MidJet GSM Text

User's Guide

This manual is intended for the person responsible for the installation and operations of MidJet GSM Text. It is written in a concise form, reading it carefully will maximise the benefit of the product

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1　Introduction

1.1　Overview

MidJet GSM Text is a robust interface to the Short Message Service (SMS) offered by all major GSM network operators. It provides the capability to exchange up to 160 characters long text messages, between iSeries and GSM telephones.

The main functions are:

- A user-friendly paging system, with ability to create and send SMS messages to individual person(s) or group(s) of persons.

- A solid monitor for operational problems. MidJet GSM Text will send a message when a batch job halts with MSGW status, or if a message arrives at a message queue. Thus system messages like multiple attempts to sign on with incorrect password, application program errors, communications problems, running out of disk space etc will be forwarded to the operator in charge. Messages can also be sent as e-mail using GSM Text's integrated SMTP client.

For inquiry messages, a reply message can be sent from the GSM telephone back to the iSeries. After an authority check, the message will perform a reply to the message in the message queue. In addition, the second level (help) text can be forwarded to the mobile phone.

Using the design of checkpoints, a number of different conditions can be controlled. MidJet GSM Text checks the iSeries to ensure that certain subsystems and jobs are active when they should be. Job queues and out queues can be monitored in order to check that only an allowed number of entries exist. Connection checks to remote systems or other units using TCP/IP is supported. Configuration objects, lines, controllers, devices or network interfaces descriptions can be checked for an accepted status. The accessibility to HTTP, POP3, SMTP and generic servers can be checked. A user written program can be used to check other conditions.

The operations monitor offers the possibility of message escalation. When this is active, operational messages will be sent to the next person in a distribution group when no attention was paid by the first receiver.

With the use of the included API's, the user defined question and reply handling function is enabled. This makes it possible to use the GSM telephone as a device to issue inquiries to the database and receive replies. A source file with example programs illustrates the ease of using the API's.

When an iSeries operational message is sent to the mobile, it is possible to use the modem to ring the mobile phone afterwards. The intended use is to alert the operator in charge during night time etc. This function is called "alarm call".

 The application creates logs where sent and received messages can be retrieved. The logs contain all important information about each message. There is also an API that can be used to retrieve message information from within your own application.

The MidJet Win2000/NT Monitor product allows you to perform the similar operations monitoring on systems the Microsoft Win2000 and NT operating systems. Entries in the Event Log can be selected and transferred, and predefined processes can be controlled active. As an option, user log files in text format can be monitored. Commands can be run, initiated from the

iSeries or the mobile phone. Messages can be created interactively on the NT, and an API allows the Win2000/NT programmer to include submission of SMS messages in Win2000/NT application programs.

1.2   License types

The following license types is available:

LO=Limited outgoing only
Functionality is limited to sending messages without system operations monitoring functions.

LB=Limited bidirectional
Functionality is limited to sending/receiving messages without system operations monitoring functions.

SO=Single user outgoing
One user, system operations monitor and outgoing messages.

2B=Two users bidirectional
Two users, system operations monitor and bidirectional messages.

UO=Unlimited users outgoing
Unlimited users, system operations monitor and outgoing messages.

U1=10 users bidirectional
10 users, system operations monitor and bidirectional messages.

UB=Unlimited users bidirectional
Unlimited users, system operations monitor and bidirectional messages.

NT=MidJet NT Monitor
Support for the MidJet NT Monitor product. The product code is displayed NT-n, where n is the number of NT's supported.

If n is '99+', an unlimited number of NT systems are supported.

2 GENERAL CONDITIONS FOR USE

Important, please read carefully!

Do not install the software until you have carefully read the following agreement. This agreement sets forth the terms and conditions for licensing the software from MidJet AB to you, and installing the software indicates that you have read this agreement and accept its terms and conditions.

2.1 License agreement

By installing the MidJet GSM Text software you agree to be bound to the following conditions for use.

Buying a license for this software grants the licensee the unlimited right to use this software on one IBM iSeries computer. The software itself and the trade mark are the sole properties of MidJet AB.

You are not allowed to make any changes in the software. It is not allowed to reverse engineer, adapt, translate, rent, sublicense, assign, lend, resell, distribute or network the software, or to create derivative works based upon the software or any part thereof.

The software may only be copied for backup reasons. It is the responsibility of the customer to make sure that the software and all documentation is not made available to other than users in the licensee's own organisation.

2.2 Maintenance agreement

Non-mandatory maintenance fee is charged 90 days after installation. This fee covers the following:

- Free telephone support

- New and updated versions of the product at no extra charge

2.3 Limited warranty

MidJet AB warrants that the software will perform substantially as described in this manual under normal use for a period of 90 days.

The entire liability for MidJet AB is either refund of the price paid or replacement of software or software components. MidJet AB has the option to decide if the software should be returned or replaced.

The customer is always granted the right to return the software within 30 days after first installation, with full refund of license fee paid.

MidJet AB or its suppliers is under no circumstance responsible for any damages including, without limitation, loss of business profits, business interruption, loss of business information or any other pecuniary loss, by using or by not being able to use the software.

3 Installation on the iSeries

3.1 Preparations for initial installation

The installation of MidJet GSM Text software is highly automated and will normally require less than two hours of work. All parts of communication, subsystem and other objects required are created automatically by the installation program or by the product itself when used. All configuration related files are also delivered with as much information as possible already in place.

Before installation you must decide upon method to connect to the GSM network(s). MidJet GSM Text supports:

- Connection via a supported GSM module attached to a V24 line or attached via a W&T TCP/IP Communication Server. Outgoing to GSM phones as well as incoming messages from GSM phones are supported.

- Dial-up direct connection via an asynchronous modem using the AT command set, connected to a V.24 communications line and to a telephone line. This connection type supports outgoing (from the iSeries to GSM telephones) messages only.

- Connection via TCP/IP. Availability depends on the support from the GSM operator. Provides bidirectional message transfer.

MidJet GSM Text supports connections to multiple GSM network operators using different connection methods.

The preferred method depends on required functionality and availability of a communication line, data communication and GSM network charges.

Installation from one iSeries to another via a communication link is supported. See chapter 9 for description of the Remote Install function.

3.1.1 Installation pre-requisites

In addition to a communication line or TCP/IP communication server and a modem or a GSM module with a GSM subscription, the following is needed:

- An iSeries/iSeries computer of any model running operating system OS/400 Version 5 Release 1 or later.

- Access to QSECOFR user profile.

- MidJet GSM Text delivery media and license code.

3.2 Initial installation procedure

Follow these steps:

- Verify that your communications equipment is installed and operational.

- Sign on to the system as QSECOFR. No other user profile will be accepted by the installation program.

- Place the GSMTEXT CD in the CD drive.

- Run the command **LODRUN** (*device name*).

The software will now be loaded, and entries with default values will be created in the files.

3.2.1 Quick install program (recommended)

MidJet GSM Text features a Quick Install program that very much simplifies the installation. It supports connection of a GSM module using a communication line or via a communication server. The server and the iSeries communicate over the local area network.

If you prefer to perform a manual installation or if another connection method is to be used, just press F12 when the first Quick Install screen is displayed.

The values entered in the Quick Install program can all be changed later.

After a few minutes, depending on system model and workload, the GSM Text Quick Install screen will be displayed.

```
GSM8901                     MidJet GSM Text            12-02-01   12.00.00
Ver  6.13                                              USERID     SYSNAME
                          Quick install program


              Important!
              Read chapter 2 in the MidJet GSM Text User's Guide
              before you proceed with the installation.
              This chapter contains the license agreement.

Type values and press Enter


Company name . . . . . . . . .

Specify Resource name or IP address comm server
Resource name  . . . . . . . .
IP address comm server . . . .

Network ID . . . . . . . . . .        F4=List
SIM card PIN code  . . . . . .
Device type  . . . . . . . . .



F12=Cancel
```

Quick install

Type values in the fields and press Enter.

Company name

The name of your company/organisation. It will be displayed on the Main menu and on printed reports.

Resource name

Specify the iSeries hardware resource that the GSM module is connected to. Use the command **WRKHDWRSC** to determine the resource name. Use this

field when the GSM module is connected to the iSeries via a communication line.

IP address comm. server

Use this field when the GSM module is connected via a communication server. Specify the IP address of the communication server. MidJet GSM text supports servers from W&T, type numbers supported are W&T #58001, #58004 and #58201.

Network ID

Specifies the number of the network of the SIM card. Press F4 to display a list of networks.

SIM card PIN code

The PIN code is used to check authority to the GSM SIM card. It cannot be altered with MidJet GSM Text, use in that case a mobile phone.

Module type

This field holds the type of the GSM module. The following types are supported:

A1	Siemens A1
ETM9200	ETM 9200
ETM9300	ETM 9300
ETM9350	ETM 9350
GM12	Ericsson GM12
GM22	Ericsson GM22
M1	Siemens M1
TC35	Siemens TC35
TC35i	Siemens TC35i
POCKETGSM	Digicom PocketGSM

F12=Cancel

Leave the Quick install program without saving the entered values.

3.3   Register license code

Before you can use any function of the product a license code must be entered. Use function key F23 to start the license code entry program.

See chapter 8 Main Menu for a description of how to use this program.

If you completed the Quick Install program go to section *Installation verification*, else continue with *Manual Installation*.

3.4 Manual installation

Use main menu option 20 to display the Configuration menu.

Then use:

- Option 1 to define/review general parameters.

- Option 3 to define/review systems, if in a multiple system environment.

- Option 4 to define/review communications parameters.

- Option 5 to define/review networks.

A detailed description how to use the options is found in *chapter 9.*

3.5 SSL Configuration

If you will use the TCP/IP connection to you network provider and use SSL or send e-mail using SSL, follow these steps to enable SSL on your system. The first step may already have been completed if you use SSL for other purposes on your system.

- Run command STRTCPSVR SERVER(*HTTP) HTTPSVR(*ADMIN)

- Connect to the system with a browser on port 2001

- Click Digital Certificate manager.

- Click Create New Certificate Store.

- Follow the prompt to create a new *SYSTEM certificate store.

No certificate needs to be assigned or created for GSM Text.

Then go to a command line and run the following command:

CALL GSMTEXT/GSM880C

This will grant GSMTEXT user profile authority to the system certificate store.

3.6 Installation verification

When installation is completed you are ready to verify the installation by sending a message. To do this, return to the MidJet GSM Text Main Menu and:

- Add an entry to the User File by using option 11.

- Start the MidJet GSM Text subsystem using option 21.

- Use option 1 to create a message.

If you have installed a GSM module, also check the radio signal quality. From the main menu, select option 20 Configuration, then option 4 Communications descriptions. Place an 8 in front of the used configuration, normally GSMT34, and press Enter. The Signal quality should be at least 10. If lower consider moving or replacing the antenna.

This completes the first part of the installation. Continue with options 2, 3 on the configuration menu for Schedules and Systems setup. Use menu option 10 on the main menu to specify options for Monitor Operations. Use option 20 to specify commands to be received from mobile phones.

It s highly recommended that you carefully read the configuration chapter describing all options. You will then be able to tailor MidJet GSM Text in a way that best suits your needs.

3.7 Upgrade Installation

Please observe that a new license code is required if upgrading from an earlier version than 6.00.

The upgrade installation is very easy to perform. Just follow these steps:

- Sign on as QSECOFR.

- End the subsystem by running the command **ENDGSMTSBS**.

- Make sure that MidJet GSM Text is not being used. This can be done with the command: **WRKOBJLCK GSMTEXT/USUSERP *FILE**
  The displayed list shall be empty. If not, end the jobs on the list before proceeding with the installation.

- Take a backup copy of the GSMTEXT library.

- Place the new CD in the desired CD drive.

- Run the command **LODRUN** (*device name*).

If a new license code is provided, also perform this step:

- When the MidJet GSM Text main menu is displayed, select F23 and enter the new license code.

The installation program automatically preserves the application data, and it is ready to use as soon the MidJet GSM Text Menu is displayed.

If you are upgrading from version 3.xx or later the installation program will automatically convert your files to new formats. It is recommended that you verify the Communications and Network file entries before you use the application the first time. Also change/verify the values in the configuration menu option 10 if you want to use the new monitor operations options.

MidJet GSM Text should now be available for use. Start the subsystem using menu option 21, and send a message using menu option 1 to verify the upgrade.

3.8 Move installation to a new system

When you want to move the GSM Text installation from one system to another, follow these steps. This procedure will retain all your data from the old system.

- On the old system – run Upgrade Installation of GSM Text if you have a later version of the software available.

- Save library GSMTEXT on the old system.

- Sign on as QSECOFR on the new system.

- Restore the GSMTEXT library.

- Place the new GSMTEXT CD in the CD drive.

- Run the command **LODRUN** (*device name*).

- When the MidJet GSM Text main menu is displayed, select F23 and enter the license code for the new system.

- Return to a command line with F3 or F12.

- Run command **CLRPFM GSMTEXT/MWMSQMP**

- Clear all message queues monitored by GSM Text, typically QSYSOPR and QSYSMSG and other message queues that may have been added.

  This completes the move to the new system.

3.9   Uninstall from iSeries

Follow these steps to perform a complete uninstall of the product:

- Sign on as QSECOFR.

- End the subsystem by running the command **ENDGSMTSBS**.

- Make sure that MidJet GSM Text is not being used. This can be done with the command: **WRKOBJLCK GSMTEXT *LIB** The displayed list shall be empty.

- Run the command **ADDLIBLE GSMTEXT**

- Run the command **CALL GSM730C**

- Run the command **RMVLIBLE GSMTEXT**

- Run the command **DLTLIB GSMTEXT**

- Run the command **WRKOBJOWN GSMTEXT**
  The displayed list shall be empty. If not, change owner of, or delete the objects still owned by the user GSMTEXT.

- Run the command **WRKDIRE**
  If any, remove all entries with user ID GSMTEXT.

Run the command **DLTUSRPRF GSMTEXT**

4 Installation on the Win2000 or NT system

4.1 Prepare for initial installation

The installation of MidJet NT Monitor software will normally take less than 30 minutes.

The software itself is always delivered together with the MidJet GSM Text software. When delivered on a CD, the same CD can be used for installation both on the iSeries and the on NT system. The NT Monitor software is also automatically loaded in a save file in the GSMTEXT library on the iSeries when the MidJet GSM Text product in installed. The save file is then loaded to a directory in IFS (Integrated File System). The MidJet NT Monitor installation program can be used with either of these sources.

The configuration related files are delivered with as much information as possible already entered, the only mandatory value that must be entered as part of the installation is the IP address to the iSeries.

4.1.1 Installation pre-requisites

The following is needed:

- An iSeries computer with the MidJet GSM Text product installed.

- The PC with Microsoft Windows 2000 or NT 4.00 operating system which is the target for the installation.

4.2 Initial installation procedure

Follow these steps:

- Sign on to the iSeries system as QSECOFR or another profile with authority level 2 to the GSM Text product.

- Run the command **STRGSMT.**

- Verify that the Win2000/NT license code is entered on the iSeries by pressing F23 from the main menu. The Win2000/NT license type must allow the number of NT Monitor systems you intend to use. See section *Register license code* in the *Installation on the iSeries* chapter for additional information.

- Go to configuration menu option 3, and add the Win2000/NT system.

- Select option 20, Command codes, on the configuration menu. If this is the first system you are installing the NT Monitor on, and then change the *Target system name* on command codes ZC, ZD and ZR from blank to the name of the Win2000/NT system. For the second and following systems, copy these command codes for every Win2000/NT Monitor system you add. Then change the target system name in the newly created command codes.

- Restart the GSMTEXT subsystem. Use GSM Text Main menu options 22 and 21.

- Log in to the target Win2000/NT system as *Administrator*.

- Use **either** *the Installation from CD* or *Installation from IFS* procedures described below.

4.2.1 Installation from CD

- Place the MidJet GSM Text CD in the CD drive on your Win2000 or NT system.

- Run *d*:**gsmntm/setup** where *d* is the letter of the CD drive.

- Follow the instructions on the screen.

4.2.2 Installation from IFS

This installation method assumes that you have Client Access or other equivalent software installed.

- On the iSeries, run the configuration menu option 31. This menu option is available once the NT license code is entered. This will load the NT Monitor software to *midjetinstall* directory on the iSeries.

- On the Win/2000 or NT system, use Explorer and open the midjetinstall directory located under the name of the iSeries.

- Double click on the **setup.exe** file.

- Follow the instructions on the screen.

4.3 Completing the installation

- Click on the ConfigTool icon on your desktop, or click the Start button, Programs, ConfigTool.

- Click on TCP/IP Config and enter the TCP/IP address of the iSeries.

> **Important!** Before you start to use the application, remove all old messages from the Win2000/NT's event log. If you don't, a huge number of messages could be sent to the operator's GSM phone.

The MidJet Win2000/NT Monitor is implemented using a service program. It is recommended to configure it to start automatically whenever the NT system is started.

To do this, click on Start, Settings and then on Control panel. Then click on Services, and select the MidJet Monitor service. Click on Configure and change Start Method from Manual to Automatic and click OK.

Now start the service manually by clicking Start.

4.4 Installation verification

You are now ready to verify the installation by sending a message.

- Click on Send Message on the Win2000/NT's desktop.

- Enter your GSM number (in international format), a message text and click Send. The message will be transferred to the iSeries, and will be delivered to you.

To verify the system monitor functions on the NT, sign on to the iSeries with the user ID you normally use.

- Start the GSM Main menu option 10. Assign yourself as the recipient of operational messages for the Win2000/NT system.

- Start the menu option 21 on Configuration menu of GSM Text on the iSeries.

- Send a ZC message from the mobile phone to the iSeries. This will start the Crash program on the Win2000/NT system, which simulates an error by creating an event log entry. This entry will then be received by MidJet Win2000/NT monitor, and it will be sent to your GSM phone.

> It s highly recommended that you carefully read the chapter describing all configuration options. You will then be able to tailor MidJet Win2000/NT Monitor according to your needs.

4.5 Upgrade Installation

The upgrade of the Win2000/NT Monitor follows the corresponding procedures as first install. When the upgrade is performed, all configuration data on the Win2000/NT system is preserved.

Before you begin the installation process on the Win2000/NT system, first stop the MidJet Monitor service.

Use the First installation procedure described from the beginning of this chapter, and bypass data-entry steps already performed during first installation. If you are installing from IFS, run menu option 31 on the iSeries GSM Text Configuration menu prior to installation on the Win2000/NT system.

4.6 Uninstall

Follow these steps to perform a complete uninstall of the product:

- Sign on as Administrator

- Stop the MidJet Monitor service

- Run the Uninstall program from the same source as you installed it from. If you don't know the installation source, then run install again, and then uninstall.

This procedure uninstalls all components of MidJet Win2000/NT Monitor from your system.

5 MidJet GSM Text functions

This section provides information about the functions in MidJet GSM Text. For a detailed description how to configure and use the product on your iSeries, please consult the following chapters.

5.1 Create messages

Messages to be sent out to mobile telephones can be created in different ways:

- You can use the interactive program from the Main menu. Message text is typed in, and recipient or recipients are selected. Messages can be sent to individuals or to persons connected to a distribution group. For the unlimited user's license types, a message can be addressed using only the GSM number.

- Using the SNDGSMTMSG messages can be created from a command line or, more likely, from within your application. This is very useful in case you want to know if an important batch job has reached a normal end or not. In this case you will include this command in your high-level program.

- The XSBMGTM API can be called to create a message from your high-level program. This is useful in situations when you want to report send result or other information about the message to your application. This API returns the message sequence number, which is the key parameter, along with the system name, when using the XRTVGT4 to retrieve information about the message. The version 3 XTRVGT4 API is still available.

5.2 Monitor system operations

MidJet GSM Text is designed to be a very useful tool helping the iSeries operator. System malfunctions and unexpected conditions generate a GSM Text message which will be forwarded to the operator or group on call.

The system operations monitor can be configured to perform the monitoring functions in a very flexible way. This is implemented using the concept of checkpoints. Thirteen different types of checkpoints are available and multiple checkpoints of each type can be created where applicable.

This section describes the characteristics of the different checkpoints.

- **MSGW   checkpoint**

    The monitor can check for the occurrence of jobs that have status MSGW. This is similar to using the WRKACTJOB command and looking in the status column. In this case it is performed using a system API to reduce system resource consumption. When a job with MSGW status is found, it is checked against the Job Name filter file including the jobs and the user ID of the jobs, with normal status MSGW, e g UPS monitor jobs. Jobs can be filtered out using *ALL as Job name or user ID. This alternative finds all application program errors which leave jobs in MSGW status, but not system problems.

- **MSGQ checkpoint**

The monitor can report all inquiry type messages entering a message queue. Messages a primarily selected by comparison of the severity level. Message exception handling is defined in the Message filter file. Messages can be selected or excluded based on any combination of message id, job name or user id. Specific messages can be re-routed to another user than the one who was defined for the entire system. Compared to the MSGW checkpoint, this covers more of the activity in the system, but it may require a little more effort to configure.

With the default setup of monitoring QSYSOPR and QSYSMSG all the important system messages will be forwarded.

If using MidJet GSM Text bidirectional, you have the capability to retrieve the help text of a message and to send a reply to a message directly from the GSM phone.

Do not use both MSGW and MSGQ for QSYSOPR at the same time. Duplicate error messages may be forwarded.

- **Job queue checkpoint**

  This checkpoint compares the number of jobs actually in the job queue with a configured value. If exceeded, an error message will be created. This is useful for finding jobs and programs in error, a job queue "piling up" might indicate an application program loop.

- **Out queue checkpoint**

  This checkpoint compares the number of spool files and/or number of pages actually in the out queue with configured values. If exceeded, an error message will be created. This is useful for finding program loops, printer performance problems and unexpected query list results.

- **Job checkpoint**

  Checks that a job with a specific user is active on the system. It can be any type of job, like order entry batch processing, communications or printer jobs.

- **Subsystem checkpoint**

  Works similar to the job checkpoint, checks that a subsystem is active.

- **Configuration status checkpoint**

  This checkpoint is used for checking the current status of a configuration object. Any status a configuration object can have can be defined as valid. Line descriptions, controllers, devices or network interfaces can be checked. If an exception if found, an error message will be created.

- **Sysact checkpoint**

  Active systems checkpoint is used to check that a remote system responds to a connection check. The remote system can be another iSeries, or if TCP/IP is used, any system with an IP address can be checked. In this case also routers, printers etc. with an IP address can be included. A completion message can be created at a predefined time, indicating how many systems were checked.

- **HTTP checkpoint**

  This checkpoint is used to check web servers. It will connect to the web server and receive response. If connection is unavailable or the response is invalid, a number of retries will be made. If still not available after all

retries, a message will be sent to the receiver of operational messages. The number of retries is controlled by the value specified under General configuration, "Max nbr of IP connect attempts". Another message is sent when the server resumes to normal operation after a failure.

- **POP3 checkpoint**

  Checks POP3 servers which hold incoming mail. The procedure is the same as for the HTTP checkpoint.

- **SMTP checkpoint**

  Checks SMTP servers which are used to send mail. The procedure is the same as for the HTTP checkpoint.

- **Server checkpoint**

  Generic check for TCP/IP servers. A connect attempt using the specified IP address and port number will be made. The retry procedure is the same as for HTTP checkpoint.

- **User defined checkpoint**

  A user-written program can be used to check for any other condition that should be tested.

All checkpoints are attached to schedules. Schedules control when the checkpoint shall run. A schedule describes a week in 30-minute segments which can be set on or off, and allows for change of the day of week for specific dates. Thereby holidays can be handled properly. Many schedules can be defined, allowing you to run the checkpoints exactly when you need.

The monitor program completes a processing cycle of all checkpoints after waiting a configurable number of seconds. A checkpoint can be set to bypass some cycles, it may be desirable to check message queues more frequently than the connections to remote systems. With these control mechanisms the resource consumption can be kept minimal.

A messages escalation function can be used. If a message is not replied or acknowledged within a specified time, an escalation message will be sent to the next member of the distribution group.

5.3   Send SMS messages from the iSeries

When a message is created it will be placed in a send queue to be processed immediately, and the message is sent to the mobile phone via a GSM operator. If a communications error occurs, multiple retries will be performed.

All relevant information about a message can then be retrieved in the Message log. If the iSeries is connected to the operator via a modem, the send result will also be stored in the log. If a GSM module is used, the return information from the device is stored instead. A user with full authority can view all messages on the system, without this authority a user will only see the messages he created himself.

Operational messages and messages created with the SNDGSMTMSG command, or the API, can also initiate an Alarm Call. This means a telephone call is placed to the GSM telephone after the message has been sent.

The entries in the log are automatically removed after a number of days, to be specified from 1 to 999.

5.4 Send e-mail from the iSeries

Messages created by GSM Text may user selectable be sent as e-mail. This function is controlled by the user options, main menu option 2. E-mails can be sent in addition to SMS or send instead of SMS. This is achieved by the integrated SMTP client. It has support for encrypted mail using SSL built into it.

5.5 Receive SMS messages on the iSeries

MidJet GSM Text has the optional (license types LB, 2B, U1 and UB) capability to receive messages. It can receive SMS messages sent from GSM telephones, or other equipment. The originator can be another iSeries, running this software.

When a message arrives, it is stored in the receive log file. The content of this file can be viewed in the Message log on the Main menu.

The message content will be a one or two character command code with optional parameters. Parameters are separated with blank or # sign. Other separator characters can be configured. A special type of command is used to reply to system or user-created messages. A message that will accept a reply is identified on the string

--> rpy to nbr: (*reply number*)

This string is added to the message text when the message is sent from the iSeries. The reply number is created automatically, and is starting from 1 for every recipient. Reply numbers are reused, if no messages for a user are waiting for a reply the next will have reply number 1.

A message reply must be sent before the reply validity period for a message expires. For system messages this limit is 72 hours. For user created messages this can be specified when the message is created. A message that no longer accepts a reply will be marked in the Receive log as *EXPIRED .

In the same way as for delivered messages, entries in the receive log can be automatically removed.

5.6 Process received messages

Receiving a message activates the receive process function. A new message will first be checked concerning authority. Three levels exist, and can be individually specified per command code. The most secure level requires that the originator is registered in the MidJet GSM Text user file, and specifically granted authority to the command. Intermediate level requires that the originator is a registered user. The third level performs no security check at all.

If the incoming message is valid for processing, a command string will be built. It will be based on the command string in the command code file together with parameters from the incoming message and/or default parameter values. System message replies are processed immediately, user messages can optionally be processed in batch later.

5.7 File maintenance

All MidJet GSM file maintenance is performed from the Main menu and from the Configuration menu. After the installation is completed, MidJet GSM Text will normally require very little maintenance efforts.

A user must have full authority in the user file to be able to use the configuration menu.

5.8 Multiple iSeries

There is a well-developed support for installations with multiple iSeries in a network. This includes the possibility to share communications equipment. Systems can share a modem or a GSM module connected to one of the systems. Operational messages for all iSeries can be presented on, and replied to, from one or more GSM telephone(s) or iSeries display.

6   MidJet Win2000/NT Monitor functions

6.1   System monitor functions

Monitor the Event Log

System, security and program messages from the Event Log can be forwarded to the receiver of operational messages. They can be selected based on category - Information, Warning or Error.

A filter function makes it possible to exclude unwanted messages based on event id.

Monitor other logs

Applications using their own log files in text format can be monitored. This is performed in the same way as for the Event Log, and any filtering must be done in the application.

Monitor processes

Important processes can be controlled to verify active status. If a process is missing, an operational message will be created.

6.2   Run commands

MidJet NT Monitor features a function to start commands on the Win2000/NT system from a mobile phone. The incoming messages are first authority checked on the iSeries and then transferred and executed on the Win2000/NT system.

When the command in the Win2000/NT system is started, the user can optionally receive a confirmation message. If a problem appears, this will be reported instead.

6.3   Reboot Win/2000 or NT system

A program that re-boots the system is a part of the package. It is available using the command code ZR.

6.4   Send messages

An interactive program enables you to enter a phone number to see the message text, and the message will be sent to a GSM telephone via the iSeries.

6.5 Languages

Screens and help-texts can be displayed in English, German, Spanish or Swedish.

6.6 Message API

For the purpose of message creation within user applications, an API is provided.

This makes it possible to develop programs that first receive a request from a GSM telephone, and then retrieves information stored in an application on the Win2000/NT, and finally sends the result back as a text message.

6.7 Background program

After the Win2000/NT system is started, the MidJet Monitor program starts. This program, running as a service, should always be active. It is a server program that collects and transfers the information to the monitor function of the iSeries.

If MidJet Monitor is not started on the Win2000/NT system, optionally a message can be created by the monitor function of the iSeries.

7 Start MidJet GSM Text

7.1 Interactive part

MidJet GSM Text consists of two major parts. One contains the interactive programs used for message creation, application set-up and maintenance. The other is the batch subsystem which handles message transmission, processing of incoming messages, and monitoring of mail and system operations.

To start the interactive part run the command

STRGSMT

and the MidJet GSM Text menu will be displayed.

Or optionally run the STRGSMT command with a function parameter:

STRGSMT 1   Send GSM Text Message.

STRGSMT 2   User options.

STRGSMT 5   Message Log.

STRGSMT 10 Monitor operations options.

STRGSMT 11 User maintenance.

STRGSMT 11 Distribution groups.

STRGSMT 20 Configuration.

STRGSMT 23 License code entry.

The library list is changed when MidJet GSM Text is started. When leaving the application, the initial library list is restored.

7.2 Batch Subsystem

The batch subsystem can be started in three different ways:

- By using option 21 on the menu.

- By including the command **STRSBS SBSD(GSMTEXT/GSMTEXT)** in your start-up program. See *CL Programmers guide* for a detailed description of how to modify the QSTRUP program.

- By including the command **STRSBS SBSD(GSMTEXT/GSMTEXT)** in a job scheduler program. Use the command **WRKJOBSCDE** if you want to use the standard OS/400 job scheduler program.

It is recommended that you automate the subsystem start, thereby making the MidJet GSM Text application available whenever desired.

Consequently, the subsystem could be ended by using option 22 on the menu.

A better way is to automate this similar to the start of the subsystem, using the command **ENDGSMTSBS**. Avoid ending the subsystem with the ENDSBS command, this can cause operational problems.

It is strongly recommended that you restart the subsystem once a day. This will prevent from having very long job logs on the system and will also free some disk space.

8 Main Menu

This is the main menu of MidJet GSM Text and it is displayed when you run the STRGSMT command with parameter 1 default value *MENU in effect.

```
 GSMMNU                        MidJet GSM Text            12-02-01   12.00.00
 Ver  6.13 T UB                                          USERID    SYSNAME

 (c) MidJet AB             Company name                   SBS Active

                      1. Send GSM Text message
                      2. User options

                      5. Message log

                     10. Monitor operations options
                     11. User maintenance
                     12. Distribution groups

                     20. Configuration
                     21. Start subsystem
                     22. End subsystem

                     90. Signoff

             Option ->  __
 _____
 F3=Exit          F12=Cancel         F14=WRKACTJOB        F23=License code
```

MidJet GSM Text Main Menu

Like most MidJet GSM Text displays the first line has the display name to the left and date and time to the right.

The second line displays the software version number i.e. 5.00, then a T or a P indicating that a Temporary or Permanent license code is in effect. The following two letters shows the license type.

To the right on the second line the user ID and the system name are displayed.

The number of options displayed on this screen depends on the value of the Authority level field in the User file and the License type. Options 1, 2, 5 are displayed for a user not registered in the user file or registered with Authority level 0. For a user with Authority level 1 also options 11 and 12 are displayed. If Authority level is 2, all options are available.

Option

Select a menu option, and press Enter.

F3 or F12

Leave the MidJet GSM Text application.

F14

Go to WRKACTJOB screen. Although adopted authority is used in the application, it is disabled when this function is used.

F23

Go to License code entry screen.

8.1 Send GSM Text message

This program is used to interactively enter message text and select recipients.

Use menu option 1 to display this screen.

```
GSM1001                     Send GSM Text message        12-02-01  12.00.00
                                                         USERID    SYSNAME
Enter message text and select recipients
                                           Position to      _____
Message text . . . .  _____
_____
_____
                                    Send to GSM number   _____
1=Select
O User ID    User name                 O User ID    User name
  USERID     User Name




                                                                       End
F3=Exit          F7=Message log   F9=Retrieve msg  F10=Distribution groups
F16=User maintenance      F19=Alarm call          F21=Non-display in log
Bottom
```

Message entry screen

Position to

Position the list of recipients to the user id entered in this field.

Message text

Type the message text, up to 160 characters

Select recipients
Place a 1 in front of users to receive this message. Multiple users can be selected. If more users than can be displayed exist, a plus sign on the lower right side of the screen will appear.

A message can be sent to any combination of registered users, an unregistered user and/or distribution group(s).

Send to GSM number

A message could be sent directly, without having to register the recipient. In that case, only type the GSM number in national format in this field. The message will be filed in the message log as sent to user *NONREG.

Access to this field depends on the license type and the setting of the field "Allow msg to nonregist receiver" in the user file.

F3=Exit

Leave the program.

F7=Message log

Go to the Message log.

F9=Retrieve message

This function retrieves the text of the previous message(s) created.

F10=Distribution groups

Go to the distribution group selection screen.

F12=Cancel

Return to the previous screen.

F16=User Maintenance

Go to the User maintenance screen.

F19=Alarm call

When using this function MidJet GSM Text will place an ordinary phone call to the receiving telephone after the message is sent. Enable the function with F19, it will be disabled after a message is sent or by pressing F19 again.

F21=Non-display message text in log

This function makes the message text unreadable in the message log. Instead '*Non-displayable text' will be displayed. Enable the function with F21, it will be disabled after a message is sent or by pressing F21 a second time.

8.1.1 Distribution group selection

This screen is displayed after pressing F10 in the main Send GSM Text message screen.

```
GSM1002                    Send GSM Text message      12-02-01   12.00.00
Ver  6.13                                             USERID     SYSNAME
              Type option, press Enter

Message text . . . .


1=Select
  Distribut
O group      Description
_ OPER       System operators












F12=Cancel
```

Distribution groups

Option

Place a '1' in front of distribution groups to receive this message, and press Enter.

After selecting one or more distribution groups, the message entry screen will be displayed again with the selected distribution group members marked with a '1'. Then press Enter again to send the message.

F12=Cancel

Return to the previous screen.

8.2   User options

Use menu option 2 to display this screen.

```
GSM1101                      User options              12-02-01   12.00.00
Ver  6.13                                              USERID    SYSNAME

Type values and press Enter

User ID  . . . . . . . . . . . USERID     User Name

Send message as GSM message  . 1  0=Never, 1=Always
                                   2=If signed on, 3=If signed off,
                                   4=On schedule
  Send as GSM msg schedule nbr     F4=List

Send msg as e-mail . . . . . . 1  0=Never, 1=Always
                                   2=If signed on, 3=If signed off,
                                   4=On schedule, 5=When not sent to GSM phone
  Send msg as e-mail schd nbr    8  F4=List

Run exit command . . . . . . . 5  0=Never, 1=Always
                                   2=If signed on, 3=If signed off,
                                   4=On schedule, 5=When not sent to GSM phone
  Run exit cmd on schedule nbr     F4=List

F3=Exit                  F12=Cancel
```

User options

This screen allows the user to specify how messages should be delivered.

Send message as GSM message

This field specifies the if/when a message created for this user shall be sent as a GSM message.

0   Messages will not be sent as GSM messages.

1   Messages will always be sent as GSM messages.

2   Messages will be sent as GSM messages if the user is signed on.

3   Messages will be sent as GSM messages if the user is signed off.

4   Messages will be sent as GSM messages determined by the schedule in the schedule number field.

Send as GSM msg schedule nbr
Schedule number used when 'Send message as GSM message' is set to 4.

Send messages as e-mail

This field specifies the if/when messages created for this user shall be sent as e-mail.

0   Messages will not be sent as e-mail.

1   Messages will always be sent as e-mail.

2   Messages will be sent as e-mail if the user is signed on.

3   Messages will be sent as e-mail if the user is signed off.

4   Messages will be sent as e-mail determined by the schedule in the schedule number field.

5	Messages will be sent as e-mail if messages are not sent as GSM messages.

Send as e-mail schd nbr

Schedule number used when 'Send message as e-mail' is set to 4.

Run exit command

This field specifies if and when the exit command shall run.

0	The exit command will not run.
1	The exit command will always run.
2	The exit command will run if the user is signed on.
3	The exit command will run if the user is signed off.
4	The exit command will run determined by the schedule in the schedule number field.
5	The exit command will run if messages are not sent as GSM messages.

Run exit command on schedule nbr

Schedule number used when for the exit command. Used when 'Run exit command' is set to 4.

8.3 Message logs

8.3.1 User message log

This screen is displayed for a user with authority level 0 or 1 by using menu option 5.

```
GSM1201                         Message log            12-02-01   12.00.00
Ver  6.13                                              USERID     SYSNAME

Type option, press Enter                Position to date
  5=Display

Opt Crt date Time  Status     To user ID Message text
    03-12-01  9:52 Stored     MIDJET     Text
    03-12-01  9:50 Stored     MIDJET     Text




                                                                     End
F3=Exit          F5=Refresh      F12=Cancel          F17=Top
Bottom
```

User send log

This screen displays the user's messages, sorted in descending order on creation date and time.

Option

Type a '5' and press Enter to display detailed information about a message.

F3=Exit

Leave the program.

F5=Refresh

Refreshes the display, useful to see if the status has changed.

F12=Cancel

Redisplay previous screen.

F17=Top

Position to first record in file.

8.3.2 Operator Message log

This screen is displayed for a user with authority level 2 by using menu option 5.

```
GSM1301                        Message log            12-02-01   12.00.00
Ver  6.13                                             USERID     SYSNAME

Type option, press Enter              Position to date
  5=Display

Opt Status      To/From           Message text
 _  Delivered   To: USERID        Outgoing message text
 _  Processed   From: USERID      R C




F3=Exit         F5=Refresh   F11=List type 2  F12=Cancel            More
F13=Select      F17=Top
```

Operator Message Log, List type 1

This screen displays all outgoing and incoming messages, sorted in descending order on creation date and time. Messages that require a reply are displayed highlighted.

Option

Type a '5' and press Enter to display detailed information about a message.

F3=Exit

Leave the program.

F5=Refresh

Refreshes the display, useful to see if the status has changed.

F11=Display list type 2

Changes the display to list type 2.

F12=Cancel

Redisplay previous screen.

F13=Select

Go to message selection screen.

F17=Top

Position to first record in file.

8.3.3 List type 2

This screen is displayed after pressing F11 in the operator message log screen.

```
GSM1302                          Message log              12-02-01   12.00.00
Ver  6.13                                                 USERID     SYSNAME

Type option, press Enter                   Position to date
  5=Display
                                Ori                        Rpy
Opt Crt date Time  Status       sys From       To user ID nbr Reply
  _  12-02-01 12:00 Delivered        GSMTEXT    USERID
  _  12-02-01 12:01 Processed        USERID     *LOCAL







F3=Exit         F5=Refresh   F11=List type 1  F12=Cancel           More
F13=Select      F17=Top
```

Operator Message Log, List type 2

Option

Type a '5' and press Enter to display detailed information about a message.

F3=Exit

Leave the program.

F5=Refresh

Refreshes the display, useful to see if the status has changed.

F11=Display list type 1

Changes the display to list type 1.

F12=Cancel

Redisplay previous screen.

F13=Select

Go to message selection screen.

F17=Top

Position to first record in file.

8.3.4 Message selection

This screen is used for specifying message selection criteria. Use any combination of the fields.

This screen is displayed after pressing F13 in a message log screen.

```
GSM1306                        Message log              12-02-01   12.00.00
Ver  6.13                                               USERID    SYSNAME

Type selection value or values and press Enter

From date  . . . . . . . . . ._____
From time  . . . . . . . . . ._____

To date  . . . . . . . . . . ._____
To time  . . . . . . . . . . ._____

Message word or phrase . . . . _____

To user  . . . . . . . . . . . _____
From user  . . . . . . . . . . _____

System descript abbreviation . ___




F12=Cancel
```

Message selection

From date

Type the lowest creation date to display in YYMMDD format.

From time

Type the lowest creation time to display in HHMMSS format.

To date

Type the highest creation date to display in YYMMDD format.

To time

Type the highest creation time to display in HHMMSS format.

From date

Type the lowest creation date to display in YYMMDD format.

Message word or phrase

Type a word or phrase that shall be found in the message.

To user

The user id of the recipient of the message.

From user

The user id of the originator of the message.

8.3.5 Sent message details

This screen is displayed after selecting a sent message in a message log screen.

```
GSM1302                      Message log              12-02-01   12.00.00
Ver  6.13                                            USERID     SYSNAME

Sequence number  . .     84            Creation date  . . . 12-02-01
Status . . . . . . . Delivered         Creation time  . . . 12:00:00

To user ID . . . . . USERID            Alarm send date  . .
GSM number . . . . . 46708360259       Alarm send time  . .
Send alarm call  . . No
                                       Reply number . . . .    7
Send date  . . . . . 12-02-01          Reply  . . . .
Send time  . . . . . 12:00:07          Reply date . . . . .
From user ID . . . . GSMTEXT           Reply time . . . . .

E-mail sent to . . . user.name@example.com 12-02-01 12.00.02

 Message text . . . . QDFTJOBD GSMTEXT 059152 DEMOERR 1800 tried to divide by
zero (factor 2) (C G S D F).

 Network response . .  +CMGS: 18    OK

 F3=Exit         F8=Reply        F12=Cancel         F13=Resend message
 F23=Delete message
```

Sent Message Details

This screen holds the detailed information for each message.

The sequence number is assigned by the system creating the message.

The Status field could have the following values:

Sndq   In send queue.

Sndq-rmt In send queue on a remote system.

Snd-rty   Attempt to send message failed. Maximum three attempts will be made, if still not successful the status is changed to Perm error.

Stored   Message accepted for transmission by the network.

Delivered The message is successfully delivered to the recipient.

Not avail The message could not be sent because there was no configuration available to the network or mobile telephone number.

Unknown   The status of the message submission could not be determined.

Perm error Permanent error, message distribution failed, and no more distribution attempts will be made.

The *To user ID* field holds the user id of the recipient if he is registered in the user file. Messages sent directly to a GSM number are filed to User ID *NONREG.

This screen also shows message creation, message send, and message alarm date and time.

For a message, which can be replied to, the reply number is displayed. The reply number start from 1 for every user, and the number is reused. That means, if a user has no outstanding messages to reply to, the next message will have reply number 1. If a reply has arrived it is displayed together with reply time and reply date.

If e-mail was requested the e-mail address and the data and time the messages was delivered to the SMTP server is displayed.

The bottom field holds the response received from the network operator, for messages sent via modem, TCP/IP. For messages sent via a GSM module, the device return message is placed here.

Pressing Enter redisplays the previous screen.

F8=Reply

Go to the reply entry screen.

F13=Resend

Changes the status to Sendq, and the message will be resent.

F23=Delete

Removes the message from the file, independent of the message status.

8.3.6 Reply entry

This screen is displayed after pressing F8 in the message detail screen.

```
GSM1304                      Message log              12-02-01   12.00.00
Ver  6.13                                             USERID     SYSNAME


Sequence number  . .      84           Creation date  . . . 12-02-01
Status . . . . . . . Delivered         Creation time  . . . 12:00:00

To user ID . . . . . USERID            Alarm send date  . .
GSM number . . . . . 46708360259       Alarm send time  . .
Send alarm call  . . No
                                       Reply number . . . .    7
Send date  . . . . . 12-02-01          Reply  . . . .
Send time  . . . . . 12:00:07          Reply date . . . . .
From user ID . . . . GSMTEXT           Reply time . . . . .

Message text . . . . QDFTJOBD GSMTEXT 059152 DEMOERR 1800 tried to divide by
zero (factor 2) (C G S D F).


Reply  . . . . . . . _____


F12=Cancel
```

Reply entry

Reply

Type the reply text and press Enter. A *MSGRPY type message will be
created and processed by MidJet GSM Text, as if the message was sent
from a GSM telephone.

8.3.7 Received message details

This screen is displayed after selecting a received message in a message log screen.

```
GSM1305                    Message log              12-02-01   12.00.00
Ver  6.13                                           USERID     SYSNAME

Sequence number  . .      1             Creation date  . . . 12-02-01
                                        Creation time  . . . 12:00:00
Status . . . . . . . Processed
Reject reason . . .                     Target system name . NTSYS

From user ID . . . . USERID
GSM number . . . . . 46675234890

Message text . . . . ZD



Command string . . . *NTCMD





F3=Exit         F12=Cancel      F18=Process again   F23=Delete message
```

Received Message details

This screen holds the detailed information for each received message.

The sequence number is assigned by the system creating the message.

Status

The Status field could have the following values:

New   New message, not yet processed.

Processed   Successfully processed message.

Rejected   Processing of this message failed. The reject reason is shown in the *Reject reason* field.

Reject reason

The reject reason field can have the following values:

blank   This field will be blank for new or successfully processed messages.

Unkn user   The user was not registered in the user file, and it was specified in the command code file that this command can only be used by a registered user.

Unkn CMD   The command code does not exist in the command code file.

Not author The user does not have the proper authority to run this command.

Rp nbr err The reply number used does not match any outstanding reply request for the user.

Reply error The reply to the message was not correct.

The *From user ID* holds the user id of the originator if he is registered in the user file. Otherwise this field shows *NONREG.

This screen also shows message creation date and time, and the command string that was created.

Pressing Enter redisplays the previous screen.

F18=Process again

Changes the incoming message's status to new, and causes it to be processed again.

F23=Delete

Removes the message from the file, independent of message status.

8.4 Monitor operations options

This program is used to specify the receiver of operational messages.

This screen is displayed after selecting menu option 10.

```
 GSM1401                    Monitor operations options     12-02-01   12.00.00
 Ver  6.13                                                 USERID     SYSNAME

 Type option, press Enter                       Position to  _____
   2=Change
     System                                      Operations Alarm Sched
 Opt name       Description                      msg receiv call  nbr
  _  *LOCAL      Local system                     USERID     0
  _  NTSYS       NT Server                        USERID     0       1













                                                                      End
 F3=Exit          F12=Cancel
```

Monitor operations options

Option

Type a '2' and press Enter to change the values for a system.

8.4.1 Local system values

This screen is displayed after selecting a system for change.

```
GSM1402                    Monitor operations options      12-02-01   12.00.00
Ver  6.13                                                  USERID     SYSNAME

Type values and press Enter

System name  . . . . . . . . . *LOCAL

System description . . . . . . Local system
System descript abbreviation .

Operational message receiver . *NONE_____
Send alarm call  . . . . . . . 0  0=No, 1=Yes












F3=Exit              F12=Cancel
```

Local system

Operational messages receiver

The ID of a user, or the ID of the distribution group that is currently assigned
to receive operational messages. Also valid value is *NONE.

Send alarm call

This field controls if the alarm call function is to be used. When used, a
normal telephone call will be made with a modem. The purpose of this is to
use the loud ring signal to make the operator in charge aware of a system
problem message.

8.4.2 Win/2000 NT system values

This screen is displayed after selecting a Win/2000 or NT system.

```
GSM1402              Monitor operations options      12-02-01  12.00.00
Ver  6.13                                            USERID    SYSNAME

Type values and press Enter

System name  . . . . . . . . . NTSYS

System description . . . . . . NT
System descript abbreviation . 010

Operational message receiver . USERID____
Send alarm call  . . . . . . . 0  0=No, 1=Yes

Schedule number  . . . . . . .   1
Check cykles bypass value  . .   0

Send message if connect failed 1
Maximum number of msg per day  25




F3=Exit              F12=Cancel
```

Win/2000 or NT system values

Operational messages receiver

The ID of a user, or the ID of the distribution group that is currently assigned to receive operational messages. Also valid value is *NONE.

Send alarm call

This field controls if the alarm call function is to be used. When used, a normal telephone call will be made with a modem. The purpose of this is to use the loud ring signal to make the operator in charge aware of a system problem message.

Schedule number

The number of the schedule used to control when this function shall be active.

Check cycle bypass value

This field controls if the checkpoint shall run every time the monitor operations program runs. In order to save system resources it might be desirable to bypass some check cycles. The value controls how many cycles in a row should be bypassed before the Win2000/NT monitor will run again.

Send message if connect failed

Use this field to specify if a message should be sent when a connect attempt to this system was unsuccessful.

0=No   Message will not be sent.

1=Yes   Message will be sent.

Maximum number of msg per day

If not blank, the maximum number of messages to be sent for this system during a day. When the maximum number is reached, a message indicating this condition will be sent to the receiver of operational messages.

8.5 User maintenance

This screen is displayed after selecting option 11 on the menu.

```
GSM1501                        User maintenance            12-02-01   12.00.00
Ver  6.13                                                  USERID     SYSNAME

Type option, press Enter                       Position to  _____
  2=Change  3=Copy     4=Delete    7=Rename
                                                                   Auth
Opt User ID    User name                     GSM number           lvl
 _   USERID     User Name                     123456789             2









                                                                         End
 F3=Exit          F6=Create      F12=Cancel
```

User's screen

A user could be registered in this file in order to appear in the *Select Recipients Screen* when entering messages. Also, if a user should have access to all functions of the MidJet GSM Text application, a user record with operator authority must be present.

Option

Use option 2 to change an existing, or option 4 to delete a record.

F6=Create

F6 displays a screen used to create a new user.

8.5.1 User details

This screen is displayed after selecting a user to change, or an empty screen if F6 is pressed.

```
 GSM1502                     User maintenance          12-02-01   12.00.00
 Ver  6.13                                             USERID    SYSNAME

 Type values and press Enter

 User ID  . . . . . . . . . . . USERID

 User name  . . . . . . . . . . User Name _____

 Country prefix . . . . . . . . 46_
 GSM number . . . . . . . . . . 123456789_____
 Send via network . . . . . . . 240-01 F4=List

 E-mail address . . . . . . . . user.name@company.com_____
 _____

 Authority level  . . . . . . . 2 0=Base, 1=Extended, 2=All
 Allow msg to nonreg receiver . 1 0=No, 1=Yes




 F3=Exit         F10=User options      F11=Advanced options  F12=Cancel
```

User details

Type values and press Enter

User ID

The user ID used in MidJet GSM Text. It is good practice to use the same user ID as used for sign on, and this is necessary if the mail check function is to be used.

User Name

Will be displayed in various screens.

Country prefix

Country prefix that is used to identify the country when sending messages. The value is the same as for international phone calls.

GSM number

The GSM telephone number in national format. I.e. without any international prefix or country code. It can be entered with separating characters, i.e. 123-4567890, making it easier to read.

Send via network

This field specifies which network to be used when sending messages to this user. Press F4 with the cursor in this filed for a list of operators.

E-mail address

The e-mail address to the user.

Authority level

This field controls the user authority within the MidJet GSM Text application.

0   The user is limited to create messages, control his own User options and display messages that he created.

1   In addition to 0 (Base) authority the user can also maintain users, create new users with the same or lower authority and maintain distribution groups.

2   The user can use all functions of the product.

F10=User options

This function key allows any user with authority level 2 update access to any user's "User option". See this section earlier in this manual.

F11=Advanced options

Go to advanced options screen.

8.5.2 Advanced options

This screen is displayed after pressing F11 in the User details screen.

```
GSM1503                    User maintenance           12-02-01   12.00.00
Ver  6.13                                             USERID     SYSNAME

Type values and press Enter

User ID  . . . . . . . . . . . USERID

User name  . . . . . . . . . . User Name

Phone display line length  . .
Originator number  . . . . . . _____

Exit command string  . . . . . *SYS_____
_____
_____
_____
_____
_____
_____
_____

User data  . . . . . . . . . . _____

F3=Exit          F12=Cancel
```

Advanced options

Phone line length

 Max number of characters on each line when the GSM telephone is used to display short messages (SMS).

Originator number

The originator number is sent together with the message, and is shown on the telephone display. This function is only supported by some GSM operators.

If not specified here, the value entered in General configuration is used.

The value is used when this user creates a message.

Exit command string

Specify the command to be run when the exit command function is active. It can be any valid user or system command. The following describes the variables and values returned for the substitution parameters:

&U   User id in the user file.

&M   The text content of the message.

If the value is *SYS, the command string specified in General configuration, Part 2 will be used.

User data

User data about the user can be stored here. This field is not processed by the MidJet GSM Text application.

8.5.3 Copy/rename a user

This screen is displayed after selecting a user for rename or copy in the screen.

```
GSM1506                    User maintenance        12-02-01  12.00.00
Ver  6.13                                          USERID    SYSNAME

Copy - Type new name and press Enter.

User ID  . . . . . . . . . . USERID
User name  . . . . . . . . . User Name

New name . . . . . . . . . . _____




F12=Cancel
```

Copy/rename screen

New name

Type the new name. This must not be the same as an existing user in the user or distribution group file.

8.6 Distribution groups

Use option 12 on the main menu to display this screen.

```
GSM1601                      Distribution groups        12-02-01   12.00.00
Ver  6.13                                               USERID     SYSNAME

Type option, press Enter                    Position to  _____
  2=Change    4=Delete
     Distribut
Opt group      Description
  _   OPER       System operators






                                                                      End

 F3=Exit          F6=Create     F12=Cancel
```

Distribution groups

Option

Use option 2 to change the description or add/delete distribution group members. Use option 4 to delete a distribution group and its members.

F6=Create

F6 displays a screen used to create a new distribution group.

8.6.1 Distribution group details

This screen is displayed after selecting a distribution group to change, or an empty screen if F6, Create, is pressed.

```
GSM1602                    Distribution groups        12-02-01   12.00.00
Ver  6.13                                             USERID     SYSNAME

Type values and press Enter

Distribution group name  . . . OPER

Distribution group description System operators_____






F3=Exit          F12=Cancel
```

Distribution group details

Press Enter to maintain distribution group members.

Distribution group ID
An ID of a group cannot be the same as the ID of a user.

Group description
Descriptive text of the distribution group.

8.6.2 Group members

This screen is displayed after pressing Enter on a Distribution group detail screen.

```
GSM1611                        Group members            12-02-01   12.00.00
Ver  6.13                                               USERID     SYSNAME

OPER       System operators

Type option, press Enter
 4=Delete

Opt Seq User ID    User name                    GSM number
 _     5 USERID    User Name                    46123456789




F3=Exit          F6=Create     F12=Cancel
```

Group members

This screen allows add or delete of group members.

Option

Use option 4 to delete one or more members of a group.

F6=Create

Use F6 to add new group members.

8.6.3 Add group member

This screen is displayed after pressing F6 in the distribution group screen.

```
GSM1612                      Group members           12-02-01  12.00.00
Ver  6.13                                            USERID    SYSNAME

Type values and press Enter

Distribution group name  . . . OPER

User ID  . . . . . . . . . . . _____  F4=List








F12=Cancel
```

Add group member

User ID

Enter the ID of a user or press F4 for a list of users.

8.6.4 License codes

This screen is displayed after pressing F23 in the main menu.

```
GSM1901                      Enter license code          12-02-01  12.00.00
Ver  6.13                                                USERID    SYSNAME

Type option, press Enter
  4=Delete
    License  Lic    Temp  Expiration
Opt class    type   Perm  date        Remarks
 _  AS400    UB        P
 _  NT       NT-99+    T   1998-12-31




                                                                      End
 F3=Exit          F6=Register license code        F12=Cancel
```

License codes

This screen contains information about existing license codes. One or two lines may exist, the license code for the iSeries and license code for the Win2000/NT product.

F6=Register license code

Use F6 to display the license entry screen.

8.6.5 Register a license code

This screen is displayed after pressing F6 in the license code screen.

```
GSM1902                    Enter license code          12-02-01   12.00.00
Ver  6.13                                              USERID     SYSNAME

Type values and press Enter



License code string  . . . . . ____ - ____ - ____ - ____








F12=Cancel
```

Register a license code

License code string

Type the license code string and press Enter. A message will indicate of the code was accepted.

9 Configuration

MidJet GSM Text is delivered with as much information as possible already entered in the configuration files. The configuration menu items are intended to be used by the person responsible for the installation. It is highly recommended that you read this chapter carefully before performing any of the configuration tasks.

Use option 20 on the GSM Text Main Menu to display this screen.

```
GSM2001                        Configuration              12-02-01   12.00.00
Ver  6.13                                                 USERID     SYSNAME


                       1. General
                       2. Schedules
                       3. Systems
                       4. Communication config descriptions
                       5. Network operators

                       7. National character translation

                      10. Monitor system operations


                      20. Command codes
                      21. Simulate msg from mobile

                      30. Remote installation
                      31. Load NT Monitor programs

              Option ->

F3=Exit
```

Configuration menu

Option

Select an option from the menu and press Enter.

Avoid changing values in items 2 through 10 when the MidJet GSM Text subsystem is active, as this may cause operational problems.

F3=Exit

Leave the configuration menu.

9.1 General configuration

This and the following two screens contain base values for MidJet GSM Text operation.

Use option 1 on the configuration menu to display this first screen.

9.1.1 Part 1

```
GSM2101                         General                 12-02-01   12.00.00
Ver  6.13                                               USERID    SYSNAME
                           Type values and press Enter

Company name . . . . . . . . . Company Name_____

Language code  . . . . . . . . ENG
Country prefix . . . . . . . . 46_

Sending system name  . . . . . *LOCAL____ F4=List
Cfg name outgoing/combined msg *NONE_ F4=List
Config name incoming messages  *NONE_ F4=List
Configuration name alarm calls *NONE_ F4=List

Port number for outbound comm  5012
Port number for inbound comm . 5013

Enable reply function  . . . . 1 0=No, 1=Yes

Originator number  . . . . . . 1_____


F12=Cancel
```

General Configuration part 1

Company name

The company name is displayed on the MidJet GSM Text main menu, and on printed output.

Language code

Available language codes for MidJet GSM Text screens and help texts.

DEU German

DES Swiss German

ENG English

ESP Spanish

FRA French

ITA Italian

NON Norwegian

SVE Swedish

If the language code is changed, the new value will be in full effect after the application and the subsystem has been restarted.

Country prefix

The country prefix identifying the country when sending messages. The value is the same as for international phone calls.

Sending system name

The name of the iSeries system that actually delivers the messages to the GSM network(s). Press F4 with the cursor in this field for a list of systems.

Cfg name outgoing/combined msg

Specify the configuration name to use for message transmission. This value is used only if "Sending system" is set to "*LOCAL", and the corresponding field in the network file is set to "*SYS".

Cfg name incoming messages

Not in use, leave the value "*NONE".

Configuration name alarm calls

Specify the configuration name to use for placing alarm calls. It must be a configuration of connection type 1 (asynchronous modem) or connection type 2 (synchronous modem). This value is used only if "Sending system" is set to "*LOCAL", and the corresponding field in the network file is set to "*SYS".

Port number for outbound comm

The port number used for outbound TCP/IP communication with the MidJet NT Monitor program product.

Port number for inbound comm

The port number used for inbound TCP/IP communication with the MidJet NT Monitor program product.

Enable reply function

This field controls if the message reply function is to be enabled. When active, a reply number is added to messages with reply request. This is performed when the message is sent, and the reply will be processed when it arrives.

Specify **0** if the function shall be inactive, **1** if it shall be active.

Originator number

The originator number is sent together with the message, and shown on the telephone display. This function is supported by some GSM operators and is only in effect when messages are sent via a modem.

9.1.2 Part 2

```
GSM2102                          General                  12-02-01   12.00.00
Ver  6.13                                                 USERID     SYSNAME
                          Type values and press Enter

Use blank as separator charact 1   0=No, 1=Yes
Additional separator character #

Rejected message receiver  . . USERID____

Keep messages  . . . . . . . .  90 Days
Keep communication logs  . . .  30 Days

Exit command string  . . . . . SNDGSMTBRK USID(&U) MTXT(&M)_____
_____
_____
_____
_____
_____
_____
_____




F12=Cancel
```

General Configuration part 2

Use blank as separator character

This field controls if blank shall be used as separator character between the command code and between the parameters in incoming messages. Specify **0** for no, and **1** for yes.

Additional separator character

If desired, specify the additional separator character to be used.

Rejected message receiver

This field specifies the id of the receiver to be notified if an incoming message has been rejected. A message will be rejected if the command code is unknown, or if the user is not authorised to use it.

*NONE Function is not active.

*SYS The notification message will be sent to the same user as is specified to receive operational messages for this system.

User id The id of the user or distribution group who shall receive the notification message.

Keep messages

The number of days during which messages (outgoing and incoming) are kept on the system. Thereafter they will automatically be deleted when the subsystem is started.

Keep communication logs

The number of days communication logs are kept in out queue GSMTEXT in library GSMTEXT. Thereafter they will automatically be deleted when the subsystem is started.

Exit command string

Specify the command that shall be run when the exit command function is activated. It can be any valid user or system command. The following describes the variables and values returned for the substitution parameters:

&U User id in the user file.

&M The text content of the message.

This value is used when the Exit command string value in the user file is set to *SYS.

9.1.3 Part 3

```
GSM2103                          General              12-02-01  12.00.00
Ver  6.13                                             USERID    SYSNAME
                          Type values and press Enter

Modem command translation from $#@_____
Modem command translation to . ÅÄÖ_____

Operations monitor interval  .   15 Seconds

Enable group escalation  . . . 0    0=No, 1=Inquiry msg, 2=All msg
Escalation delay time  . . . . 15   Minutes

Max nbr of IP connect attempts  5
Incoming SMS validity period . 72   Hours

SMTP server  . . . . . . . . . smtp.example.com_____
_____
SMTP server port number  . . . __465
Sender e-mail address  . . . . sender@example.com_____
_____
Use SSL  . . . . . . . . . . . 1    0=No, 1=Yes
User id  . . . . . . . . . . . userid_____
Password . . . . . . . . . . . password_____
F12=Cancel
```

General Configuration part 3

Modem command translation from

Enter the national character string to be translated. It is used when sending AT commands via an asynchronous modem.

Modem command translation to

The translated values of the characters.

Operations monitor interval

Interval in seconds between the system performs system monitor activity. Specify a value between 10 and 9999 seconds. A value less than 10 will be handled as 10.

Enable group escalation

This field controls if group escalation shall be active for system messages. When active, an escalation message is created if a message is not replied/acknowledged within a specified time. The escalation message is sent to the next member in the distribution group.

0   Not active.

1   Active for inquiry messages

2   Active for all messages.

Escalation delay time

The number of minutes the system waits before creating an escalation message.

Max nbr of IP connect attempts

The maximum number of connect attempts made to a remote system before considered as unsuccessful. This value is used when the *SYSACT, *HTTP, POP3, *SMTP or *SERVER checkpoint is testing the TCP/IP connection to a remote system.

Incoming SMS validity period

Enter the number of hours the incoming SMS should be considered valid.

SMTP server

The name or ip address to the SMTP server.

SMTP server port number

Port number to be used for connection to the SMTP server. Usually port number 25 is used for non-SSL connections and port 465 for SSL.

Sender e-mail address

The sender e-mail address.

E-mail address	A valid e-mail address.
*NOREPLY	When this special value is specified 'noreply' will be used as the local part of the address. Domain name will be determined from the system TCP/IP configuration value of DMNNAME.

Use SSL

This field controls if SSL is used for this connection.

0   SSL is not used.

1   SSL is used.

User id

The user ID for logon to the SMTP server. Use this field if required by the SMTP server, otherwise leave blank.

Password

Password to the SMTP server. Enter a value in this field if 'User id' is specified, otherwise this field may be left blank.

9.2 Schedules

This option is used for maintenance of the schedule file. A schedule describes a week in 30 minute segments, which can be active or not. The monitor functions of MidJet GSM Text uses schedules to decide when the function should be performed.

This screen is displayed using menu option 2.

```
GSM2201                          Schedules              12-02-01   12.00.00
Ver  6.13                                               USERID     SYSNAME

Type option, press Enter                    Position to  _____
  2=Change    4=Delete
    Sched
Opt nbr      Description
 _     1     0:00 - 23:59
 _     2     7:00 - 18:59




                                                                   End
 F3=Exit         F6=Create      F11=Alter day of week    F12=Cancel
```

Schedules

Option

Use option 2 to display a screen for maintenance of a schedule or use option 4 to delete an entry.

F6=Create

Press F6 in order to create a new schedule.

9.2.1 Schedule details

This screen is displayed after selecting a schedule for change, or an empty screen if F6, Create, was pressed.

```
GSM2202                      Schedules            12-02-01   12.00.00
Ver  6.13                                         USERID     SYSNAME

Type values and press Enter

Schedule number  . . . . . . .   1

Schedule description . . . . . 0:00 - 23:59_____

                 Time               1 1 1 1 1 1 1 1 1 1 2 2 2 2
Day              0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3
1 Monday         XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
2 Tuesday        XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
3 Wednesday      XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
4 Thursday       XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
5 Friday         XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
6 Saturday       XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
7 Sunday         XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX




F3=Exit          F12=Cancel
```

Schedule details

Schedule number
A number between 1 and 999 identifying the schedule.

Schedule description
Descriptive text of the schedule.

Schedule period active flag
Indicate with an 'X' every period during the week that shall be considered active. Any other character will be translated to an 'X' when pressing Enter.

9.2.2 Change day of week

This screen show all dates that have an alternate day of week assigned to it.

It is displayed after pressing F11 in the first schedule screen.

```
 GSM2211                        Change day of week        12-02-01  12.00.00
 Ver  6.13                                                USERID    SYSNAME

 Type option, press Enter                    Position to  _____
   2=Change    4=Delete
                 Alt day
 Opt Date        of week
  _  2003-12-24   7
  _  2003-12-25   7
  _  2003-12-26   7
  _  2003-12-31   6




                                                                        End
 F3=Exit          F6=Create      F12=Cancel
```

Change day of week

Option

Use option 2 to display a screen for maintenance of a schedule or use option 4 to delete an entry.

F6=Create

Press F6 in order to create a new date entry.

9.2.3 Change day of week for a date

```
GSM2212                    Change day of week        12-02-01  12.00.00
Ver  6.13                                            USERID    SYSNAME

Type values and press Enter

Date . . . . . . . . . . . . .              YYYYMMDD

Alternative day of week  . . .







F3=Exit         F12=Cancel
```

Change day of week

Date

Enter the date in YYYYMMDD that should have the day of week value altered.

Alternative day of week

Enter the day number of the week. Monday is 1, Tuesday is 2 etc.

9.3 Systems

This file holds information about the other systems in the network that this iSeries will communicate with using MidJet GSM Text.

Also other units like routers, printers or any other device, unit, or node with an IP address can be entered here. They will then be enabled for connection check using the *SYSACT checkpoint.

Use option 3 on the configuration menu to display this screen.

```
GSM2301                         Systems            12-02-01  12.00.00
Ver  6.13                                          USERID    SYSNAME

Type option, press Enter                  Position to  _____
  2=Change   4=Delete
    System                                System
Opt name        Description              type
  _  *LOCAL      Local system            *AS400
  _  NTSYS       NT Server               *NT
  _  REMOTE      Remote iSeries          *AS400
  _  ROUTER      Router                  *OTHER




                                                               End
 F3=Exit         F6=Create      F12=Cancel
```

Systems

Option

Use option 2 to change an existing record or option 4 to delete.

F6=Create

F6 displays a screen used to create a new system record.

9.3.1 Name and type

This screen is displayed after selecting a system for change, or after pressing F6 for add.

```
GSM2302                        Systems              12-02-01   12.00.00
Ver  6.13                                           USERID     SYSNAME

Type values and press Enter

System name  . . . . . . . . . _____

System description . . . . . . _____
System descript abbreviation . ___
System type  . . . . . . . . . _____












F3=Exit             F12=Cancel
```

Name and type

System name

*LOCAL is used for this iSeries system, use a symbolic name for other systems.

System description

System description text.

System description abbreviation

Abbreviated system name. It is displayed in the message log.

System type

Describes the system type. The following values are allowed:

*AS400   An iSeries system with MidJet GSM Text installed.

*NT   A PC system running Microsoft NT operating system, which has MidJet NT Monitor program product installed.

*OTHER   Specify *OTHER for all other systems. It can be another computer, or any type of unit that has an IP address.

9.3.2 Local system

This screen is displayed after selecting the local system for change.

```
GSM2303                        Systems              12-02-01   12.00.00
Ver  6.13                                           USERID     SYSNAME

Type values and press Enter

Sending system name  . . . . . *LOCAL

System description . . . . . . Local system
System descript abbreviation .
System type  . . . . . . . . . *AS400

Message prefix . . . . . . . . 1_____




F3=Exit             F12=Cancel
```

System details Local system

The *LOCAL entry is created during installation. Do not remove this entry, and change only the System description field if desired.

System name

Constant *LOCAL.

Message prefix

Operational messages for this system start with the prefix entered here.

9.3.3 Remote iSeries

This screen is displayed after selecting a remote system for add or change.

```
GSM2304                        Systems               12-02-01   12.00.00
Ver  6.13                                            USERID     SYSNAME

Type values and press Enter

System name  . . . . . . . . . SYSNAME

System description . . . . . . Text for SYSNAME
System descript abbreviation . 001
System type  . . . . . . . . . *AS400

Communication protocol . . . . 2 1=TCP/IP, 2=SNA






F3=Exit              F12=Cancel
```

System details Remote system

System name

The system name of the remote iSeries system

Communication protocol

The protocol to be used for the communication with the other system.

1   TCP/IP

2   SNA

9.3.4 TCP/IP communication protocol

This screen is displayed after selecting the local system for change.

```
GSM23041                        Systems                12-02-01  12.00.00
Ver  6.13                                              USERID    SYSNAME

Type values and press Enter

System name  . . . . . . . . . REMOTE

System description . . . . . . Remote iSeries
System descript abbreviation . RMT
System type  . . . . . . . . . *AS400

Communication protocol . . . . 1 1=TCP/IP, 2=SNA

IP address . . . . . . . . . . 192.168.0.1




F3=Exit            F12=Cancel
```

TCP/IP communication protocol

System name

The system name of the remote iSeries system

IP address

The IP/address of the remote iSeries system

9.3.5 SNA communication protocol

This screen is displayed after selecting an entry of type *AS400 for change or add.

```
GSM2304                        Systems              12-02-01   12.00.00
Ver  6.13                                           USERID     SYSNAME

Type values and press Enter

System name  . . . . . . . . . REMOTE

System description . . . . . . Remote iSeries
System descript abbreviation . RMT
System type  . . . . . . . . . *AS400

Remote location  . . . . . . . REMOTE__
Device description . . . . . . *LOC_____
Local location . . . . . . . . *LOC____
Remote network ID  . . . . . . *LOC_____
Mode description . . . . . . . GSMTEXT_






F3=Exit             F12=Cancel
```

System details Remote system

When creating a new entry, default values are available in the Device description, Local location, Remote network ID and Mode description fields. In many cases these defaults can be used, consult to the person responsible for communications configuration on your system, for information about values to use.

Remote location

This value can be retrieved by issuing DSPNETA system command on the remote system, use value on line 'Default local location'.

Device description

The name of the device description on the local system used for communication with the remote system. Default value *LOC will use the device associated with the remote system.

Local location

To retrieve this value, use system command DSPNETA on the local system, and use value on line 'Default local location'.

Remote network ID

This value can be retrieved by issuing DSPNETA system command on the remote system, use value on line 'Local network ID'.

Mode description

Name of the mode description used for communication with the remote system.

9.3.6 Win/2000 NT System

This screen is displayed after selecting an entry of type *NT for change or add.

```
GSM2305                         Systems             12-02-01   12.00.00
Ver  6.13                                           USERID     SYSNAME

Type values and press Enter

System name  . . . . . . . . . NTSYS

System description . . . . . . NT Server
System descript abbreviation . NTS
System type  . . . . . . . . . *NT

IP address . . . . . . . . . . 192.168.1.64___
Message prefix . . . . . . . . 2_____




F3=Exit              F12=Cancel
```

System details

System name

The system name of the system

IP address

The IP address of the system.

Message prefix

This value will be combined with all operational messages created on the system.

9.3.7 Other system

This screen is displayed after selecting an entry of type *OTHER for change or add.

```
GSM2306                          Systems              12-02-01   12.00.00
Ver  6.13                                             USERID     SYSNAME

Type values and press Enter

System name  . . . . . . . . . ROUTER

System description . . . . . . Router
System descript abbreviation .
System type  . . . . . . . . . *OTHER

IP address . . . . . . . . . . 192.168.1.128__







F3=Exit              F12=Cancel
```

System details Other systems

System name

The system name of the system

IP address

The IP address of the system.

9.4   Communications descriptions

This file holds the information which - together with data from the Network file - is used for creation of communication objects such as line, controller, device descriptions etc.

> It is important that you only change communication related parameters with this program. If you change the automatically created objects, you will lose your changes when MidJet GSM Text recreates the objects.

Use option 4 on the configuration menu to display this screen.

```
GSM2401                Communication config descriptions   12-02-01   12.00.00
Ver  6.13                                                   USERID     SYSNAME

Type option, press Enter                     Position to       _____
  2=Change     4=Delete     8=Device info
    Config                                    Cfg  Conn  Resource
Opt name    Description                       type type  name
 _  GSMT11 Asynchronous modem send             1    1    CMN02
 _  GSMT12 X.32 send                           1    2    CMN03
 _  GSMT13 X.25 send                           1    3    CMN04
 _  GSMT34 Asynchronous GSM device             3    4    CMN01
 _  GSMT35 GSM module communication svr        3    5




                                                                       End
 F3=Exit          F6=Create      F12=Cancel
```

Communication descriptions

Option

Use option 2 to change the description. Use option 4 to delete a communication description.

F6=Create

Press F6 in order to create a new communication description.

9.4.1 Name and type

This screen is displayed after selecting a description to change, or an empty screen if F6, Create, is pressed.

```
GSM2402              Communication config descriptions   12-02-01   12.00.00
Ver  6.13                                                USERID     SYSNAME

Type values and press Enter

Configuration name . . . . . . GSMT11

Configuration description  . . Asynchronous modem send_____
Configuration type . . . . . . 1
Connection type  . . . . . . . 1










F3=Exit                  F12=Cancel
```

Communication name and type

Type values and press Enter.

Configuration name
ID of the communication description.

Config description
Descriptive text.

Configuration type
This value describes the intended use for the configuration.

1   Outgoing messages. This configuration is used for outgoing messages and/or alarm calls.

2   Incoming messages. This configuration is used for incoming messages only.

3   Combined incoming/outgoing. This configuration is used for both incoming and outgoing messages.

Connection type
Connection type to the GSM network operators. Consult your dealer or GSM network for latest information about connection types supported.

1   Asynchronous modem. Dial-up connection using an ordinary V.24 communication line on the iSeries, with an asynchronous modem. The AT command set is used. This connection type can be used for outgoing messages and alarm calls.

2   X.32 via synchronous modem. This type uses X.32, i.e. synchronous dial-up connection to the X.25 network. The service modem can be used in this case. However, delays may occur if it is in use for other purposes when a message should be sent. This connection type can be used for outgoing messages and alarm calls.

3   X.25. Used together with a leased line connection to the X.25 network, currently for outgoing messages only.

4   GSM module. This type uses a GSM module for transmission of messages. It is connected to the iSeries through a V.24 line, and supports both outgoing and incoming messages and alarm calls.

5   GSM module. This type uses a GSM module for transmission of messages. It is connected to the iSeries through a W&T TCP/IP Communication server. This configuration supports both outgoing and incoming messages and alarm calls.

6   TCP/IP. Direct connection to the GSM operator using TCP/IP. This connection type supports outgoing and incoming messages.

9.4.2 Asynchronous modem

This screen will be displayed if connection type 1 is selected.

```
GSM2403              Communication config descriptions   12-02-01   12.00.00
Ver  6.13                                                USERID     SYSNAME

Type values and press Enter

Configuration name . . . . . . GSMT11

Configuration description  . . Asynchronous modem send
Configuration type . . . . . . 1
Connection type  . . . . . . . 1

Resource name  . . . . . . . . CMN02_____
Dial prefix  . . . . . . . . . 0W_____
Line speed . . . . . . . . . . 9600_
Modem initialization string  . &F_____
_____
Number of data bits  . . . . . 8
Parity . . . . . . . . . . . . 0
Number of stop bits  . . . . . 1
Flow control . . . . . . . . . 0
Tone/pulse dial  . . . . . . . T

F12=Cancel
```

Asynchronous communications

Resource name

Specifies the hardware resource to be used. Use the command
WRKHDWRSC to determine the resource name.

Dial prefix

Specify optionally the dial prefix to be used when accessing the public
telephone network, e.g. 0W to dial 0 and wait for new dial tone. Used when
the modem is connected via a switchboard.

Line speed

Line speed in baud. The following values are supported by MidJet GSM
Text, however the value should be set as specified by the GSM operator.

Use one of these values:

1200 2400 4800 9600 19200

Modem initialization

Modem initialization string. This is sent to the modem before the connection
is established.

Number of data bits

Valid values are 7 or 8. Should be set as specified by the GSM operator.

Parity

Parity control. Should be set as specified by the GSM operator.

Valid values:

0   None.

1   Odd.

2   Even.

Number of stop bits

Should be set as specified by the GSM operator.

Supported values are 0, 1 or 2.

Flow control

This value controls if flow control is used. Should be set as specified by the GSM operator.

0   Flow control is not used.

1   Flow control is used

Tone or pulse dial

T   Tone dial will be used.

P   Pulse dial will be used.

9.4.3 X.32 communications

This screen will be displayed if connection type 2 is selected.

```
GSM2404              Communication config descriptions   12-02-01   12.00.00
Ver  6.13                                                USERID     SYSNAME

Type values and press Enter

Configuration name . . . . . . GSMT12

Configuration description  . . X.32 send
Configuration type . . . . . . 1
Connection type  . . . . . . . 2

Resource name  . . . . . . . . CMN03_____
Dial prefix  . . . . . . . . . :0:_____
Line speed . . . . . . . . . . 9600_




F12=Cancel
```

X.32 communication

Resource name

Specifies the hardware resource to be used. Use the command
WRKHDWRSC to determine the resource name.

Dial prefix

Specify optionally the dial prefix to be used when accessing the public
telephone network. Used when the modem is connected via a switchboard.

Line speed

Line speed in baud. The following values are supported by MidJet GSM
Text, however the value should be set as specified by the GSM operator.

Use one of these values:

1200 2400 4800 9600 19200

9.4.4 X.25 communications

This screen will be displayed if connection type 3 is selected.

```
GSM2405              Communication config descriptions   12-02-01   12.00.00
Ver  6.13                                                USERID     SYSNAME

Type values and press Enter

Configuration name . . . . . . GSMT13

Configuration description  . . X.25 send
Configuration type . . . . . . 1
Connection type  . . . . . . . 3

Resource name  . . . . . . . . CMN04_____
Line speed . . . . . . . . . . 9600_

Local network address  . . . . 1235544_____
X.25 line description name . . GSMTX25___




F12=Cancel
```

X.25 communication

Resource name

Specifies the hardware resource to be used. Use the command **WRKHDWRSC** to determine the resource name.

Line speed

Line speed in baud. The following values are supported by MidJet GSM Text, however the value should be set as specified by the GSM operator.

Use one of these values:

1200 2400 4800 9600 19200

Local network address

The local network address issued by the X.25 network service provider.

X.25 line description

Specify the name of an existing line description to be used, or specify a new. If GSMTX25 is used the line will be deleted and recreated when a new MidJet GSM Text version is installed.

9.4.5 GSM Module

This screen will be displayed if connection type 4 is selected.

```
GSM2406                Communication config descriptions   12-02-01   12.00.00
Ver  6.13                                                  USERID     SYSNAME

Type values and press Enter

Configuration name . . . . . . GSMT34

Configuration description  . . Asynchronous GSM device
Configuration type . . . . . . 3
Connection type  . . . . . . . 4

Resource name   . . . . . . . . CMN01_____
Line speed . . . . . . . . . . 9600_
Number of data bits  . . . . . 8
Parity . . . . . . . . . . . . 0
Number of stop bits  . . . . . 1
Flow control . . . . . . . . . 0

Device type  . . . .           GM12_____
SIM card PIN code  . . . . . . 0000____
Network ID . . . . . . . . . . 240-07
Service center address to use  1      1=Sender, 2=Receiver
F12=Cancel
```

GSM module

Resource name

Specifies the hardware resource to be used. Use the command
WRKHDWRSC to determine the resource name.

Line speed

Specify 9600 for a GSM module.

Module type

The following GSM module types are supported:

A1   Siemens A1

ETM9200   ETM 9200

ETM9300   ETM 9300

ETM9350   ETM 9350

GM12   Ericsson GM12

GM22   Ericsson GM22

M1   Siemens M1

TC35   Siemens TC35

TC35i   Siemens TC35i

POCKETGSM Digicom PocketGSM

SIM card PIN code

The PIN code is used to check authority to the SIM card. A PIN code is
assigned by the GSM operator. Place the SIM card in a mobile phone if you
want to change it.

Network ID

The ID of the GSM network that issued the SIM card used in the GSM
module. Press F4 to display a window with available networks.

Service centre address to use

Service centre address to use when sending messages through this configuration.

1=Sender The service centre address of the SIM card in the GSM module will be used.

2=Receiver The service centre address for the receiver's network defined in the network file will be used.

9.4.6 GSM Module via communication server

This screen will be displayed if connection type 5 is selected.

```
GSM2406            Communication config descriptions  12-02-01  12.00.00
Ver  6.13                                              USERID    SYSNAME

Type values and press Enter

Configuration name . . . . . . GSMT34

Configuration description  . . Asynchronous GSM device
Configuration type . . . . . . 3
Connection type  . . . . . . . 4

Configuration name . . . . . . GSMT35

Configuration description  . . GSM module communication svr
Configuration type . . . . . . 3
Connection type  . . . . . . . 5

IP address comm server . . . . 192.168.1.26
Port number communication svr  8000
Port number comm svr ctl job . 8001

Device type  . . . . . . . . . ETM9300
SIM card PIN code  . . . . . . 0000
Network ID . . . . . . . . . . 240-01 F4=List
Service center address to use  1

F12=Cancel
```

GSM module

IP address

Specify the IP address assigned to the communication server.

Port number communication server

TCP/IP port number for communication with the server.

Port number communication server control job

TCP/IP port number for communication with the communication server
control job.

Module type

The following GSM module types are supported:

A1   Siemens A1

ETM9200   ETM 9200

ETM9300   ETM 9300

ETM9350   ETM **9350**

GM12   Ericsson GM12

GM22   Ericsson GM22

M1   Siemens M1

TC35   Siemens TC35

TC35i   Siemens TC35i

POCKETGSM Digicom PocketGSM

SIM card PIN code

The PIN code is used to check authority to the SIM card. A PIN code is assigned by the GSM operator. Place the SIM card in a mobile phone if you want to change it.

Network ID

The ID of the GSM network that issued the SIM card used in the GSM module. Press F4 to display a window with available networks.

Service centre address to use

Service centre address to use when sending messages through this configuration.

1=Sender   The service centre address of the SIM card in the GSM module will be used.

2=Receiver   The service centre address for the receiver's network defined in the network file will be used.

9.4.7 TCP/IP

This screen will be displayed if connection type 6 is selected.

```
GSM240A              Communication config descriptions   12-02-01   12.00.00
Ver  6.13                                                USERID     SYSNAME

Type values and press Enter

Configuration name . . . . . . SMS_IP

Configuration description  . . SMS over TCP/IP
Configuration type . . . . . . 3
Connection type  . . . . . . . 6

Short ID . . . . . . . . . . ._____
Password . . . . . . . . . . ._____

IP address SMSC primary  . . ._____
  Port number primary  . . . ._____

IP address SMSC secondary  . ._____
  Port number secondary  . . ._____

Use SSL  . . . . . . . . . . ._  0=no, 1=Yes.
Port number control job  . .  _____

F12=Cancel
```

TCP/IP

Short ID

The short ID assigned by the GSM operator.

Password

Password for the account.

IP address primary

Assigned by the GSM operator.

Port number primary

Assigned by the GSM operator.

IP address secondary

Assigned by the GSM operator.

Port number secondary

Assigned by the GSM operator.

Use SSL

Specify if SSL is to be used for this connection.

Port number control job

Specify an available port number for use by the control job.

9.4.8 Module information

This screen is displayed after selecting option 8 on the Communication descriptions first display.

```
GSM2408              Communication config descriptions  12-02-01   12.00.00
Ver  6.13                                                USERID     SYSNAME

Type values and press Enter

Configuration name . . . . . . GSMT34

Configuration description  . . Asynchronous GSM device
Configuration type . . . . . . 3
Connection type  . . . . . . . 4

Resource name  . . . . . . . . CMN01
Manufacturer ID  . . . . . . . ERICSSON
Model ID . . . . . . . . . . . 6050102
Version  . . . . . . . . . . . 980608 2244 CXC1
Serial number  . . . . . . . . 520001610011990
Signal quality . . . . . . . . 31,99

Retrieve date  . . . . . . . . 2012-02-01
Retrieve time  . . . . . . . . 12:00:00


F5=Refresh     F9=Retrieve          F12=Cancel
```

Device information

The device information is automatically renewed when the subsystem is started. Use Function key F9 if you want to renew the information while the subsystem is active.

Manufacturer ID

The name of the manufacturer of the GSM module (device).

Model ID

The manufacturer's model ID of the GSM module (device).

Version

Version number of the software and its creation date.

Serial number

The manufacturer's serial number.

Signal quality

The first value is the receive level.

0   -113 dB

2...30 -109...-53 dB

31   -51 dB or greater

99   Unknown or cannot be detected

The signal quality shall be at least 10. If lower consider moving or replacing the antenna.

The second value is the receive errors.

value Receive errors as a percentage

99   Unknown or cannot be detected

Retrieve date

Date when the information was retrieved.

Retrieve time

Time when the information was retrieved.

F5=Refresh

Refresh the screen.

F9=Retrieve

Submit an instruction to renew the device information. If the device is immediately available, the information is returned in a couple of seconds. Use F5 to refresh the screen.

F12=Cancel

Return to previous screen.

9.5 Network operators

This file contains information about the GSM Network operators. The entries in this file are created during installation, and all supported operators in the country of installation are displayed.

Use option 5 on the configuration menu to display this screen.

```
GSM2501                        Network operators          12-02-01   12.00.00
Ver  6.13                                                 USERID     SYSNAME

Type option, press Enter                   Position to
  2=Change    4=Delete
                                        Sending   Config Config Config
Opt Nw ID  Network name                 sys name  out/cm incom  alarm
    204-04 Vodafone Libertel N.V        *SYS       *SYS   *NONE  *SYS
    204-08 KPN Mobile The Netherlands BV *SYS      *SYS   *NONE  *SYS
    208-01 Orange France                *SYS       *SYS   *NONE  *SYS
    208-10 SFR                          *SYS       *SYS   *NONE  *SYS
    214-01 Airtel Movil S.A (VODAFONE)  *SYS       *SYS   *NONE  *SYS
    214-03 Retevision Movil S.A (AMENA) *SYS       *SYS   *NONE  *SYS
    214-07 Telefonica Moviles España S.A. *SYS     *SYS   *NONE  *SYS
    222-01 Telecom Italia Mobile        *SYS       *SYS   *NONE  *SYS
    222-10 Vodafone Omnitel N.V.        *SYS       *SYS   *NONE  *SYS
    222-88 WIND Italia                  *SYS       *SYS   *NONE  *SYS
    222-98 BLU Italia                   *SYS       *SYS   *NONE  *SYS
    228-01 Swisscom Mobile Ltd          *SYS       *SYS   *NONE  *SYS
    228-02 TDC Switzerland AG (sunrise) *SYS       *SYS   *NONE  *SYS
    228-03 Orange Communications S.A    *SYS       *SYS   *NONE  *SYS
                                                                    More
F3=Exit          F6=Create     F12=Cancel
```

Network operators

Option

Use option 2 to change the description of a Network operator. Use option 4 to delete a network operator description.

F6=Create

Press F6 in order to create a new network description.

9.5.1 General

This screen is displayed after selecting a network to change, or an empty screen if F6, Create, is pressed.

```
GSM2502                      Network operators        12-02-01   12.00.00
Ver  6.13                                             USERID     SYSNAME

Type values and press Enter

Network ID . . . . . . . . . . 240-01

Network name . . . . . . . . . Telia Mobitel GSM Text_____

Sending system name  . . . . . *SYS_____  F4=List








F12=Cancel       F18=Restore default values
```

Network operators, general

Network ID

A 5 digit identification number of the network.

Network name

Text description of the network.

Sending system name

This field controls if messages created to be sent via this operator shall be transmitted by this or another iSeries system. The following values are allowed:

*SYS	The value in General configuration, part 1, will be used.
*LOCAL	This system will transmit messages for this operator.
System name	The name of the system that will transmit the messages.

9.5.2 Name and configuration selection

This screen is displayed after pressing Enter in the General screen if this system was selected for message transmission.

```
GSM2503                      Network operators      12-02-01  12.00.00
Ver  6.13                                           USERID    SYSNAME

Type values and press Enter

Network ID . . . . . . . . . . 240-01

Network name . . . . . . . . . Telia Mobitel GSM Text

Cfg name outgoing/combined msg *SYS__ F4=List
Config name incoming messages  *NONE_ F4=List
Configuration name alarm calls *SYS__ F4=List

Country prefix . . . . . . . . 46_
Service center address . . . . +46705008999_____




F12=Cancel
```

Name and Configuration selection

Cfg name outgoing/combined msg

Specify the configuration name to use for message transmission. If "*SYS" is specified the value in General configuration, part 1, will be used.

Press F4 for a list of configuration descriptions.

Cfg name incoming messages

Not in use, leave the value "*NONE".

Configuration name alarm calls

Specify the configuration name to use for placing alarm calls. It must be a configuration of connection type 1 (asynchronous modem) or connection type 2 (synchronous modem). If "*SYS" is specified the value in General configuration, part 1, will be used.

Country prefix

Country prefix identifying the country when sending messages. The value is the same as for international phone calls.

Service centre address

Service centre address provided by the GSM operator.

9.5.3 Common values for modem transmission

This screen is displayed for an operator using a modem connection.

```
GSM2504                    Network operators        12-02-01  12.00.00
Ver  6.13                                           USERID    SYSNAME

Type values and press Enter

Network ID . . . . . . . . . . 240-01

Network name . . . . . . . . . Telia Mobitel GSM Text

Protocol . . . . . . . . . . . UCP_
International prefix . . . . . 009
Send delay in seconds  . . . .  2    0-99
Login prompt . . . . . . . . . *NONE_____

Response text delivered  . . . 1_____
  Starting position text . . .  1   0-20

Response text failed . . . . . 2_____
  Starting position text . . .  1   0-20

Response text stored . . . . . 3_____
  Starting position text . . .  1   0-20
F12=Cancel
```

Common values for modem transmission

Protocol

Message encoding protocol. MidJet GSM Text supports the following protocols:

UCP   Universal Computer Protocol.

UCPP   Universal Computer Protocol implemented for pagers.

CIMD   Computer Interface to Message Distribution.

TAP   Telelocator Alphanumeric Protocol.

Send delay in seconds

This field specifies the number of seconds the system waits before first message is sent after a connection is established.

Login prompt

Login prompt from the remote system.

Response text delivered

Response text returned by the GSM operator upon successful delivery.

Starting position text

If specified the response text is searched for in the specified position. Else, the entire text is searched.

Response text failed

Works according to response text delivered.

Response text stored

Works according to response text delivered.

9.5.4 CIMD values

This screen is displayed if CIMD protocol was selected on the previous screen.

```
 GSM2505                      Network operators        12-02-01   12.00.00
 Ver  6.13                                             USERID     SYSNAME

 Type values and press Enter

 Network ID . . . . . . . . . 240-08

 Network name . . . . . . . . Vodafone

 SMSC login . . . . . . . . . cimd2_____
 SMSC password  . . . . . . . *NONE_____
 Login message  . . . . . . . CIMD_____

 TMD user ID  . . . . . . . . MIDJET_____
 Password . . . . . . . . . . 1028_____




 F12=Cancel
```

CIMD values

SMSC login

Login on the GSM operator's system. Provided by the GSM network.

SMSC password

Password on the GSM operator's system.

Login message

Login message from the remote system.

TMD user ID

TMD User ID on the remote system.

Password

Password on the remote system.

9.5.5 TAP protocol values

This screen is displayed if TAP protocol was selected on the previous screen.

```
GSM2506                    Network operators          12-02-01  12.00.00
Ver  6.13                                             USERID    SYSNAME

Type values and press Enter

Network ID . . . . . . . . . . 234-10

Network name . . . . . . . . . O2 (UK) Ltd

TAP password . . . . . . . . . *NONE







F12=Cancel
```

TAP values

TAP password

Password in the remote system. Specify *NONE if not used.

9.5.6 Asynchronous access number

This screen is displayed if an asynchronous communication description was selected for this operator.

```
GSM2507                     Network operators        12-02-01  12.00.00
Ver  6.13                                            USERID    SYSNAME

Type values and press Enter

Network ID . . . . . . . . . . 240-01

Network name . . . . . . . . . Telia Mobitel GSM Text

Connection number  . . . . . . 0740930000_____
Connect message  . . . . . . . CONNECT_____

Max number of msg/connection .  2 1-99




F12=Cancel
```

Asynchronous connection

Connection number
The telephone number to the GSM operator's modem pool.

Connect message
Connect message from modem.

Max number of messages per connection
This field controls how many messages could be sent during a connection. If more messages are to be sent, the system will reconnect immediately. This value should be set according to specification from the GSM operator.

9.5.7 X.32 values

This screen is displayed if a X.32 communication description was selected.

```
GSM2508                    Network operators      12-02-01  12.00.00
Ver  6.13                                         USERID    SYSNAME

Type values and press Enter

Network ID . . . . . . . . . . 240-01

Network name . . . . . . . . . Telia Mobitel GSM Text

Connection number  . . . . . . 020910032_____
Data address X.32  . . . . . . 745101041_____

Network password . . . . . . . password_____
Network user number  . . . . . 123456_____

Max number of msg/connection .  1 1-99






F12=Cancel
```

X.32 values

Connection number
The telephone number to the modem pool of the operator providing the X.32 service.

Data address
X.25 data address for message transmission provided by the GSM operator.

Network password
X.32 network password. This is supplied by the X.32 service provider.

Network user number
X.32 network user number. This is supplied by the X.32 service provider.

Max number of messages per connection
This field controls how many messages could be sent during a connection. If more messages are to be sent, the system will reconnect immediately. This value should be set according to specification from the GSM operator.

9.5.8 X.25 values

This screen is displayed if a X.25 communication description was selected.

```
GSM2509                    Network operators        12-02-01  12.00.00
Ver  6.13                                           USERID    SYSNAME

Type values and press Enter

Network ID . . . . . . . . . . 240-01

Network name . . . . . . . . . Telia Mobitel GSM Text

Data address X.25  . . . . . . 745101041_____
Data address incoming messages 1_____

Max number of msg/connection .  1 1-99








F12=Cancel
```

X.25 values

Data address

X.25 data address for outgoing messages transmission provided by the GSM operator.

Data address incoming messages

X.25 data address to receive messages from. Currently not supported, leave the field blank or enter *NONE.

Max number of messages per connection

This field controls how many messages could be sent during a connection. If more messages are to be sent, the system will reconnect immediately. This value should be set according to specification from the GSM operator.

9.6 National character translation

This file is used for translation of national characters from/to the EBCDIC representation in the iSeries and the ETSI GSM standard ASCII representation.

MidJet GSM Text is delivered with translation file entries for supported operators and protocols. Please consult MidJet AB or your distributor for more information before you change the translation.

This screen is displayed after selecting option 7 on the configuration menu.

```
GSM2701                  National character translation    12-02-01   12.00.00
Ver  6.13                                                  USERID     SYSNAME

Type option, press Enter                     Position to
  2=Change    4=Delete
          Proto
Opt Nw ID  col   Network name
    228-01 ATP   Swiss PTT
    228-01 UCP   Swiss PTT
    232-01 ATP   Mobilkom Austria
    232-03 ATP   max.mobil
    238-01 ATP   Tele Danmark Mobil
    238-01 UCP   Tele Danmark Mobil
    238-02 ATP   Sonofon
    240-01 ATP   Telia Mobitel GSM Text
    240-01 UCP   Telia Mobitel GSM Text
    240-07 ATP   Comviq GSM AB
    240-07 UCP   Comviq GSM AB
    240-08 ATP   Europolitan
    242-01 ATP   Tele-Mobil Norge
    242-01 UCP   Tele-Mobil Norge
                                                                        More
 F3=Exit          F6=Create     F12=Cancel
```

Translation file

Option

Use option 2 to display a screen for maintenance of a schedule or use option 4 to delete an entry.

F6=Create

Press F6 in order to create a new entry.

9.6.1 Translation file entry

This screen is displayed after selecting an entry to change, or an empty screen if F6, Create, is pressed.

```
GSM2702                  National character translation    12-02-01   12.00.00
Ver   6.13                                                 USERID     SYSNAME

Type values and press Enter

Network ID . . . . . . . . . . 240-01 Telia Mobitel GSM Text
Protocol . . . . . . . . . . . ATP


EBCDIC set characters  . . . . @$éÅåÉ!#¤ÄÖ§äöü_____
GSM set characters . . . . . . ÖÅ`$}\¤Ä]#@[{|~_____



GSM set characters . . . . . . ÖÅ`$}\¤Ä]#@[{|~_____
EBCDIC set characters  . . . . @$éÅåÉ!#¤ÄÖ§äöü_____




F12=Cancel
```

Translation file entry

EBCDIC set characters

This is the base character string for translation of outgoing messages.

GSM set characters

This is the result character string after translation of outgoing messages.

EBCDIC set characters

This is the base character string for translation of incoming messages.

GSM set characters

This is the result character string after translation of incoming messages.

9.7 Monitor system operations

This program is used to select configuration options for the system operating monitoring functions.

Use option 10 on the configuration menu to display this screen.

```
GSM2801                    Monitor system operations    12-02-01  12.00.00
Ver  6.13                                               USERID    SYSNAME

Type option, press Enter                     Position to _____
  2=Change     4=Delete
   Checkpoint                               Sched Operations Check
Opt type       Description                    nbr  msg receiv bypass
 _  *CFGSTS    X.25 line                        1  *SYS            5
 _  *HTTP      Web server                       1  *SYS           10
 _  *JOB       PRT01                            1  *SYS            5
 _  *JOBQ      QBATCH                           1  *SYS            5
 _  *MSGQ      QSYSOPR Msgq                     1  *SYS
 _  *MSGQ      QSYSMSG Msgq                     1  *SYS
 _  *MSGW      Jobs in MSGW                     1  *SYS
 _  *OUTQ      QEZJOBLOG                        1  *SYS            5
 _  *POP3      POP3 server                      1  *SYS           10
 _  *SBS       QSNADS                           2  *SYS            5
 _  *SERVER    Generic server                   1  *SYS           10
 _  *SMTP      SMTP server                      1  *SYS           10
 _  *SYSACT    All systems                      1  *SYS           10
 _  *USRDFN    User defined checkpoint          1  *SYS            5
                                                                End
 F3=Exit        F6=Create     F12=Cancel
```

Monitor system operations

Option

Use option 2 to display the screen used for changing a checkpoint, or use option 4 to delete.

F6=Create

F6 displays a screen used to create a new checkpoint.

9.7.1 Checkpoint type

This screen is displayed after selecting a checkpoint for change, or after pressing F6.

```
GSM2802                   Monitor system operations     12-02-01   12.00.00
Ver  6.13                                               USERID     SYSNAME

Type values and press Enter

Checkpoint type  . . . . . . .











F12=Cancel
```

Checkpoint type

Checkpoint type

This field specifies the checkpoint type. The following values are valid:

***CFGSTS**   This checkpoint is used to monitor a configuration object. If it is in another status than defined correct, an error message will be created.

***HTTP**   Checks that a HTTP server is responding.

***JOB**   Checks that a job with a specified user is active on the system.

***JOBQ**   This checkpoint is used to check that jobs do not pile up in a jobq. If the number of jobs actually in the queue exceeds the specified value, it will be reported.

***MSGQ**   This checkpoint is used to monitor a message queue for messages. Messages are selected based on severity level, and can also be selected on message id, job or user name. This is configured in the message filter file. Specific messages can also be routed to another person than the normal receiver of messages from the message queue.

***MSGW**   The Job in MSGW checkpoint can be used to report batch jobs that have stopped with MSGW status. Jobs that normally have status MSGW or jobs that should not be checked for other reasons can be omitted by using a filter entry.

Consider using MSGQ checkpoint for QSYSOPR and QSYSMSG messages queues instead. This will cover more of the problems that might occur. Do not use both MSGW and MSGQ type checkpoints at the same time, as this will cause duplicate error messages.

*OUTQ   Works in the same way as the jobq checkpoint. If too many spool files or pages exist in an out queue, a message will be created

*POP3   Checks that a POP3 server is responding.

*SBS   Checks that a subsystem is active on the system.

*SERVER   Checks that a server accepts a connect attempt.

*SMTP   Checks that a SMTP server is responding.

*SYSACT   Active systems checkpoint is used to check that a remote system responds to a connection check. The remote system can be another iSeries or, if TCP/IP is used, any system with an IP address can be checked using Ping. In this case also routers, printers etc. with an IP address can be included.

*USRDFN   A user written program is used to perform the check.

9.7.2 Configuration status

This screen is displayed after selecting a CFGSTS checkpoint for update or add.

```
GSM280A                    Monitor system operations      12-02-01   12.00.00
Ver  6.13                                                 USERID    SYSNAME


Type values and press Enter

Checkpoint type  . . . . . . . *CFGSTS
Description  . . . . . . . . . X.25 line_____

Schedule number  . . . . . . .   1 F4=List
Operational message receiver . *SYS_____
Check cycles bypass value  . .   5
Configuration object name  . . X25LIN____ Configuration object type *LIND_____

Mark valid status codes with 1.
VARIED OFF          _      ACTIVE READER       _      FAILED            _
VARY OFF PENDING    _      ACTIVE WRITER       _      FAILED READER     _
VARY ON PENDING     _      HELD                _      FAILED WRITER     _
VARIED ON           1      POWERED OFF         _      DIAGNOSTIC MODE   _
CONNECT PENDING     1      RCYPND              _      DAMAGED           _
SIGNON DISPLAY      _      RCYCNL              _      LOCKED            _
ACTIVE              1      SYSTEM REQUEST      _      UNKNOWN           _

F12=Cancel
```

Configuration status checkpoint

Checkpoint Description

Descriptive text of the checkpoint.

Schedule number

Number of the schedule that controls when this checkpoint will run.

Operational message receiver

Name of the user or distribution group that shall receive messages created by this checkpoint. Value *SYS directs those messages to the user specified when using the main menu item 10 for this system.

Check cycle bypass value

This field controls if the checkpoint shall run every time the monitor operations program runs. In order to save system resources it might be desirable to bypass some check cycles. The value controls how many cycles in a row to be bypassed before the checkpoint is run again.

For the *CFGSTS checkpoint the default value is 5, the checkpoint bypasses five cycles before it runs the next time.

Checkpoint configuration object type

*LIND   The configuration object to be checked is a line description.

*CTLD   The configuration object to be checked is a controller description.

*DEVD   The configuration object to be checked is a device description.

*NWI   The configuration object to be checked is a network interface.

Valid status codes

Mark with '1' status codes that should be considered as valid.

9.7.3 HTTP Server

This screen is displayed after selecting a HTTP checkpoint for update or add.

```
GSM280G                  Monitor system operations      12-02-01   12.00.00
Ver  6.13                                               USERID    SYSNAME


Type values and press Enter

Checkpoint type  . . . . . . . *HTTP
Description  . . . . . . . . . Web server description

Schedule number  . . . . . . .  1 F4=List
Operational message receiver . *SYS
Check cykles bypass value  . .   10

Server name  . . . . . . . . . www.webserver.com






F12=Cancel
```

HTTP checkpoint

Checkpoint Description

Descriptive text of the checkpoint.

Schedule number

Number of the schedule that controls when this checkpoint will run.

Operational message receiver

Name of the user or distribution group that shall receive messages created by this checkpoint. Value *SYS directs those messages to the user specified when using the main menu item 10 for this system.

Check cycle bypass value

This field controls if the checkpoint shall run every time the monitor operations program runs. In order to save system resources it might be desirable to bypass some check cycles. The value controls how many cycles in a row to be bypassed before the checkpoint is run again.

For the *HTTP checkpoint the default value is 10, the checkpoint bypasses ten cycles before it runs the next time.

Server name

The name of the web server to monitor. Include the leading www.

9.7.4 Job

This screen is displayed after selecting a JOB checkpoint for update or add.

```
GSM2808                    Monitor system operations        12-02-01   12.00.00
Ver  6.13                                                   USERID     SYSNAME

Type values and press Enter

Checkpoint type  . . . . . . . *JOB
Description  . . . . . . . . . PRT01_____

Schedule number  . . . . . . .    1 F4=List
Operational message receiver . *SYS_____
Check cycles bypass value  . .    5

Job name . . . . . . . . . . . PRT01_____  Name, generic*
User ID  . . . . . . . . . . . QSPLJOB___




F12=Cancel
```

JOB Checkpoint

Checkpoint Description

Descriptive text of the checkpoint.

Schedule number

Number of the schedule that controls when this checkpoint will run.

Operational message receiver

Name of the user or distribution group that shall receive messages created by this checkpoint. Value *SYS directs those messages to the user specified when using the main menu item 10 for this system.

Check cycle bypass value

This field controls if the checkpoint shall run every time the monitor operations program runs. In order to save system resources it might be desirable to bypass some check cycles. The value controls how many cycles in a row to be bypassed before the checkpoint is run again.

For the *JOB checkpoint the default value is 5, the checkpoint bypasses five cycles before it runs the next time.

Job name

name	The name of the job to be checked.
generic name	Specify the generic name of the job to be checked. A generic name is one or more characters followed by an asterisk (*), for example ABC*.

User ID

The user id of the job to be checked.

9.7.5 Job queue

This screen is displayed after selecting a JOBQ checkpoint for update or add.

```
GSM2806                   Monitor system operations        12-02-01   12.00.00
Ver  6.13                                                  USERID     SYSNAME

Type values and press Enter

Checkpoint type  . . . . . . . *JOBQ
Description  . . . . . . . . . QBATCH_____

Schedule number  . . . . . . .   1 F4=List
Operational message receiver . *SYS_____
Check cycles bypass value  . .   5

Job queue name . . . . . . . . QBATCH____
Job queue library name . . . . *LIBL_____

Maximum number of jobs . . . .        10




F12=Cancel
```

Job queue checkpoint

Checkpoint Description

Descriptive text of the checkpoint.

Schedule number

Number of the schedule that controls when this checkpoint will run.

Operational message receiver

Name of the user or distribution group that shall receive messages created by this checkpoint. Value *SYS directs those messages to the user specified when using the main menu item 10 for this system.

Check cycle bypass value

This field controls if the checkpoint shall run every time the monitor operations program runs. In order to save system resources it might be desirable to bypass some check cycles. The value controls how many cycles in a row to be bypassed before the checkpoint is run again.

For the *JOBQ checkpoint the default value is 5, the checkpoint bypasses five cycles before it runs the next time.

Job queue name

The name of the job queue to be monitored.

Job queue library name

The library name of the job queue to be monitored.

Maximum number of jobs

The maximum number of jobs in the job queue. If the actual number is higher when the queue is checked, a message will be sent.

9.7.6 Message queue

This screen is displayed after selecting a MSGQ checkpoint for update or add.

```
GSM2804                    Monitor system operations      12-02-01   12.00.00
Ver  6.13                                                 USERID    SYSNAME

Type values and press Enter

Checkpoint type  . . . . . . . *MSGQ
Description  . . . . . . . . . QSYSOPR Msgq_____

Schedule number  . . . . . . .   1 F4=List
Operational message receiver . *SYS_____
Check cycles bypass value  . .

Message queue name . . . . . . QSYSOPR___
Message queue library name . . QSYS_____

Severity level . . . . . . . . 99

 Notify if msgq is unavailable  0  0=No, 1=Yes




F12=Cancel      F10=Message filter    F11=Advanced options
```

Message queue checkpoint

Checkpoint Description

Descriptive text of the checkpoint.

Schedule number

Number of the schedule that controls when this checkpoint will run.

Operational message receiver

Name of the user or distribution group that shall receive messages created by this checkpoint. Value *SYS directs those messages to the user specified when using the main menu item 10 for this system.

Check cycle bypass value

This field controls if the checkpoint shall run every time the monitor operations program runs. In order to save system resources it might be desirable to bypass some check cycles. The value controls how many cycles in a row to be bypassed before the checkpoint is run again.

For the *MSGQ checkpoint the default is 0, the checkpoint runs every cycle.

Message queue name

The name of the message queue to be monitored.

Message queue library name

The library name of the message queue to be monitored.

Severity level

The severity threshold level used for this checkpoint. A message with this or higher severity level will be included, if not a message filter entry excludes it. If special value 101 is used only messages specified in the message filter will be processed.

Notify if msgq is unavailable

This function can create a message to the receiver of operational messages when the monitored message queue is not available or does not exist. A new message is created when it becomes available again.

F10=Message filter

Go to the message filter screen.

F11=Advanced options

Go to the advanced options screen.

9.7.7 Message filter

Entries are placed here for message exception handling. A message can be selected or excluded without message severity comparison. Specific messages can be re-routed to another receiver than the appointed receiver of operational messages for this .system.

Message filter records are associated with a specific message queue checkpoint.

This screen is displayed after pressing F10 in the MSGQ checkpoint screen.

```
GSM2821                      Message filter              12-02-01  12.00.00
Ver  6.13                                                USERID    SYSNAME

QSYSOPR    QSYS                                 Position to

Type option, press Enter
  2=Change    4=Delete
                                   Message    Sl
Opt Msg ID   Job name   User ID   data       cd System message text
    CPA58E0  *ANY       *ANY      *ANY        0 Controller  not replying
    *ANY     JOBBNAMN   *ANY      *ANY        0
    *ANY     *ANY       USER      *ANY        1




                                                                     End
F3=Exit         F6=Create      F12=Cancel
```

Message filter

Option

Use option 2 to display a screen for maintenance of a filter entry or use option 4 to delete an entry.

F6=Create

Press F6 in order to create a new entry.

9.7.8 Filter entry details

This screen is displayed after selecting a filter entry for change, or after pressing F6, Create.

```
GSM2822                    Message filter            12-02-01  12.00.00
Ver  6.13                                            USERID    SYSNAME
Type values and press Enter


Message ID . . . . . . . . . . CPF1234
Job name . . . . . . . . . . . *ANY
User ID  . . . . . . . . . . . *ANY
Message data . . . . . . . . . *ANY

Selection code . . . . . . . . 0  0=Omit, 1=Include

Operational message receiver . *SYS






F3=Exit
```

Filter entry details

Message ID

The message ID of the message to process with this filter entry. If *ANY is specified, the message will be processed regardless of message ID. Specify *NONE to select impromptu messages as they do not have a message id.

Job name

The job name of the message to process with this filter entry. If *ANY is specified, the message will be processed regardless of job name.

User ID

The user ID of the message to process with this filter entry. If *ANY is specified, the message will be processed regardless user ID.

Message data

This field holds the data to compare with the message data from the message to process. If the message received is an impromptu message, all text in the message is considered as message data. When the test is performed the message data is used as base string for a scan. If this string is found anywhere in the message data this filter entry is used if the other conditions are met.

*NONE   No scan is performed. The condition is always met.

String   The data string to use for the scan.

Selection code

0   The message is omitted if the selection criteria is met

1   The message is included if the selection criteria is met

Operational message receiver

The user ID of the receiver for messages selected by this filter entry. Specify *SYS if the currently appointed receiver of operational messages for this system shall receive the message

9.7.9 Message queue advanced options

This screen is displayed after pressing F11 in the MSGQ checkpoint screen.

```
GSM2805                    Monitor system operations      12-02-01   12.00.00
Ver  6.13                                                 USERID     SYSNAME

Type values and press Enter

Checkpoint type  . . . . . . .  *MSGQ
Description  . . . . . . . . .   QSYSOPR Msgq

Message queue name . . . . . .  QSYSOPR
Message queue library name . .  QSYS

Include impromptu messages . .  1 0=No, 1=Yes
Include job name . . . . . . .  1 0=No, 1=Yes
Include job number . . . . . .  1 0=No, 1=Yes
Include job user name  . . . .  1 0=No, 1=Yes
Include message id . . . . . .  0 0=No, 1=Yes
Include message severity . . .  0 0=No, 1=Yes

Duplicate msg threshold value
Retain msg if monitor inactive _  0=No, 1=Yes
Send msg to QSYSOPR msg queue    0=No, 1=Yes

F12=Cancel
```

Message queue advanced options

Include impromptu messages

This field controls if impromptu messages will be processed or not.
Impromptu messages are messages without a message ID.

Specify **0** to discard impromptu messages or **1** to include.

Include job name

Specify **0** to omit or **1** to include the job name in messages created for this checkpoint.

Include job number

Specify **0** to omit or **1** to include the job number in messages created for this checkpoint.

Include job user name

Specify **0** to omit or **1** to include the job user name in messages created for this checkpoint.

Include message id

Specify **0** to omit or **1** to include the message id in messages created for this checkpoint.

Include message severity

Specify **0** to omit or **1** to include the message severity in messages created for this checkpoint.

Duplicate msg threshold value

If not blank, the maximum number of messages with the same message id that will be sent for a job. When the threshold value is reached, a message indicating the condition will be sent.

Retain msg if monitor inactive

This field controls how to handle messages arrived to the message queue while the monitor was inactive shall be handled. If messages are saved, they will be sent out when the monitor starts.

Specify **0** to if you not want messages saved, or **1** to save the messages.

Send msg to QSYSOPR msg queue

This field controls if messages received in this message queue should be sent to QSYSOPR message queue.

Specify **0** to omit or **1** to send the message.

9.7.10 Job in MSGW

This screen is displayed after selecting a MSGW checkpoint for update or add.

```
GSM2803                   Monitor system operations      12-02-01   12.00.00
Ver  6.13                                                USERID    SYSNAME

Type values and press Enter

Checkpoint type  . . . . . . . *MSGW
Description  . . . . . . . . . Jobs in MSGW_____

Schedule number  . . . . . . .   1 F4=List
Operational message receiver . *SYS_____
Check cycles bypass value  . .






F12=Cancel           F11=Job name filter
```

MSGW checkpoint details

Checkpoint Description

Descriptive text of the checkpoint.

Schedule number

Number of the schedule that controls when this checkpoint will run.

Operational message receiver

Name of the user or distribution group that shall receive messages created by this checkpoint. Value *SYS directs those messages to the user specified when using the main menu item 10 for this system.

Check cycle bypass value

This field controls if the checkpoint shall run every time the monitor operations program runs. In order to save system resources it might be desirable to bypass some check cycles. The value controls how many cycles in a row to be bypassed before the checkpoint is run again.

For the *MSGW checkpoint the default is 0, the checkpoint runs every cycle.

F11=Job name filter

Go to job name filter screen.

9.7.11 Job name filter

This screen is displayed after pressing F11 in the MSGW checkpoint screen.

```
GSM2811                        Job name filter        12-02-01  12.00.00
Ver  6.13                                             USERID    SYSNAME

Type option, press Enter                  Position to  _____ _____
  4=Delete

Opt Job name    User ID
  _  *ALL       QSPLJOB












                                                                    End

F3=Exit          F6=Create      F12=Cancel
```

Job name filter

Option

Use option 4 to delete an entry.

F6=Create

F6 displays a screen to create a new filter record.

9.7.12 Add filter entry

This screen is displayed if F6 is pressed in the Job name filter screen.

```
GSM2812                         Job name filter            12-02-01  12.00.00
Ver  6.13                                                  USERID    SYSNAME

Type values and press Enter

Job name . . . . . . . . . . . _____
User ID  . . . . . . . . . . . _____

















F3=Exit          F12=Cancel
```

Add filter entry

Job name

Job name as it appears on the screen presented by WRKACTJOB command. Entry *ALL is valid, then **all** jobs for the user will be omitted.

User ID

The job User ID. Entry *ALL is valid, then all jobs with the specified name will be omitted.

9.7.13 Out queue

This screen is displayed after selecting an OUTQ checkpoint for update or add.

```
GSM2807                  Monitor system operations      12-02-01   12.00.00
Ver  6.13                                               USERID     SYSNAME


Type values and press Enter

Checkpoint type  . . . . . . . *OUTQ
Description  . . . . . . . . . QEZJOBLOG_____

Schedule number  . . . . . . .  1 F4=List
Operational message receiver . *SYS_____
Check cycles bypass value  . .  5

Outqueue name  . . . . . . . . QEZJOBLOG_
Outqueue library name  . . . . *LIBL_____

Outq max nbr of spool files  . ____100_
Outqueue maximum nbr of pages  ____500_




F12=Cancel
```

Out queue checkpoint

Checkpoint Description
Descriptive text of the checkpoint.

Schedule number
Number of the schedule that controls when this checkpoint will run.

Operational message receiver
Name of the user or distribution group that shall receive messages created by this checkpoint. Value *SYS directs those messages to the user specified when using the main menu item 10 for this system.

Check cycle bypass value
This field controls if the checkpoint shall run every time the monitor operations program runs. In order to save system resources it might be desirable to bypass some check cycles. The value controls how many cycles in a row to be bypassed before the checkpoint is run again.

For the *OUTQ checkpoint the default value is 5, the checkpoint bypasses five cycles before it runs the next time.

Out queue name
The name of the out queue to be monitored.

Out queue library name
The library name of the out queue to be monitored.

Maximum number of spool files
This field is used to specify the maximum number of spool files allowed in the out queue before an error message is created.

Maximum number of pages
This field is used to specify the maximum number of pages allowed in the out queue before an error message is created.

9.7.14 POP3 Server

This screen is displayed after selecting a POP3 checkpoint for update or add.

```
GSM280E                   Monitor system operations      12-02-01   12.00.00
Ver  6.13                                                USERID     SYSNAME

Type values and press Enter

Checkpoint type  . . . . . . . *POP3
Description  . . . . . . . . . POP3 server description

Schedule number  . . . . . . .  1 F4=List
Operational message receiver . *SYS
Check cykles bypass value  . .   10

Server name  . . . . . . . . . pop3server.com




F12=Cancel
```

POP3 checkpoint

Checkpoint Description
Descriptive text of the checkpoint.

Schedule number
Number of the schedule that controls when this checkpoint will run.

Operational message receiver
Name of the user or distribution group that shall receive messages created by this checkpoint. Value *SYS directs those messages to the user specified when using the main menu item 10 for this system.

Check cycle bypass value
This field controls if the checkpoint shall run every time the monitor operations program runs. In order to save system resources it might be desirable to bypass some check cycles. The value controls how many cycles in a row to be bypassed before the checkpoint is run again.

For the *POP3 checkpoint the default value is 10, the checkpoint bypasses ten cycles before it runs the next time.

Server name
The name of the POP3 server to monitor.

9.7.15 Subsystem

This screen is displayed after selecting a SBS checkpoint for update or add.

```
GSM2809                 Monitor system operations    12-02-01  12.00.00
Ver  6.13                                            USERID    SYSNAME

Type values and press Enter

Checkpoint type  . . . . . . .  *SBS
Description  . . . . . . . . .  QSNADS_____

Schedule number  . . . . . . .   2 F4=List
Operational message receiver .  *SYS_____
Check cycles bypass value  . .    5

Subsystem name . . . . . . . .  QSNADS____







F12=Cancel
```

Subsystem checkpoint

Checkpoint Description
Descriptive text of the checkpoint.

Schedule number
Number of the schedule that controls when this checkpoint will run.

Operational message receiver
Name of the user or distribution group that shall receive messages created by this checkpoint. Value *SYS directs those messages to the user specified when using the main menu item 10 for this system.

Check cycle bypass value
This field controls if the checkpoint shall run every time the monitor operations program runs. In order to save system resources it might be desirable to bypass some check cycles. The value controls how many cycles in a row to be bypassed before the checkpoint is run again.

For the *SBS checkpoint the default value is 5, the checkpoint bypasses five cycles before it runs the next time.

Subsystem name
The name of the subsystem to be checked.

9.7.16 Server

This screen is displayed after selecting a Server checkpoint for update or add.

```
GSM280D                  Monitor system operations      12-02-01   12.00.00
Ver  6.13                                               USERID    SYSNAME


Type values and press Enter

Checkpoint type  . . . . . . . *SERVER
Description  . . . . . . . . . Server description

Schedule number  . . . . . . .   1 F4=List
Operational message receiver . *SYS
Check cycles bypass value  . .   10

Server name  . . . . . . . . .
IP address . . . . . . . . . . 192.168.1.1
Port number  . . . . . . . . . 1234




F12=Cancel
```

Server checkpoint

Checkpoint Description
Descriptive text of the checkpoint.

Schedule number
Number of the schedule that controls when this checkpoint will run.

Operational message receiver
Name of the user or distribution group that shall receive messages created by this checkpoint. Value *SYS directs those messages to the user specified when using the main menu item 10 for this system.

Check cycle bypass value
This field controls if the checkpoint shall run every time the monitor operations program runs. In order to save system resources it might be desirable to bypass some check cycles. The value controls how many cycles in a row to be bypassed before the checkpoint is run again.

For the *SERVER checkpoint the default value is 10, the checkpoint bypasses ten cycles before it runs the next time.

Server name
The name of the web server to monitor. Specify either server name or IP address.

IP address
IP address to the server.

Port number
The port number of the server.

9.7.17 SMTP Server

This screen is displayed after selecting a SMTP checkpoint for update or add.

```
GSM280F                  Monitor system operations      12-02-01   12.00.00
Ver  6.13                                               USERID    SYSNAME


Type values and press Enter

Checkpoint type  . . . . . . . *SMTP
Description  . . . . . . . . . SMTP server description

Schedule number  . . . . . . .  1 F4=List
Operational message receiver . *SYS
Check cycles bypass value  . .  10

Server name  . . . . . . . . . smtpserver.com








F12=Cancel
```

SMTP checkpoint

Checkpoint Description
Descriptive text of the checkpoint.

Schedule number
Number of the schedule that controls when this checkpoint will run.

Operational message receiver
Name of the user or distribution group that shall receive messages created by this checkpoint. Value *SYS directs those messages to the user specified when using the main menu item 10 for this system.

Check cycle bypass value
This field controls if the checkpoint shall run every time the monitor operations program runs. In order to save system resources it might be desirable to bypass some check cycles. The value controls how many cycles in a row to be bypassed before the checkpoint is run again.

For the *SMTP checkpoint the default value is 10, the checkpoint bypasses ten cycles before it runs the next time.

Server name
The name of the SMTP server to monitor.

9.7.18 Active systems

This screen is displayed after selecting a SYSACT checkpoint for update or add.

```
GSM280B                    Monitor system operations      12-02-01   12.00.00
Ver  6.13                                                 USERID     SYSNAME


Type values and press Enter

Checkpoint type  . . . . . . . *SYSACT
Description  . . . . . . . . . All systems_____

Schedule number  . . . . . . .   1 F4=List
Operational message receiver . *SYS_____
Check cycles bypass value  . .   10

Send system active message . . 1
Send time system active msg  . 6:00







F12=Cancel
```

System active checkpoint

Checkpoint Description
Descriptive text of the checkpoint.

Schedule number
Number of the schedule that controls when this checkpoint will run.

Operational message receiver
Name of the user or distribution group that shall receive messages created by this checkpoint. Value *SYS directs those messages to the user specified when using the main menu item 10 for this system.

Check cycle bypass value
This field controls if the checkpoint shall run every time the monitor operations program runs. In order to save system resources it might be desirable to bypass some check cycles. The value controls how many cycles in a row to be bypassed before the checkpoint is run again.

For the *SYSACT checkpoint the default value is 10, the checkpoint bypasses ten cycles before it runs the next time.

Send system active message
Use this field to specify if a message should indicate that the *SYSACT checkpoint is completed.

0 indicates that no message shall be sent, **1** means that a message shall be sent.

If active, one message is sent every 24 hours.

Send time system active message
Send time in HHMM format when the system active message shall be sent. If the GSMTEXT subsystem is started later, the message will be sent then.

9.7.19 System active systems

The systems that will be checked with the *SYSACT checkpoint is shown in this screen.

This screen is displayed after pressing Enter in the *SYSACT checkpoint screen.

```
 GSM2831                    System active systems      12-02-01  12.00.00
 Ver  6.13                                             USERID    SYSNAME

 All systems                                Position to  _____

 Type option, press Enter
  4=Delete
     System
 Opt name        Description
  _  NTSYS       NT Server
  _  REMOTE      Remote iSeries
  _  ROUTER      Router






                                                                     End

 F3=Exit          F6=Add system     F12=Cancel
```

System active systems

Option

Use option 4 to delete a system from this checkpoint.

F6=Add system

F6 displays a screen used to add a system.

9.7.20 Add system

This screen is displayed if F6 was pressed in the previous screen.

```
GSM2832                    System active systems       12-02-01   12.00.00
Ver  6.13                                              USERID     SYSNAME

Type values and press Enter

Description  . . . . . . . . . All systems

System name  . . . . . . . . . _____    F4=List











F12=Cancel
```

Add system

System name

Enter the name of the system to be added to the *SYSACT checkpoint. Use
F4 with the cursor in this field for a list of systems.

9.7.21 User defined checkpoint

This screen is displayed after selecting a USRDFN checkpoint for update or add.

```
GSM280C                    Monitor system operations        12-02-01   12.00.00
Ver  6.13                                                   USERID     SYSNAME


Type values and press Enter

Checkpoint type  . . . . . . . *USRDFN
Description  . . . . . . . . . User defined checkpoint_____

Schedule number  . . . . . . .   1 F4=List
Operational message receiver . *SYS_____
Check cycles bypass value  . .   5

User written program name  . . USERPGM___
Library name . . . . . . . . . USERLIB___






F12=Cancel
```

User defined checkpoint

Checkpoint Description
Descriptive text of the checkpoint.

Schedule number
Number of the schedule that controls when this checkpoint will run.

Operational message receiver
Name of the user or distribution group that shall receive messages created by this checkpoint. Value *SYS directs those messages to the user specified when using the main menu item 10 for this system.

Check cycle bypass value
This field controls if the checkpoint shall run every time the monitor operations program runs. In order to save system resources it might be desirable to bypass some check cycles. The value controls how many cycles in a row to be bypassed before the checkpoint is run again.

For the *USRDFN checkpoint the default value is 5, the checkpoint bypasses five cycles before it runs the next time.

User written program name
Name of the user written program.

See chapter Sample programs for more information on how to write a user checkpoint program.

Library name
Name of the library containing the user written program.

9.8   Command codes

This file holds the information about the command codes that are used when sending messages from mobile phones to the iSeries.

Use option 20 on the configuration menu to display this screen.

```
GSM2901                          Command codes              12-02-01   12.00.00
Ver  6.13                                                   USERID     SYSNAME

Type option, press Enter                       Position to  __
  2=Change  3=Copy      4=Delete     7=Rename
    CMD                                   Target
Opt cde Description                       system
  _  A   Message acknowledgement          *LOCAL
  _  H   Message help                     *LOCAL
  _  R   Message reply                    *LOCAL
  _  ZC  Demonstration error on NT syst   NTSYS
  _  ZD  Display demo on NT system        NTSYS
  _  ZE  Demonstration error program      *LOCAL
  _  ZI  Example item inquiry             *LOCAL
  _  ZM  Test message                     *LOCAL
  _  ZO  Example order entry              *LOCAL




                                                                        Bottom
 F3=Exit         F6=Create        F12=Cancel
```

Command codes

Option

Use option 2 to change an existing command code or option 3 to copy. Option 4 is used to delete a command code and option 7 to rename.

F6=Create

F6 displays a screen used to create a new command code.

9.8.1 Command code details

This screen is displayed after selecting an entry to change, or an empty screen if F6, Create, is pressed.

```
GSM2903                      Command codes            12-02-01   12.00.00
Ver  6.13                                             USERID     SYSNAME

Type values and press Enter

Command code . . . . . . . . . ZI
Command code description . . . Example item inquiry
Target system name . . . . . . *LOCAL

Command security level . . . . 1
Verify SMS protocol  . . . . . 1
Confirmation message . . . . . 0
Transparent mode . . . . . . . 0

Command string . . . . . . . . CALL GSMTEXT/EXP001 PARM(&T &P1)_____
_____
_____
_____
_____
_____
_____
_____

 F3=Exit        F4=Prompt CMD   F12=Cancel
```

Command code details

Command code

This is the command code entered on the mobile when sending messages to the iSeries. It can be 1 or 2 characters long and it can be either fully alphabetic (A-Z), or fully numeric (0-9). If a lowercase command code is entered on the mobile, it will be translated to uppercase before processing.

Command code description

Descriptive text of the command code.

Target system name

The system name, or *LOCAL if the target is the local system, to receive and process the message.

Command security level

This field is used to specify what authority the user needs in order to run the command.

0 High. The user who sent the message must exist in the MidJet GSM Text user file. There must also be an entry for the user in the Command Authority file.

1 Medium. The user who sent the message must exist in the user file.

2 None. No authority checking will be performed.

Verify SMS protocol

This field controls if the SMS protocol for incoming messages shall be verified. When verification is active incoming messages will be verified to origin from a GSM telephone or GSM module.

0 No, SMS protocol will not be verified.

1 Yes, SMS protocol will be verified.

Confirmation message

This field controls if a confirmation message should be sent to the originator.

If the command is executing the *MSGRPY message reply function the values in this field will have the following meanings.

0   No. Confirmation message will not be sent.

1   System messages. Confirmation message will be sent on replies to system messages.

2   Non-system messages. Confirmation message will be sent on replies to non-system messages.

3   All messages will generate a confirmation message.

For other commands this field will have the following meanings.

0   No. Confirmation message will not be sent.

1   Yes. Confirmation message will be sent.

Command string

This is the iSeries command that corresponds to the command code entered on the mobile phone. It can be any valid system or user command. Be sure that the command or program will run without attempts to use a display file, and it must not issue any inquiry message. If this happens, it will not be possible to reply to such a message using MidJet GSM Text.

Use F4 in this field to use the prompt function.

These special values can be used:

*MSGHLP   Use this value to retrieve the help (second level) text for a system message

*MSGRPY   Sends a reply to a message sent to a user. Messages accepting a reply have a reply number attached.

*MSGACK   Sends an acknowledgement reply to a message sent to a user. Messages accepting an acknowledgement have a reply number attached.

*NONE   No command is executed.

*REMOVE   No command is executed and the entry will be removed from the log.

*USRMSG   GSM phone to iSeries user message. Uses two predefined parameters, User Id on the iSeries and message text.

The following describes the variables and values returned for the substitution parameters:

&L   The maximum number of characters on the phone when used for displaying messages. This value is retrieved from the User file. If a message arrives from an unregistered user, this parameter will contain *N.

&P1 - &P9 Parameters. Parameter value as typed on the mobile phone, or default value from command code file.

&S   The sequence number in the Received messages file.

&T   Origin telephone number. The telephone number of the mobile phone that sent the message.

&U   User ID. The user ID in the User file corresponding to the telephone number.

&Z   Operator timestamp. The timestamp assigned to the message by the operator. The value is 14 bytes long. The first 6 is the date in YYMMDD format, the following 6 is the time in HHMMSS format and the last two represents the time zone. The time zone indicates the difference, expressed in quarters of an hour, between the local time and GMT (Greenwich Main Time).

9.8.2 Parameter descriptions

Description of the assigned parameters, and optional default values. This
screen is displayed only if one or more parameters were defined in the
previous screen.

```
 GSM2904                        Command codes              12-02-01  12.00.00
 Ver  6.13                                                 USERID    SYSNAME

 Type values and press Enter

 Command code . . . . . . . . . ZI
 Command code description . . . Example item inquiry

 Parameters:

                        0=A
 Nbr Description    Lth 1=N Default value
  1  Item number____  7  1  _____
  2  _____  _     _____
  3  _____  _     _____
  4  _____  _     _____
  5  _____  _     _____
  6  _____  _     _____
  7  _____  _     _____
  8  _____  _     _____
  9  _____  _     _____

 F12=Cancel
```

Command code parameters

Parameter description
Descriptive text of the parameter.

Parameter length
Length in bytes.

Parameter type

0 Alphanumeric characters allowed. The value will be enclosed in
quotes if the value is not a name when the command string is built.

1 Positive numeric value. The value will be right adjusted and zero
filled according to the parameters length.

Parameter default value
Parameter default value to be used if omitted in the message from the
mobile.

9.8.3 Command authority

This screen is displayed if command security level is 0.

These are the users currently granted authority to the command.

```
GSM2911                        Command authority        12-02-01  12.00.00
Ver  6.13                                               USERID    SYSNAME

ZI Example item inquiry                     Position to  _____

Type option, press Enter
 4=Delete

Opt User ID    User name
 _   USERID    User Name




                                                                      End

F3=Exit          F6=Create      F12=Cancel
```

Command code authority

Option

Use option 4 to delete command authority for a user.

F6=Create

F6 displays a screen used to create a new record in command authority file

9.8.4 Grant command authority

This screen is displayed if F6 was pressed in the previous screen.

```
GSM2912                      Command authority          12-02-01  12.00.00
Ver  6.13                                               USERID    SYSNAME

Type values and press Enter

Command code . . . . . . . . . ZE

User ID  . . . . . . . . . . .












F12=Cancel
```

Grant command authority

User ID

The user ID of the user who will be granted authority.

9.8.5 Command code IS

The special command code IS can be used to process incoming SMS that does not start with a command code. When this code is processed a search is made to see if there was an outgoing SMS sent to the originator of the incoming SMS. The id of the sender of the outgoing messages is then available in the &O special parameter.

9.9 Simulate message from mobile

This program is used to simulate sending messages from a mobile phone to the iSeries. Messages entered are placed on the received messages queue.

Use option 21 on the configuration menu to display this screen.

```
GSM5901                     Simulate msg from mobile      12-02-01   12.00.00
Ver  6.13                                                 USERID     SYSNAME




                            _____
                            _____          From GSM number:
                            _____          461
                            _____



                            1    2    3

                            4    5    6

                            7    8    9

                            *    0    #



 F3=Exit        F7=Message log  F9=Retrieve msg F11=Full screen
```

Simulate message from mobile, phone screen

Message text

Four lines of message text.

From GSM number

The GSM number of the currently signed on user.

F7=Message log

Go to the message log.

F9=Retrieve msg

This function retrieves the text of previous message(s) created.

F11=Full screen

Display the full screen format that allows entry of full length messages.

9.9.1 Full screen entry

This screen is displayed when F11 is pressed in the Simulate message from mobile phone screen. It works in the same way as the previous screen, the only difference is the possibility to type full length messages.

```
 GSM5902                   Simulate msg from mobile      12-02-01   12.00.00
 Ver  6.13                                               USERID     SYSNAME

         1         2         3         4         5         6         7
 1234567890123456789012345678901234567890123456789012345678901234567890123456789
 _____
 _____


                                                       From GSM number:
                                                       461









 F3=Exit         F7=Message log  F9=Retrieve msg F11=Phone screen
```

Simulate message from mobile, full screen

Message text

Up to 160 characters of message text.

From GSM number

The GSM number of the currently signed on user.

F7=Message log

Go to the message log.

F9=Retrieve msg

This function retrieves the text of previous message(s) created.

F11=Phone screen

Return to the phone screen.

9.10 Remote installation

9.10.1 Prepare for remote installation

The Remote Installation function is intended for distribution of the MidJet GSM Text application to other systems, as an alternative to distribution on CD.

Use the following preparation steps:

- Verify that SNADS is configured and active for the source and target systems.

- Sign-on to the remote system as the security officer.

- Create a user profile with the following command:

CRTUSRPRF USRPRF(GSMTEXT)

- Create two system directory entries with the following commands:

ADDDIRE USRID(GSMTEXT source-system**) SYSNAME**(source-system**) USRD('MidJet GSM Text')**

where the source-system is the system name of the sending system.

ADDDIRE USRID(GSMTEXT remote-system**) SYSNAME(*LCL) USRD ('MidJet GSM Text') USER(GSMTEXT)**

where the remote-system is the system name of the receiving system.

- Change network job action with the command

CHGNETA JOBACN(*SEARCH)

Add a network job entry with the following command:

ADDNETJOBE FROMUSRID(GSMTEXT source-system**) ACTION(*SUBMIT) SBMUSER(QLPINSTALL)**

Consider the security exposure after the last two commands. You may want to reset/delete them after the remote installation is completed.

9.10.2 Run remote install

Select menu option 30 to use this function.

This screen is displayed:

```
GSM6801                    Remote installation         12-02-01  12.00.00
                                                        USERID    SYSNAME

Type values and press Enter

To system . . . . .  _____




















F12=Cancel
```

Remote installation

Data will be extracted and sent to the remote system. Messages will be sent back to the GSMTEXT message queue on the source system indicating file transfer progress and the installation result. If the remote installation fails on the remote system, the job log of the remote system will be transferred to the GSMTEXT out queue on the source system. Correct the error condition, delete net files addressed to GSMTEXT on the remote system and retry the operation. Net files can be viewed with command
 WRKNETF GSMTEXT.

To system

The system name of the receiving system.

MidJet GSM Text Commands

All MidJet GSM Text commands are copied to library QGPL during the installation.

A command may change the library list during execution. The library list is reset when the command is completed.

9.11 CHGGSMTOPR

CHGGSMTOPR USID(*user ID or distribution group ID*) **SYSN**(*system name*, default *LOCAL)

Purpose

This command is used to change the receiver or operational messages from a system.

Parameters

USID

User ID or distribution group for the new receiver of operational messages.

SYSN

System name for the system that shall have the receiver changed. Default value is *LOCAL

9.12 CRTGSMTSRV

CRTGSMTSRV RSCN(*resource name*)

Purpose

This command is used to create communication objects used by your service provider for MidJet GSM Text to sign-on to your system. The IBM service modem is normally used.

The command creates a line, a controller and devices. The configuration will be varied on, if vary on fails an error message is sent.

A user profile is also created. It will have the ID and password GSMSRV and have user class *PGMR.

Use the command DLTGSMTSRV when the service job is completed, to avoid an undesired security risk exposure.

Parameters

RSCN

The resource name to be used.

9.13 DLTGSMTSRV

DLTGSMTSRV

Purpose

This command is used to vary off and remove all objects created by the command CRTGSMTSRV.

This command has no parameters.

9.14 ENDGSMTSBS

ENDGSMTSBS

Purpose

The ENDGSMTSBS command is used to end the MidJet GSM Text subsystem in a controlled way.

Always use this command instead of ENDSBS command.

This command has no parameters.

9.15 RUNGSMTRPP

RUNGSMTRPP SELECT(*program name, default *ALL*) **ORDER**(*sort order, default *FIFO*)

This command runs the reply processing programs specified in the XSBMGTM API with option delayed selected.

SELECT

Use this parameter to specify the name of the reply processing program you want to run. Default value *ALL.

ORDER

Specifies the sort order the reply processing programs are executed in. Valid entries are *FIFO or *PGMNAME.

9.16 SNDGSMTMSG

SNDGSMTMSG USID(*User ID or distribution group*) **GSMI**(*GSM number in international format*) **MTXT**(*message text*) **SNAC**(*0 or 1*) **NDMT**(*0 or 1*)

MidJet GSM Text provides a command interface used for sending messages directly from application programs. A call level interface is also available, se XSBMGTM section.

It could be used in many different situations like:

- Confirmations that an important job has reached a normal end of job. Examples of this kind are jobs like backup, period closing jobs, or the nightly invoicing routine.

- Sending messages from application programs about certain conditions that require attention, for example urgent service calls to field service staff.

- Perform person paging by sending standard messages.

Include the **MONMSG CPF0000** command if for any reason the MidJet GSM Text application is not available.

Parameters

USID

The User ID can be an individual user, a distribution group or *GSMTOPR, the pseudo user ID for the current receiver of operational messages.

GSMI

GSM number in international format. Can be used at the same time as the USID parameter. This parameter is available for LO, LB, UO and UB license types only.

MTXT

The message text can be up to 160 characters long. If the message to be sent exceeds 160 characters, just divide the text into 160 character blocks and send multiple messages.

SNAC

Send alarm call. Specify 0 for no, 1 for yes.

NDMT

Non-display message in log. Specify 0 for no, 1 for yes.

9.17 STRGSMT

See chapter 5 for a description of this command.

9.18 UPDGSMTFSD

UPDGSMTFSD

Purpose

This command is used to update users in MidJet GSM Text users file with name and GSM telephone number stored in the second telephone number field in the system directory. This is helpful when the system directory is the primary place to store GSM numbers.

If the user does not exist in MidJet GSM Text, a new user file entry is created when a system directory entry with the second telephone number used is found.

This command has no parameters.

10 MidJet GSM Text API's

Five call level API's are included in the product. A source file with sample programs is available, see chapter *Sample programs.*

10.1 XSBMGTM

This API is used to create GSM Text messages.

See the example program EXP001 for an example how to use this API.

Parameters:

1	User ID	Input	Char(10)
2	GSM number	Input	Char(20)
3	Message text	Input	Char(160)
4	Send alarm call	Input	Char(1)
5	Message type	Input	Char(*)
6	Request reply	Input	Char(1)
7	Validity period hours	Input	Char(2)
8	Validity period minutes	Input	Char(2)
9	Reply proc program library	Input	Char(10)
10	Reply proc program name	Input	Char(10)
11	Rpy proc program execution	Input	Char(1)
12	User data	Input	Char(32)
13	Non-display message text in log	Input	Char(1)
14	Sequence number	Output	Char(7)
15	Return code	Output	Char(1)

User ID

The user ID in the user file for the recipient of the message. Leave blank if a GSM number is specified.

GSM number

The GSM number of the recipient. The number must be entered in international format. This is only available for the UO and UB license types. Leave blank if a user ID is specified.

Message text

The message text to be sent.

Send alarm call

Send alarm call. Specify 0 for no, 1 for yes.

Message type

Optionally specify an alphanumeric character. The optional value is not processed by GSM Text, but can be used as a selection value when a query is run on the message log file. Reserved values are S and U.

Request reply

Optionally specify 1 if a reply shall be requested. This will cause a reply string to be added to the message text when the message is sent.

Validity period, hours

Optionally specify how many hours a reply request shall be considered valid. When this period is expired, the message will be displayed with *EXPIRED

in the reply column of the send log. This field is only in effect if the Request reply field is set to 1.

Validity period, minutes
Works in conjunction with the previous field.

Reply processing program library
The name of the library where the reply processing program is stored. This field is only in effect if the Request reply field is set to 1.

Reply processing program name
The name of the reply processing program. This field is only in effect if the Request reply field is set to 1.

Reply processing program execution
Specify I if the reply should be processed immediately after arrival, else specify D if the reply should be processed by command RUNGSMTRPP.

User data
The user data is stored together with the message and is not processed by the product. It can be retrieved with the XTRVGT4 API.

Non-display message text in log
Specify 1 in this parameter if the message text shall not be readable in the message log.

Sequence number
The sequence number is assigned when this API runs. Store it in your application if you want to retrieve the message later.

Return code
The return code indicating the result of the message submission.

0   Message submission completed successfully.

9   Unspecified error.

10.2 XTRVGT4

This API is used to retrieve information about messages in the Receive log or in the Send log.

Parameters:

1	Origin system name	Input	Char(8)
2	Sequence number	Input	Packed(7,0)
3	Format name	Input	Char(6)
4	Return code	Output	Char(1)
5	Receiver variable	Output	Char(*)

Origin system name
The name of the system that created the message.

Sequence number
Sequence number of the message. It can be obtained when submitting a message with the XSBMGTM API for outgoing messages. For incoming messages the sequence number can be referenced as a parameter in the command string.

Format name

Use SND010 for messages in the send log and RCV010 for messages in the receive log.

Return code

The following codes can be returned:

0   Message successfully retrieved.

1   Message not found.

8   Wrong format name specified.

9   Program error.

Receiver variable

Formats SND010 and RCV010 are available in the GSMTEXT/EXPSRC source file.

10.3 XTRVGTM

This API was used in version 3 of MidJet GSM Text for the same purpose as XRTVGT4 is now. It is still supported for compatibility reasons.

10.4 XCLRGMO

When XCLRGMO is run, this causes all checkpoints with an active schedule to run immediately. Any error will be reported whether or not reported before.

No parameters are used.

11   iSeries sample programs

The following programs are included in the source file GSMTEXT/EXPSRC. They also exist in object form in the GSMTEXT library.

11.1 Item inquiry program

EXP001   This program performs a simulated database lookup based on an item number, and sends a message back to the originator. The program is called using the ZI command code.

11.2 Order entry request

EXP002   The purpose of this program is to demonstrate how message reply technique can be used. It works in conjunction with the EXP003 reply processing program. The order entry request demonstration is called using command code ZO.

11.3 Order entry reply processing

EXP003   Contains the data structures SND010 and RCV010 used by the XTRVGT4 API.

11.4 User defined system checkpoint

EXP004   This program contains skeleton code to demonstrate a user written system checkpoint program.

12 MidJet Win2000/NT Monitor Configuration

This program is used for configuration of the options on the NT.

Please note that the MidJet Monitor service program must first be stopped to perform most of the options.

12.1 ConfigTool main menu
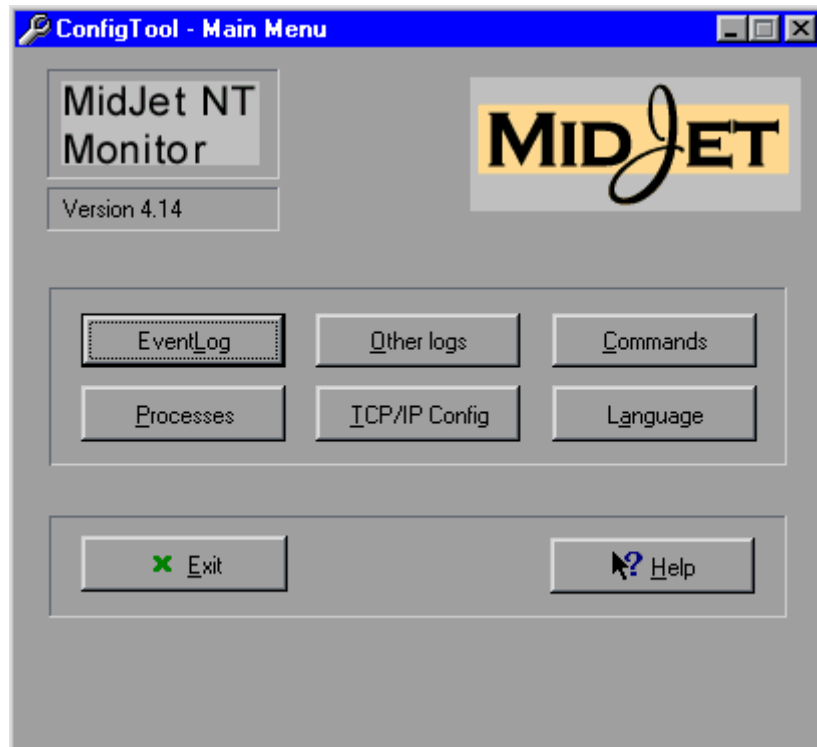
Main Menu

Select an option by clicking on one of the buttons.

Throughout the configuration program online help is available. Just click the help button, move the cursor to the desired position, and click again.

12.2 Event log

This program is used to configure how the event log should be monitored.

Messages arriving at the Win2000/NT's event log will be processed by the service program MidJet Monitor. Messages selected will be transferred to the controlling iSeries. The messages will then be sent to the operator appointed for the Win2000/NT system. The ID of the operator is specified on the iSeries GSM Text Main Menu, option 10.

12.2.1 Message selection

This screen exists for the System, Security and Program event logs respectively.
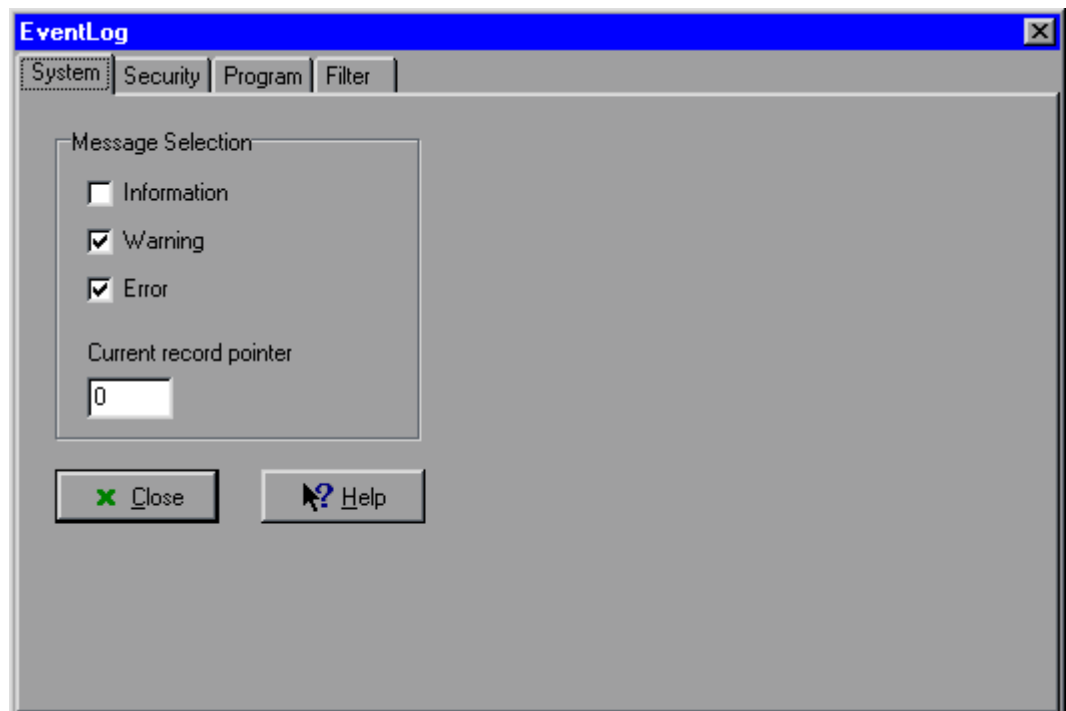
Message selection

Message selection

Messages can be selected by type, just select/exclude the type of messages you want to transfer to the appointed operator.

Current record pointer

This field holds the number of the last read message. During normal operations, this value should not be changed manually.

12.2.2 Filter

The Event log filter allows you to override the normal event log entry selection based on event type. For every event log entry, the selection

process first reads all the filter entries. If a filter entry matches, the event log entry is included or excluded based on that filter entry.
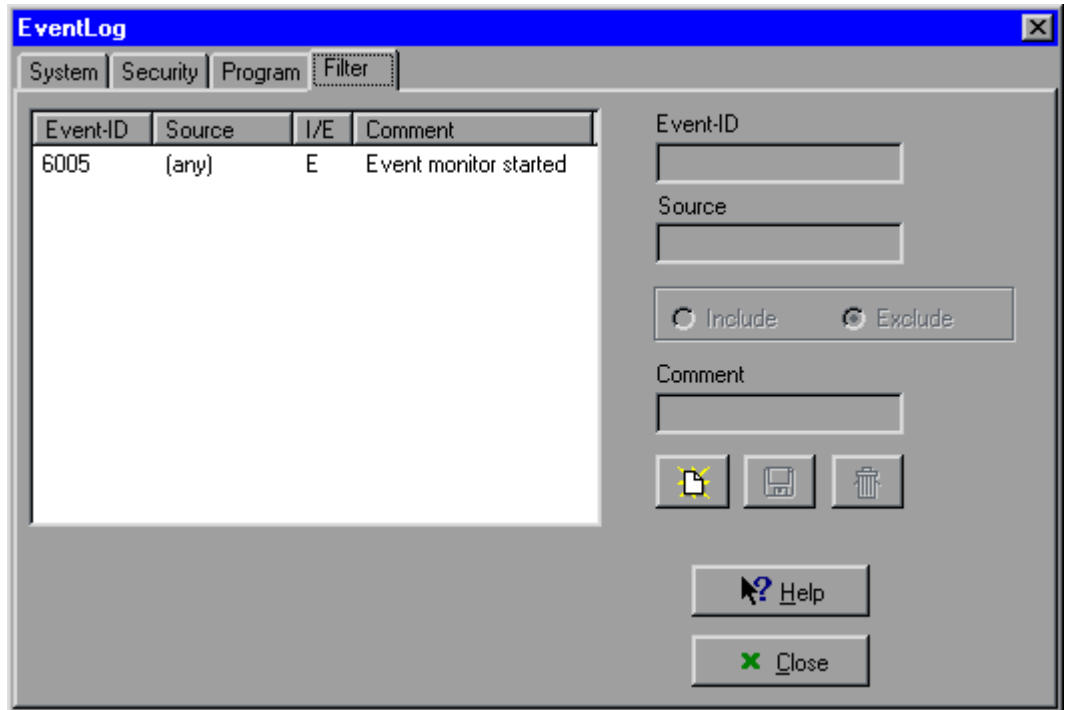
Event log filter

Event-ID

The ID of the event you want to include or exclude. Special value *(any)* allows you to make the selection based only on the source.

Source

The source of the event you want to include or exclude. Special value *(any)* allows you to make the selection based only on the event id

Note. If you specify (any) for both event id and source, this filter entry will be used for all events.

I/E, Include/Exclude

Use button Include if a log entry matching this filter entry shall be included, or use button Exclude for exclusion.

Comment

Your comment to this filter entry.

12.3 Other logs

This screen is used to define other than NT system log files that you want to monitor. The log files must be in text format.
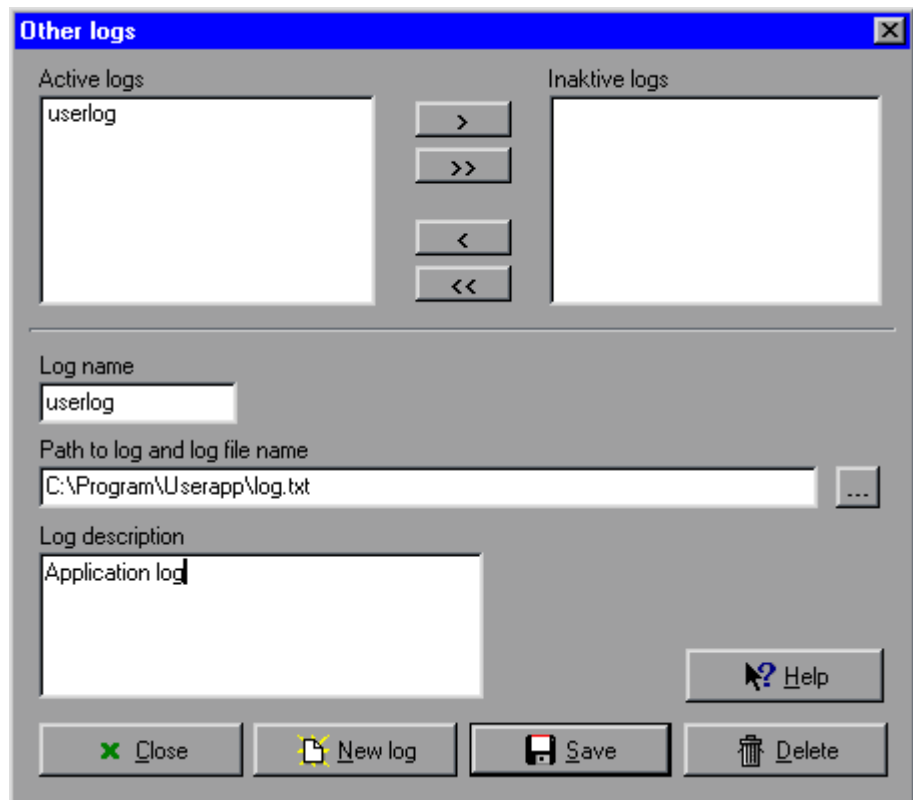
Other logs

Active logs

This box holds the names of the logs currently being monitored. By selecting a file and press the > button the log will be moved to the Inactive logs box. By pressing the >> all active logs will be moved to Inactive logs.

Inactive logs

This box holds the names of the inactive logs. These are not currently monitored, but the entry is kept for eventual future use. By selecting a file and press the < button the log will be moved to the Active logs box. By pressing the << all inactive logs will be moved to Active logs.

Log name

Your name of the log. The name can be a name other than the file name.

Path to log and log file name

Full path and log file name. A search function is available by pressing the ... - button to the right of the field.

Log description

Your description of the log.

12.4 Commands

This screen is used to define the command codes for program start requests from the GSM telephone.

A message indicating successful program start can be sent as an option. This is set in the iSeries.

If the program start fails, a message is always created.
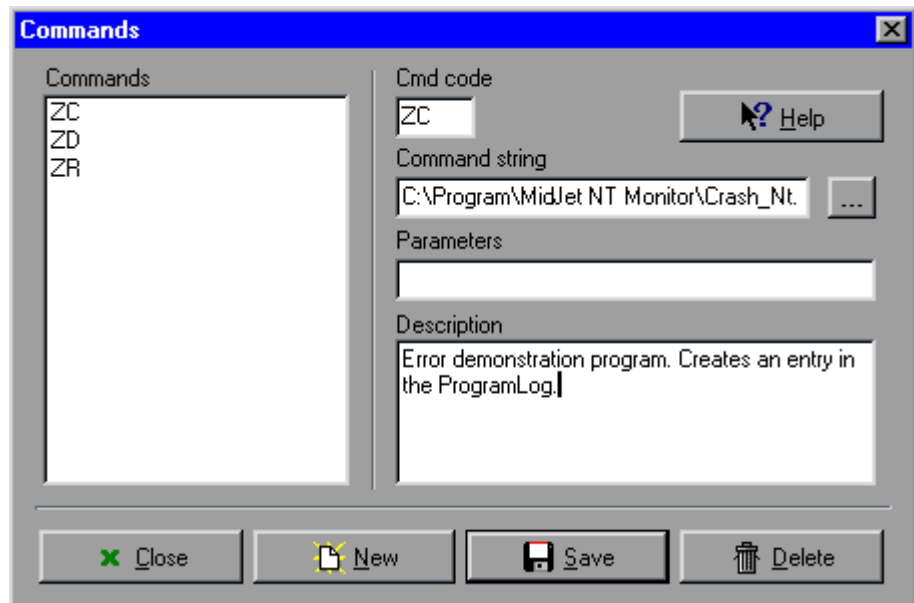
Commands

Commands

List of define command codes.

Command code

The one or two character command code. This code must also be created on the iSeries.

Command string

This is the full path and file/program name that will run when the command code is used. A search function is available by pressing the ... -button to the right of the field.

Parameters

Parameters used, they are referred to as %1 for the first, %2 for the second etc.

Description

Descriptive text of the command code.

12.5 Processes

NT processes monitored to check they are active are configured in this screen.

If a process is missing, this will be reported to the operator of the NT. When a missing process is recovered, this will also be reported.
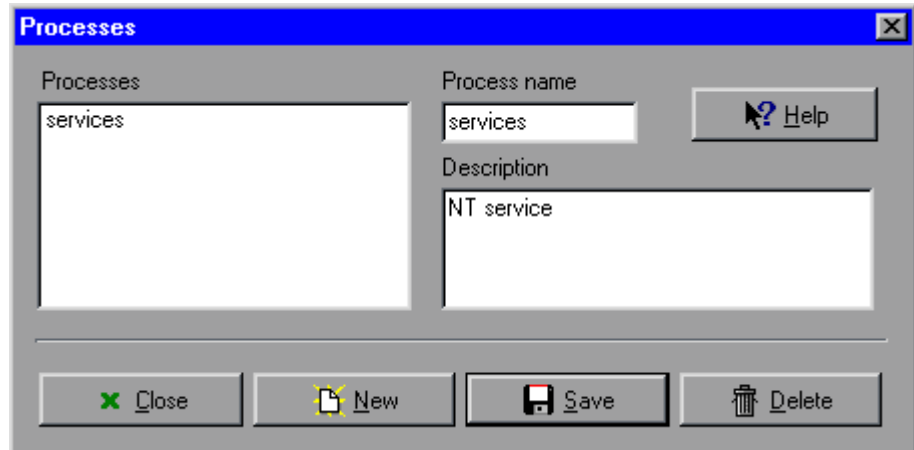
Processes

Processes

List of processes to be monitored.

Process name

The name of the process, without any file extension.

Description

Descriptive text of the process.

12.6 TCP/IP Configuration

IP address of the iSeries with MidJet GSM Text product installed.
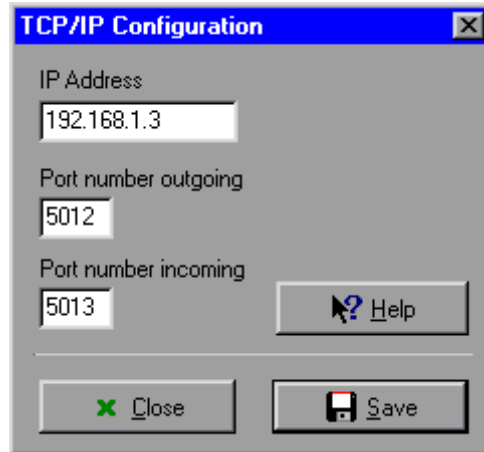
TCP/IP Configuration

IP Address

The IP address of the iSeries.

Port number outgoing

Port number to use for outgoing communication. The value 6851 is assigned during installation, and should only be changed if it must be used for another purpose.

Port number incoming

Port number to use for incoming communication. The value 6852 is assigned during installation and should only be changed on the same condition as Port number outgoing.

12.7 Language
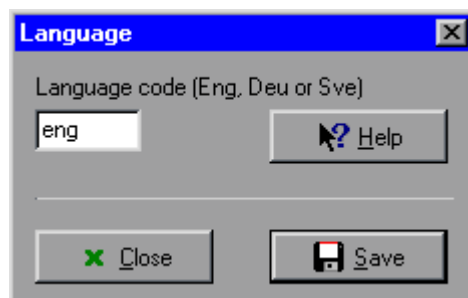
Language

Language code

Available language codes are Eng for English, Esp for Spanish, Deu for German and Sve for Swedish.

13 Win2000/NT Monitor Background program

13.1 Program purpose

MidJet Win2000/NT Monitor uses a program, MidJetMonitor, implemented as a service. This program handles the system monitor function and program start requests initiated from the iSeries.

14 MidJet NT Monitor DLL

This DLL is constructed using Borland C+++ Builder and contains two API's: SndMsg and SndErr. Together with the DLL file there is also a LIB file called MidJet.lib.

14.1 SndMsg API

This API will send a message to a TCP/IP server. The message is built up of a telephone number, a message text and an alert code.

The IP-address and port number of the server has to be specified in the ConfigTool of the MidJet NT Monitor software.

Prototype

extern "C" int_export SndMsg (char * phone, char * text, char alert);

If your program is a C program, you can discard the extern "C" clause.

Parameters

Phone is a NULL-terminated string of a telephone number. Maximum size is 20 bytes.

Text is a NULL-terminated string of text. Maximum size is 160 bytes.

Alert is a char.

Return value

 0 =   SndMsg successful.

-1 =   SndMsg failed due to communication error. An explanation can be retrieved by SndErr API (see below).

>0   The server returned this code. The meaning of the code is beyond this API. Please consult the server documentation.

14.2 SndErr API

This API will return a message text explaining the cause of a communication error that occurred when running the SndMsg API.

Prototype

extern "C" char * _export SndErr ();

If your program is a C program, you can discard the extern "C" clause.

Parameters

None.

Return value

A pointer to a NULL-terminated error text string.

15 Modems and GSM modules

15.1 Asynchronous modems

MidJet GSM Text is developed using asynchronous modems of types Ericsson V34DT and Multitech MT1932ZDXI. No change of the factory configuration of these modems is required.

If you intend to use asynchronous connection type we recommend that you use one of these, or a 100% compatible.

Other modems should be configured as follows:

Data correction   On

Data compression   Off

DSR control   AT&S1&W0

Please observe that the DSR control setting must be configured by attaching the modem to a PC with a terminal emulation program. It cannot be changed using the modem initialisation function in the Communication description file.

15.2 Synchronous modems

IBM ECS modems for 2.400, 9.600 and 19.200 BPS were used for development. No special configuration is required.

When communication via the service modem is used a X.32 access service to the X.25 network is used. Verify with your GSM operator that support for this is available.

15.3 GSM modules

MidJet GSM Text supports ETM 9200, 9300, 9350, Ericsson GM12, GM22, Siemens A1, M1, TC35, TC35i and Digicom PocketGSM devices.

16   Using the mobile phone

16.1 Prepare the mobile phone

In order to use the mobile phone to send messages to the iSeries, follow these steps if you have not yet used the message function.

- Verify that the short message centre address is registered on the mobile phone.

- The telephone should send messages as text.

- Send a message to your own GSM number to verify the function. If it does not arrive, or if a related question arises, consult your GSM operator's help desk.

16.2 Sending messages to the iSeries

Consult the telephone manual on how to use the mobile phone for messages editing and sending, the procedure varies between different types.

Functions on the mobile can often be reached using different methods i.e. following a menu tree, or direct selection of a function by using a "shortcut command".

By reading your telephone manual carefully, you will be able to use the phone in the most effective way.

When messages are sent to the iSeries, the command codes described in the configuration section are used.

Command codes can be followed by parameters. Separate the command code and parameters with a blank or the # sign.

If you are uncertain if messages are waiting for a reply from you, just send a reply message without any reply text. MidJet GSM Text will return a message with the original message text, and if not found, an error message.

16.3 Usage examples

This section describes how to use the command codes related to the example programs. They can be run from a mobile phone, or by using the simulation program.

16.3.1 Command code ZE, Demonstration error

To use this command, you must first obtain authority to the command in the Command code file. The iSeries shall be configured to monitor the QSYSOPR message queue, and the message reply function shall be enabled. You must also be the receiver of operational messages.

Enter message text **ZE** and send the message to the iSeries. The iSeries will submit a job calling the program DEMOERR, which immediately will try division by zero. The first response will be:

ZE command completed.

This message is received because the Confirmation message field is set to 1. Then the following message is received:

RPG0102 DEMOERR 1800 tried to divide by zero (factor 2) (C G S D F). --> Rpy to nbr: 1.

The format for sending replies to messages is always:

Rn reply

Where R is the command code for message reply, n is the reply number assigned by the iSeries. If the reply number is 1, it can be omitted, as in the following example. The reply number follows the R without any blank or other separator, the reply text follows the reply number separated by a blank or the # sign.

The same rules apply to retrieving the second level (help) text command. The format is:

Hn

No additional parameters are used. When this command is issued, the help text is retrieved from the corresponding message, and forwarded to the phone. If the message text is longer than 160 characters, the text will be divided into 160 character segments and sent as multiple messages to the requester. Any ". . . . . " or multiple blanks strings are truncated.

By sending the command:

R C

The reply will be used to send a reply to the message in QSYSOPR message queue. MidJet GSM Text will then send a confirmation message:

Successful reply C to nbr. 1. Message text: RPG0102 DEMOERR 1800 tried to divide by zero (factor 2) (C G S D F).

16.3.2 Command code ZM, Test message

Enter message text: **ZM** and send the message to the iSeries. The response will be:

Test message from MidJet GSM Text for IBM iSeries.

16.3.3 Command code ZI, Item inquiry

Enter message text **ZI 1** and send the message to the iSeries. The response will be:

Item no: 0000001, in stock: 1.250, on order 1.500.

Item number 1 is the only recognised by the example program. Other item numbers will create an error message.

16.3.4 Command code ZO, Order entry request and reply processing

Enter message text **ZO 100 200 300** and send the message to the iSeries. The response will be:

Item: 0000100, Customer: 0200, Qty: 300 available. Crt order? (Y N)--> Rpy to nbr: 1.

By sending the reply **R Y** an example order printout will be created in out queue GSMTEXT/GSMTEXT and the following confirmation message will be received:

Successful reply Y to nbr 1. Message text: Item: 0000100, Customer: 0200, Qty: 300 available. Crt order? (Y N)

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