# **GSM Service Packs (SP-1 to SP-10)**

#### 1. Introduction & Overview

This document describes the "GSM Service Pack" concept. A "GSM Service Pack" provides a very convenient upgrade mechanism for installed GSM systems.

**Important Note-1:** This document describes GSM SP-1 to the first revision of GSM SP-10. Technical Note IN294 describes GSM SP-10A (i.e. the second revision of GSM SP-10), and later. GSM SP-1 to the first revision of GSM SP-10 can **only** be applied to GSM V8.1I (lower case "L") whereas GSM SP-10A (and later), described in IN294, can be applied to **any** version of GSM V8.1.

**Important Note-2:** Do not confuse the simple "GSM Service Pack" mechanism, described in this document, with the more sophisticated "Global Product Service Pack" mechanism described in Technical Note IN284.

## 2. Pre-requisites

The current GSM Service Pack mechanism can only be used to upgrade a pre-installed GSM or GSM-PM (Windows) V8.1I system (i.e. the configuration **must be** GSM (Windows), configuration code 5661 or 5663; the GSM revision **must be** V8.1I).

Furthermore, the Monitor Customisation option described in Appendix A of this document must also be applied.

**Important Note:** If it is necessary to apply the Monitor Customisation described in Appendix A then GSM **MUST** be reloaded in order for the changes to have any effect.

From GSM SP-6 onwards, the GSM Service pack mechanism was extended to allow GSM Service Packs to be applied to V8.1I GSM (Unix) configurations.

Run the \$S utility (see below) to check the current version of GSM. The top line should start with one of the following text strings:

GSM V8.1	Revision %
GSM PM V8.1	Revision %
GSM V8.1. <i>x</i>	Revision %
GSM PM V8.1. <i>x</i>	Revision %

Where % is a lower-case letter and x is a number.

**Important Note:** If the "V8.1" is followed by an upper-case letter (e.g. V8.1G) then you are using an "Internal Release" version of GSM V8.1. Internal Release versions cannot be upgraded by a GSM Service Pack - please log the problem with the Hotline.

The % letter is the GSM Revision letter. GSM Service Packs can only be applied if this letter is "I" (i.e. a lower-case "L"). If the GSM Revision is not lower-case "L" then an upgrade to revision "I" must be applied using the techniques described in Appendix A of the GSM V8.1 Notes.

The *x* specifies the GSM Service Pack number. **IT IS NOT NECESSARY TO APPLY GSM SERVICE PACKS INCREMENTALLY**. For example, GSM SP-6 can be applied directly to GSM SP-2 (i.e. without applying SP-3, SP-4, SP-5). If the ".*x*" absent then you are running "vanilla" GSM V8.1 as installed from the GSM (Windows) CD.

### 3. **GSM Service Pack Contents**

A GSM Service Pack consists of the following files:

GSMSP*n*.GSM (where *n* is the SP ID)
P\_CMLB0.GSM
P\_CMLB1.GSM

P\_CMLB3.GSM P\_CMLB9.GSM MONITOR.GSM P\_MON.GSM P\_PAGES.GSM P\_BAPGS.GSM P\_SDLM0.GSM P\_DBG.GSM

P CMLB2.GSM

P\_GSDLM.GSM \_\_INSLOG.GSM ERREX.GSM EREST.GSM P\_BAPGS.GSM P\_BRPGS.GSM

P\_CF.GSM P\_DEB.GSM P\_G3PGS.GSM P\_OV.GSM

Although this list is accurate at the time of writing (i.e. for GSM Service Pack 6), other modules may be included in future GSM Service Packs.

**Important Note:** For GSM Service Packs prior to GSM SP-6 the .GSM filename contained a "\$" character, where appropriate (e.g. \$MONITOR.GSM rather than MONITOR.GSM). For GSM SP-6, and later, the "\$" characters have been removed to allow GSM Service Packs to be distributed with GSM (Unix) configurations.

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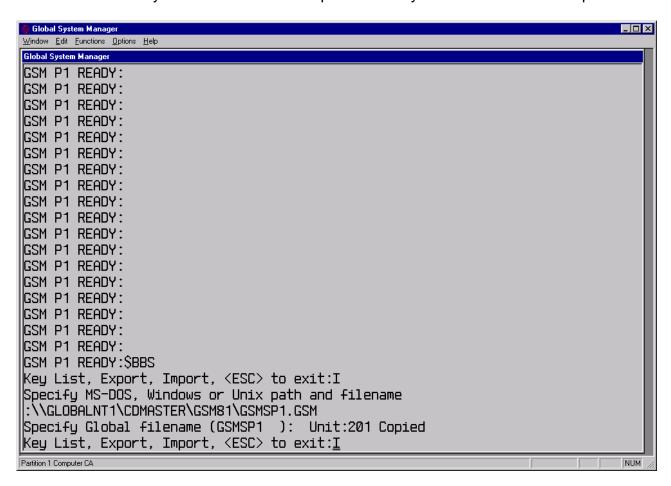
## 4. Applying a GSM Service Pack

A GSM Service Pack is applied in 2 stages:

- Converting the GSMSPn.GSM file to the GSMSPn upgrade utility;
- Running the GSMSP*n* utility to complete the upgrade.

### 4.1 Converting GSMSP*n*.GSM

The GSMSP*n* upgrade utility is reconstituted from GSMSP*n*.GSM using the \$BBS Import function. It is usually most convenient to import this utility to SYSRES. For example:



Note that the directory in the above example was used during testing. The most likely location of a GSM Service Pack will be:

x:\GSM81SERVICEPACKn\

where *x* is the drive letter of the CD and *n* is the GSM Service Pack number. For example:

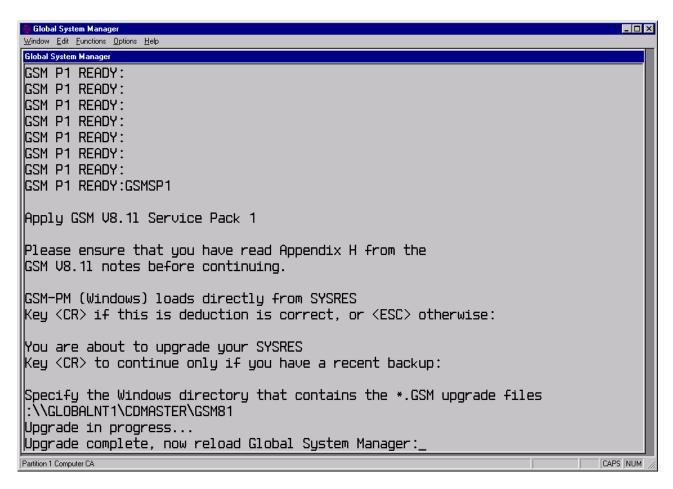
D:\GSM81SERVICEPACK6\

**IMPORTANT NOTE**: The GSMSP*n* upgrade utility **MUST** only be used with the "GSM Service Pack" that it was included with otherwise the results will be unpredictable. For example, GSMSP6 must only be used to apply GSM Service Pack 6; GSMSP5 must only be used to apply GSM Service Pack 5 etc. Do not use GSMSP5, for example, to apply GSM Service Pack 6.

### 4.2 Using the GSMSP*n* upgrade utility

The GSMSP*n* upgrade utility is used to copy the various \*.GSM files to either SYSRES or SYSIPL (depending on the actual configuration and the contents of the Service Pack). The following steps are required:

- 1. Ensure the GSM Monitor Customisation has been applied as described in Appendix A. Note that if \$MNDISP is used to export the \$MONITOR customisations to the registry then GSM (Windows) **must be reloaded** in order for GSMSP*n* to recognise the change;
- 2. Ensure you have a recent backup of SYSRES (and SYSIPL if the Global Client does not load from a local SYSRES);
- 3. Ensure you are the only user running Global System Manager (you will be required to reload GSM immediately after applying the upgrade);
- 4. Run the GSMSP*n* upgrade utility. The dialogue will be similar to:



Note that the directory in the above example was used during testing. The most likely location of a GSM Service Pack will be:

#### x:\GSM81SERVICEPACKn\

where x is the drive letter of the CD and n is the GSM Service Pack number. For example:

#### D:\GSM81SERVICEPACK6\

- 5. If any of the various deductions made by the GSMSP*n* upgrade utility are incorrect, abort the upgrade immediately and log the problem with the Hotline;
- 6. Specify the directory that contains all the various \*.GSM Service Pack files;
- 7. When the upgrade completes, reload Global System Manager and run \$S to confirm that the upgrade has been applied correctly. The GSM Service Pack number will be shown in the version number displayed by \$S (e.g. 8.1.1 indicates GSM Service Pack 1 has been applied; 8.1.2 indicates GSM Service Pack 2 has been applied etc.):

```
Global System Manager
Window Edit Functions Options Help
Global System Manager
GSM PM V8.1.1
                  Revision 1
                                                      29/09/2000 15.21.41
                                  Serial
                  Level 9
Run-Time
                                  Maximum number of users 9999
Configuration 566SYN
                                  Windows NT
BACNAT variant 3.1
Architecture W (Windows) Machine family code
                                                           W1 (01)
GSM nucleus
                  4 (Windows NT)
Language code UK
Computer CA Master computer A
User
      1 - partition 1
         3 screens (11 partitions)
        11 memory banks available
           no disk cacheing
    55296 bytes user area #001C12 to #00F412
      100 ms clock frequency
      100 ms time slice
      631 Kb of 31590 Kb of available memory in use 993 Kb of 9000 Kb of available 32-bit memory in use
System stack
                     0 butes.
                                     0 free
Key P to print, <CR> to continue, <ESC> to exit:_
Partition 1 Computer CA
```

8. Some versions of GSMSP*n* (e.g. GSMSP6) involve multiple phases. The 1st phase is always the main upgrade phase; the subsequent phases are generally "house-keeping" phases. If the following message is displayed:

1st phase completed OK, key <CR> to start 2nd phase

then the Service Pack upgrade has completed successfully. If a 2nd, or subsequent, phase fails there is no need to restore from the previous version of GSM. However, any failures in subsequent upgrade phases should be reported to the Hotline.

## 4.3 Trouble-shooting problems with GSMSP*n*

The most likely cause of an unexpected JOB MANAGEMENT TERMINATED message from GSMSP*n* is insufficient spare space on the SYSRES volume. The Job Dialogue generated by GSMSP*n* can be displayed by keying <CTRL A> to either of the prompts that start with the text "Key <CR> ...".

If GSMSP*n* fails, the recommended recovery procedure is to restore SYSRES from the backup copy and increase the size of the free space to 4Mb.

## Appendix A - Upgrading GSM (Windows) from GSM V8.11

Three modifications to SYSRES have been implemented to make upgrades from GSM (Windows) V8.1I possible via the application of a GSM Service Pack:

- The \$STARB customisation file has been moved out of the P.\$CMLB0 command library;
- All the stubs to Development System components have been moved out of the P.\$CMLB1 and P.\$CMLB2 command libraries;
- The option to move the customisations from within the \$MONITOR file to the Windows registry is available.

The first two modifications (i.e. the re-organisation of files and stubs within the command libraries) are automatically applied when GSM V8.1I is installed. The 3<sup>rd</sup> modification (i.e. moving the customisations from the \$MONITOR file to the Windows registry) **MUST** be implemented before attempting to apply a "Global Service Pack" for GSM. The V8.1I \$MNDISP utility includes an option to perform this modification.

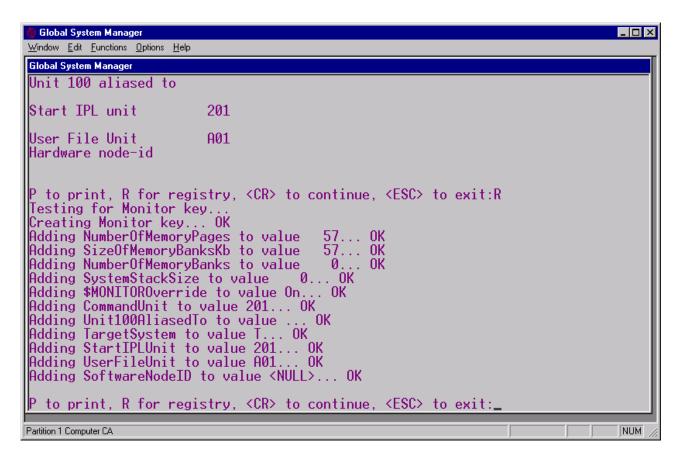
**Important Note:** This procedure should only be attempted if the version of GLOBAL.EXE (or GLCONS.EXE) is V3.0, or later:

Run \$MNDISP. Key <CR> to the MONITOR FILE: and UNIT: prompts. After the display of the various \$MONITOR customisations, the following prompt should appear:

P to print, R for registry, <CR> to continue, <ESC> to exit:

Key R to automatically update the registry with the current \$MONITOR parameters: A new set of registry options will be automatically created. As these entries are created, a number of informative messages are displayed followed by "OK". If any of these operations fail please log the problem.

The dialogue should be similar to:



#### If \$MNDISP displays the message:

\*\*\* Warning - \$MONITOROverride registry option enabled

this customisation has already been applied and the R option will not be available.

Once the \$MNDISP "R" option has been used to export the customisations to the Windows registry, a GSM (Windows) V8.1I system can be upgraded by applying a GSM Service Pack.