1: In general, the various diagnostics options enabled by registry settings under the Diagnostics key should only be switched on to investigate a specific problem. Unless a particular problem is under investigation the Diagnostics key should be empty; or all the settings should be set to "Off". **DO NOT ENABLE ANY OF THESE OPTIONS UNLESS EXPLICITLY TOLD TO DO SO.**

Important Note-2: Most of the changes to the various registry settings under the Diagnostics key require a reload of the Global Client in order for the change to become effective.

2.1 AcceptPollLogInputCharacters

This string setting is available to diagnose problems in the NETWORK screen controller. Enabling this option results in the creation of the log file **networkinputinpoll***NN***.log**, where *NN* is the notional Console Index Number.

The default setting is "Off".

2.2 AcceptThreadLogInputCharacters

This string setting is available to diagnose problems in the NETWORK screen controller. Enabling this option results in the creation of the log file **networkinputin***NN*.log, where *NN* is the notional Console Index Number.

The default setting is "Off".

2.3 ActivateTimeSlicingDiags

This string setting is only recognized if the "TimeSlicingDiagnostics" setting (see section 2.68) is already enabled. The "ActivateTimeSlicingDiags" setting can be enabled to activate Global Client diagnostics "on the fly" i.e. without a reload of the Global Client. Enabling this option at any time, providing the "TimeSlicingDiagnostics" were enabled when the Global Client was loaded, results in the creation of the log file called timeslicediags.bin.

Warning: This log file will grow in size very quickly.

The default setting is "Off".

2.4 ArchiveLogFilesBeforeOverwrite

This string setting does not in itself create a log file but modifies the behaviour of two other settings.

By default, if the relevant diagnostic registry settings (Enable\$BYEDiagnostics, see section 2.9 and EnableAllocMemoryDiagnostics, see section 2.10) are enabled, the \$BYE processing will copy the current "byediagsforclientXX.log" and "allocmemdiags.log" log files from the "log" folder to the "log\archive" folder, creating the "archive" folder, if necessary. The archived files are renamed with the current date/time, in seconds, to ensure uniqueness. The automatic archiving of existing log files can be prevented by setting the ArchiveLogFilesBeforeOverwrite string setting to "Off".

The default setting is "On" (sic).

2.5 AuxPrintDiagnostics

This string setting is available to diagnose problems in the control initiation section of the AuxPrint printer controller. Enabling this option results in the creation of the log file **AuxPrintDiagsforclientXX.log**, where XX is the Global Client node-id.

The default setting is "Off".

2.6 ConsoleDiagnostics

This string setting is available to diagnose problems in the Console Executive. When this option is enabled all the characters displayed on the first console, until the TAP is loaded, are written to the log file **conslog.bin**. This option can be used to diagnose fatal GSM Load errors. Note that the name of the log file created when the ConsoleDiagnostics setting is enabled is the same as the log file created when the ConsoleLogging (see section 2.7) setting is enabled.

The default setting is "Off" unless the GLOBAL.EXE /I or /J command line arguments have been supplied. Note that GLOBAL.EXE uses a default of "On" for this setting when either the /I or /J command line arguments are specified so these diagnostics are enabled by default when the GLINSCLI.BAT or GLINSSRV.BAT installation batch files are being used to install GSM (Windows).

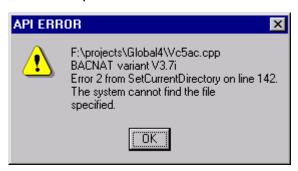
2.7 ConsoleLogging

This string setting is available to diagnose problems in the Console Executive. When this option is enabled all the characters displayed on the first console are written to the log file **conslog.bin**. Note that the name of the log file created when the ConsoleLogging setting is enabled is the same as the log file created when the ConsoleDiagnostics (see section 2.6) setting is enabled.

The default setting is "Off".

2.8 DiagnosticDisplays

If this string setting is enabled details of all errors from the Windows API calls executed by GLOBAL.EXE are displayed in an "Error Message Box" on the main GLOBAL.EXE application window. For example:



See Technical Note IN304 for full details. This setting does not create a log file.

Important Note: On a multi-user configurations with GSMWIN32.EXE or GX.EXE thinclients (or serial screens) attached to the GLOBAL.EXE client the system will appear to freeze, until the OK button on the "Error Message Box" is clicked.

The default setting is "Off" unless the GLOBAL.EXE /I or /J command line arguments have been supplied. Note that GLOBAL.EXE uses a default of "On" for this setting when either the /I or /J command line arguments are specified so these diagnostics are enabled by default when the GLINSCLI.BAT or GLINSSRV.BAT installation batch files are being used to install GSM (Windows).

2.9 Enable\$BYEDiagnostics

This string setting is available to diagnose problems in the \$BYE processing of GLOBAL.EXE.

Enabling this option results in the creation of the log file **byediagsforclient***XX***.log**, where *XX* is the Global Client node-id.

Note that the ArchiveLogFilesBeforeOverwrite (see section 2.4) is relevant when the Enable\$BYEDiagnostics option is enabled.

The default setting is "Off".

2.10 EnableAllocMemoryDiagnostics

This string setting is available to diagnose problems in the \$BYE processing of GLOBAL.EXE.

Enabling this option, if the /EN command line option has not been specified, results in the creation of the log file **allocmemdiags**. Enabling this option, if the /EN command line option has been specified (i.e. to specify an Asymmetric Multiple Client configuration), results in the creation of the log file **allocmemdiagsforclient***XX***.log**, where *XX* is the Global Client node-id.

Note that the ArchiveLogFilesBeforeOverwrite (see section 2.4) is relevant when the EnableAllocMemoryDiagnostics option is enabled.

The default setting is "Off".

2.11 EnableGXResendDiags

This string setting is available to diagnose problems in the GX re-attach logic within the NETWORK screen controller. Enabling this option results in the creation of the log file **resend-XX-YY.log**, where XX is the fixed screen number and YY is an auto-incrementing Connection-id

The default setting is "Off".

2.12 EnableSpecialAttachDiags

If this string setting is enabled details of key stages in the GX re-attach logic within the NETWORK screen controller are displayed in an "Information Message Box" on the main GLOBAL.EXE application window. The Information Message Boxes that are suppressed when this option is disabled include the messages "Something has gone wrong" and "Partial Send".

This setting does not create a log file.

Important Note: The GLOBAL.EXE client the system will appear to freeze, until the OK button on the "Information Message Box" is clicked.

The default setting is "Off".

2.13 EnableSpecialNetworkDiags

If this string setting is enabled the results from some socket operations attempted by the NETWORK screen controller are displayed in an "Information Message Box" on the main GLOBAL.EXE application window.

This setting does not create a log file.

Important Note: The GLOBAL.EXE client the system will appear to freeze, until the OK button on the "Information Message Box" is clicked.

The default setting is "Off".

2.14 FileExecDiagnostics

This string setting is available to diagnose problems in the File Executive. Enabling this option results in the creation of the log file **FileExec.log.**

Important Note: Enabling this option will create a very large log file very quickly.

The default setting is "Off".

2.15 FileExecLockDiagnostics

This string setting is available to diagnose problems in the Lock Table handling within the File Executive. Enabling this option results in the creation of the log file **FileExecLock.log.**

The default setting is "Off".

2.16 GlobalErrorLog

This string setting is available to log any "soft" errors generated during the initialisation of the Global Client. Enabling this option results in the creation of the log file **GlobalErrorLog.log.**

The default setting is "Off".

2.17 GlobalLoadDiagnostics

This string setting is available to diagnose problems in the Steering Routine (a specialized component of the Global loader). Enabling this option results in the creation of the log file **SteeringRoutineDiags.log.**

The default setting is "Off" unless the GLOBAL.EXE /I or /J command line arguments have been supplied. Note that GLOBAL.EXE uses a default of "On" for this setting when either the /I or /J command line arguments are specified so these diagnostics are enabled by default when the GLINSCLI.BAT or GLINSSRV.BAT installation batch files are being used to install GSM (Windows).

2.18 GlobalRegistryDump

By default, the Global Client will automatically generate a dump of the Global keys in the current registry in the log file **global_registry_dump.log**. This string setting is available to suppress the automatic creation of this small log file.

The default setting is "On".

2.19 GXFileDownLoadDiagnostics

This string setting is available to log low-level diagnostics during the GX Automatic Download phase of operator sign-on. Enabling this option results in the creation of the log file **GXDownLoadDiagsForClientXX.log**, where XX is the client node-id. See Technical Note IN271 for further details.

The GXFileDownLoadlogging registry setting (see section 2.20) is also available to provide less detailed and more readable diagnostics.

The default setting is "Off".

2.20 GXFileDownLoadlogging

This string setting is available to log high-level diagnostics during the GX Automatic Download phase of operator sign-on. Enabling this option results in the creation of the log

file **GXDownLoadLoggingForClientXX.log**, where *XX* is the client node-id. See Technical Note IN271 for further details.

The GXFileDownLoadDiagnostics registry setting (see section 2.19) is also available to more detailed diagnostics.

The default setting is "Off".

2.21 LANExecutive Diagnostics

This string setting is available to diagnose problems in the Local Area Network (LAN) Executive. Enabling this option results in the creation of the log file **LANExecutive.log.**

Important Note: Enabling this option will create a very large log file very quickly.

The default setting is "Off".

2.22 LogConfigurationSynthesis

This string setting is available to diagnose problems during the Configuration File synthesis phase of the Global Client loader (i.e. when the "UseConfigurationFile" setting is disabled). Enabling this option results in the creation of the log file **config.log**. See Technical Note IN181 for further details.

The default setting is "Off".

2.23 LogExceptionLevel

This value setting is available to diagnose problems with 32-bit applications.

If this value is set to 1 a single-line record is written to the **Exception.log** file whenever an exception occurs. Note that a single Exception.log file is created by the Global Client.

If this value is set to 3 two very large Exception Dump Files are created whenever any non-suppressed exceptions occur. The names of the Exception Dump Files are **exedump_NN_UUU.log** and **exedump_NN_UUU.bin** (where NN is the node-id and UUU is the User Number. The format of these dump files is beyond the scope of these notes.

A value of 0 disables all logging. All other values are reserved for future use.

The default value is 0.

2.24 LogExternalPointerUseForJackDuijf

This string setting is available to diagnose problems with the External Pointer handling in the Commercial Code Interpreter. Enabling this option results in the creation of the log file **epblockdiags.log.**

2.25 LogHardResumeErrors

This string setting is available to diagnose problems with the Commercial Code Interpreter. Enabling this option results in the creation of the log file **resumeharderrors.log.** Do not enable this option unless explicitly advised to do so.

The default setting is "Off".

2.26 LogKeystrokes

This string setting is available to diagnose problems in the Console Executive. When this option is enabled all the characters accepted by the Console Executive are written to the log file **keylog_hh_nn.bin**, where *nn* is the Console Index number from 01 to 99; and *hh* is the node-id specified by the /EN option, or 00 if the /EN option was not specified in the GLOBAL.EXE command line.

The default setting is "Off".

2.27 LogNetworkConnections

This string setting is available to diagnose problems in the connection function of the NETWORK screen controller. If the SeparateConnectionLogFiles setting (see section 2.41) is disabled, enabling this option results in the creation of the log file **networkconnectsforport_NNNN.log**, where *NNNN* is the Port number. For example, on a system that is configured with Network consoles on ports 23, 24, 25 and 26 the following files will be created: networkconnectsforport_23.log, networkconnectsforport_24.log, networkconnectsforport_25.log, networkconnectsforport_26.log.

If the SeparateConnectionLogFiles setting (see section 2.41) is enabled, enabling this option results in the creation of the log file **networkconnectsforport-NNNN_TTTT.log**, where *NNNN* is the Port number and *TTTT* is the current Windows tick-count (to make the log files unique).

The default setting is "Off".

2.28 LogNetworkDisConnections

This string setting is available to diagnose problems in the disconnect function of the NETWORK screen controller. Enabling this option results in the creation of the log file **networkdisconnectsforport_NNNN.log**, where *NNNN* is the Port number. For example, on a system that is configured with Network consoles on ports 23, 24, 25 and 26 the following files will be created: networkdisconnectsforport_23.log, networkdisconnectsforport_24.log, networkdisconnectsforport_25.log, networkdisconnectsforport_26.log.

Note that the SeparateConnectionLogFiles setting (see section 2.41) does not affect the log file names created by this option.

The default setting is "Off".

2.29 LogRawKeystrokes

This string setting is available to diagnose problems in the Console Executive. When this

option is enabled all the characters accepted by the Console Executive are written to the log file **rawkeylog_hh_nn.bin**, where *nn* is the Console Index number from 01 to 99; and *hh* is the node-id specified by the /EN option, or 00 if the /EN option was not specified in the GLOBAL.EXE command line.

Unlike the "cooked" keystrokes logged by the LogKeyStrokes setting (see section 2.26) the "raw" keystrokes are cached in a memory buffer to avoid constantly writing to disk. The size of the buffer is determined by the LogRawKeystrokes registry setting (see section 2.30).

The "raw" keystroke logging can be suspended by keying <SYSREQ> followed by one of the following keys:

- Kill Raw Key Logging and close the log file
- Temporarily disable logging (but don't close the log file)
- [Re-enable logging, if temporary disabled

The default setting is "Off".

2.30 LogRawKeystrokesBufferSize

This value setting is only recognized when the LogRawKeystokes setting (see section 2.29) is enabled. It configures the size of the buffer used to cache the "raw" keystrokes before they are written to the log file

The default value is 1024.

2.31 LogRPCConnectionTime

This string setting is available to time the Global Client to Global Server connection times. Enabling this option results in the creation of the log file **RPCConnectionTimes.log**.

The default setting is "Off".

2.32 LogServiceMessages

This string setting is available to log the various Windows Service Control functions in the log file **globalclientservice.log**. Note that disabling this setting does not prevent the log file from being created and populated by "internal GSM" messages, it just prevents the (frequent) Service Event messages, generated by Windows, from being written to the log file.

The default setting is "Off".

2.33 LogSoftResumeErrors

This string setting is available to diagnose problems with the Commercial Code Interpreter. Enabling this option results in the creation of the log file **resumesofterrors.log.** Do not enable this option unless explicitly advised to do so.

The default setting is "Off".

2.34 LogStackUnderOverFlow

This string setting is available to diagnose problems with the Commercial Code Interpreter. Enabling this option results in the creation of the log file **exptrstack.log.** Do not enable this option unless explicitly advised to do so.

The default setting is "Off".

2.35 LogZeroResumeErrors

This string setting is available to diagnose problems with the Commercial Code Interpreter. Enabling this option results in the creation of the log file **resumezeroerrors.log.** Do not enable this option unless explicitly advised to do so.

The default setting is "Off".

2.36 MultiUserPrinterDiagnostics

This string setting is available to diagnose problems in the Printer Executive. Enabling this option results in the creation of the log file **PrinterExec.log**.

The default setting is "Off".

2.37 PregemDiagnosticDisplays

This string setting is available to diagnose problems in the interface to the highly-specialised PREGEM.DLL. Details of this interface are beyond the scope of these notes. If this string setting is enabled details of all calls to the Pregem interface are displayed in an "Error Message Box" on the main GLOBAL.EXE application window. Unlike the PregemLogfile setting (see section 2.38) this option does not create a log file.

The default setting is "Off".

2.38 PregemLogFile

This string setting is available to diagnose problems in the interface to the highly-specialised PREGEM.DLL. Details of this interface are beyond the scope of these notes. Enabling this option results in the creation of the log file **pregendiags.log**.

The default setting is "Off".

2.39 PrinterTranslationDiagnostics

This string setting is available to diagnose problems in the character translation logic within the Printer Executive. Enabling this option results in the creation of the log file **PrinterTranslationDump.log**, containing all the internal printer translation tables.

2.40 PurgeLogFileDiagnostics

This string setting is available to diagnose problems in the internal File Purge logic within GLOBAL.EXE. Enabling this option results in the creation of the log file **PurgeLogFile.log**.

The default setting is "Off".

2.41 SeparateConnectionLogFiles

This string setting controls the name of the log file created by the LogNetworkConnections registry setting. See section 2.27 for further details.

The default setting is "Off".

2.42 SVC61Diagnostics

This string setting is available to diagnose problems in the SVC 61 interface. Enabling this option results in the creation of the log file **svc61Diagnostics.log**.

By default, details of all (non Speedbase Gateway) SVC 61 operations, for all users, are written to this log file. However, the registry settings SVC61DiagUserNumber (see section 2.43) and SVC61DiagShortOpcode (see section 2.45) can be enabled to filter the logging for just a single user number and/or operation code.

Note that a separate registry setting, SVC61SpeedbaseDiagnostics (see section 2.46) must be used to log details of the SVC 61 operations that are used to interface to the Speedbase gateway.

The default setting is "Off".

2.43 SVC61DiagUserNumber

This value setting is for use with the SVC61Diagnostics setting (see section 2.42). By default, SVC 61 diagnostics are written for all users. This setting can be used to restrict the logging for just a single User Number.

The default value is 0 (i.e. log SVC 61 functions for all users).

2.44 SVC61FindFileDiagnostics

This string setting is available to diagnose problems in the SVC 61 FindFirstFile, FindNextFile and FindClose and operations. Enabling this option results in the creation of the log file **svc61findfilediags.log**.

2.45 SVC61DiagShortOpcode

This value setting is for use with the SVC61Diagnostics setting (see section 2.42). By default, SVC 61 diagnostics are written for all SVC 61 operations. This setting can be used to restrict the logging for just a single opcode.

The default value is 0 (i.e. log SVC 61 functions for all opcodes).

2.46 SVC61SpeedbaseDiagnostics

This string setting is available to diagnose problems in the Speedbase Gateway functions of the SVC 61 interface. Enabling this option results in the creation of the log files **svc61SpeedbaseDiagnostics.log** and, optionally, if this file reaches a present limit (see section 2.47), **svc61SpeedbaseDiagnosticsOld.log**.

By default, details of SVC 61 Speedbase Gateway operations, for all users, are written to this log file. However, the registry setting SVC61SpeedbaseDiagUserNumber (see section 2.48) can be enabled to filter the logging for just a single user number.

The default setting is "Off".

2.47 SVC61SpeedbaseDiagMaxLineCount

This value setting can be used to limit the size (in terms of number of lines) of the log file created when the SVC61SpeedbaseDiagnostics setting (see section 2.46) is enabled. Each line in the svc61SpeedbaseDiagnostics.log file is approximately 50 characters.

A value of 0 will disable the size limit and the svc61SpeedbaseDiagnostics.log file will just increase in size.

A nonzero value will restrict the size of the svc61SpeedbaseDiagnostics.log file to the specified number of lines. When the svc61SpeedbaseDiagnostics.log file reaches its maximum size it is renamed as svc61SpeedbaseDiagnosticsOld.log and a new, empty svc61SpeedbaseDiagnostics.log file is created.

The default value is 0.

2.48 SVC61SpeedbaseDiagUserNumber

This value setting is for use with the SVC61SpeedbaseDiagnostics setting (see section 2.46). By default, SVC 61 Speedbase Gateway diagnostics are written for all users. This setting can be used to restrict the logging for just a single User Number.

The default value is 0 (i.e. log SVC 61 Speedbase Gateway functions for all users).

2.49 SVC79Diagnostics

This string setting is available to diagnose problems in the SVC 79 interface, which is used by the 32-bit program loader. Enabling this option results in the creation of the log file **svc79Diags.log**.

The related SVC79DiagLevel setting (see section 2.50) can be used to precisely control the type of diagnostics that are written to this log file.

The default setting is "Off".

2.50 SVC79DiagLevel

This value setting is used in conjunction with the SVC79Diagnostics string setting (see section 2.49) to control the type of information written to the svc79Diags.log file. The following values are recognized:

SVC79Diagnostics	SVC79DiagLevel	Diagnostics logged
Off	Don't care	Diagnostics disabled
On	0	Reserved for future use
On	1	Log SVC 79 hard errors
On	2	Log all SVC 79 errors
On	3	Log all SVC 79 operations
On	4, or higher	Reserved for future use

The default value is 1.

2.51 SVC79LoaderDiagnostics

This string setting is available to diagnose problems in the Loader section of the SVC 79 interface. Enabling this option results in the creation of the log file **svc79LoaderDiagsForClientXX.log**, where XX is the node-id of the Global Client.

The default setting is "Off".

2.52 SVC79Opcode5758Diagnostics

This string setting is available to diagnose problems in the section of the SVC 79 interface that processes opcodes 57 & 58 (details of which are outside the scope of these notes). Enabling this option results in the creation of the log file **svc79opcode5758diags.log**.

The default setting is "Off".

2.53 SVC79ValueTrapDiagnostics

This string setting is available to diagnose problems in the section of the SVC 79 interface that processes 32-bit Value Traps (details of which are outside the scope of these notes). Enabling this option results in the creation of the log file **valuetraps.log**.

2.54 SVC86Diagnostics

This string setting is available to diagnose problems in the SVC 86 interface. This interface is used to communicate with the GX thin-client. Enabling this option results in the creation of the following logs files: SVC86oplog1.bin, SVC86oplog2.bin, SVC86oplog3.bin, svc86inlog1-XX.bin and svc86inlog2-XX.bin, where XX is the Console Index Number.

Note that this setting overrides both the 2.56 SVC86InputDiagnostics (see section 2.56) and SVC86OutputDiagnostics (see section 2.57) string settings.

The default setting is "Off".

2.55 SVC86LogExceptions

This string setting is available to log exceptions returned from the SVC 86 interface. This interface is used to communicate with the GX thin-client. Enabling this option results in the creation of the log file **SVC86errlog.txt**.

The default setting is "Off".

2.56 SVC86InputDiagnostics

This string setting is available to diagnose problems in the Input functions of the SVC 86 interface. This interface is used to communicate with the GX thin-client. Enabling this option results in the creation of the following logs files: **svc86inlog1-XX.bin** and **svc86inlog2-XX.bin**, where XX is the Console Index Number.

Note that this setting may be overridden by the SVC86Diagnostics string setting (see section 2.54).

The default setting is "Off".

2.57 SVC86OutputDiagnostics

This string setting is available to diagnose problems in the Output functions of the SVC 86 interface. This interface is used to communicate with the GX thin-client. Enabling this option results in the creation of the following logs files **SVC86oplog1.bin**, **SVC86oplog2.bin** and **SVC86oplog3.bin**.

Note that this setting may be overridden by the SVC86Diagnostics string setting (see section 2.54).

2.58 SVC90FileName

This string setting is available to specify the name of the log file that is created when a call is made to the SVC 90 interface. This SVC interface is available to write low-level diagnostics to a Windows log file.

The default string setting is "log\svc90log.bin".

2.59 SVC90Count

This value setting is used to specify the expected number of parameters supplied to the SVC 90 interface. If this setting is absent the SVC 90 will be ignored; otherwise this setting must be set to the number of calling parameters between 1 and 7 (which a few special cases - see below) otherwise a STOP 9001 will be generated by SVC 90.

If the SVC90Count value is set to 16 or 17, SVC 90 expects either a 3-parameter call (from the Shared-Lock Monitor Page) or a 4-parameter call (from the Pages DMAM Access Method). The name of the log file that is created under these conditions is always called **SVC90_XX** (where XX is the Global Client node-id) regardless of the SVC90FileName string setting (see section 2.59).

The default value is 1.

2.60 SVC90Length1

This value setting is used to specify the length of the 1st parameter passed to the SVC 90 interface.

The default value is 16.

2.61 SVC90Length2

This value setting is used to specify the length of the optional 2nd parameter passed to the SVC 90 interface.

The default value is 16.

2.62 SVC90Length3

This value setting is used to specify the length of the optional 3rd parameter passed to the SVC 90 interface.

The default value is 16.

2.63 SVC90Length4

This value setting is used to specify the length of the optional 4th parameter passed to the SVC 90 interface.

The default value is 16.

2.64 SVC90Length5

This value setting is used to specify the length of the optional 5th parameter passed to the SVC 90 interface.

The default value is 16.

2.65 SVC90Length6

This value setting is used to specify the length of the optional 6th parameter passed to the SVC 90 interface.

The default value is 16.

2.66 SVC90Length7

This value setting is used to specify the length of the optional 7th parameter passed to the SVC 90 interface.

The default value is 16.

2.67 SVC90Padding

This value setting is used to specify the length of optional binary zero "padding" to be written to each record of the SVC 90 log file.

The default value is 0.

2.68 TimeSlicingDiagnostics

This string setting is available to diagnose problems in the Multi-User Interpreter. Enabling this setting does not in itself create a log file but merely enables diagnostic logic within the Global Client that checks for the value of the related "ActivateTimeSlicingDiags" (see section 2.3).

The default setting is "Off".

2.69 WinPrintDiagnostics

This string setting is available to enable diagnostics for **all** the WinPrint printer controllers.

Setting this option directly under the "Client\Diagnostics\" key avoids the need to set this option under **all** the "Printers\WinPrint\5nn\Diagnostics\" keys. See section 5.1 of Technical Note IN407 for further details.

Important Note: The processing of the WinPrintDiagnostics setting is different from the normal hierarchy rules. For a particular printer, WinPrint diagnostics are enabled if **either** the printer-specific setting:

..\Global\Client\Printers\WinPrint\5nn\Diagnostics\WinPrintDiagnostics

or this generic setting:

..\Global\Client\Diagnostics\WinPrintDiagnostics

are enabled.

Enabling this option results in the creation of the following logs files: **WinPrintDiags***NNN***.log** (where *NNN* is the printer unit number of the WinPrint controller(s)).

The default setting is "Off".

2.70 AllowCtrlVToToggleDiags

This string setting is available to enable diagnostics in the Commercial Code Interpreter. Setting this option to "On" etc. does not enable diagnostics directly, but does allow diagnostics to be toggled on/off by the ^V keystroke.

When this option is enabled, and ^V is subsequently used to switch on the diagnostics, results in the creation of the log file **fetch.log**.

Warning: This log file will grow in size very, very rapidly.

The default setting is "Off".

3. Other Log Files

Although most log-files are created by the explicit setting of a registry option (e.g. Enable\$BYEDiagnostics), a small number of tiny log files are created, in the log-directory, automatically. There is no way to suppress the creation of the following log-files:

bootdiags.log gsminfo.bin