More than 99 Partitions

1. Introduction

For GSM V8.1j (??-??-2003) the following changes to 16-bit run-time Global System Manager were implemented:

- The limit on the number of partitions per computer/system has been increased from 99 to 250. Note that this 99-partition limit is per SYSTEM. Much larger configurations are running with multiple systems in either true LAN (NT fat client) or pseudo-LAN (GSM (Unix) or NT SMC) configurations.

  This enhancement is only available on GSM (Windows) and GSM (Unix) configurations. The Global Configurator section (below) describes how this new option is enabled. The changes that affect Global System Manager start-up and a large number of GSM and Speedbase utilities are self-contained and have all been incorporated into GSM V8.1j.

  Unfortunately, a number of external sub-routines have also been affected and thus applications (both TIS Software applications and 3rd party applications) must be modified in order to operate correctly on a system configured with more than 99 partitions (i.e. a system with User Numbers higher than 99). Thus, we have invented another compliance standard against which applications, linked with those subroutines, must be judged. To be "more than 99 user" (M99U) compliant a 16-bit application must be re-linked with V8.1j, or later, if it contains any of the subroutines listed below.

  If a non-M99U compliant application is run on a GSM system with more than 99 partitions it will behave perfectly normally for User Numbers 1 to 99 but will stop, typically with an unexpected PGM CHK 11, for User Numbers between 100 to 250. Note that the exact behaviour for User Numbers 100 to 127 may be different from that for User Numbers 128 to 250.

  Any application that includes the following sub-routines must be re-linked (and possibly recompiled) to be M99U complaint:

USER$	Any application using USER$ must be recompiled to include USERX$ instead. The US block for USERX$ is slightly different from the US block for USER$ (see below).
OPID$	Any application using OPID$ must be recompiled to include OPIDX$ instead. The US block for OPIDX$ is slightly different from the US block for OPID$ (see below).
JOB$	Simple relink required
LOG$	Simple relink required

PURGE$	Simple relink required
LOAD$	Simple relink required
SDATA$	Simple relink required
LCUS$	Simple relink required
UNLO$	Simple relink required
UNLC$	Simple relink required
ENTRY$	Simple relink required
RESID$	Simple relink required
AUTH$	Simple relink required
GETX$	Simple relink required
RELX$	Simple relink required

Although the above list is quite daunting the subroutines listed above are very specialised and are highly unlikely to be used by most typical applications.

Applications should also be checked to ensure that they don't convert $$USER to a 2-digit number to create a user-specific object (e.g. when creating the name of a work-file).

There is further checking in Global System Manager start-up to remove users higher than 99 if the GSM nucleus does not support extended User Numbers. At the time of writing only the V2.8 GSM (Windows) nucleus supports extended User Numbers (see section 5.8). This change will be ported to the GSM (Unix) nucleus in due course but there are no plans to include this new functionality into GSM(BOS), GSM(DOS) or 16-bit GSM(Novell);

Important Note: At the time of writing no Global 2000 or Global 3000 modules are “M99U compliant”. Global Business Systems have no plans to upgrade any 16-bit Global 2000 or 16-bit Global 3000 applications to become “M99U compliant”. Please bear this restriction in mind when considering upgrading a site to more than 99 partitions per system.