Installing 32-bit Global Applications ($LICENCE and $INSTALL)

1. Introduction

This document describes the new software distribution and installation mechanism that is being used to distribute Global 3000 V5.0. In addition to providing the only means to distribute and install Global 3000 V5.0 we are using this release as a trial of the software distribution technology. If this initial trial, involving just Global 3000 V5.0, is successful then, subject to feedback from resellers, **all** Global products (including GSM) will be distributed using this mechanism.

The new CD-based software distribution mechanism is vastly superior to the existing serialised diskette, or sub-volume, based technique. The key improvements, shown emboldened, are detailed in the text that follows.

The new procedure involves releasing a non-serialised "Global Product Set" (GPS), containing all the Global products (currently only Global 3000 V5.0 and Global 3000 V7.0), to every reseller each month. Initially, the GPS will be released on a Windows format CD. However, the software distribution mechanism does not depend on any particular media. Thus, the GPS can be distributed via CD, DVD etc. or by downloading from a web site. NB. For a glossary of terms and acronyms, see Appendix A.

The contents of the monthly GPS will be guaranteed to be "up to date" on the day the GPS is created. **Thus, the inevitable delays involved in transferring new software from Development to Production have been eradicated.**

Given that the reliability of CD's (and DVD's and internet downloads) is significantly higher than the reliability of diskettes**, then the problems and frustrations caused by un-readable diskettes have been eradicated.**

The software that comprises the GPS will not be installable without a licence file. The licence file (see section 5) will be the only information that is required to fulfill a software order. The licence information will be sent by the Production Dept. via email. **Thus, any delays incurred when dispatching a software order have been eradicated.**

Given that the simple licence file is the only information required to fulfill a software order, **then the problems and frustrations caused by incorrect order-information and/or incorrect generations have been significantly reduced.**

When a product is updated it will automatically become available on the next monthly GPS. **Thus, all resellers will automatically receive all upgrades to all software products.**

Although a monthly release cycle is envisaged for major re-releases, the new methodology allows a rapid-response (non-Autozap) release mechanism for emergency

repackages/re-releases. This "Global Product Service Pack" mechanism is described in more detail in Technical Note IN284.

The new software installation process automatically records and logs all software that has been installed at a particular site. Checking that a site is running the latest software merely involves inspecting the installation log file.

Important Note-1: Before attempting any of the procedures described in this document please refer to the "pre-requisites" section described in Appendix B. In particular, **the appropriate "GSM Service Pack" must be applied in order to use some of the utilities described below.**

Important Note-2: The Global 3000 V5.0 installation procedure was changed with the release of the November-2001 CD. **Please read Appendix C for further details.**

2. Software Installation Overview

Global software distributed within a Global Product Set is installed via a multi-stage process:

- One, or more, de-activated Global Cabinet Files (see section 3) are activated using the $LICENCE utility (see section 6). This process requires a valid Global Licence File (see section 5);

- The activated Global Licence Files are installed using the $INSTALL utility (see section 7);

- For some Global products, the generic $INSTALL process completes the installation. However, for Global 3000 V5.0 an application-specific installation step is required. This application-specific installation phase is invoked automatically by $INSTALL.

The $INSTALL utility also allows the contents of an activated GCF to upgrade a pre-installed product (see section 7). This process does not require the application-specific installation phase.

In addition to using $INSTALL to upgrade installed software from a set of activated Global Cabinet Files, software updates may also be applied from a "Global Product Service Pack" using the $GSP utility (see section 9).

3. Global Cabinet Files (GCF's)

One of the key components in the new software distribution mechanism is the Global Cabinet File (GCF). A Global Cabinet File is created for each software module/version combination. Only Global 3000 V5.0 GCF's are currently available in the Global Product Set. However, this restricted release will be expanded as further products are released in the Global Product Set. Each Global Cabinet File is released as a standard Windows file and contains all the software components for a particular module.

The GCF's released in the monthly GPS are unserialised and de-activated. The $LICENCE utility (see section 6) serialises and activates one, or more, GCF's.

The naming convention for a Global Cabinet File is as follows:

ppvv_yymmrr.GCF

where:
- *pp* Product Code (e.g. ZM)
- *vv* Version Number (e.g. 50)
- *yy* Year Number of release (i.e. 00=2000; 01=2001 etc.)
- *mm* Month Number of release (01 to 12)
- *rr* Revision Number of release (01 to 99)

For example, the September-2000 first release of the ZM V5.0 product will be:

ZM50_000901.GCF

The October-2000 third release of ZI 5.0 will be:

ZI50_001003.GCF

Note that the various GCF's for a particular Product Code/Version Number combination naturally collate in order of release revision.

4. Global Cabinet Files and the contents of the Monthly GPS

The initial monthly GPS will be released on a Windows format CD containing the following files and directories (in addition to a number of "read me" text-files and documents):

GSM81_*yymm*01.GCF
NY50_*yymm*01.GCF
XE50_*yymm*01.GCF
ZA50_*yymm*01.GCF
ZC50_*yymm*01.GCF
ZD50_*yymmrr*.GCF
ZG50_*yymmrr*.GCF
ZI50_*yymmrr*.GCF
ZJ50_*yymmrr*.GCF
ZL50_*yymmrr*.GCF
ZM50_*yymmrr*.GCF
ZO50_*yymmrr*.GCF
ZP50_*yymmrr*.GCF
ZQ50_*yymmrr*.GCF
ZS50_*yymmrr*.GCF
ZT50_*yymmrr*.GCF
ZX50_*yymmrr*.GCF
CDCOPY.LOG

```
GXA\
GSM81SERVICEPACK1\
GSMNTUPGRADE\
G3000DOC\
GUI30\
G3000V50.DOC
README.TXT
CDREADME.DOC
```

In addition to the instantly recognisable Global 3000 V5.0 GCF's the following extra files and directories are present on the GPS:

GSM81_*yymm*01.GCF	Special GSM GCF. This file will be required for upgrade releases;
CDCOPY.LOG	Log file created when the GPS is created. Intended for internal use only;
G3000DOC\	Global 3000 on-line documentation directory;
GXA\	Global Application Explorer installation directory;
GSMNTUPGRADE\	Collection of upgrade components (e.g. GLOBAL.EXE etc.) for GSM (Windows);
GSM81SERVICEPACK*n*\	GSM Service Pack **directory** (not to be confused with a Global Product Service Pack **file**). A GSM Service Pack directory contains various files required to upgrade GSM V8.1l to enable the new installation procedure;
GUI30\	Latest version of the Global Windows Workstation (GUI-1). Not relevant to this document but distributed via the CD for convenience;
CDREADME.DOC	This document;
G3000V50.DOC	Global 3000 V5.0 Installation Notes;
README.TXT	Text file describing the CD layout.

Eventually, the free-format directories will be replaced by a number of standard Global Cabinet Files.

5. The Global Licence File (GLF)

For every software order that includes one, or more, products that are available on the current GPS, a Global Licence File (GLF) will be emailed to the reseller who has placed the order.

The Global Licence File (GLF) is a simple Windows text file that contains the following information:

Line number	*Description*
1	Comment line describing the creation date, time and operator-id;
2	Version number (as a 4 digit decimal number);
3	7 character order number;
4	Serial number and standard checksum
5	Plain-text description of 1st Product & Version
6	Encrypted 1st Product & Version
7	Plain-text description of 2nd Product & Version
8	Encrypted 2nd Product & Version
9	Plain-text description of 3rd Product & Version
10	Encrypted 3rd Product & Version
etc.	

For example:

```
* Licence file created on 30/08/2000 at 16.42.13 by ALAN
0001
123456X
8330003OIMZXQ
* Product code NY version V5.0
HDBDTNZZKPQDJZRHNMBQQZQPCCCZCCCBLHJTFVLNYCZZYLKKNK
* Product code ZI version V5.0
SJBDTNZZKPQCYXTLDMBQQZQPCCCZCCCBJFTBJVPZICZZLZKKNK
* Product code ZT version V5.0
KFBDTNZZKPQNMVGNBMBQQZQPCCCZCCCBLBDBBDPZTCZZKJKKNK
* Product code ZQ version V5.0
HQBDTNZZKPQTSRKTHMBQQZQPCCCZCCCBJRDTFCSZQCZZYGKKNK
```

The name of the GLF is always *sssssss_nnnnnna*.GLF, where *sssssss* is the serial number; and *nnnnnna* is the Order Number for the software order. For example, the above licence file will be called:

8330003_123456X.GLF

Although the encrypted licence information appears daunting to key in, the licencing mechanism does not require any information other than the name of the GLF file to be supplied by the reseller. It is **not** necessary to key in the 50 character passwords. The $LICENCE utility (see section 6) extracts the passwords from the GLF.

Note that prior to 13-Feb-2001, GLF files did not include the serial number in the file name.

6. The $LICENCE utility - Activating the Global Cabinet Files

Important Note-1: The $LICENCE utility was **NOT** included in the first release of GSM V8.1l. GSM Service Pack-1 **MUST** be applied - please refer to Appendix B for further details.

Important Note-2: For generality, the initial version of $LICENCE has been coded as a text-based screen-formatting application. For GSM SP-11, and later, when running on GX $LICENCE **automatically** chains to the 32-bit, GX-compliant equivalent utility: $32LICE.

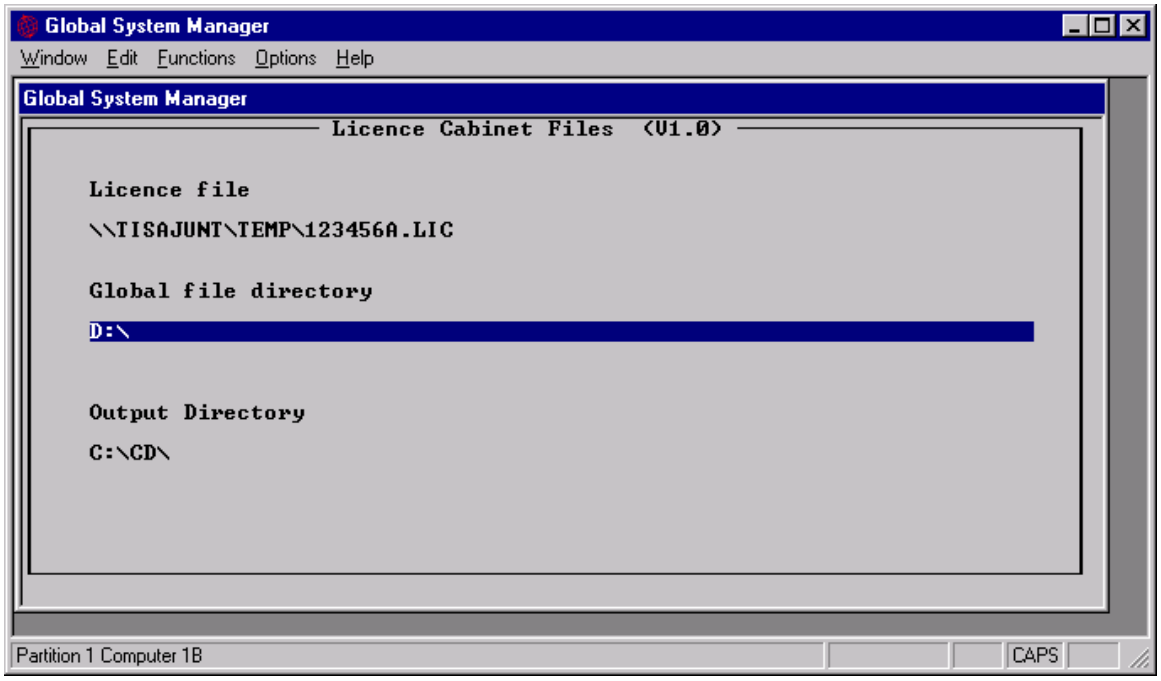
Section 6.1 describes the 16-bit $LICENCE utility; section 6.2 describes the 32-bit $32LICE utility; section 6.3 provides the recommended procedure for using $LICENCE (and $32LICE).

6.1 16-bit, text $LICENCE Dialogue

Running the $LICENCE utility is the first stage in installing Global software from the GPS. The $LICENCE utility merely "activates" the appropriate Global Cabinet File for every product listed in the Global Licence File. The $INSTALL utility (see section 7) is then used to install the software from one, or more, activated GCF's.

This 2-stage installation process has been implemented to keep the software activation and serialisation process separate from the actual software installation process. This 2-stage process allows the activation and serialisation phase to be performed at the resellers premises on a GSM (Windows) configuration; and the software installation phase to be performed, on any configuration, on the end-users system (remotely, if necessary).

$LICENCE prompts for the name of the Global Licence File and input and output directories. The input directory may be the root directory of the monthly CD or a work directory on a PC, or server, that contains the required Global Cabinet Files (i.e. the monthly CD can be copied to a suitable work directory on a PC). The output directory may be the same, or different, from the input directory (obviously the output directory must have write permissions).



In this example:

\\tisajunt\temp\123456a.lic	name of the Global Licence File (GLF). Note that this example includes an "old style" GLF;
d:\	input directory containing the **deactivated**, **unserialised** Global Cabinet Files (GCF's);
c:\cd\	output directory to hold the **activated**, **serialised** Global Cabinet Files (GCF's);

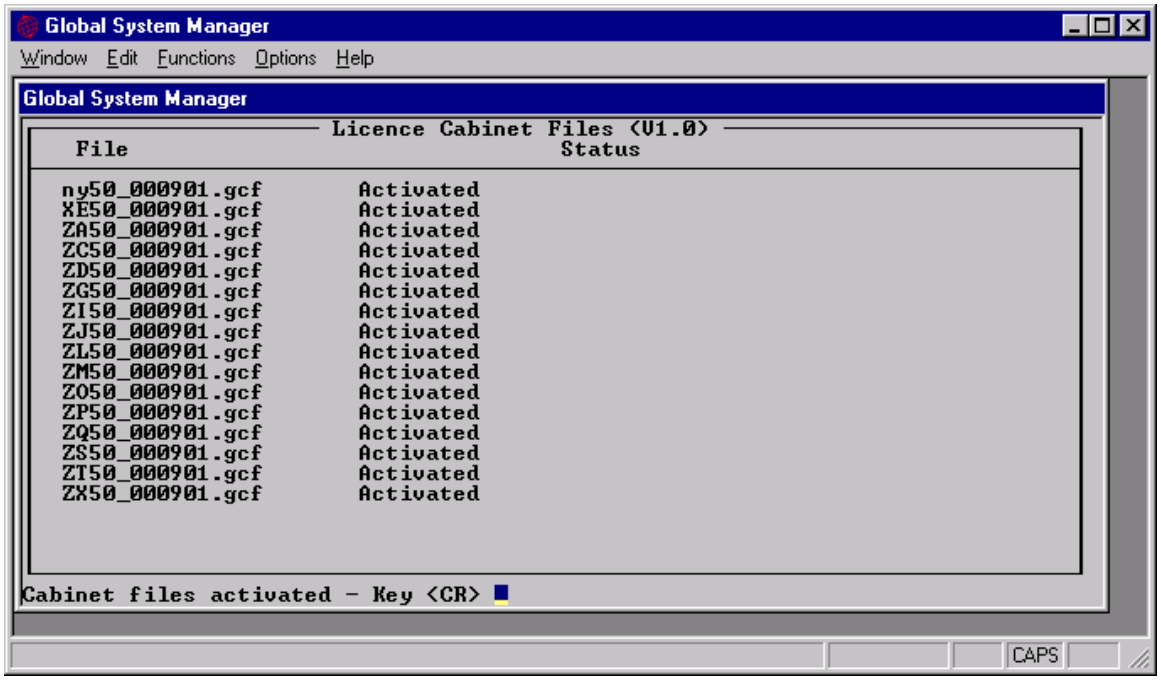
$LICENCE scans the GLF to activate and re-serialise every Global product listed in the GLF. As well as changing the contents of the GCF's, this re-serialisation procedure also involves renaming the GCF from:

ppvv_yymmrr.GCF

to:

ppvv_yymmrr_sssssss.GCF

where *ppvv_yymmrr* are described in section 3 and *sssssss* is the serial number that the GCF has been activated for. This rename should allow the software for a particular site to be readily identified.

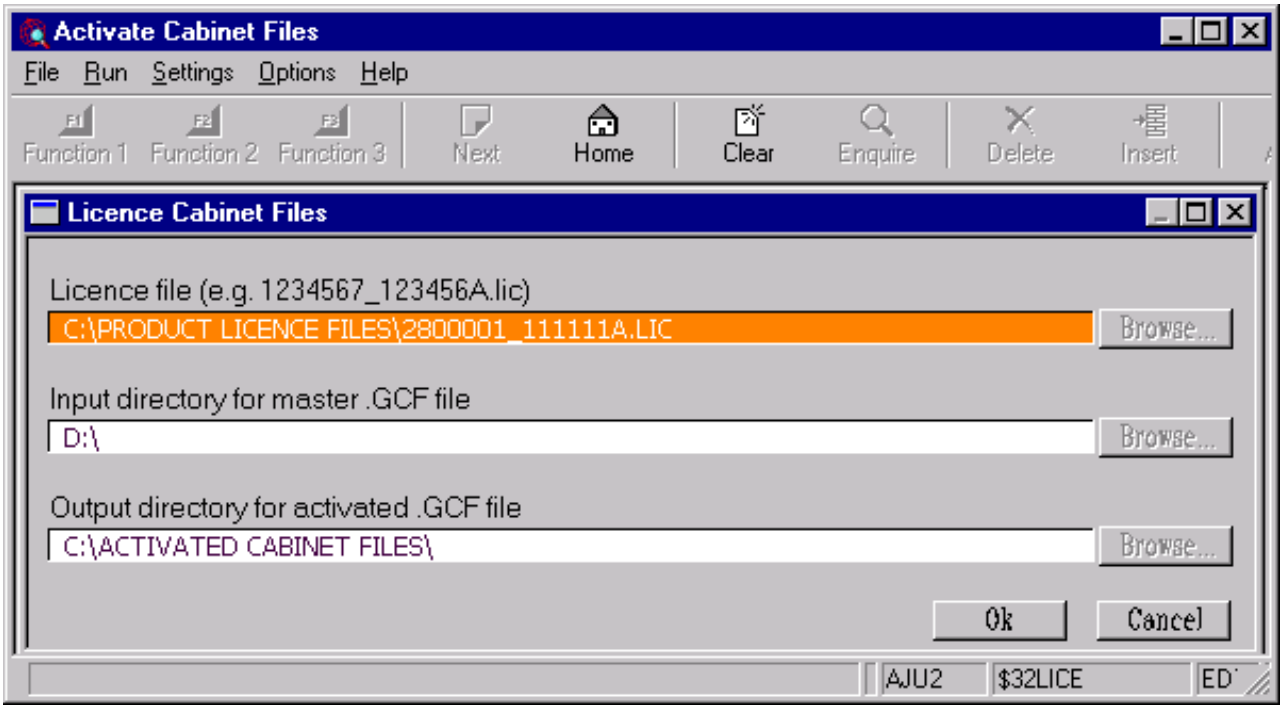


Each serialised GCF is suitable for use by $INSTALL (see section 7).

6.2 32-bit, GX $LICENCE ($32LICE) Dialogue

As described above there is no need to run $32LICE explicitly. In all cases where $32LICE can be used, $LICENCE will automatically chain to $32LICE.

The GSM SP-11 version of $LICENCE detects that it is running on a GX screen and automatically chains to the 32-bit, GX $32LICE utility which proceeds with a GX compatible dialogue. The following screen shows a typical dialogue:



The Browse buttons will only appear if GX is running on the Global server.

In this example:

2800001_111111A.lic	name of the Global Product Licence File
c:\product licence files\	folder containing the Global Product Licence File
d:\	input folder containing the deactivated, unserialised Global Cabinet Files (GCF's)
c:\activated cabinet files\	output folder to hold the activated, serialised Global Cabinet Files (GCF's);

If the input and output folders are the same, you will be warned that any deactivated, unserialised Global Cabinet Files (GCF's) will be deleted by the activation process.

$LICENCE scans the GLF to activate and re-serialise every Global product listed in the GLF. As well as changing the contents of the GCF's, this re-serialisation procedure also involves renaming the GCF from:

ppvv_yymmrr.GCF

to:

ppvv_yymmrr_sssssss.GCF

where *ppvv_yymmrr* are described in section 3 and *sssssss* is the serial number that the GCF has been activated for. This rename should allow the software for a particular site to be readily identified. In this example:

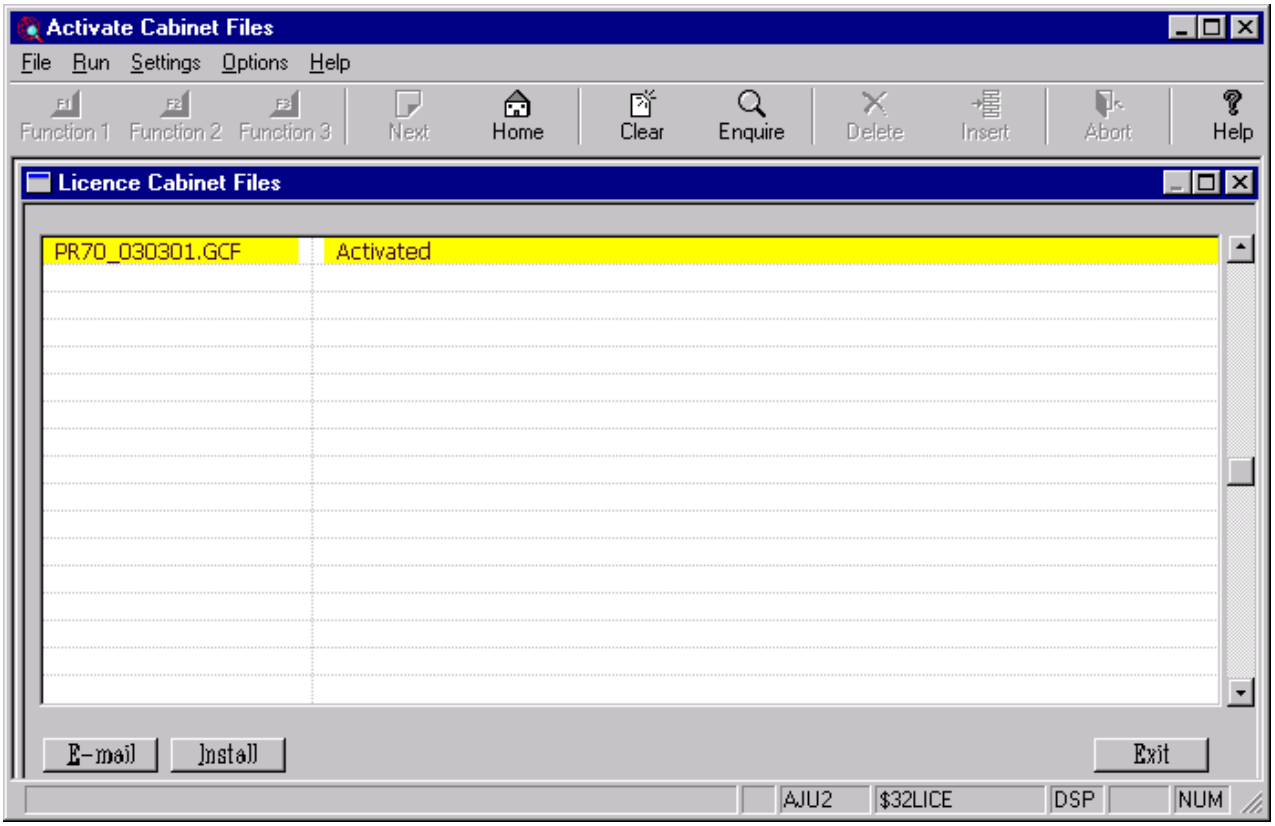
D:\PR70_030301.GCF

will be copied and renamed to

C:\ACTIVATED CABINET FILES\PR70_030301_2800001.GCF

Each serialised GCF is suitable for use by $SETUP or $32INST (see section 8).

After a short delay, if the activation succeeds, the following window will appear:



You now have to option to:

Install — This option runs $SETUP (see Technical Note IN297)

E-mail — This option sends a message to Global Support to confirm that a Global Product Licence File has been used to activate one, or more, Global Cabinet File(s). This option should not normally be required. Only use this option if you have been advised by Global Support to provide a $LICENCE log file.

Exit — Exit $LICENCE

If it was **not** possible to activate a Global Cabinet File the reason for the failure (e.g. USER NOT ON SERVICE) will be displayed.

6.3 $LICENCE Recommended Procedure

In the various internal trials of $LICENCE we have developed the following recommended procedure for activating GCF's:

- On a suitable PC, create a directory to hold all the Global Licence Files (GLF) that are emailed to fulfill orders;
- For each order, create a sub-directory which is simply the serial number of the end-user;
- Optionally create a work-directory to hold the contents of the latest Global Product Set (GPS). For convenience, the monthly CD can be copied to a suitable work directory on a PC;
- $LICENCE prompts for the name of the Global Licence File and input and output directories. The licence files will always be accessed in the same "Licence File" directory. The supplied input directory should be the root directory of the CD, or the work directory that has been allocated to hold the GPS. The output directory should be the serial-number specific directory;
- When using $LICENCE, the same "GLF directory" is specified every time, the same input directory (either the root directory of the CD, or the "GPS directory") is specified every time, only the instantly recognisable output directory is changed for each run of $LICENCE.

The following example directory structure results:

D:\glfs	Global Licence Files
D:\gcfs	Unserialised Global Cabinet Files
D:\gcf1230001	Global Cabinet Files serialised for 1230001
D:\gcf1230002	Global Cabinet Files serialised for 1230002
D:\gcf1230003	Global Cabinet Files serialised for 1230003
etc.	

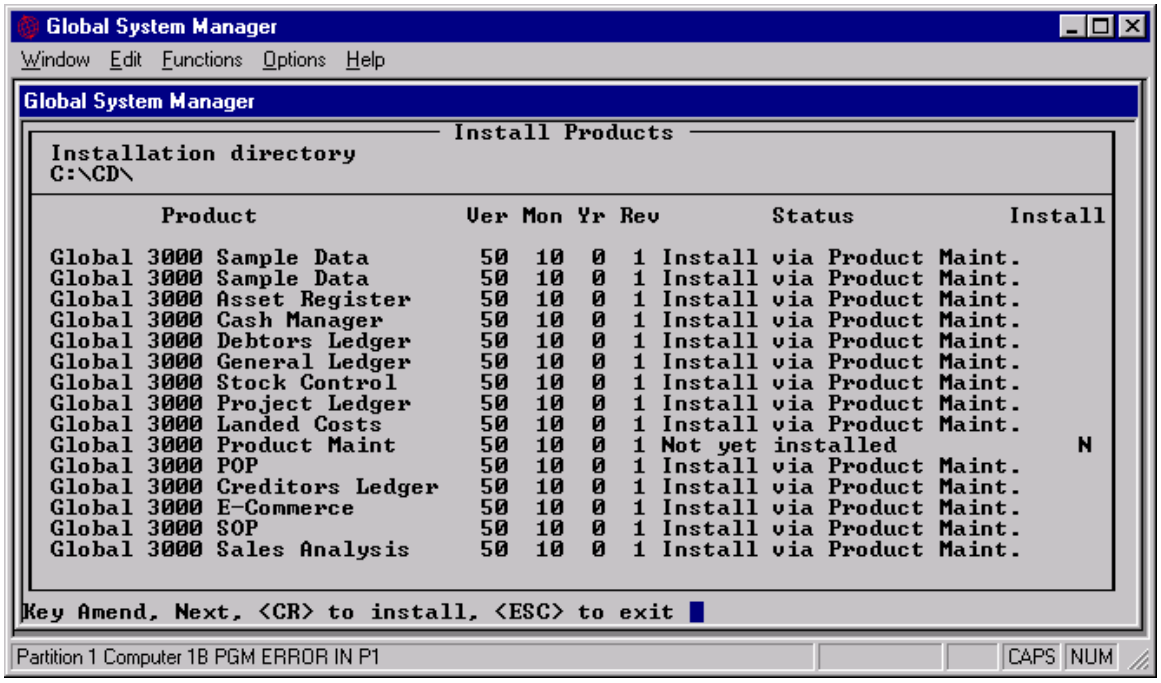
7. The $INSTALL utility - Installing the Global Cabinet Files

Important Note-1: The $INSTALL utility was **NOT** included in the first release of GSM V8.1l. GSM Service Pack-1 **MUST** be applied - please refer to Appendix B for further details.

Important Note-2: For generality, the initial version of $INSTALL has been coded as a text-based screen-formatting application. Work is currently in progress to supplement this initial (text-based) version of $INSTALL by a GX-compliant version for 32-bit configurations,

$INSTALL prompts for the name of the directory containing the activated, and serialised, Global Cabinet Files:

Every serialised Global Cabinet File in the Windows directory is validated and a list of all the possible installable products is presented:



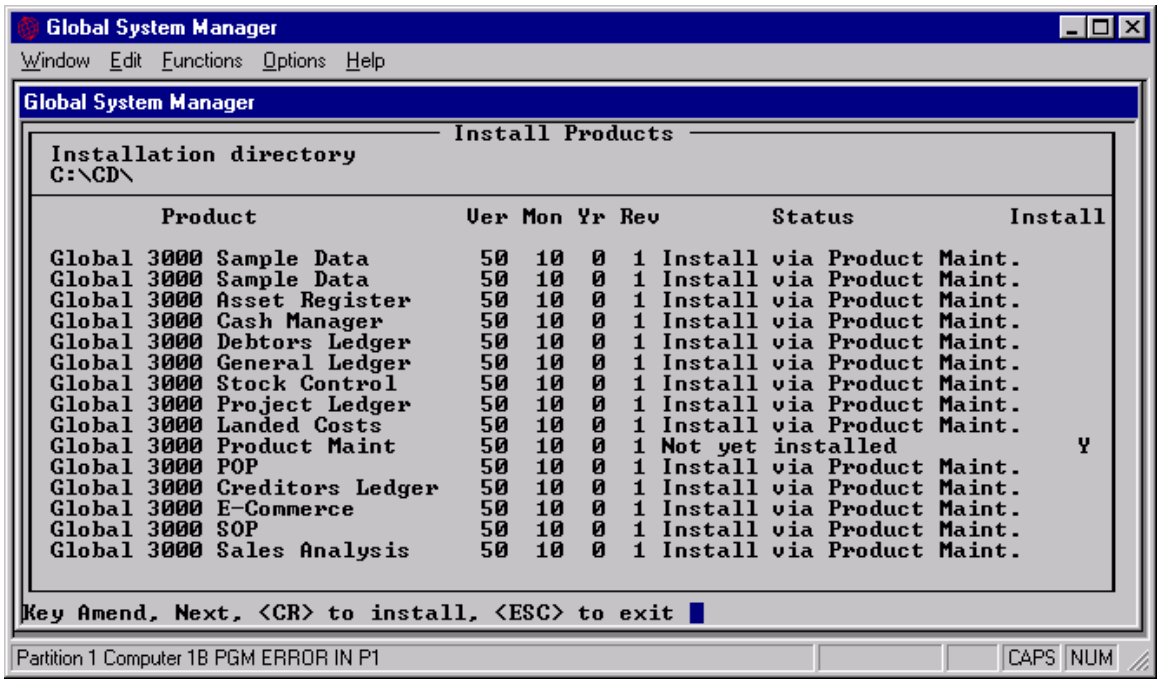
Important Note: The Global 3000 installation procedure is a special case: Only one of the modules that comprises the product suite (i.e. product ZM) is directly installable. All the other Global 3000 products are installed "on the back of" the ZM installation.

The status of each product can be either:

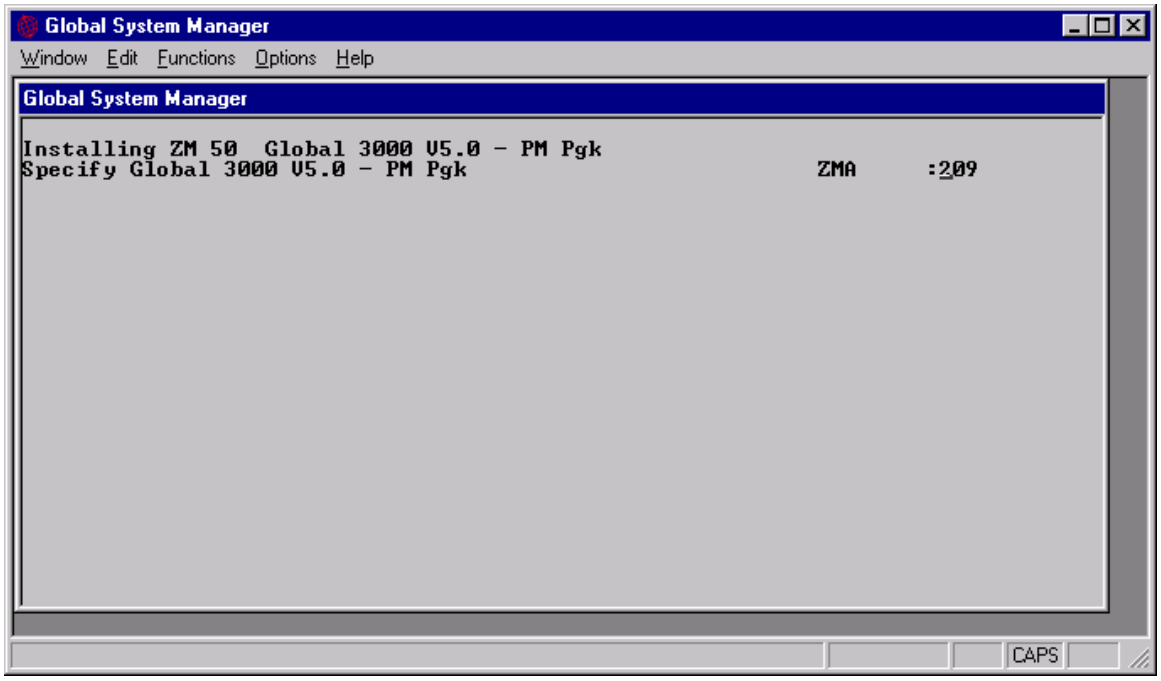
N	Not yet installed (see ZM in the above example);
<blank>	Product that is not directly installable (see NY, XE, ZA etc. in the above example)
Y	Product to be installed by the current run of $INSTALL. This procedure may involve the use of a product-specific installation process;
R	Product to be re-installed by the current run of $INSTALL. This option is NOT currently available (see section 7.2).

7.1 Using $INSTALL to Install a new product

Use the Amend option to change the required products from the "not yet installed" status to the "to be installed" status (i.e. change the "N" to a "Y").



Key <CR> to start the installation process. Normally $INSTALL prompts for the target unit into which the product is to be installed. However for Global V5.0 installations this is merely the unit number of a suitable work unit (i.e. the following prompt is slightly misleading):



Important Note-1: For the Global 3000 installation, which includes its own sophisticated product-specific installation mechanism, the unit supplied to $INSTALL is merely used as work-unit (i.e. rather than a final installation unit). The Global 3000 installation procedure will take over and will offer the prompts described in the Global 3000 Installation and Set-up manual (MINMV4.5).

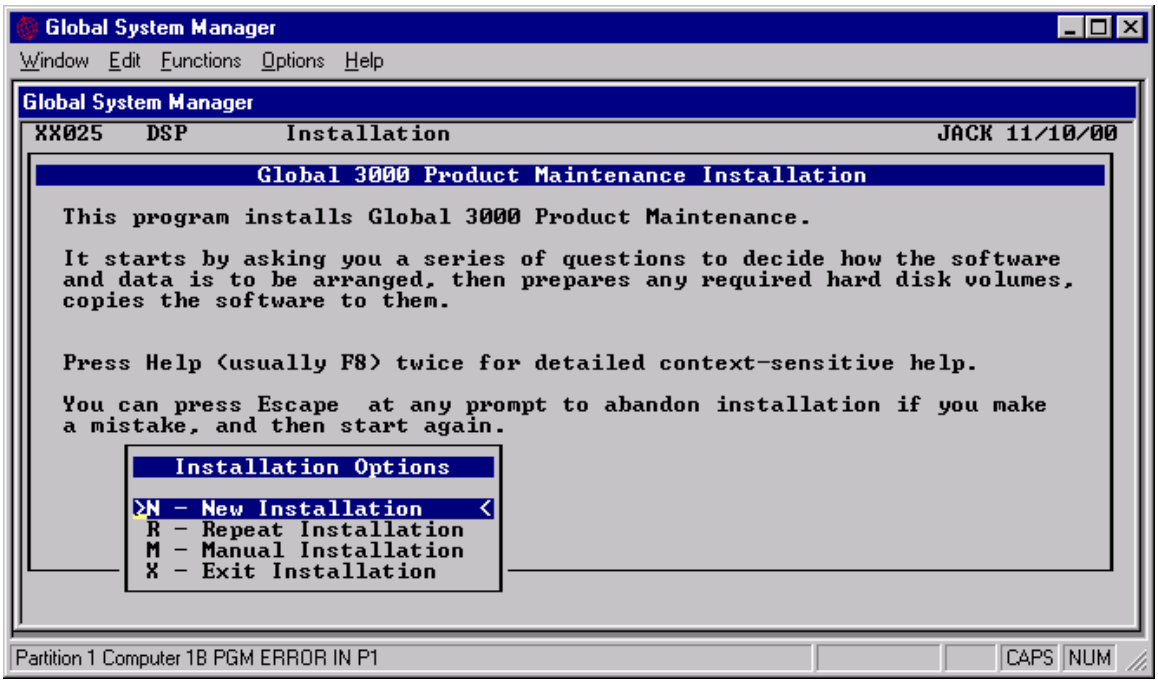
Important Note-2: To install on a local domain (e.g. a sub-volume on domain 200) rather than a network domain (e.g. a sub-volume on domain A00) the reply to the "Node-id" prompt must be "2".

7.2 Using $INSTALL to Re-install over an existing product

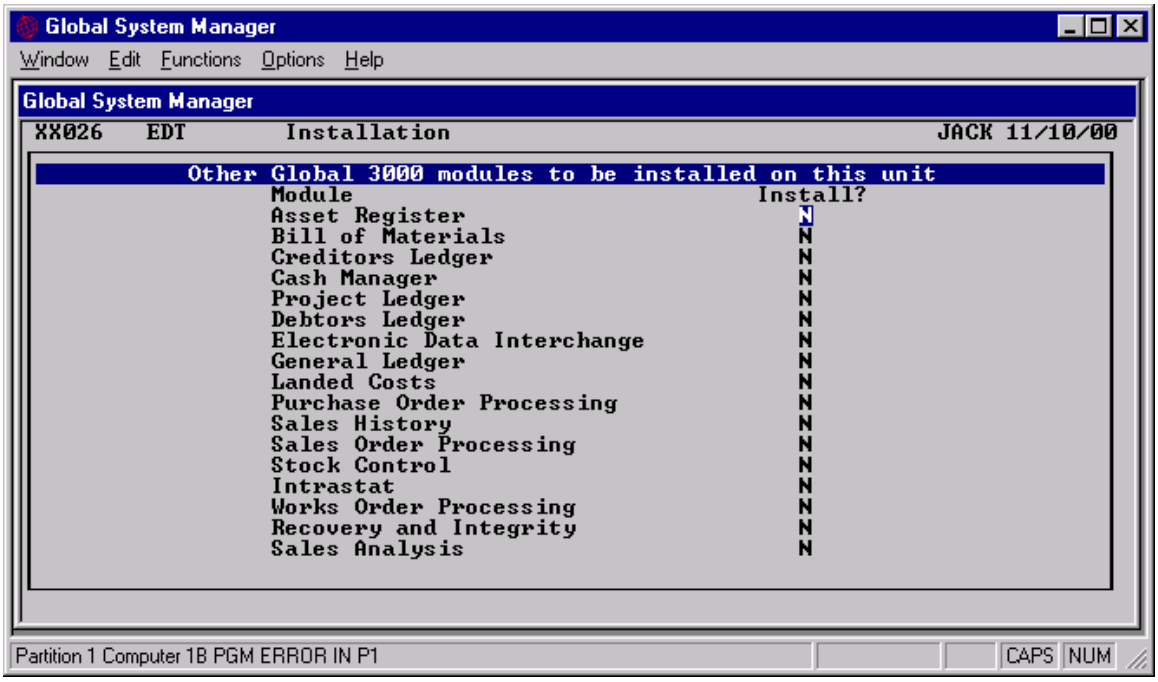
$INSTALL does not currently include a "Re-install" facility.

7.3 Some tips when installing Global 3000 V5.0

The Global 3000 V5.0 specific installation procedure commences by displaying the following window:


Global System Manager
Window Edit Functions Options Help
Global System Manager
XX025 DSP Installation JACK 11/10/00
Global 3000 Product Maintenance Installation
This program installs Global 3000 Product Maintenance.
It starts by asking you a series of questions to decide how the software and data is to be arranged, then prepares any required hard disk volumes, copies the software to them.
Press Help (usually F8) twice for detailed context-sensitive help.
You can press Escape at any prompt to abandon installation if you make a mistake, and then start again.
Installation Options
N - New Installation
R - Repeat Installation
M - Manual Installation
X - Exit Installation
Partition 1 Computer 1B PGM ERROR IN P1
CAPS
NUM

After selecting a New Installation the following window will appear during the installation dialogue:

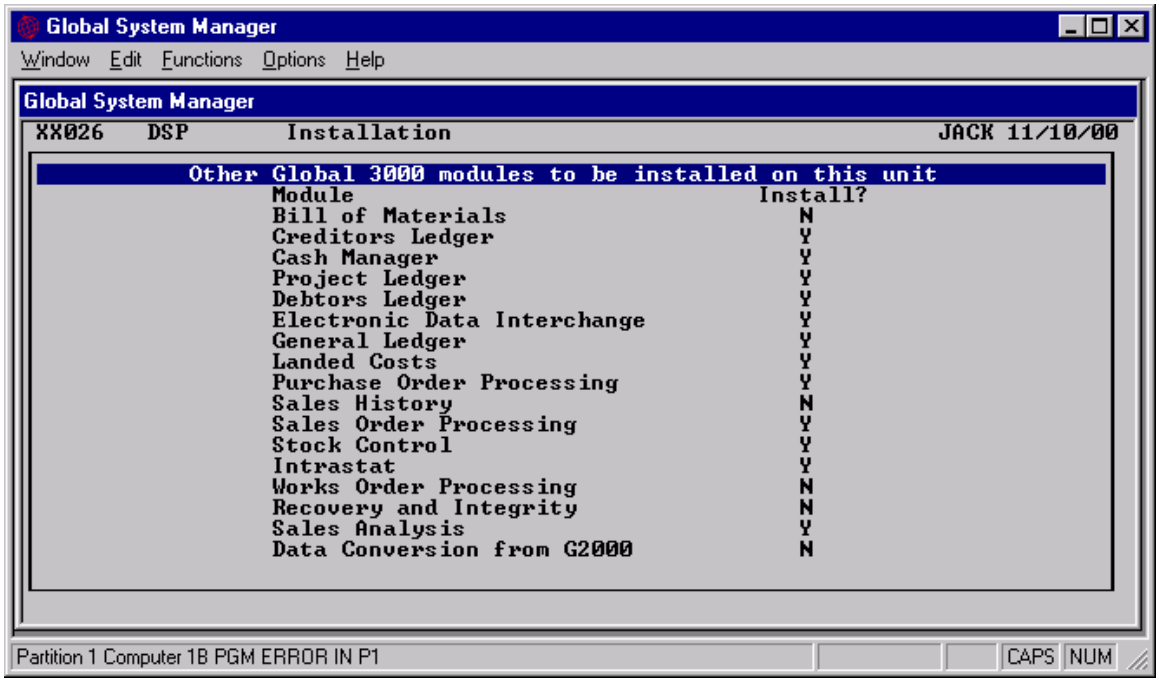


Because a number of products in the above list are not currently distributed with Global 3000 V5.0 you must **NOT** set the "Install?" flag to Y for the following products:

Bill of Materials
Sales History
Works Order Processing
Recovery and Integrity
Data Conversion from G2000

Note that in the above list the terms "Electronic Data Interchange" and "E-Commerce" and interchangeable.

Thus, the "Install All Global 3000 V5.0 Products" list becomes:



Obviously the installation status of other products must not be toggled from "Install? = N" to "Install? = Y" if they are not present on the order (i.e. as listed in the Global Licence File).

For new installations you are strongly recommended to use $V to pre-allocate the G3PROG (30Mb), G3DATA and $$WORK volumes before commencing the Global 3000 V5.0 installation.

Important Note: Astute readers will have noticed that the Global 3000 V5.0 installation procedure is modeled very closely on the pre-CD Global 3000 V4.5 procedure. We are currently implementing an improved Global 3000 V5.0 installation procedure that integrates more closely to the $INSTALL mechanism.

Appendix A - Glossary of terms and acronyms

This appendix describes the various new terms introduced in this document:

Acronym	Term	Meaning
GCF	Global Cabinet File	Windows binary file containing a Compressed Global format Installation Template Volume
GLF	Global Product Licence File	Windows text file emailed to a reseller to fulfill a software order
GPS	Global Product Set	Collection of GCF's routinely released on a monthly basis
GSMSP	GSM Service Pack	A collection of files in $BBS format (within a Service Pack directory) that can be used to upgrade GSM very rapidly, without the need for a re-installation. GSM Service Packs are normally applied using a bespoke job devised for the particular upgrade
GSP	Global Product Service Pack	A single file that provides a Service Pack upgrade to a software module. Global Product Service Packs are applied using the $GSP utility
IPL	Installed Program Logfile	A Global log-file that contains a full installation and upgrade history for all Global 3000 V5.0 and Global 3000 Payroll V7.*x* products
ITV	Installation Template Volume	Global volume created by the Development Team and converted to a GCF for external release

Appendix B - Pre-Requisites

In order for a reseller to install Global software from a Global Product Set (GPS) the following is required:

- PC with CD drive and at least 100Mb of free disk space;
- Ability to accept in-coming email with a simple text file attachment;
- Ability to download software from the Global web site;
- PC running GSM (Windows) V8.1l (normally be the same as the PC with the CD-drive);
- GSM Service Pack-1 must be applied in order to install $LICENCE and the "new installation" option of $INSTALL. GSM-SP1 is supplied on the October-2000 (i.e. "001001") GPS CD;
- GSM Service Pack-3 must be applied in order to install $GSP.

Appendix C - Changes for the November-2001 CD

The steps required to install, and subsequently update, Global 3000 V5.0 from any GPS CD prior to November-2001 are:

1. Ensure the latest GSM Service Pack has been applied;

2. Run $CUS to install an Installed Product Log (IPL) file (see Technical Note IN284)

3. Run $LICENCE to activate the GCF's (see section 6 of this document);

4. Run $INSTALL to install Global 3000 from the activated GCF's (see section 7 of this document);

5. Run $INSLOG to add entries to the IPL file (see Technical Note IN284);

6. When required to fix a problem or apply an enhancement, run $GSP to apply the appropriate Global Product Service Pack(s) (see Technical Note IN284).

With the release of the November-2001 GPS CD the Global 3000 V5.0 installation procedure was enhanced to avoid the requirement to use $INSLOG. **HOWEVER, IN ORDER TO AVOID THE REQUIREMENT TO RUN $INSLOG AFTER INSTALLING GLOBAL 3000 V5.0, THE GSM SERVICE PACK REVISION MUST BE HIGHER THAN GSM SP-5.** This means that either GSM SP-6, or later, must be applied **OR** the SP5UPD job from the gsm81servicepack5upgrade directory should be used to upgrade GSM V8.1.5 to V8.1.5.2.

The steps required to install, and subsequently update, Global 3000 V5.0 from the November-2001, or later, GSP CD (**provided the GSM Service Pack version is V8.1.5.2 or V8.1.6, or later**) are:

1. Ensure that the GSM version is at least V8.1.5.2;

2. Run $CUS to install an Installed Product Log (IPL) file (see echnical Note IN284)

3. Run $LICENCE to activate the GCF's (see section 6 of this document);

4. Run $INSTALL to install Global 3000 from the activated GCF's (see section 7 of this document);

5. When required to fix a problem or apply an enhancement, run $GSP to apply the appropriate Global Product Service Pack(s) (see Technical Note IN284).