Miscellaneous GSM (Windows) Tricks

1. Introduction

This document describes a few GSM (Windows) configuration "tricks".

2. Removing GLSERVER.EXE from GSM (Windows)

See document in214-gsmntwithoutserver.doc for further details.

3. Enabling the "go faster" GSMRPC Protocol

This section describes the steps required to enable the GSMPRC protocol on both single-Client and Symmetric Multiple Client (SMC) configurations.

3.1 Enabling the GSMRPC Protocol on a Single Client Configuration

Each Global Server "listens" on two RPC interfaces:

- the RPC protocol explicitly defined in the Server section of the registry;
- an Automatic-Local RPC connection (ncalrpc), with a special Endpoint, that is always enabled regardless of the explicit RPC protocol.

In addition to the two RPC interfaces the Global Server can be customised to use an additional non-RPC interface to communicate with a Global Client running on the same PC. This extra functionality, which supplements the explicit RPC interface (i.e. the RPC interface specified in the ..\Global\Servers section of the registry) and the Automatic-Local RPC (described above) is enabled by settings in both the Global Client and Global Server sections of the registry.

3.1.1 Global Server Registry Settings

The following registry setting must be enabled (i.e. set to "On"):

..\Global\Servers*x*\EnableGSMRPC=On

where *x* is the server node-id (e.g. A, B, etc.). If this option is enabled, the following message will appear on the GLSERVER.EXE messages screen:

Enabling gsmlrpc connection

3.1.2 Global Client Registry Settings

To configure a local Global Client to use the GSMRPC interface, which is much faster than Local RPC and very much faster than intra-computer TCP/IP RPC, the following registry option must be set:

..\Global\Client\Servers\x\ProtocolSequence = gsmlrpc

The following registry option must be present but must be set to <blank>:

..\Global\Client\Servers\x\NetworkAddress

The following registry option can either be absent or, if specified, must be set to "GLSERVER_*x*" (where *x* is the server node-id):

..\Global\Client\Servers\x\Endpoint

Important Note 1: The new Server registry ValueName is "EnableGSMRPC" whereas the new Global Client registry Value for the ProtocolSequence ValueName is "gsmlrpc". This subtle difference is deliberate.

3.2 Enabling the GSMRPC Protocol on a Multiple Client Configuration

In addition to the settings described in section 3.1 a number of additional settings must be enabled for Multiple Global Client configurations.

3.2.1 Global Server Registry Settings

For the Global server, the following registry settings must be enabled:

..\Global\Servers\EnableMultipleGSMRPC=On
..\Global\Servers\MultipleClientGSMRPC*NN*=*xx*

where *NN* (or *N*) is a unique, arbitrary number and *xx* is the node-id of a local client. For example, to enable "gsmrpc" for Global clients 27,28 and 29:

..\Global\Servers\MultipleClientGSMRPC1=27
..\Global\Servers\MultipleClientGSMRPC2=28
..\Global\Servers\MultipleClientGSMRPC3=29

3.2.2 Global Client Registry Settings

For the Global Client, the following registry setting must be enabled:

..\Global\Client\EnableMultipleGSMRPC=On

4. Switching from a "local" to a "central" SYSRES

It is sometimes necessary to convert a GSM (Windows) configuration with a local SYSRES (e.g. 201) to a configuration with a central SYSRES (e.g. A01). This change is necessary to add extra Global clients in a Symmetric Multiple Client configuration. This section assumes that the external $MONITOR customisation (..\Monitor\$MONITOROverride=On) and the option to by-pass the Global Configuration File (..\Nucleus\UseConfigurationFile=Off) have been applied.

In this example, it is assumed that GSM (Windows) has been installed into the C:\GSM directory.

A. Firstly, a SYSIPL unit (in file GL-IPL.DLV) must be allocated. Use GLREGED to add the following registry entry:

..\Client\Data\IntegratedDataFiles\IDF0=C:\GSM\GL-IPL.DLV

It is possible that this registry setting may already exist. If necessary, select the option to create this file. There is no need to make this file larger than 1Mb.

Reload the Global Client. A Z151Z Integrated Data File should appear at unit 110. Use $F to initialise this unit to SYIPL and copy the following files from SYSRES (201) to SYSIPL (110):

$MONITOR
P.$MON
+.W0
+.W1

B. Copy all the program files and libraries from 201 to A01. Normally, this means all the files with the exception of any files that start with "$$" and the menu files. This step is vital to ensure that the run-time components on SYSRES (A01) are the same version and/or service-pack level as the $MONITOR file that was copied to SYSIPL (see section A).

C. In the "Monitor" key of the registry change that:

CommandUnit from 201 to A01

StartIPLUnit from 201 to 110

D. Change the short-cut for GLOBAL.EXE from:

C:\GSM\GLOBAL.EXE C:\GSM\GSM200

to:

C:\GSM\GLOBAL.EXE C:\GSM\GL-IPL.DLV

and change the following registry key:

..\Client\BootDevice

from:

C:\GSM\GSM200

to:

C:\GSM\GL-IPL.DLV