GSM Service Packs (SP-10A and later)

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.

This document describes the installation procedure for GSM SP-10A (i.e. the second revision of GSM SP-10, released in Feb-2003). We anticipate using the same installation procedure for GSM SP-11, and later. Technical Note IN282 describes the installation procedure that was used for GSM SP-1 to the initial revision of GSM SP-10.

GSM SP-1 to the first revision of GSM SP-10 can **only** be applied to GSM V8.1l (lower case "L") whereas GSM SP-10A, and later, can be applied to **any** version of GSM V8.1. This differentiation is summarised in the following table:

Current GSM version	**Upgraded by GSMSP10 utility in original GSM SP-10**	**Upgraded by GSMSP10 utility in GSM SP-10A of Feb-2003**
GSM V8.0, and earlier	No	No
GSM V8.1	Not released externally	Not released externally
GSM V8.1a	Not released externally	Not released externally
GSM V8.1b	No	Yes
GSM V8.1c	No	Yes
GSM V8.1d	No	Yes
GSM V8.1e	No	Yes
GSM V8.1f	No	Yes
GSM V8.1g	No	Yes
GSM V8.1h	No	Yes
GSM V8.1i	No	Yes
GSM V8.1j	No	Yes
GSM V8.1k	No	Yes
GSM V8.1l "vanilla"	Yes	Yes
GSM V8.1l SP-1 to SP-9	Yes	Yes
GSM V8.1l SP-10	Yes	Yes

Important Note-1: Do not confuse the simple "GSM Service Pack" mechanism, described in this document and IN282, with the more sophisticated "Global Product Service Pack" mechanism described in Technical Note IN284.

Important Note-2: Although 2 versions of GSM SP-10 were released (i.e. GSM SP-10 and GSM SP-10A) the installation job for **both** revisions is called GSMSP10. The GSM SP-10A version of the GSMSP10 job can be identified by the following text in the introductory message:

Apply GSM V8.1l Service Pack 10A (from any version of GSM V8.1)

Important Note-3: Although GSM SP-10A, and later, can be applied to any version of GSM V8.1l the command library re-organisation described in Technical Note IN191, which is performed by the obsolete $CDUPD job when upgrading from GSM V8.1k to V8.1l, is **not** performed by the GSMSP10 etc. Service Pack installation jobs, when upgrading from pre-V8.1l to V8.1l. This omission does not affect GSM run-time systems but could affect developers if a development product (i.e. Global Toolkit, Global Cobol (16-bit), Global Speedbase (16-bit) or Global Development (32-bit)) is installed following a pre-V8.1l to V8.1l upgrade. Typically, the Global Development installation process (e.g. BTINS, MKINS etc.) will fail with various JOB MANAGEMENT TERMINATED messages. The problem is trivially overcome by using $LIB to allocate a new, empty library P.$CMLB4, with a size of 6K, on SYSRES. It must be stressed that this problem only affects the re-installation of development software and has no impact on run-time GSM configurations. Furthermore, the problem **only** occurs following service pack upgrades from **pre** GSM V8.1l installations.

2. Pre-requisites

The GSM Service Pack mechanism can only be used to upgrade a pre-installed GSM V8.1 or GSM-PM V8.1 system. The configuration must be either GSM (Windows) or GSM (Unix). The GSM Service Pack procedure cannot be used to upgrade from GSM V8.0, or earlier.

Unlike previous GSM Service Packs, when installing GSM SP-10A, or later, there is no need to apply the Monitor Customisation option described in Appendix A of Technical Note In282.

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.*x*	Revision %
GSM PM V8.1.*x*	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 Pack SP-10A and later, can be applied on any revision from "vanilla" GSM V8.1 (i.e. without a revision letter) to GSM V8.1l (i.e. a lower-case "L").

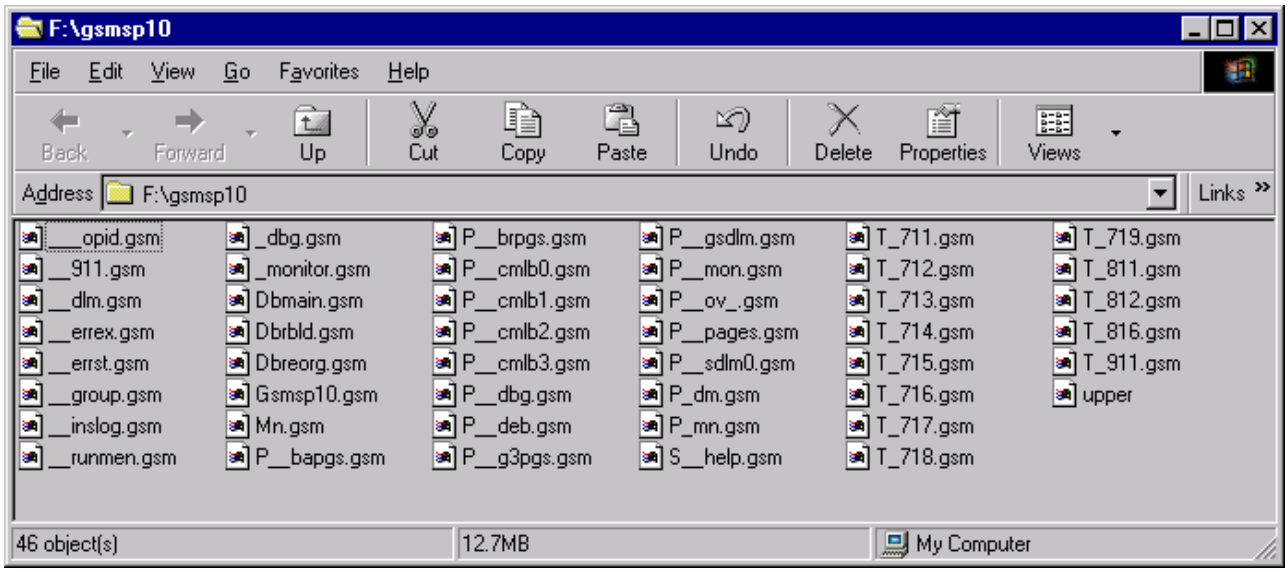
The *x* specifies the GSM Service Pack number. **IT IS NOT NECESSARY TO APPLY GSM SERVICE PACKS INCREMENTALLY**. For example, GSM SP-11 can be applied directly to GSM SP-5 (i.e. without applying SP-6, SP-7, SP-8, SP-9, SP-10). If the ".*x*" absent then you are running "vanilla" GSM V8.1.

IMPORTANT NOTE-1: Applying a GSM Service Pack should be considered a single-user, System Administrator task (i.e. all other users should be logged out of GSM and, if necessary, the system should be quiesced).

IMPORTANT NOTE-2: The GSM Service Pack requires at least 5Mb of free space on SYSRES.

3. GSM Service Pack Contents

A GSM Service Pack consists of the following files:



Although this list is accurate at the time of writing (i.e. for GSM Service Pack 10A), other modules may be included in future GSM Service Packs.

The file "upper" is a Unix Bourne shell script that converts all the files in a Unix directory to upper-case filenames, as expected by the GSM Service Pack application utility.

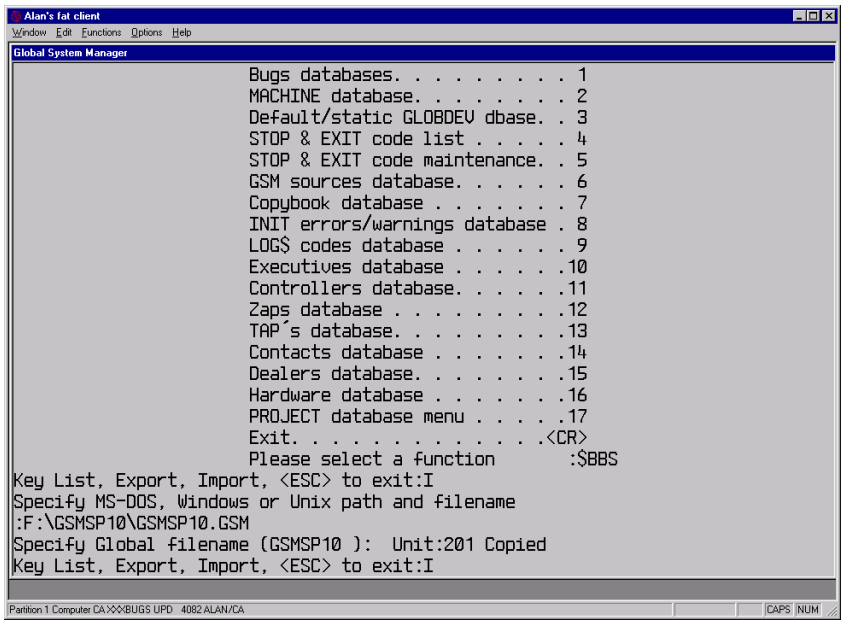
4. Applying a GSM Service Pack

A GSM Service Pack is applied in 2 stages:

- Converting the GSMSP*n*.GSM file to the GSMSP*n* 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:\GSM81SERVICEPACK*n*\

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

D:\GSM81SERVICEPACK10\

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, GSMSP11 must only be used to apply GSM Service Pack 11; GSMSP10 must only be used to apply GSM Service Pack 10 etc. Do not use GSMSP10, for example, to apply GSM Service Pack 11.

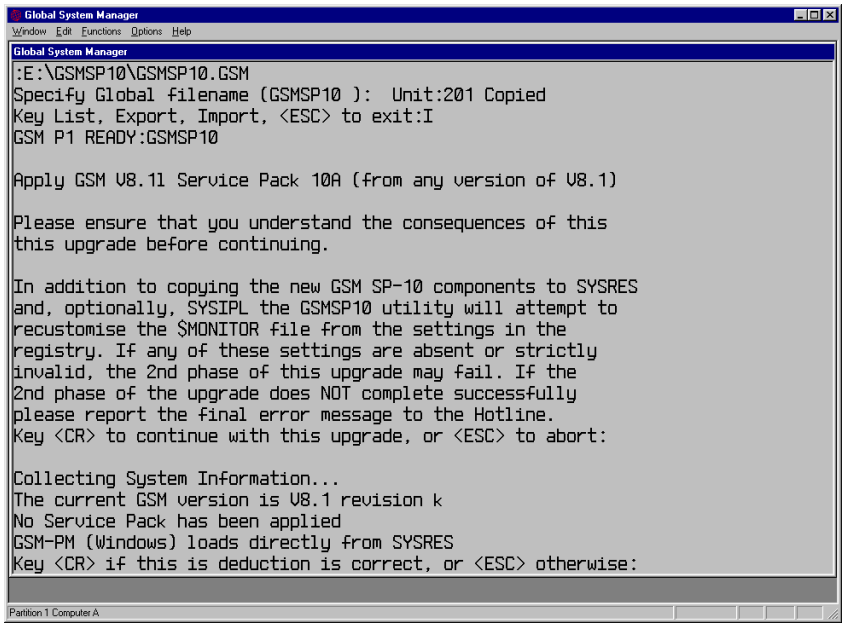
4.2 Using the GSMSP*n* upgrade utility

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 you have a recent backup of SYSRES (and SYSIPL if the Global Client does not load from a local SYSRES);

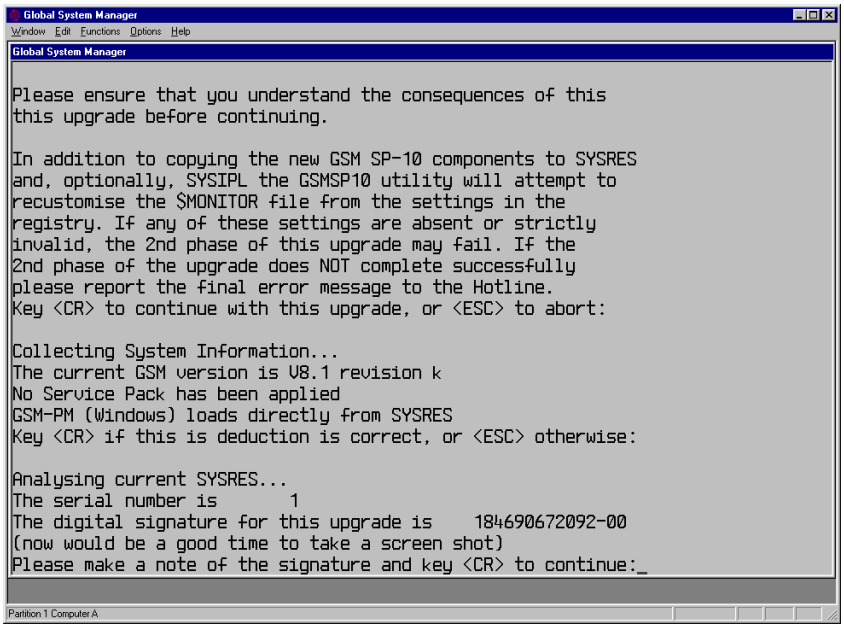
2. Ensure you are the only user running Global System Manager (you will be required to reload GSM immediately after applying the upgrade);

3. Run the GSMSP*n* upgrade utility. The **initial** dialogue will be similar to:



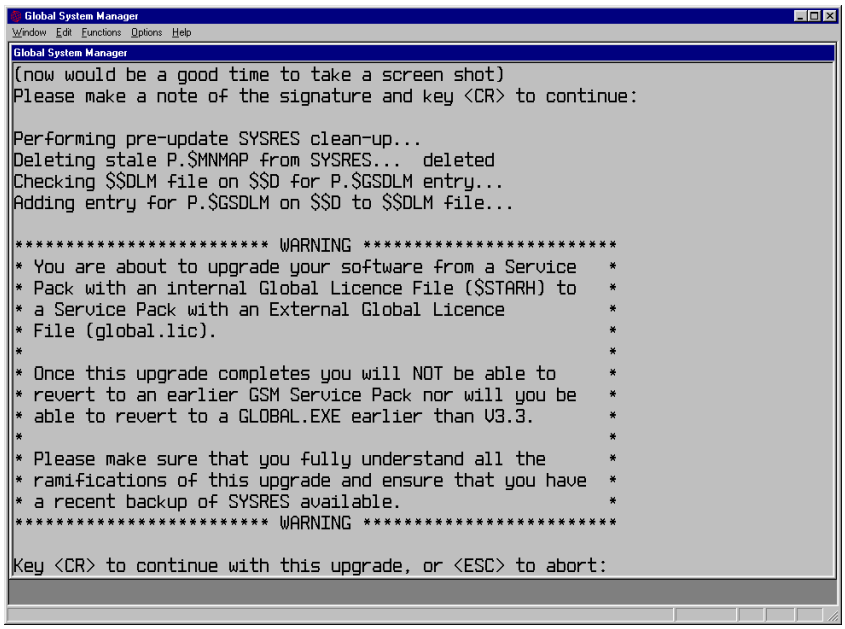
4. **If any of the various deductions made by the GSMSP*n* upgrade utility are incorrect, abort the upgrade immediately and log the problem with the Hotline;**

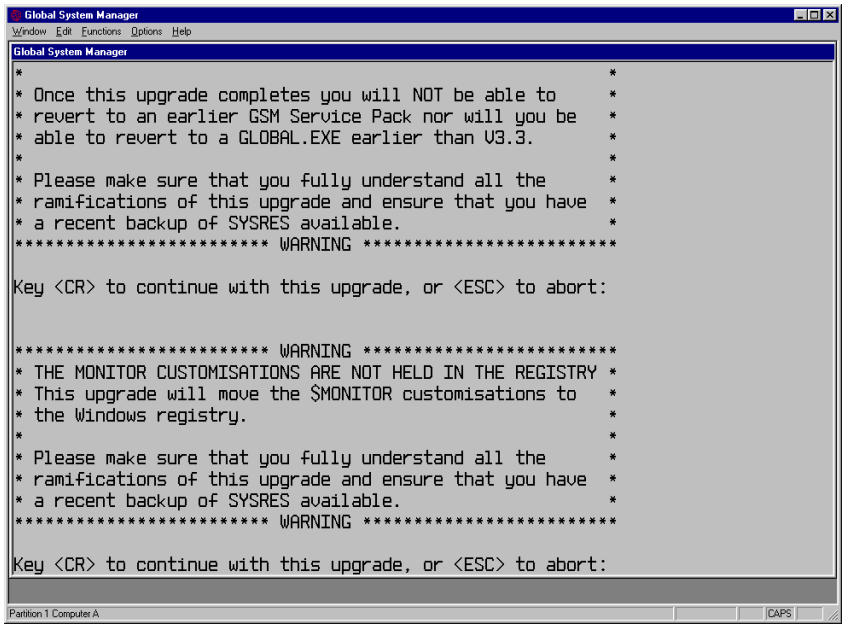
5. Key <CR> to continue if the deductions are correct. The GSMSPn upgrade utility will then analyse the contents of the SYSRES volume:

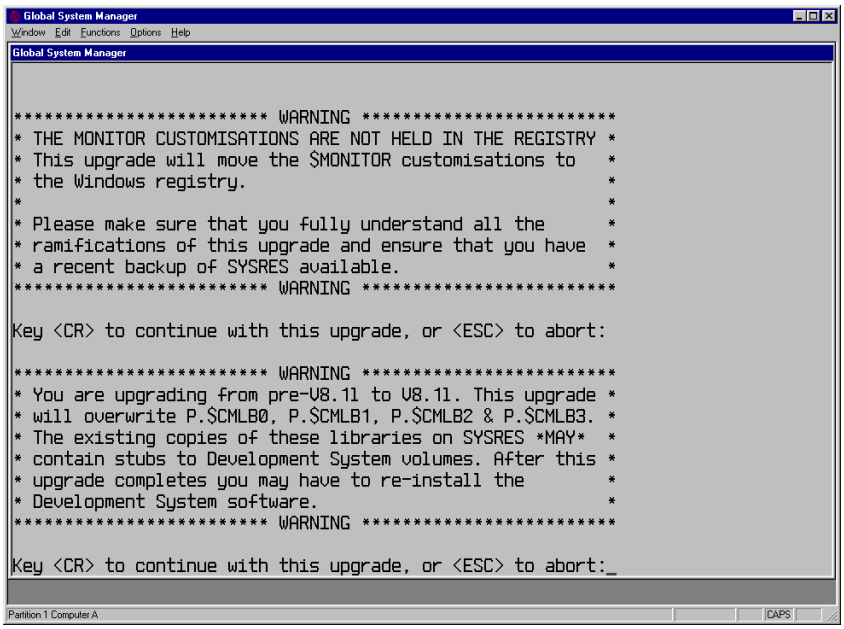


Either take a screen shot of this screen or make a note of the Digital Signature, which is merely an encoded list of the position and status of the various crucial files on SYSRES. The Digital Signature will be required to investigate any problems that occur during the upgrade.

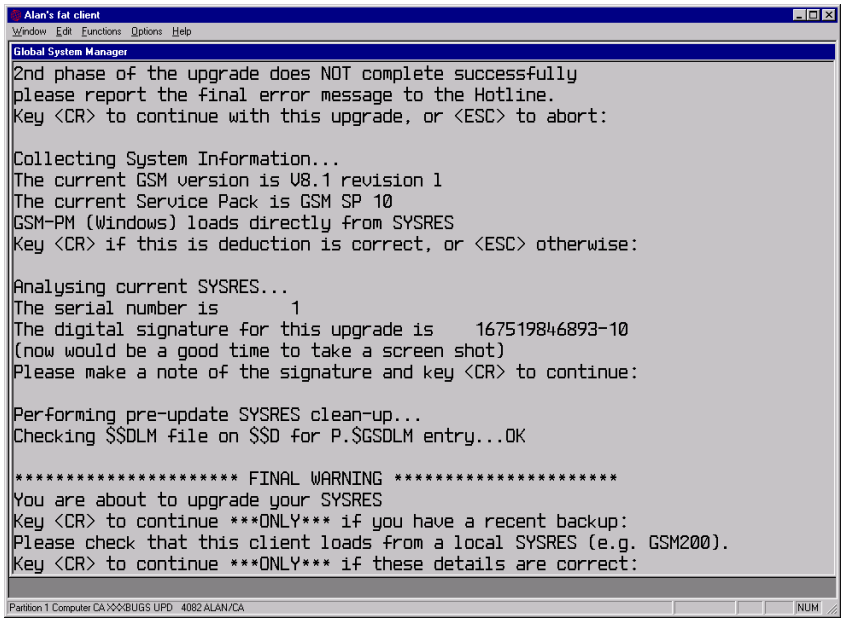
6. Depending on the version of GSM that you are upgrading from a number of further warnings will appear. In general, the earlier the current version of GSM, the more warnings will appear.





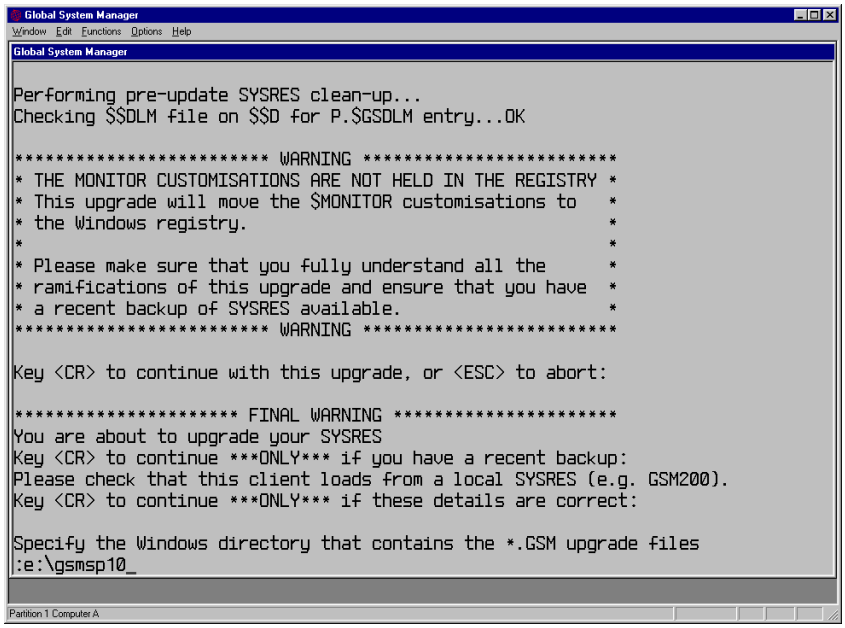


7. A final set of warnings will appear:



The first warning reminds you to have a recent backup of SYSRES before attempting the Service Pack upgrade. The second warning only appears on GSM (Windows) configurations and reminds you to check that the $IP unit assignment is correctly established. If, and only if, the Global Client loads from a SYSIPL (i.e. from GL-IPL.DLV) the $IP unit assignment **MUST** be established. If the Global Client loads from SYSRES (e.g. GSM200) the $IP unit assignment must **NOT** be established.

8. Specify the directory that contains all the various *.GSM Service Pack files;



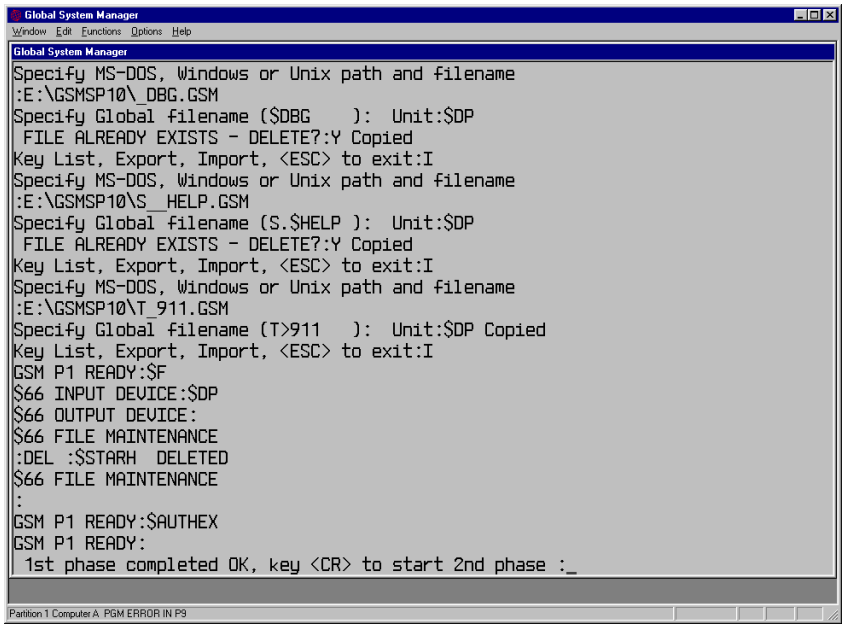
The **first phase** of the upgrade process consists of a number of $BBS file copies from the Windows (or Unix) Service Pack directory to SYSRES.

If the first phase fails for any reason, you must restore the SYSRES (and SYSIPL) from the backup copies you made in step-1.

9. When the first phase of the upgrade completes the following message is displayed on GSM (Windows) configurations:

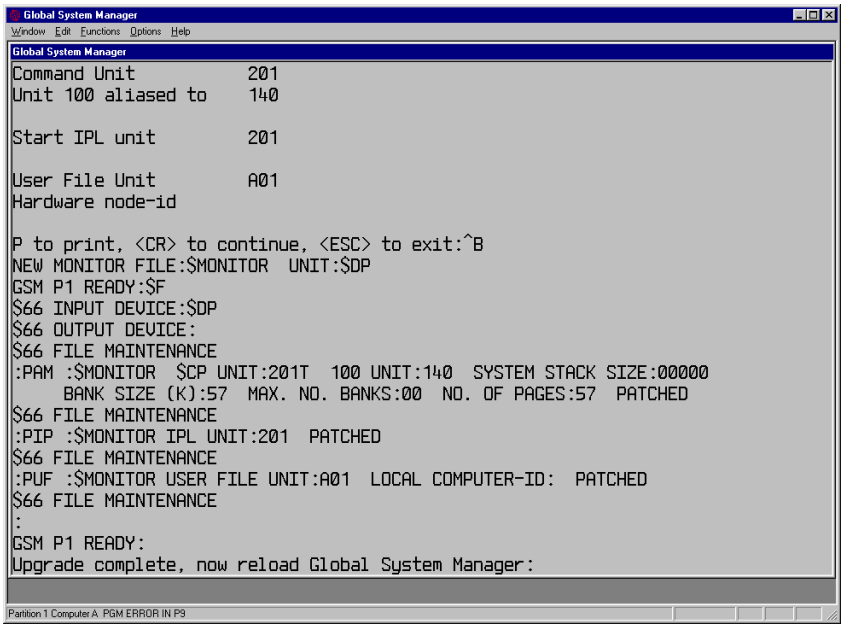
    1st phase completed OK, key <CR> to start 2nd phase

    This message will only appear on GSM (Windows) and will not appear on GSM (Unix) configurations.



    Key <CR> to start the second phase of the Service Pack upgrade.

10. When the upgrades completes, for GSM (Unix), or when the second phase of the upgrade completes, for GSM (Windows), the following message is displayed:



11. GSM **must** be reloaded immediately after the Service Pack upgrade.

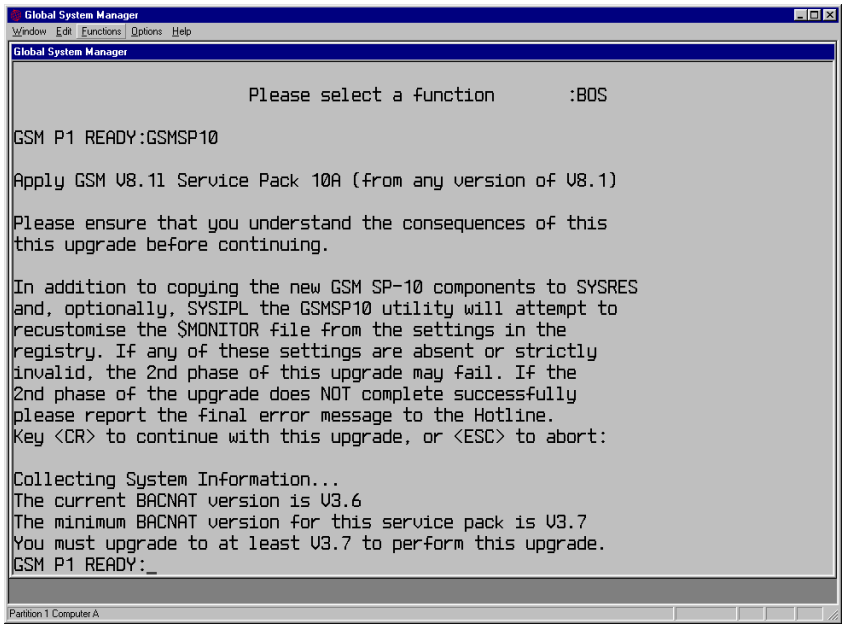
5. Trouble-shooting problems with GSMSP*n*

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* is always displayed so that the failing component can be readily identified.

If GSMSP*n* fails, the recommended recovery procedure is to restore SYSRES (and SYSIPL, if necessary) from the backup copy and increase the size of the free space to 5Mb.

WHEN REPORTING PROBLEMS WITH A SERVICE PACK UPGRADE PLEASE SUPPLY THE SYSRES DIGITAL SIGNATURE.

The Service Pack upgrade program validates several run-time options. For example, the version of the GSM (Windows) Global Client or the GSM (Unix) BACNAT software is validated. The upgrade will be abandoned if all the necessary run-time parameters are not adequate. For example:



A reply of <CTRL A>, instead of the normal <CR>, to any of the "Key <CR> to continue" prompts will enable low-level diagnostics to show the progress of the upgrade. For example: