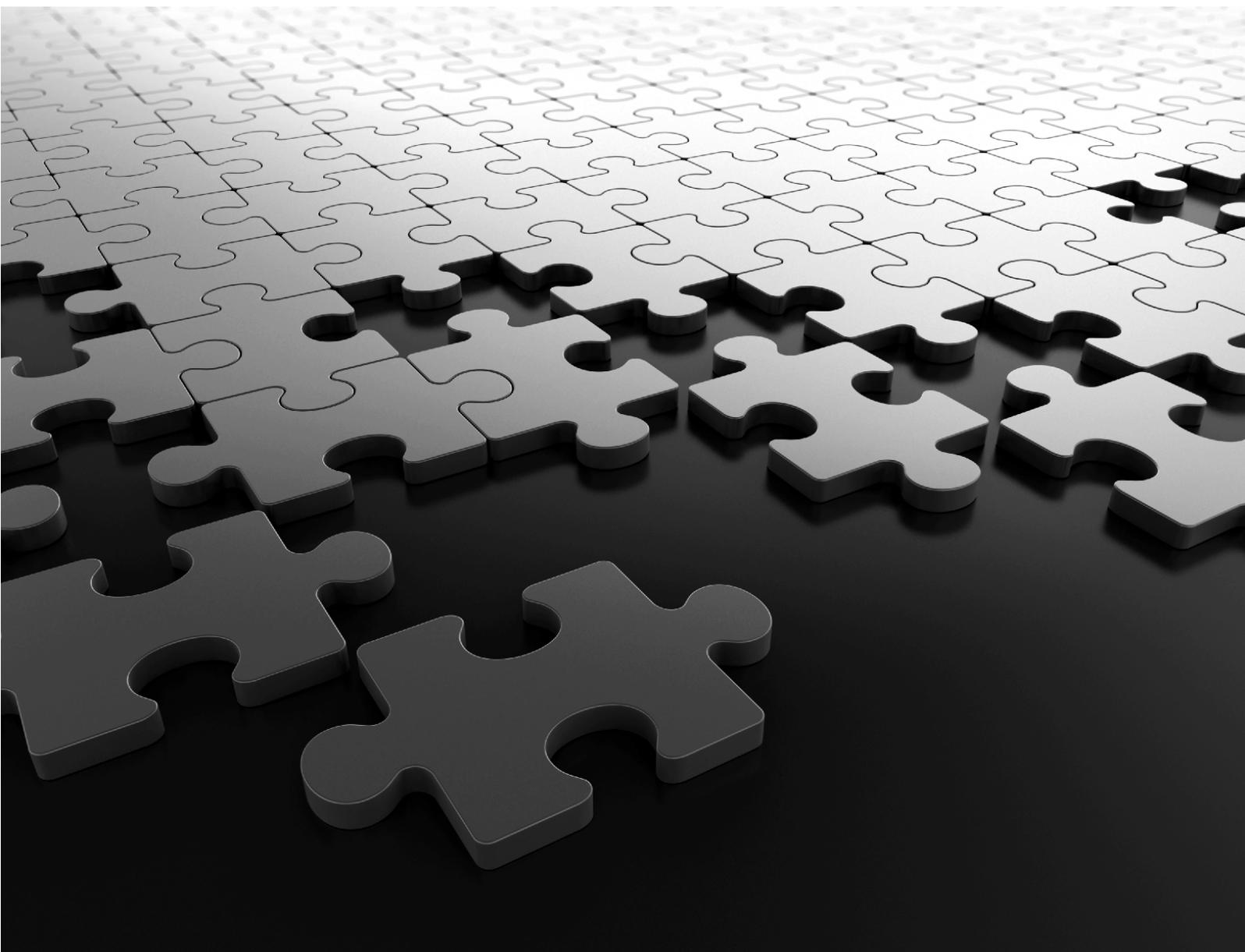


**SIMADO GFX44
System Manual**



SIMADO GFX44
Multi-port Mobile-FXS Gateway with LCR

System Manual



Documentation Disclaimer

Matrix Comsec reserves the right to make changes in the design or components of the product as engineering and manufacturing may warrant. Specifications are subject to change without notice.

This is a general documentation for all models of the product. The product may not support all the features and facilities described in the documentation.

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Welcome

Thank you for choosing SIMADO GFX44! This product is designed to give you the great performance, with real ease of use. We hope you will make optimum use of this feature-packed Multi-Port GSM-FXS Gateway. Please read this document carefully before installing your SIMADO GFX44.

About this System Manual

This System Manual contains detailed information on SIMADO GFX44 and its features, and instructions for installing, configuring and operating it. This manual also contains information on protecting and maintaining SIMADO GFX44.

Intended Audience

This System Manual is aimed at:

- Persons who will install, configure, operate, and maintain SIMADO GFX44. It is assumed that they have a basic understanding of gateways and their functioning.
- Persons who will use SIMADO GFX44 to make and receive calls and use its features.

Organization of this Document

This System Manual contains the following chapters:

Introduction: Gives an overview of this document, its purpose, intended audience, terms and conventions used to present information and instructions.

Know your SIMADO GFX44: Provides an overview of SIMADO GFX44.

Installing SIMADO GFX44: Contains information on how to install SIMADO GFX44.

Configuring SIMADO GFX44: Provides information and instructions for configuring the ports of SIMADO GFX44 and system parameters. It also provides information on system security, restoring factory default settings, system restart, and system debug.

Features of SIMADO GFX44: Describes in detail the various features of SIMADO GFX44 such as Allowed-Denied Numbers, Automatic Number Translation, Call Progress Tones, Call Minutes, and provides instructions for configuring and using them.

How to Read this System Manual

This System Manual is organized in such a way that you will find all the information you need quickly and easily.

You may use the table of contents and the Index to navigate through this document to the relevant topic or information you want to look up.

Cross-references are provided in blue font with hyperlinks. You can look up the source by clicking the links.

Conventions used in this System Manual

Instructions

Instructions for installation and configuration are provided in this document in step-by-step format, with illustrations wherever required.

System Configuration can be done using the configuration software *Jeeves*, or by dialing command strings from a phone connected to the FXS Port of SIMADO GFX44. You can also dial the commands from any remote landline/mobile phone by calling the Mobile Port of SIMADO GFX44.

System configuration using *Jeeves* is described in a step-by-step format with screenshots for illustration, and default values of all parameters.

System configuration by dialing commands is also described in a step-by-step format with the command strings to be dialed in bold font, along with the default value. The command string sequence is: **Command-Code-Termination Digit (#*)**

When dialing command strings, you must dial the digits and characters in the command string in a continuous sequence.

Following is an example of an instruction to configure Answer Signaling on the FXS Port of SIMADO GFX44 by dialing command.

- To configure Answer Signaling on the FXS Port, dial:
261-FXS Port-Answer Signal-#*
Where,
FXS Port is from 1 to 4.
Answer Signal is
0 for None
1 for Polarity Reversal

Default: **Polarity Reversal**

Here, command string to be dialed for configuring SIMADO GFX44 is presented with the default value. In the above example, if you want to set **None** as Answer Signal on the FXS Port, you must dial '0' (the code for None) in the command string along with the command termination digits **#*** in a continuous sequence as: **2210#***

Notices

The following symbols have been used to draw your attention to important things:



Note: *It indicates something that requires your special attention or it reminds you of something you need to do when you are using SIMADO GFX44.*



Caution: *It indicates an action or condition that is likely to result in malfunction or damage to SIMADO GFX44 or your property.*



Warning: *It indicates a hazard or an action that will cause damage to SIMADO GFX44 and/or cause bodily harm to the user.*



Tip: *It indicates a helpful hint giving you an alternative way to operate the system or carry out a procedure, or use a feature more efficiently.*

Terminology

You will find the terms '**SIMADO GFX44**' and '**System**' used interchangeably throughout this system manual.

Using this System Manual, you will be able to install, operate and make optimum use of SIMADO GFX44. However, if you encounter any technical problems, please contact your dealer/reseller or the Matrix Customer Care.

Overview

SIMADO GFX44 is a compact Mobile-FXS Gateway to interface Mobile and PSTN networks. On GSM side, it supports 2G Quadband and 3G Triband operation allowing it to work with any GSM network. On PSTN side, it supports FXS interfaces.

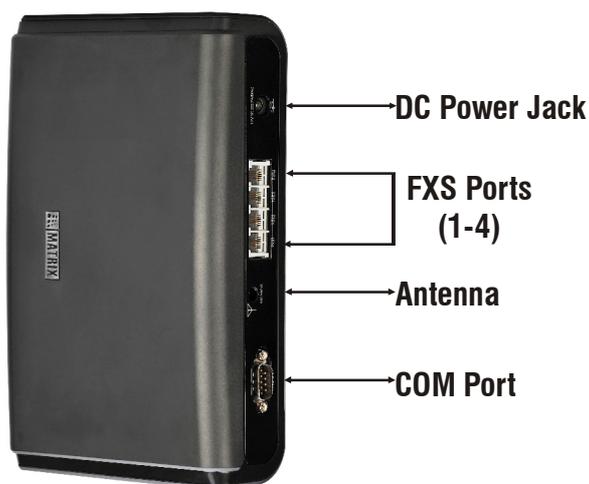
For compatibility and use of Matrix GSM products (2G/3G/4G) in Russia and Iran Province connect with Matrix Sales or Technical Support Team.

With the Least Cost Routing (LCR) feature of SIMADO GFX44, you can have your outgoing calls routed through the most cost effective port for those calls. Besides this, it offers benefits such as Call Detail Records for keeping records of call history, flexibility of remote programming.

SIMADO GFX44 is an ideal cost saving option for integrating a Mobile interface to your existing PBX or PCO machine. It can be used in the corporate offices, factories, call centers, hotels and such other establishments.

Ports and Connectors

SIMADO GFX44 has 4 FXS Ports, 4 Mobile Ports, a Communication Port, an Antenna Connector and a Power Socket.



Power Jack

- The Power jack labeled as 12V DC- 2A (Max.) is used for connecting the 12V DC, 2A power adapter provided with the system.

FXS Port

- The FXS Ports labeled as FXS1, FXS2, FXS3 and FXS4 are used for connecting telephone instruments to SIMADO GFX44.

Mobile Ports



For compatibility and use of Matrix GSM products (2G/3G/4G) in Russia and Iran Province connect with Matrix Sales or Technical Support Team.

- The 4 Mobile Ports are located on the four modules inside SIMADO GFX44. The modules may be either GSM (2G) or UMTS (3G).
- You can insert and use as many as 4 SIM Cards simultaneously, which may be of the same or of different service providers.
- Each port has a SIM holder for inserting SIM Card.

Antenna Connector

- A single Antenna connector is provided for the 4 Mobile Ports. You must connect the antenna provided with the system to this connector.

Communication Port:

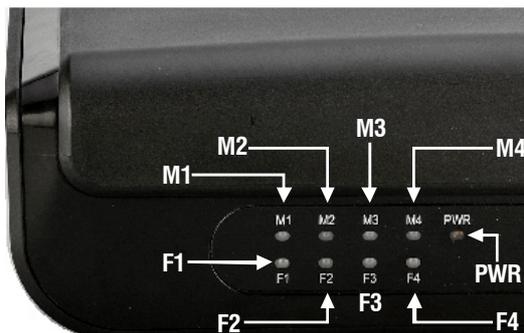
- The Serial Communication Port labeled as 'COM 10101' is used for connecting a computer to SIMADO GFX44. You need to connect a computer to
 - access the programming tool *Jeeves*
 - generate Call Detail Record report
 - generate Debug report



*You can use communication port for only one application at a time. For example, if you are taking debug report and at the same time attempt to configure the system using *Jeeves*, you will get error when you try to log on to *Jeeves*.*

LEDs

SIMADO GFX44 has 9 LEDs, as illustrated below, for indication of port status and power.



- Four LEDs for FXS Ports, labeled **F1**, **F2**, **F3** and **F4**.
- Four LEDs for Mobile Ports, labeled **M1**, **M2**, **M3** and **M4**.
- One LED for Power, labeled **PWR**.

These LEDs indicate the status of the ports, various events occurring on the ports and also the error conditions. Refer "[Switching ON SIMADO GFX44](#)" for LED indication at Power ON and during Normal Functioning of the system.

Key Features

- Allowed Denied Lists
- Least Cost Routing
- Automatic Number Translation
- Mobile Network Selection
- Call Detail Records (CDR)
- Returned Calls to Original Callers (RCOC)
- SIM PIN
- Remote Programming
- Emergency Number Dialing
- Caller Line Identification and Presentation (CLIP)
- International Mobile Equipment Identity (IMEI)
- Universal Routing

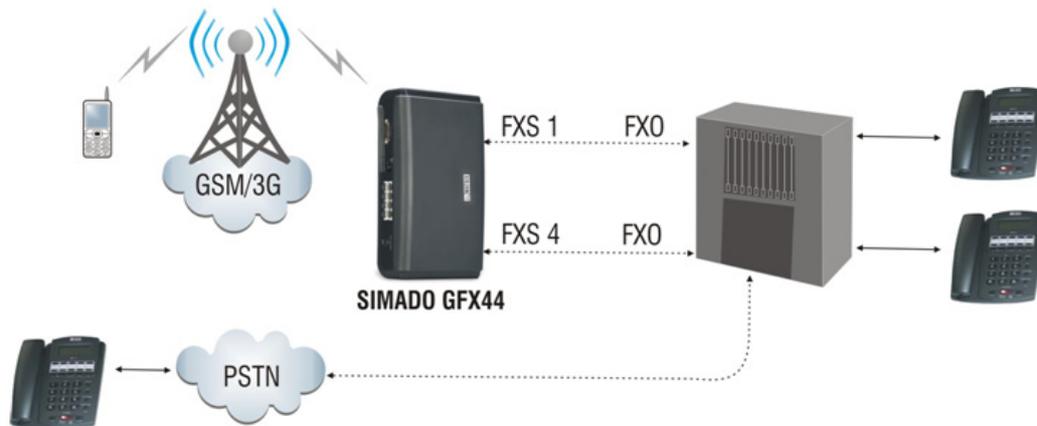
Applications of SIMADO GFX44

SIMADO GFX44 finds its applications in corporate offices, factories, call centers, hotels and such other establishments. SIMADO GFX44 can be used as a stand-alone device to make calls over GSM/UMTS networks. It can also be interfaced with a PBX as a gateway between GSM/UMTS and PSTN network for cost savings.

Case 1: SIMADO GFX44 as Stand-alone



Case 2: SIMADO GFX44 interfaced with PBX



Before You Start

Before you begin to install and set up the hardware of SIMADO GFX44, make sure you have following items ready:

- A suitable location to install SIMADO GFX44.
- Atleast one telephone instrument with LCD display to connect to a FXS Port. You can connect as many as four such telephones. You can also connect the FXS Port of SIMADO GFX44 to a PBX.
- At least one SIM Card for Mobile network connection.
- A Computer with a free COM Port to access the windows based configuration tool, *Jeeves*.
- Connection to Mains power.

Protecting SIMADO GFX44

You need to take the following measures to protect SIMADO GFX44 and yourself.

Installation Precautions

- Always install SIMADO GFX44 where there is enough open space for ventilation.
- Do not install SIMADO GFX44 where
 - it is exposed to direct sunlight, excessive cold or moisture or corrosive fumes.
 - it may come in direct contact with dust, oil or water.
 - there is a water source or water body, such as near a tap, washbasin, sprinkler, bath-tub, swimming pool.
 - sulfuric gases are produced.
 - shocks or vibrations are frequent or strong.

Safety Instructions

Always take safety precautions to reduce the risk of fire, electric shock and injury to the product as well as the person(s) handling it.

- Read and understand all the instructions given in this manual.
- When handling the system or its parts, always wear an antistatic discharge preventive wrist strap or belt and use a grounding mat.
- Do not turn on the power supply until the installation is complete.
- Never open the product cover in Power On condition. Always switch off power supply and unplug the power adapter before you open the cover.
- Unplug the product from the wall outlet before cleaning and do not use liquid cleaners. Use only dry and soft cloth.
- Ensure that interfacing cables do not touch exposed power line cables.
- The product should be operated with proper power voltage supply. You are advised to give stabilized power to the product.
- Reduce the risk of electric shock or damage to SIMADO GFX44 by taking the product to a qualified technician for service or repair. Removing covers or opening SIMADO GFX44 or incorrect reassembly may cause electric shock.

Warning for RF Safety

This product complies with the RF exposure guidelines as per standard FCC 47 CFR part 2. You are advised to observe the following safety recommendations:

- Ensure that the RF Antenna is installed at least 20 cm away from other electronic and radio transmission devices.
- Also ensure that the RF antenna is installed at a place at least 20 cm away from people's vicinity.
- Do not place the magnetic storage media near the device.
- People carrying medical implants like cardiac pacemakers are advised to maintain appropriate distance from the system. They are also advised to avoid being in the vicinity of the product for a long time.

Battery

SIMADO GFX44 contains a 3.6V, 80mAh Nickel Metal Hydride (Ni-MH) battery. The Battery should be replaced only by authorized dealers of Matrix. End Users must not attempt to replace it.



There is risk of explosion if the Battery is replaced in an incorrect manner. Please dispose-off used Batteries.

Disposal

This product must be disposed according to the national laws and regulations prevailing in the country where it is installed.

Getting Started

Verifying Package Contents

- Before installing SIMADO GFX44, unpack and verify the package contents. Make sure your package contains all the items listed below:
 - SIMADO GFX44 Unit with Rubber Ducky Antenna (SMA)
 - Power Adapter 12VDC, 2Amp (Country Specific)
 - Two M7/30 Screws with grips
 - External Cable Antenna with SMA Connector
 - Line Cord (RJ11) as per configuration
 - Wall Mounting Template
 - SIMADO GFX44 CD containing the System Manual, Quick Start and Jeeves Software

If any of the above listed item is missing or damaged, contact the source from where you have purchased the system.

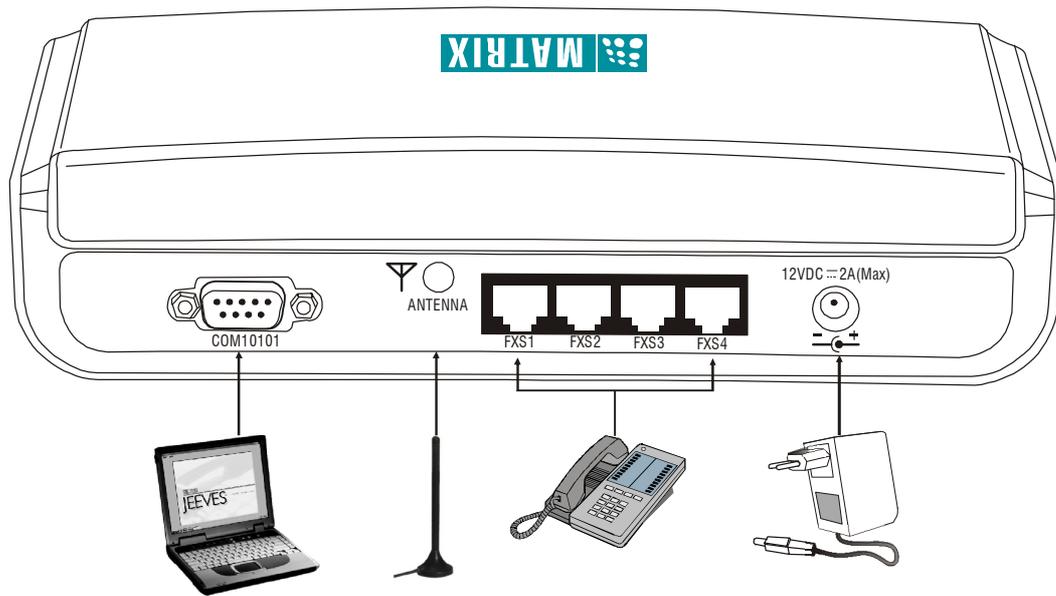
- Select a suitable location to install the system. Make sure that the site you select has proper power supply source close by and sufficient network signal strength.

If you want to mount the system on a wall, use the mounting template provided to you in the product package, for drilling the holes on the wall. Follow the instructions given below for mounting the system on a Wall.

Mounting on a Wall

- Select a suitable place on the wall for mounting the system. Make sure there is a power supply source close by and sufficient network signal strength.
- Paste the mounting template (provided in the package) on the wall.
- Drill holes of appropriate size through the screw hole markings on the template.
- Insert the screw grips in the holes.
- Insert the screws in the holes. Tighten the screws, leaving the screw heads protruding a few millimeters from the wall. You may remove the template from the wall.
- Check the strength of the screws.
- Connect the system to the mobile network and connect the telephones/PBX to the FXS ports. For detailed instructions, see [“Connecting the System”](#) in the following.
- Once you have connected the system to the network and the different devices, mount SIMADO GFX44 on the wall, aligning the screw holes on the cover with the screws you fixed.

Connecting the System



- When installing SIMADO GFX44, you will need to open the top cover and handle the internal parts. You must take appropriate electrostatic discharge prevention measures to prevent damage to the modules you handle. You may wear an electro static discharge preventive wrist strap or belt and use a grounding mat.
- Unscrew and remove the top cover of SIMADO GFX44 and keep it aside.
- Before inserting the SIM Card in the SIM Holder of SIMADO GFX44, you may enable PIN protection on SIM to protect it from unauthorized use.

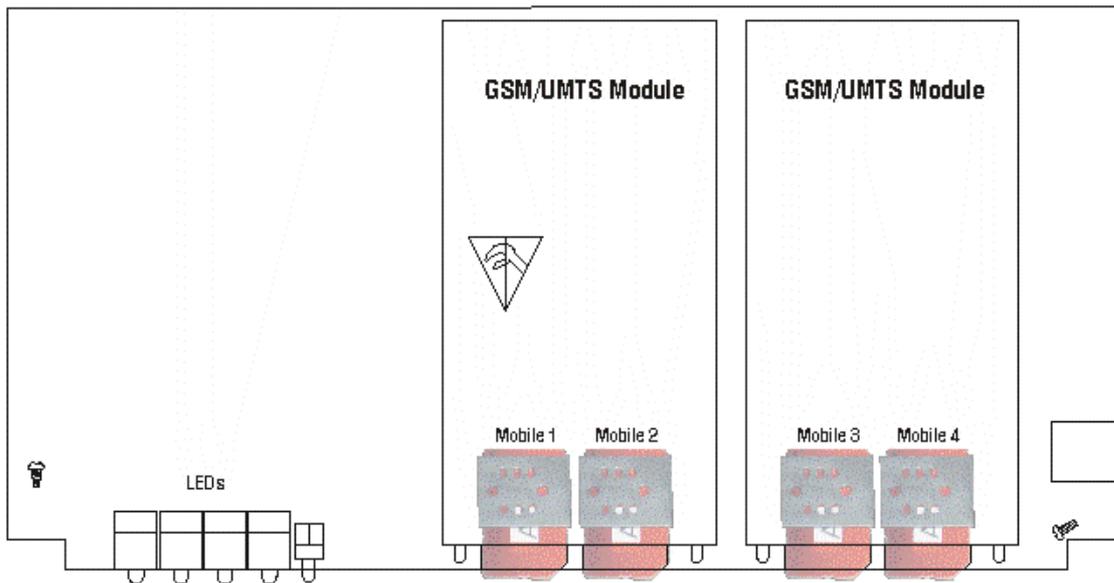
To enable PIN Protection

- Get a mobile handset. Insert the SIM into the mobile handset.
- From the mobile handset, enable PIN Protection on the SIM.
- Change the SIM PIN to **1234**. This is the default SIM PIN of SIMADO GFX44.



You can change the SIM PIN to the desired value while configuring the system. For instructions on changing the SIM PIN, refer [“SIM PIN”](#).

- If your SIMADO GFX44 has a 3G module, you must also disable Call Waiting on the SIM Card. This will prevent current calls from being disconnected whenever there is a waiting call on the Mobile Port.
- Remove the SIM from the mobile handset.
- Insert the SIM Card in the SIM Holder of SIMADO GFX44 with the contact side facing down. The SIM Holders are located on the GSM/UMTS modules as illustrated in the diagram below.



- Replace the cover and secure it with the screws.
- Screw the antenna (provided with the package) on to the **Antenna Connector**. Make sure the connection is tight enough to make proper contact.
- Connect telephone instruments with CLI display to the **FXS Ports** of SIMADO GFX44 using the RJ11 cables provided to you in the product package.
- Connect a Computer to the **COM Port** of SIMADO GFX44 using a standard crossed communication cable.

Pin details of the COM Port of SIMADO GFX44

| Pin No. | Signal Name |
|---------|---------------------------|
| 1 | NC |
| 2 | Receive Data (RXD) |
| 3 | Transmit Data (TXD) |
| 4 | Data Terminal Ready (DTR) |
| 5 | Ground (GND) |
| 6 | Data Set Ready (DSR) |
| 7 | Request to Send (RTS) |
| 8 | Clear to Send (CTS) |
| 9 | NC |

The COM port of SIMADO GFX44 has the following attributes and these are preconfigured.

| | |
|--------------|-----------|
| Baud Rate | 115200bps |
| Stop Bit | 1 |
| Parity | None |
| Data Bits | 8 |
| Flow Control | None |

You are recommended to set the attributes of the COM Port of the computer, to which you are connecting SIMADO GFX44, to the above values.

- Connect the 12V DC Power Adapter provided to you in the product package to the **Power** jack of SIMADO GFX44. Plug the adapter into the power outlet.



Use only the power adapter included in the SIMADO GFX44 package. Using an alternative non-qualified power adapter may possibly damage the unit.

- You may power the system after you have finished the installation tasks.

Switching ON SIMADO GFX44

- Switch ON the power supply and observe the LED indication.

At Power ON

- Power LED glows green (continuously).
- After approximately 2 seconds all other LEDs pursue this sequence: Glow Red for 500ms → Glow Green for 500ms → GSM initialization starts.
- GSM initialization takes approximately 50-60 seconds.
- On successful completion of GSM initialization, SIMADO GFX44 attempts network registration.
- SIMADO GFX44 takes a few seconds to connect to the network.
- After successful registration with the network, all LEDs are turned off.

Following table shows LED indications during various events and error conditions:

| Event | Color | Cadence in ms (1 Cadence = approx. 3000 ms.) |
|--|--------|--|
| During GSM Initialization | Orange | 200ms ON-200ms Off 200ms ON-200ms Off 200ms ON-200ms Off 200ms ON-200ms Off 200ms ON-1200ms Off (5 Blinks) |
| If PUK Required | Orange | 200ms ON-200ms Off 200ms ON-200ms Off 200ms ON-200ms Off 200ms ON-1600ms Off (4 Blinks) |
| If SIM PIN Faulty | Orange | 200ms ON-200ms Off 200ms ON-200ms Off 200ms ON-2000ms Off (3 Blinks) |
| If SIM Absent | Orange | 200ms ON-200ms Off 200ms ON-2400ms Off (2 Blinks) |
| If Network Absent/GSM Module could not establish connection with the network | Orange | 200ms ON-2800ms Off (1 Blink) |

During Normal Functioning

Following table shows LED indications during various events occurring on FXS/Mobile Ports of the system:

| Event | Color | Cadence in ms (1 Cadence = approx. 3000 ms.) |
|---------------------------------------|-------|--|
| Port Disable | -- | LED Off |
| Port Idle | -- | LED Off |
| Port Off-Hook | Red | Continuous ON |
| Ring Event | Green | 400ms ON-200 ms Off 400ms ON-2000ms Off |
| Port Active | Red | 68 ms ON-68 ms Off |
| Speech | Green | Continuous ON |
| Call Minutes* (Free minutes utilized) | Red | 1000 ms ON-2000 ms Off |

* *Applicable for Mobile Ports only, when mobile port is idle. (Refer [“Call Minutes”](#) topic for details)*

Once the system is switched ON, it attains the normal working position in few minutes.

You may start using your system with the default configuration. However, if you want, you may change the configuration to match your requirement.

To configure the basic parameters of the system, refer Chapter 4: [“Configuring SIMADO GFX44”](#).

To configure advanced features of the system, see the relevant topics in Chapter 5: [“Features of SIMADO GFX44”](#).

Test Calls

You can receive and make calls either from a cell phone or from the analog phone connected to SIMADO GFX44.

Making a Call

- Lift the handset of the telephone instrument connected to the FXS Port of SIMADO GFX44. You will get the dial tone.
- Dial the desired telephone number. You will hear the Ring Back Tone.
- Talk when the called party answers the call.
- Replace the handset to disconnect the call.

Receiving a Call

- Make a call to the Mobile Port of SIMADO GFX44 from a Mobile phone.
- The telephone connected to the FXS Port of SIMADO GFX44 will ring.
- Lift the handset to talk.
- Talk.
- Replace the handset to disconnect the call.

You can configure SIMADO GFX44 in the following ways:

- Using its graphic user interface, *Jeeves*.
- By dialing commands from a phone connected to the FXS Port of SIMADO GFX44. You can also dial the commands from any remote landline/mobile phone by calling the Mobile Port of SIMADO GFX44.



Before you start configuring the system, you may get the service provider dependent features, like CLIR, enabled by your service provider.

Configuring SIMADO GFX44 using Jeeves

The windows based configuration software of SIMADO GFX44, *Jeeves*, is provided to you on the product CD.

Overview of Jeeves

Home Screen

When you open Jeeves of SIMADO GFX44, the **Home screen** appears.

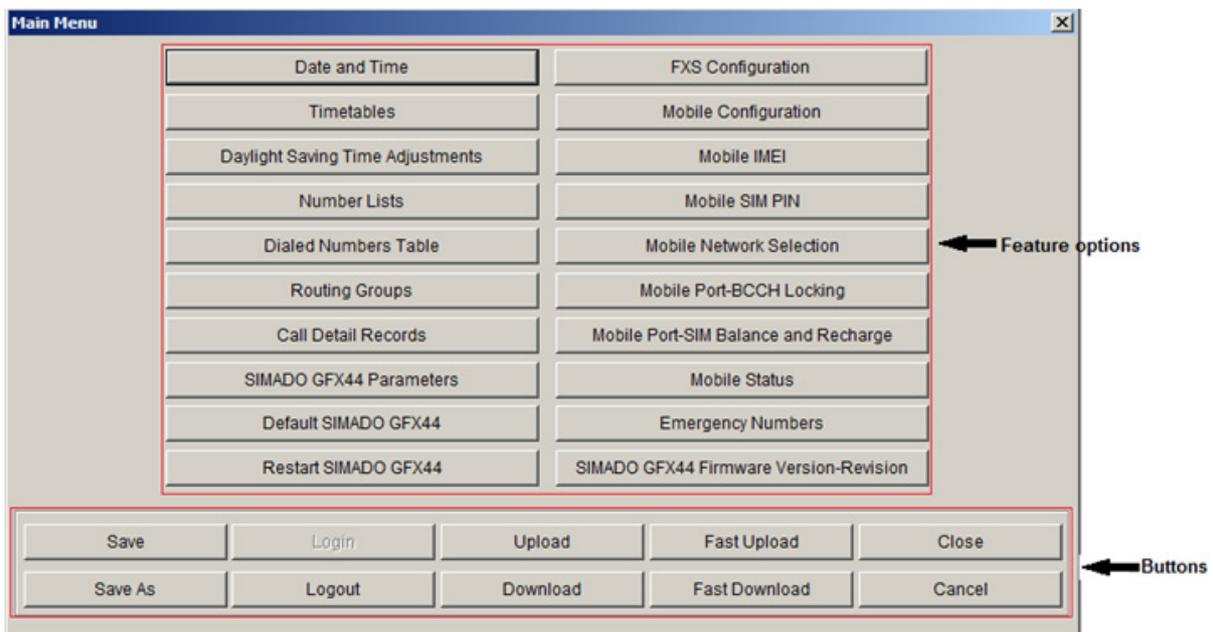


On the **Home screen** of Jeeves, on the Main Menu bar, there are three options:

1. **File:** In File, you have following options.
 - **New:** To open the Main Menu of Jeeves, select New.
 - **Open:** To open the configuration saved on your computer, select Open.
 - **Exit:** To close Jeeves, select Exit.
2. **Language:** In Language, seven different languages are displayed, namely, English, Italian, Spanish, French, German, Portuguese and Russian. Select the language in which you want the contents of Jeeves to be displayed
3. **Help:** In Help, you will be able to access, the SIMADO GFX44 System Manual, SIMADO GFX44 Quick Start, and information about Jeeves.

Main Menu

On the **Main Menu** of the Jeeves, links to the various features and facilities are displayed as buttons. Functions of each of these Feature Options and Buttons are explained in the following.



| Main Menu Feature Option | Description |
|---------------------------------------|---|
| Date and Time | Allows you to set Date and Time of SIMADO GFX44. |
| Timetables | Allows you to configure Timetable, defining the Time zone for each day of the week, for call routing. |
| Daylight Saving Time Adjustment (DST) | Allows you to set DST for your region, if applicable. |
| Number Lists | Allows you to configure Number Lists for various features such as Allowed Denied Numbers, Automatic Number Translation. |
| Dialed Numbers Table | Allows you to configure Dialed Numbers Table for routing calls on the basis of dialed numbers. |

| | |
|--|---|
| Routing Groups | Allows you to configure routing groups for routing the calls. |
| Call Detail Records | Allows you to set filters for capturing and generating Call Detail Record reports. |
| SIMADO GFX44 Parameters | Allows you to configure various system parameters. |
| Default SIMADO GFX44 | Allows you to set SIMADO GFX44 to default. |
| Restart SIMADO GFX44 | Allows you to restart SIMADO GFX44. |
| FXS Configuration | Allows you to configure FXS Port Parameters. |
| Mobile Configuration | Allows you to configure Mobile Port Parameters. |
| Mobile IMEI | Allows you to check IMEI of the GSM module installed in SIMADO GFX44. |
| Mobile SIM PIN | Allows you to view and change the SIM PIN of the SIM Card installed in the Mobile Port of SIMADO GFX44. |
| Mobile Network Selection | Allows you to set the mode of Network Selection for registration of the Mobile Port with the suitable network. |
| Mobile Port-BCCH Locking | Allows you to lock the Mobile Port of SIMADO GFX44 to a particular cell or channel or BTS (Base Transceiver Station). |
| Mobile Port-SIM Balance and Recharge | Allows you to check balance of prepaid SIM Card installed in SIMADO GFX44 and also recharge the SIM Card. |
| Mobile Status | Allows you to check Mobile Port status. |
| Emergency Numbers | Allows you to configure Emergency Numbers for your region. |
| SIMADO GFX44 Firmware Version-Revision | Allows you to view the current Firmware Version-Revision of SIMADO GFX44. |

| Main Menu Button | Function |
|------------------|--|
| Save | To save configurations done using Jeeves on your computer. When you click this button for the first time, a new configuration file will be created and saved on the computer. On every subsequent click, the configuration of the Jeeves shall get saved in the same configuration file. |
| Save As | To save the configurations done using Jeeves on your computer with a different file name and location. |
| Login | To log on to Jeeves for configuring SIMADO GFX44. |
| Logout | To log out of Jeeves after you finish configuring SIMADO GFX44. Clicking the Logout button will save the changes/configuration done in the system. |
| Upload | To upload the configuration done in the Jeeves on to SIMADO GFX44. |
| Download | To download the configuration of SIMADO GFX44 to the Jeeves. |
| Fast Upload | To quickly upload the configuration done in the Jeeves on to SIMADO GFX44. |
| Fast Download | To quickly download the configuration of SIMADO GFX44 to the Jeeves. |
| Close | To exit Main Menu. |
| Cancel | To exit Main Menu. |

Feature Dialog box

When you click a feature option on the **Main Menu**, Feature Dialog box will open.

For example, when you click FXS Configuration button, **FXS Configuration Dialog box** will open.

| FXS Port Number | Port Enable? | CLIP Type | Flash Timer (milliseconds) | Inter Digit Wait Timer (seconds) | First Digit Wait Timer (seconds) | RX Gain (dB) | TX Gain (dB) |
|-----------------|--------------|-----------|----------------------------|----------------------------------|----------------------------------|--------------|--------------|
| 1 | Yes | DTMF | 600 | 04 | 06 | 0 | 0 |
| 2 | Yes | DTMF | 600 | 04 | 06 | 0 | 0 |
| 3 | Yes | DTMF | 600 | 04 | 06 | 0 | 0 |
| 4 | Yes | DTMF | 600 | 04 | 06 | 0 | 0 |

Buttons: Upload Changes, Upload Page, Download Page, Default Page, OK, Cancel, Save, Help

On each **Feature Dialog box**, the following buttons are displayed. The functions of each button is explained in the following table.

Buttons: Upload Changes, Upload Page, Download Page, Default Page, OK, Cancel, Save, Help

| Feature Button | Function |
|----------------|--|
| Upload Changes | To upload particular changes done in a Feature Dialog box on to SIMADO GFX44. |
| Upload Page | To upload configuration on to SIMADO GFX44. |
| Download Page | To download a particular feature configuration from SIMADO GFX44 to the Jeeves. |
| Default Page | To default all the parameters in the Feature Dialog box. |
| OK | To temporarily save the changes done in particular feature configuration and close the Dialog box. |
| Cancel | To discard changes done in the Feature Dialog box and close the Dialog box. |
| Save | To save the configuration done in the Feature Dialog box on to the computer. |
| Help | To open SIMADO GFX44 System Manual. |

You will find the following buttons in specific Feature Dialog boxes.

| Feature Button | Feature Dialog box | Function |
|------------------------------|----------------------|--|
| Clear Number List | Number Lists | To clear the numbers configured in a specific Number List. |
| Default Dialed Numbers Table | Dialed Numbers Table | To default Dialed Numbers Table. |
| Default Filters | Call Detail Records | To default the filters set for capturing Call Detail Record reports. |

| | | |
|----------------|--|--|
| Clear Buffer | Call Detail Records | To clear the Call Detail Record buffer. |
| Capture Report | Call Detail Records | To capture Call Detail Record report. |
| Display | Mobile IMEI and SIMADO GFX44 Firmware Version-Revision | To display Mobile IMEI and SIMADO GFX44 Firmware Version-Revision. |
| Refresh | Mobile Status | To view the current Mobile Port Status. |

Using Jeeves

To be able to use Jeeves, you must first install it on a computer, and the computer must be connected to the COM Port of SIMADO GFX44.

Installing Jeeves

- Insert the **Matrix SIMADO GFX44** CD provided to you with the product in the CD Drive of your computer. It is an auto-run CD.
- The CD drive window will open. If the CD does not open by itself, click on **My Computer → CD Drive**.
- In the CD drive window, you will see two folders: **Documents** and **SIMADO GFX44 Jeeves VxRy**.
- Open the **SIMADO GFX44 Jeeves VxRy** folder. Run the set-up to install Jeeves on your computer.

Logging in to Jeeves

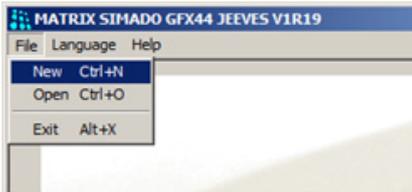
Make sure that your computer is connected to SIMADO GFX44.

- To open Jeeves, on your computer, click on **Start → Programs → Matrix → SIMADO GFX44 Jeeves VxRy → SIMADO GFX44 Jeeves VxRy**. SIMADO GFX44 Jeeves Home Screen will open.

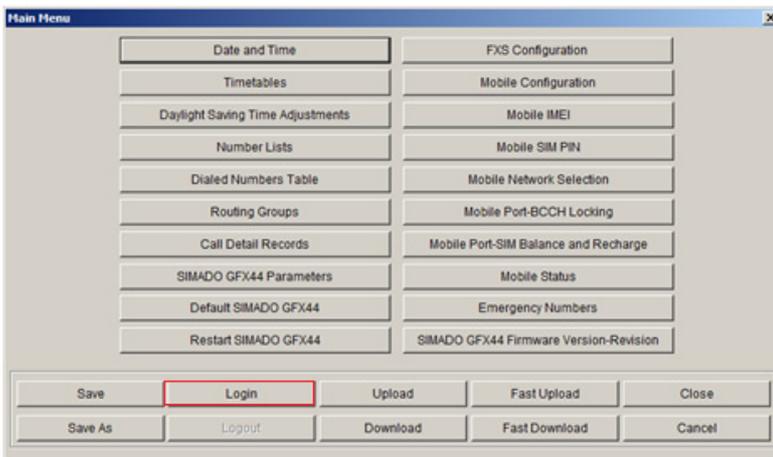


To begin the system configuration, follow the steps given below.

- On the **Menu bar**, click **File → New**.



- The **Main Menu** of the Jeeves will open. Click the **Login** button.



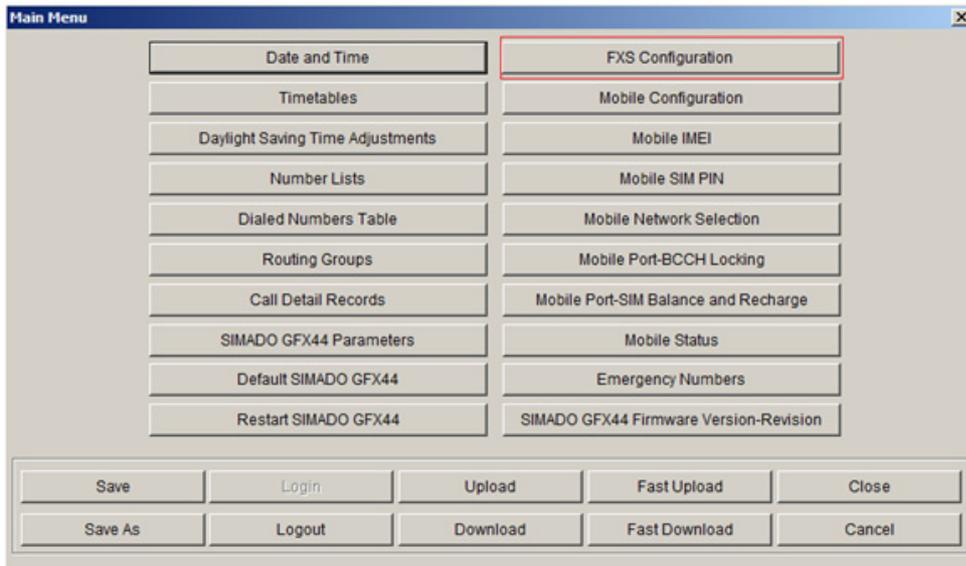
- The **Login Dialog box** will open.



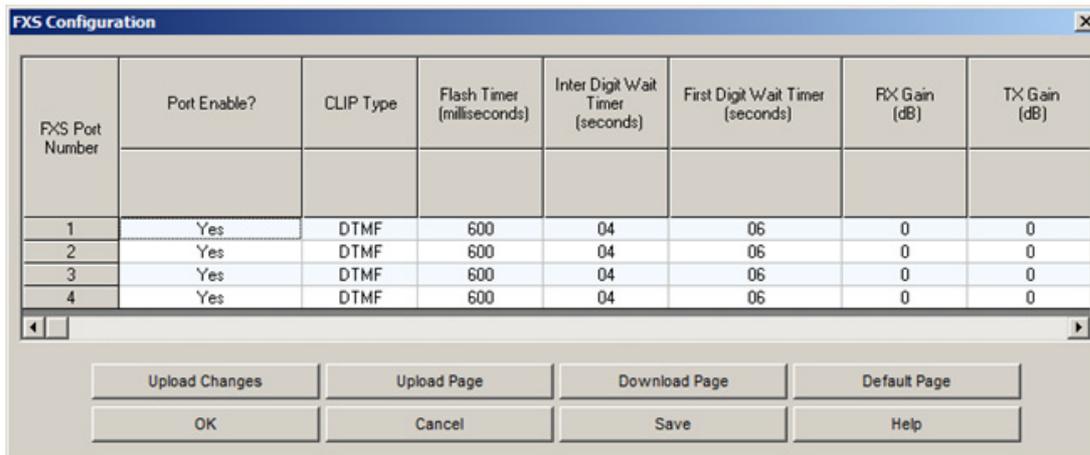
- In Login Dialog box, select the **COM Port** of your computer to which SIMADO GFX44 is connected.
- In SE Password, enter the default SE Password **1234**.
- Click the **Login** button to log in to Jeeves.

After you have logged in, you may begin system configuration as per your requirement.

For example, if you want to configure FXS Port Parameters, click the **FXS Configuration** button.



FXS Configuration Dialog box will open.

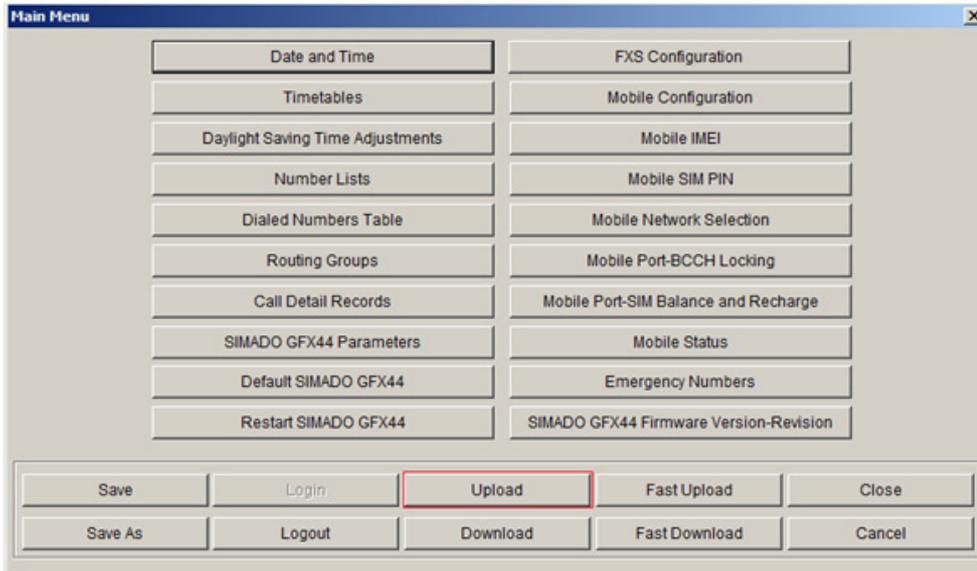


- Configure FXS Port Parameters as per your requirement and click the **Upload Page** button to upload the changes on to SIMADO GFX44. See [“Uploading Jeeves configuration to SIMADO GFX44”](#) below.
- Click the **OK** button to exit FXS Configuration Dialog box.

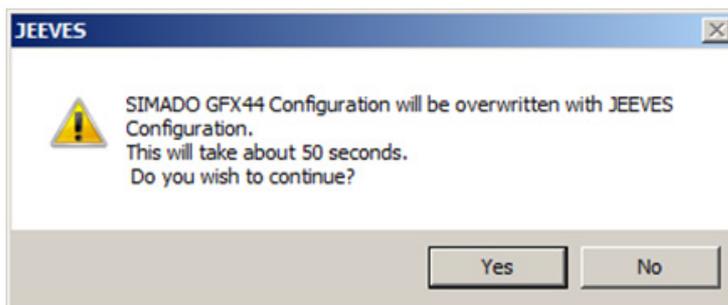
Uploading Jeeves configuration to SIMADO GFX44

After you have completed your configuration, you must upload the configuration/changes you do on Jeeves to SIMADO GFX44.

- To do so, on the **Main Menu**, click the **Upload** button.



- Following alert message will appear. Click the **Yes** button to upload the configuration on to SIMADO GFX44.

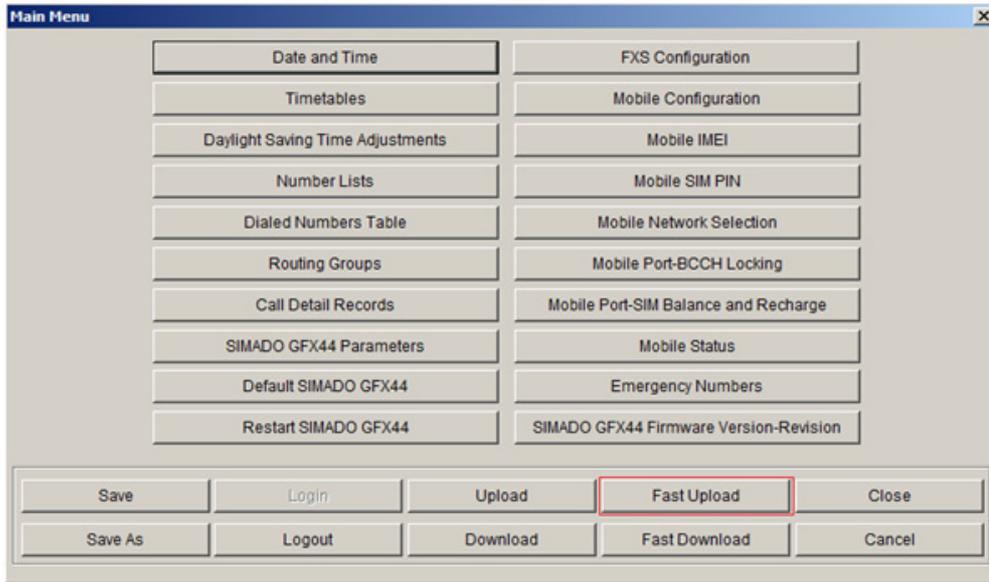


- All your configuration will be uploaded to SIMADO GFX44.



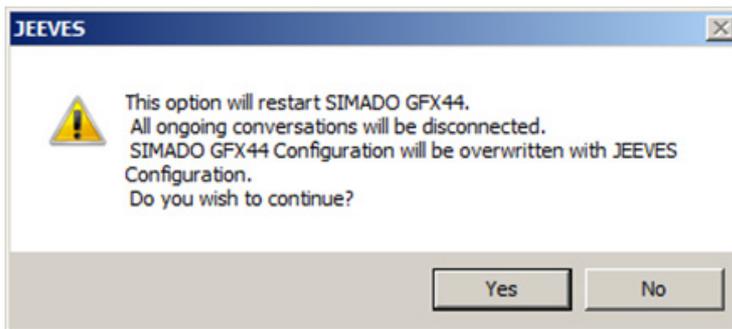
You can use SIMADO GFX44 while uploading the Jeeves configuration.

You can also click the **Fast Upload** button, on the **Main Menu**, to quickly upload Jeeves configuration to SIMADO GFX44.



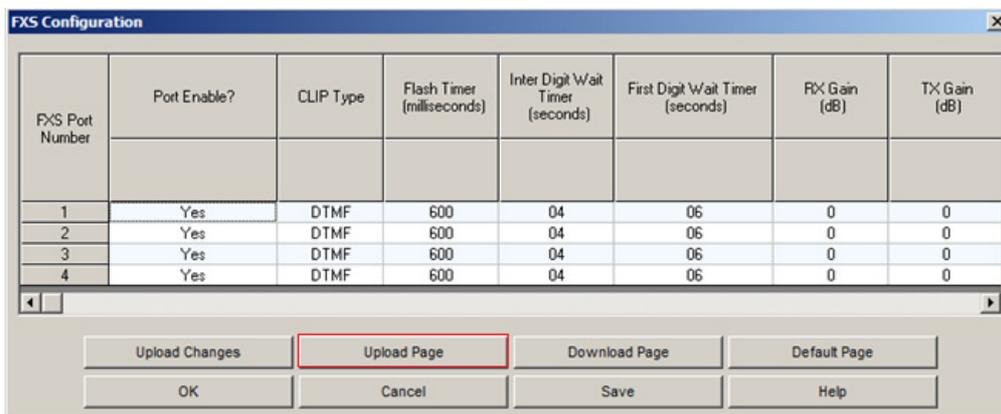
 *Fast Uploading will cause the system to restart and all the ongoing conversations will be disconnected. You will not be able to use SIMADO GFX44 when fast uploading process is on.*

- When you click the **Fast Upload** button, following alert message will appear on the screen.

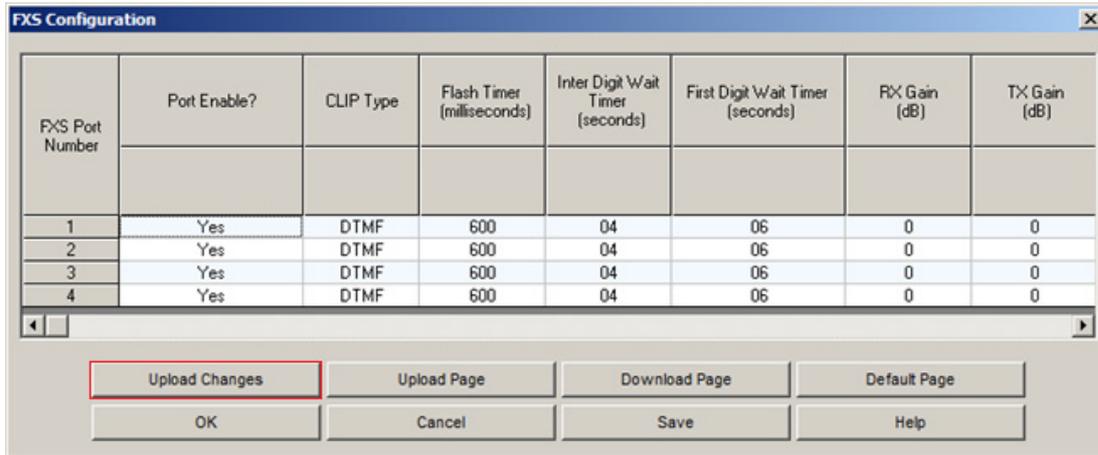


- Click the **Yes** button. Jeeves configuration will be uploaded to SIMADO GFX44 in few seconds.

Later on, if you make any changes in the Jeeves, you can upload the same to SIMADO GFX44 simultaneously by clicking the **Upload Page** button on the Feature Dialog box.



If you have made only a few changes on a Feature Dialog box, you may use **Upload Changes** button to upload those changes in SIMADO GFX44.

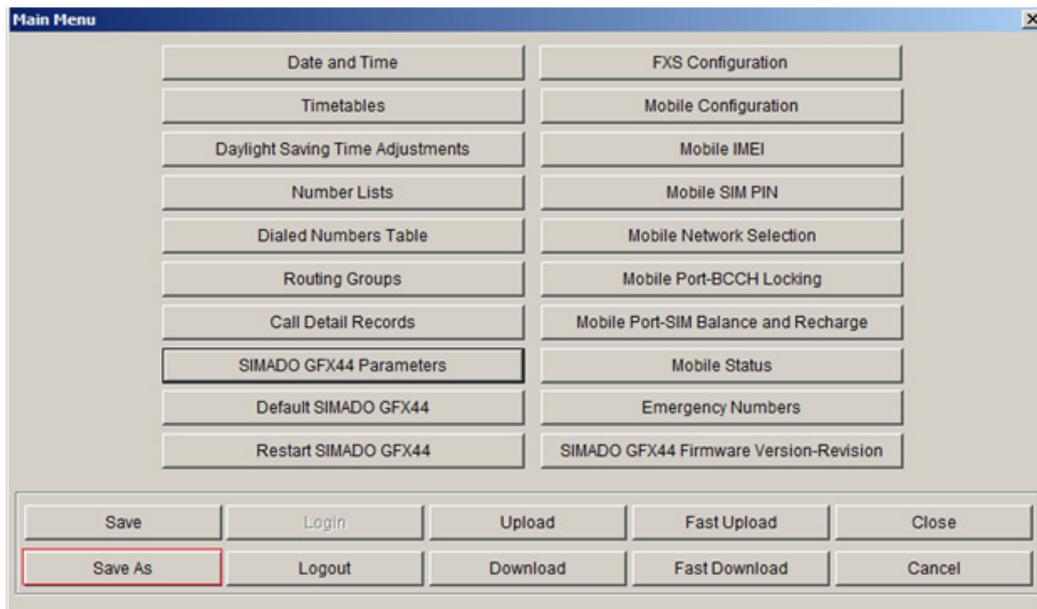


Saving Jeeves configuration to your Computer

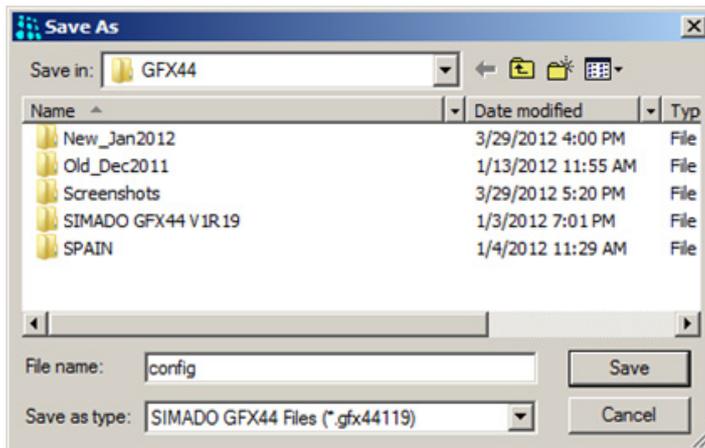
Once you have finished configuring your SIMADO GFX44, you must save existing configuration to a location on your computer as a back-up. You may need to restore your existing configuration in future.

If you are configuring SIMADO GFX44 for the first time, to save your configuration on the computer,

- On the **Main Menu**, click the **Save As** button.

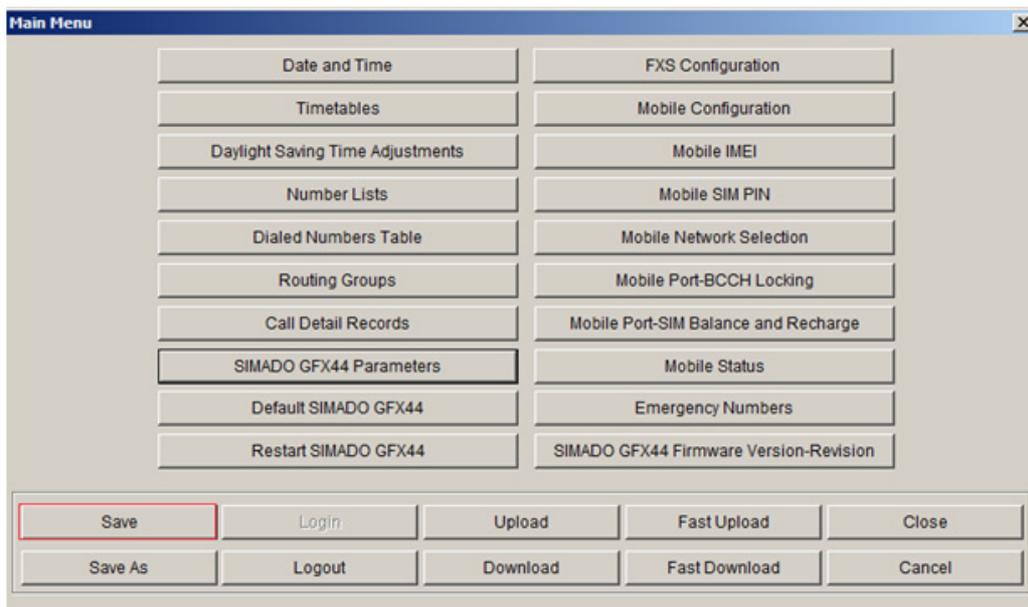


- **Save As** Dialog box will appear.



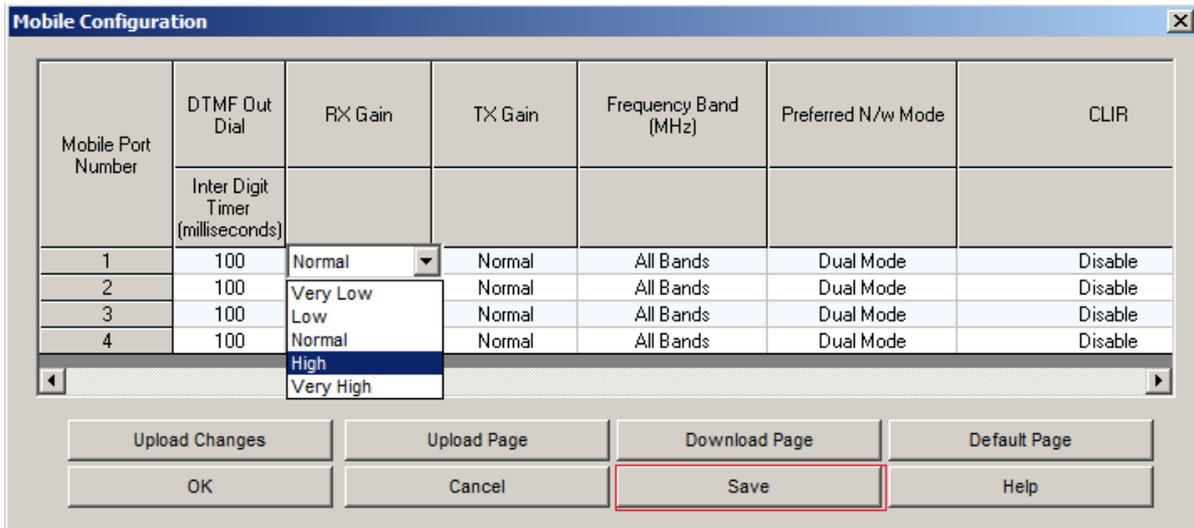
- Select the location to save the configuration file. Enter the File name and click the **Save** button.
- Jeeves configuration will be saved at the desired location on your computer.

Later on, if you make any changes in the configuration, you may click **Save** button on the **Main Menu** to save those changes on your computer.



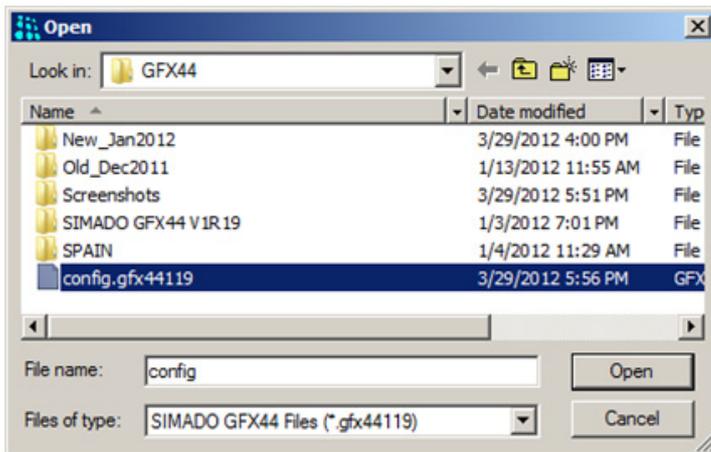
You can make changes in the configuration and simultaneously save it on your computer by clicking the **Save** button on the Feature Dialog box.

For example, you change Rx Gain of Mobile Port 1 from Normal to High. Click the **Save** button on **Mobile Configuration Dialog box** to save this change to your computer.



To open the saved configuration on your computer,

- On the Home Screen, click **File** → **Open**. **Open** dialog box will appear.



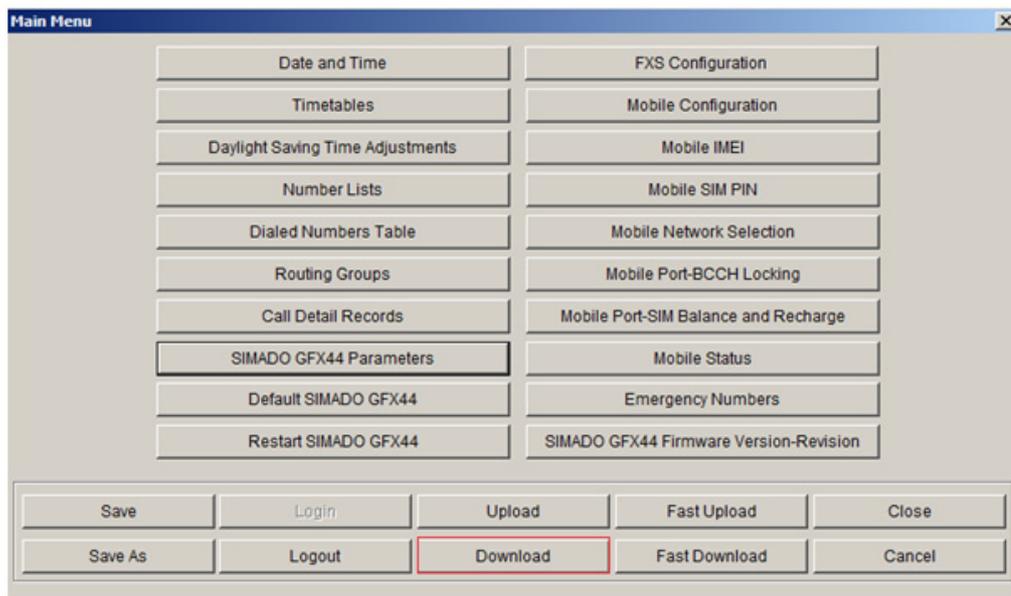
- Select the configuration file saved on your computer and then click the **Open** button. The **Main Menu** of Jeeves will open.

Downloading SIMADO GFX44 configuration to Jeeves

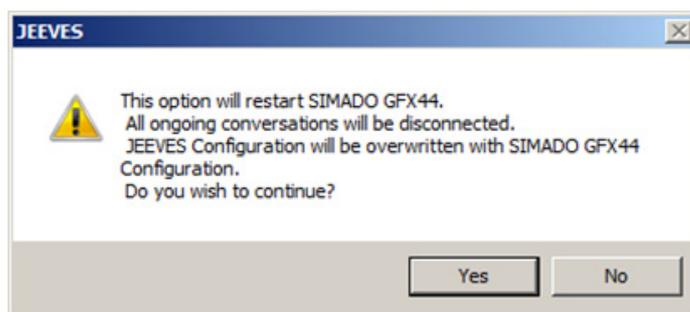
Sometimes, you may require to download SIMADO GFX44 configuration to Jeeves to make changes in it and upload it again in the system.

To download SIMADO GFX44 configuration to Jeeves,

- On the **Main Menu**, click the **Download** button.



- Following alert message will appear. Click the **Yes** button to download SIMADO GFX44 configuration to Jeeves.

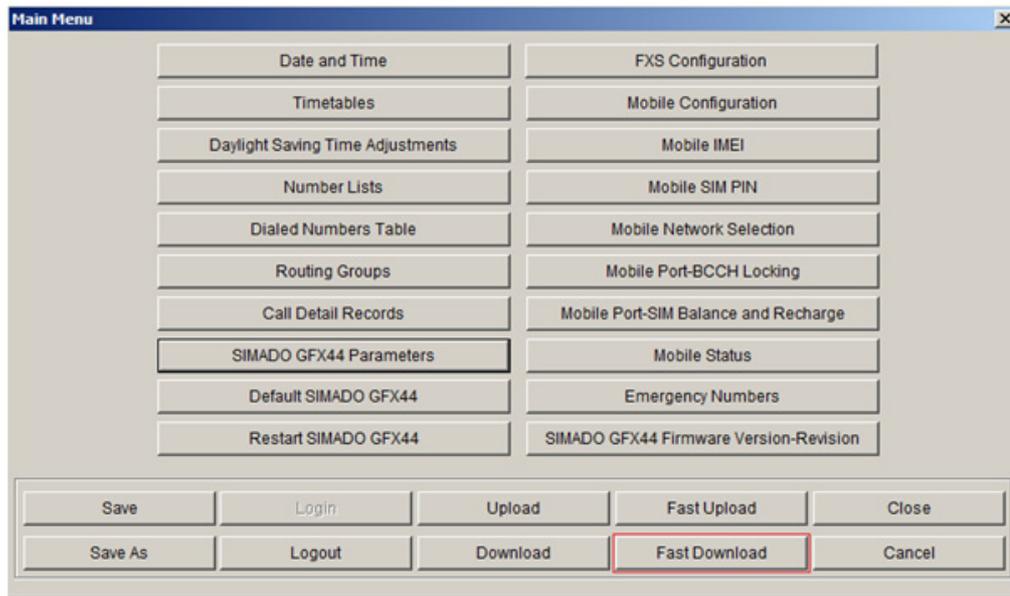


- SIMADO GFX44 configuration will be downloaded to the Jeeves.



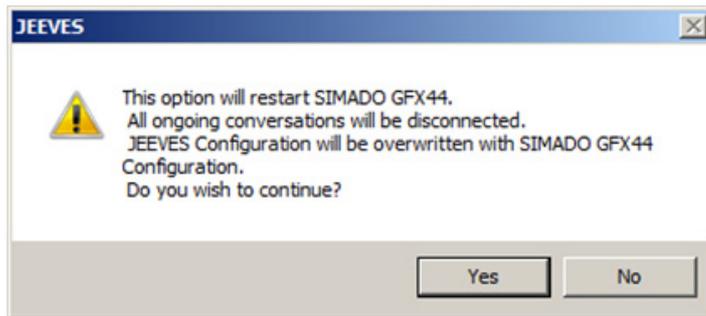
You can use SIMADO GFX44 while downloading SIMADO GFX44 configuration to Jeeves.

You can also click the **Fast Download** button, on the **Main Menu**, to quickly download SIMADO GFX44 configuration to the Jeeves.



When you click Fast download button, SIMADO GFX44 will restart and all the ongoing conversations will be disconnected. You will not be able to use SIMADO GFX44 when the fast downloading process is on.

- When you click the **Fast Download** button, following alert message will appear on the screen.

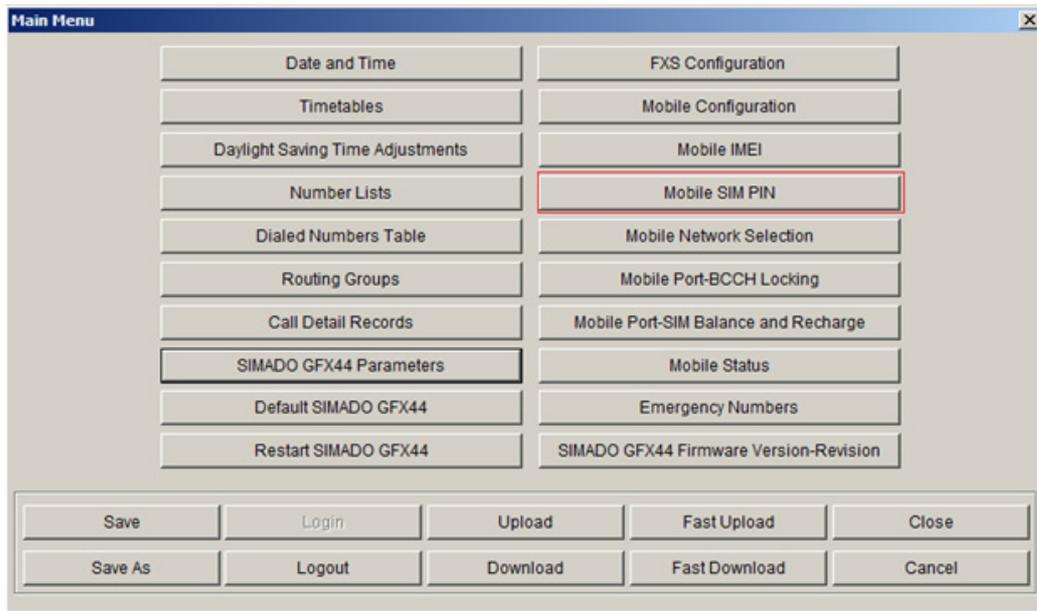


- Click the **Yes** button. SIMADO GFX44 configuration will be downloaded to the Jeeves in few seconds.

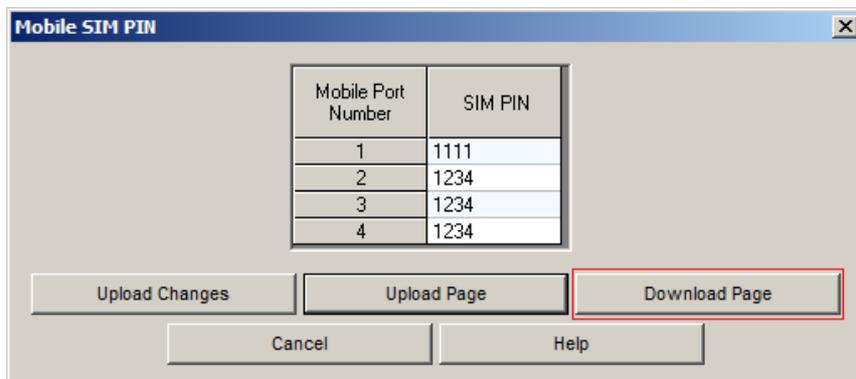
Each **Feature Dialog box** has the **Download Page** button. You can use this button to view the configuration stored in SIMADO GFX44.

For example, to view the SIM PIN of the SIM Card inserted in the GSM module of SIMADO GFX44,

- Open **Mobile SIM PIN Dialog box** by clicking **Mobile SIM PIN** button on the **Main Menu**.



- Click the **Download Page** button.



- SIM PIN stored in the SIM Card inserted in the GSM module of SIMADO GFX44 will be displayed on the Jeeves.

Configuring SIMADO GFX44 by dialing commands

You can configure SIMADO GFX44 by dialing commands from a phone connected to the FXS Port of SIMADO GFX44. You can also dial the commands from any remote landline/mobile phone by calling the Mobile Port of SIMADO GFX44.

Dialing command through the FXS Port

You can configure SIMADO GFX44 by dialing command strings from the telephone connected to the FXS Port.

Follow the steps given below to configure the system through the FXS Port.

- Lift the handset of the telephone instrument connected to the system.
- Dial ***19** followed by SE password (Default: 1234). You will enter the programming mode and will hear the programming tone.
- Dial the relevant command string.



*While dialing command strings, you must dial the digits and characters in a continuous sequence. For example, to enter programming mode you must dial the command string as ***191234** (*19 and the default SE Password).*

- Dial **00-#*** to exit the programming mode.

Dialing command through the Mobile Port

You can also configure SIMADO GFX44 through the Mobile Port. Follow these steps:

- Ensure (observe the LED indication) that the SIM Card installed in SIMADO GFX44 is registered with the network.
- Also make sure that the routing type selected for the Mobile Port is either **Answer-Number Based** or **Answer-Fixed**.
- Call Mobile Port of the system by dialing the number of the active SIM Card installed in the system with another mobile phone or telephone instrument. You will get dial tone of the system.
- Dial ***19** followed by SE password (Default = 1234) to enter the programming mode. You will get programming tone.
- Dial the programming command string.



*While dialing command strings, you must dial the digits and characters in a continuous sequence. For example, to enter programming mode you must dial the command string as ***191234**.*

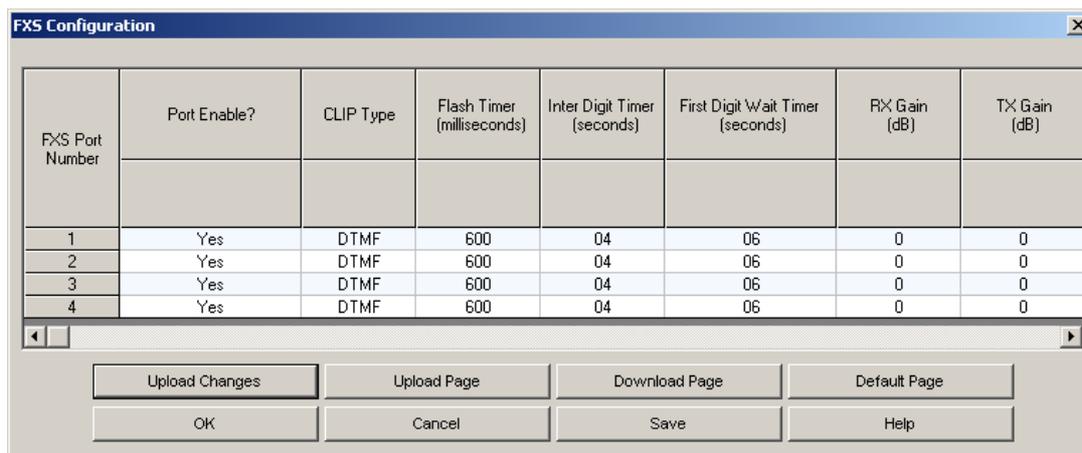
- Dial **00-#*** to exit the programming mode.

FXS Port Parameters

You may configure FXS Ports using Jeeves or by dialing commands from a phone.

Configuring FXS Ports using Jeeves

- Log into Jeeves. (See [“Configuring SIMADO GFX44 using Jeeves”](#))
- On the **Main Menu**, click the **FXS Configuration** button.



| FXS Port Number | Port Enable? | CLIP Type | Flash Timer (milliseconds) | Inter Digit Timer (seconds) | First Digit Wait Timer (seconds) | RX Gain (dB) | TX Gain (dB) |
|-----------------|--------------|-----------|----------------------------|-----------------------------|----------------------------------|--------------|--------------|
| 1 | Yes | DTMF | 600 | 04 | 06 | 0 | 0 |
| 2 | Yes | DTMF | 600 | 04 | 06 | 0 | 0 |
| 3 | Yes | DTMF | 600 | 04 | 06 | 0 | 0 |
| 4 | Yes | DTMF | 600 | 04 | 06 | 0 | 0 |

Buttons: Upload Changes, Upload Page, Download Page, Default Page, OK, Cancel, Save, Help

In **FXS Configuration**, set the following port parameters to the desired values:

- **Port Enable?** Keep the FXS Port is enabled. SIMADO GFX44 will route calls through the FXS Port only if it is enabled.

If you do not want to use the FXS Port, disable the FXS Port by selecting **No**.

- **CLIP Type:** Select the appropriate CLIP signaling for presenting the calling party number on the display of the telephone connected to the FXS Port. This will depend on the type of CLI supported by your service provider. You have the following options:
 - None
 - DTMF
 - ITU-T V.23 FSK
 - Bellcore 202A

Default: **DTMF**

- **Flash Timer (milliseconds):** Flash Timer signifies the time period for which the loop current breaks. Configure Flash Timer. Range: 083–999 milliseconds. Default: **600 milliseconds**.
- **Inter Digit Wait Timer (seconds):** Inter Digit Wait Timer signifies the time period between dialing of two consecutive digits. Configure Inter Digit Wait Timer. Range: 01–99 seconds. Default: **04 seconds**.
- **First Digit Wait Timer (seconds):** First digit wait timer signifies the time for which SIMADO GFX44 will wait for the user to dial the first digit after going Off-Hook. Configure First Digit Wait Timer. Range: 01–99 seconds. Default: **06 Seconds**.

On expiry of First Digit Wait Timer,

- If Fixed Dialing is enabled, SIMADO GFX44 will dial out the fixed destination number configured.
- If Fixed Dialing is disabled, SIMADO GFX44 will give error tone to the user.
- **Rx Gain (db):** You may adjust the Rx Gain (Receive) on the FXS Port to increase or decrease the volume of the remote party's voice being transmitted to you. Select the required Rx Gain level. Default: **0 db**.
- **Tx Gain (db):** You may adjust the Tx Gain (Transmit) on the FXS Port to increase or decrease the volume of your voice being transmitted to the remote party. Select the required Tx Gain level. Default: **0 db**.
- **AC Impedance (Ohm):** Select the appropriate impedance, according to the AC impedance supported by the device connected to the FXS Port of SIMADO GFX44. You can select from the following impedance options:
 - 600 ohm
 - 900 ohm
 - Complex

Default: **600 ohm**



If AC impedance of the telephone connected to the FXS Port of SIMADO GFX44 does not match with the AC impedance of the FXS Port, it may lead to the signal loss.

- **Answer Signaling:** Answer Signaling is a signal generated on the FXS Port to indicate that the called party has answered the call (call maturity). You can select one of the following signaling options:
 - **None:** Select this option when no answer signaling is to be generated.
 - **Polarity Reversal:** Select this option when answer signaling is to be generated in the form of Polarity Reversal. In Polarity Reversal, battery polarity of the FXS Port is reversed.

For example, the battery polarity of the FXS Port is negative for TIP and positive for RING in normal condition. When you select Polarity Reversal as Answer Signaling type, on call maturity, TIP will become positive and RING will become negative.

Default: **Polarity Reversal**

- **Disconnect Signaling:** Disconnect Signaling is a signal generated on the FXS Port to indicate that the called party has disconnected the call. When the called party disconnects the call, SIMADO GFX44 will play error tone to the user. You can select one of the following options:
 - **None:** Select this option when no disconnect signaling is to be generated on the FXS Port.
 - **Polarity Reversal:** Select this option when disconnect signaling is to be generated in the form of Polarity Reversal.
 - **Open Loop Disconnect:** Select this option when call disconnection is to be generated in the form of Open Loop Disconnect pulse. In Open Loop Disconnect, the battery voltage on the FXS Port is removed for the duration of the *Open Loop Disconnect Timer* and then it is restored after the FXS Port goes On-Hook.

Default: **Polarity Reversal**

- **Open Loop Disconnect Timer (milliseconds):** If you select *Open Loop Disconnect* as Disconnect Signaling, configure Open Loop Disconnect Timer. Range: 001–999 milliseconds. **Default: 500 milliseconds.**
- **On-Hook Detection Current or lower (mA):** Select On-Hook Detection Current on the FXS Port. You can select one of the following options:
 - 10mA
 - 12mA
 - 14mA
 - 16mA
 - 18mA

Default: **10 mA**

- **Minimum Current for Off-hook Detection (mA):** Select Minimum Current for Off-hook Detection on the FXS Port. You can select one of the following options:
 - 10mA
 - 12mA
 - 14mA
 - 16mA
 - 18mA

Default: **12 mA**

- **Fixed Dialing:** Configure following parameters, if you want to apply Fixed Dialing on the FXS Port.
 - **Status:** By default, Fixed Dialing is **disabled**. Enable Fixed Dialing on the FXS Port.
 - **Fixed Destination Number:** Enter the destination number to which you want to route the call. Default: **Blank**.

See [“Fixed Dialing”](#) for more details.

- **Allowed Denied Numbers:** Configure the following parameters, if you want to apply allowed-denied logic on the FXS Port.
 - **Apply?** By default, it is set to **Yes**. If you do not want to apply allowed-denied logic to the FXS Port, select **No**.
 - **Allowed Number List:** Assign allowed number list to the FXS Port. **Default: 01**.
 - **Denied Number List:** Assign denied number list to the FXS Port. **Default: 06**.

See [“Allowed-Denied Numbers”](#) for more details.

- **Time Table:** You may assign a Time Table to the FXS Port. By default, **Time Table 1** is assigned to all FXS Ports.

To understand and know how to configure a Time Table, see [“Time Table”](#).

- **Time Zone 1:** Configure following parameters for Time Zone 1.
 - **Routing Type:** Select Routing Type for all FXS Ports for Time Zone 1. By default, it is **Answer-Fixed**. See [“Routing Type”](#) for more details.
 - **Routing Group:** Select a Routing Group for Time Zone 1. By default, it is **04** for all FXS Ports. To configure a Routing Group, see [“Routing Group”](#).
- **Time Zone 2:** Configure following parameters for Time Zone 2.
 - **Routing Type:** Select Routing Type for all FXS Ports for Time Zone 2. By default, it is **Answer-Fixed**. See [“Routing Type”](#) for more details.
 - **Routing Group:** Select a Routing Group for Time Zone 2. By default, it is **04** for all FXS Ports. To configure a Routing Group, see [“Routing Group”](#).
- **Time Zone 3:** Configure following parameters for Time Zone 3.
 - **Routing Type:** Select Routing Type for all FXS Ports for Time Zone 3. Default: **Answer-Fixed**. See [“Routing Type”](#) for more details.
 - **Routing Group:** Select a Routing Group for Time Zone 3. Default: **04** for all FXS Ports. To configure a Routing Group, see [“Routing Group”](#).
- **Time Zone 4:** Configure following parameters for Time Zone 4.
 - **Routing Type:** Select Routing Type for all FXS Ports for Time Zone 4. Default: **Answer-Fixed**. See [“Routing Type”](#) for more details.
 - **Routing Group:** Select a Routing Group for Time Zone 4. Default: **04** for all FXS Ports. To configure a Routing Group, see [“Routing Group”](#).

Configuring FXS Ports by dialing command

- Enter Programming mode (for detailed instructions see [“Configuring SIMADO GFX44 by dialing commands”](#)) and follow the steps given below:

Enable/Disable FXS Port

- To enable/disable the FXS Port, dial:
251-FXS Port-Code-#*
Where,
FXS Port is from 1 to 4.
Code is:
0 for Disable
1 for Enable

Default: **Enable**

To enable/disable all FXS Ports, dial:
251-*-Code-#*



You will get error tone on the telephone instrument connected to the disabled FXS Port.

CLIP Type

- To configure CLIP Type for the FXS Port, dial:

161-FXS Port-CLIP Type-#*

Where,

FXS Port is from 1 to 4.

CLIP Type is

0 for None

1 for DTMF

2 for ITU-T V.23 FSK

3 for Bellcore 202A

Default: **DTMF**

To configure the CLIP Type for all FXS Ports dial:

161-*-CLIP Type-#*



You may select 'None' as CLI type when the telephone instrument connected to the FXS Port does not have a display or the user does not want to receive CLI.

Flash Timer

- To configure Flash Timer for the FXS Port, dial:

254-FXS Port-Flash Timer-#*

Where,

FXS Port is from 1 to 4.

Flash Timer range is from 083 to 999 milliseconds.

Default: **600 milliseconds**

To configure Flash Timer for all FXS Ports, dial:

254-*-Flash Timer-#*

Inter Digit Wait Timer

- To configure Inter Digit Wait Timer for the FXS Port, dial:

253-FXS Port-Inter Digit Wait Timer-#*

Where,

FXS Port is from 1 to 4.

Inter Digit Wait Timer range is from 01 to 99 seconds.

Default: **04 seconds**

To configure the Inter Digit Wait Timer for all FXS Ports, dial:

253-*-Inter Digit Wait Timer-#*

First Digit Wait Timer

- To configure First Digit Wait Timer for the FXS Port, dial:

255-FXS Port-First Digit Wait Timer-#*

Where,
FXS Port is from 1 to 4.
First Digit Wait Timer range is from 01 to 99 seconds.

Default: **06 seconds**

To configure First Digit Wait Timer for all FXS Ports, dial:
255*-First Digit Wait Timer-#*

Rx Gain

- To configure Rx Gain for the FXS Port, dial:
259-FXS Port-Code-#*

Where,
FXS Port is from 1 to 4.
Code is
1 for -1.5
2 for 0
3 for +1.5
4 for +3

Default: **0**

To configure Rx Gain for all FXS Ports, dial:
259*-Code-#*

Tx Gain

- To configure Tx Gain for the FXS Port, dial:
258-FXS Port-Code-#*

Where,
FXS Port is from 1 to 4.
Code is
1 for -1.5
2 for 0
3 for +1.5
4 for +3

Default: **0**

To configure Tx Gain for all the FXS Ports, dial:
258*-Code-#*

AC Impedance

- To configure AC Impedance for the FXS Port, dial:
260-FXS Port-Code-#*

Where,
FXS Port is from 1 to 4.
Code is
1 for 600 Ohms
2 for 900 Ohms
3 for Complex

Default: **600 Ohms**

To configure AC Impedance for all FXS Ports, dial:
260*-Code-#*



The new value of AC impedance will be effective only after you restart SIMADO GFX44.

Answer Signaling

- To configure Answer Signaling on the FXS Port, dial:
261-FXS Port-Answer Signal-#*

Where,

FXS Port is from 1 to 4.

Answer Signal is

0 for None

1 for Polarity Reversal

Default: **Polarity Reversal**

To configure Answer Signal to be generated on all FXS Ports, dial:
261*-Answer Signal-#*

Disconnect Signaling

- To configure Disconnect Signaling on the FXS Port, dial:
256-FXS Port-Disconnect Signal-#*

Where,

FXS Port is from 1 to 4.

Disconnect Signal is

0 for None

1 for Polarity Reversal

2 for Open Loop Disconnect

Default: **Polarity Reversal**

To configure the disconnect signal on all FXS Ports, dial:
256*-Disconnect Signal-#*

To configure Open Loop Disconnect Timer on the FXS Port, dial:

257-FXS Port-Open Loop Disconnect Timer-#*

Where,

FXS Port is from 1 to 4.

Open Loop Disconnect timer range is from 001 to 999 milliseconds.

Default: **500 milliseconds**

To configure Open Loop Disconnect Timer on all FXS Ports, dial:
257*-Open Loop Disconnect Timer-#*

On-hook Detection Current or lower (mA)

- To configure On-hook detection current on the FXS Port, dial:

263-FXS Port-Code-#*

Where,
FXS Port is from 1 to 4.
Code is
1 for 10mA
2 for 12mA
3 for 14mA
4 for 16mA
5 for 18mA

Default: **10mA**

To configure value of current for On-hook detection on all FXS Ports, dial:
263*-Code-#*

Minimum Current for Off-hook Detection (mA)

- To configure Minimum Current for Off-hook detection, dial:

262-FXS Port-Code-#*

Where,
FXS Port is from 1 to 4.
Code is
1 for 10mA
2 for 12mA
3 for 14mA
4 for 16mA
5 for 18mA

Default: **12mA**

To configure Minimum current for Off-hook detection on all FXS Ports, dial:
262*-Code-#*

Fixed Dialing

- To enable/disable fixed dialing on the FXS Port, dial:

171-FXS Port-Code-#*

Where,
FXS Port is from 1 to 4.
Code is
0 for Disable
1 for Enable

Default: **Disable**

To enable/disable fixed dialing on all FXS Ports, dial:
171*-Code-#*

- To configure Fixed Destination Number for fixed dialing on the FXS Port, dial:

172-FXS Port-Number String-#*

Where,
FXS Port is from 1 to 4.

Number String is of 16 digits. Allowed digits are 0-9, #, *, A, B, C, D, F, P, W and +. Refer the following table for the codes to be dialed for configuring special digits.

To configure fixed destination number for fixed dialing on all FXS Ports, dial:

172-*-Number String-#*

Codes for configuring Special Digits are:

| Special Digits | Codes |
|----------------------------|-------|
| Flash (F) | #2 |
| Pause (P) | #3 |
| Wait (W) | *1 |
| A | #4 |
| B | #5 |
| C | #6 |
| D | #7 |
| + | #1 |
| # | ## |
| * | ** |
| End of Programming Command | #* |

Allowed Denied Numbers

- To enable/disable allowed-denied logic on the FXS Port, dial:

115-FXS Port-Code-#*

Where,

FXS Port is from 1 to 4.

| Code | Meaning |
|------|---------|
| 0 | Disable |
| 1 | Enable |

Code is

0 for Disable

1 for Enable

Default: **Enable**

To enable/disable allowed/denied logic on all FXS Ports, dial:

115-*-Code-#*

- To assign allowed number list to the FXS Port, dial:

111-FXS Port-Number List-#*

Where,

FXS Port is from 1 to 4.

Number List is from 01 to 16.

Default: **01**

To assign allowed number list to all FXS Ports, dial:

111-*-Number List-#*

- To assign denied number list to the FXS Port, dial:
112-FXS Port-Number List-#*
Where,
FXS Port is from 1 to 4.
Number List is from 01 to 16.

Default: **06**

To assign denied number list to all FXS Ports, dial:
112-*-Number List-#*

Time Table

- To assign Time Table to the FXS Port, dial:
332-FXS Port-Time Table-#*
Where,
FXS Port is from 1 to 4.
Time Table is from 1 to 4.

Default: **1**

To assign Time Table to all the FXS Ports, dial:
332-*-Time Table-#*

Time Zone 1

- To assign Routing Type for Time Zone 1 to the FXS Port, dial:
181-FXS Port-Routing-Type-#*
Where,
FXS Port is from 1 to 4.
Routing Type is
0 for Off
1 for Answer Number Based
2 for Answer Fixed
3 for Direct

Default: **Answer-Fixed**

To assign Routing Type for Time Zone 1 to all FXS Ports, dial:
181-*-Routing-Type-#*

- To assign a Routing Group to the FXS Port for Time Zone 1, dial:
203-FXS Port-Routing Group-#*
Where,
FXS Port is from 1 to 4.
Routing Group is from 01 to 16.

Default: **04**

To assign a Routing Group to all FXS Ports for Time Zone 1, dial:
203-*-Routing Group-#*

Time Zone 2

- To assign Routing Type for Time Zone 2 to the FXS Port, dial:
182-FXS Port-Routing-Type-#*

Where,

FXS Port is from 1 to 4.

Routing Type is

0 for Off

1 for Answer Number Based

2 for Answer Fixed

3 for Direct

Default: **Answer-Fixed**

To assign Routing Type for Time Zone 2 to all FXS Ports, dial:

182-*-Routing-Type-#*

- To assign a Routing Group to the FXS Port for Time Zone 2, dial:
204-FXS Port-Routing Group-#*

Where,

FXS Port is from 1 to 4.

Routing Group is from 01 to 16.

Default: **04**

To assign a Routing Group to all FXS Ports for Time Zone 2, dial:

204-*-Routing Group-#*

Time Zone 3

- To assign Routing Type for Time Zone 3 to the FXS Port, dial:
183-FXS Port-Routing-Type-#*

Where,

FXS Port is from 1 to 4.

Routing Type is

0 for Off

1 for Answer Number Based

2 for Answer Fixed

3 for Direct

Default: **Answer-Fixed**

To assign Routing Type for Time Zone 3 to all FXS Ports, dial:

183-*-Routing-Type-#*

- To assign a Routing Group to the FXS Port for Time Zone 3, dial:
205-FXS Port-Routing Group-#*

Where,

FXS Port is from 1 to 4.

Routing Group is from 01 to 16.

Default: **04**

To assign a Routing Group to all FXS Ports for Time Zone 3, dial:
205*-Routing Group-#*

Time Zone 4

- To assign Routing Type for Time Zone 4 to the FXS Port, dial:
184-FXS Port-Routing-Type-#*

Where,

FXS Port is from 1 to 4.

Routing Type is

0 for Off

1 for Answer Number Based

2 for Answer Fixed

3 for Direct

Default: **Answer-Fixed**

To assign Routing Type for Time Zone 4 to all FXS Ports, dial:
184*-Routing-Type-#*

- To assign a Routing Group to the FXS Port for Time Zone 4, dial:
206-FXS Port-Routing Group-#*

Where,

FXS Port is from 1 to 4.

Routing Group is from 01 to 16.

Default: **04**

To assign a Routing Group to all FXS Ports for Time Zone 4, dial:
206*-Routing Group-#*

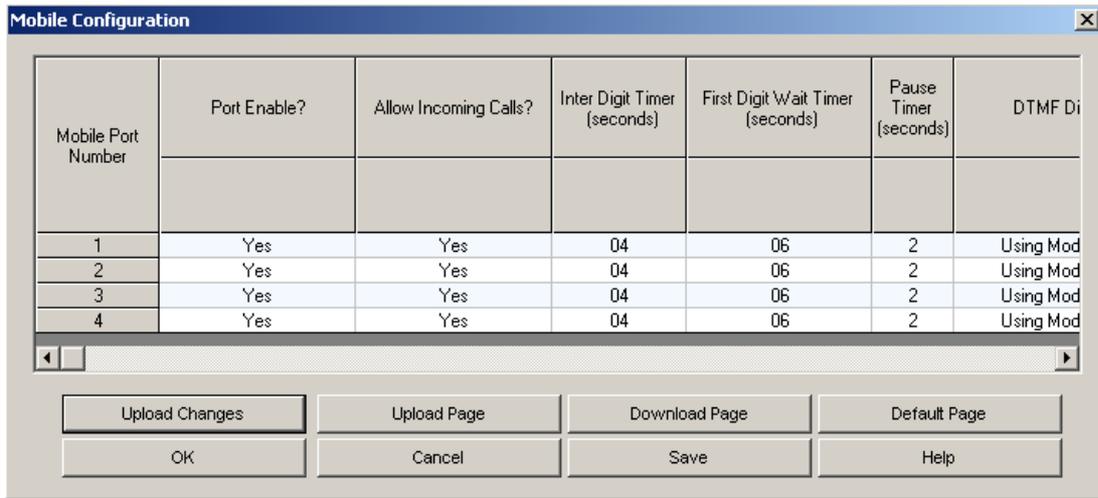
- Dial **00-#*** to exit the programming mode.

Mobile Port Parameters

You may configure Mobile Ports using Jeeves or by issuing commands through a Telephone.

Configuring Mobile Ports using Jeeves

- Log into the Jeeves. (See “[Configuring SIMADO GFX44 using Jeeves](#)”)
- On the **Main Menu**, click the **Mobile Configuration** button.



The screenshot shows a window titled "Mobile Configuration" with a table of parameters for four mobile ports. The table has columns for Mobile Port Number, Port Enable?, Allow Incoming Calls?, Inter Digit Timer (seconds), First Digit Wait Timer (seconds), Pause Timer (seconds), and DTMF Dialing Method. Below the table are buttons for "Upload Changes", "Upload Page", "Download Page", "Default Page", "OK", "Cancel", "Save", and "Help".

| Mobile Port Number | Port Enable? | Allow Incoming Calls? | Inter Digit Timer (seconds) | First Digit Wait Timer (seconds) | Pause Timer (seconds) | DTMF Dialing Method |
|--------------------|--------------|-----------------------|-----------------------------|----------------------------------|-----------------------|---------------------|
| 1 | Yes | Yes | 04 | 06 | 2 | Using Mod |
| 2 | Yes | Yes | 04 | 06 | 2 | Using Mod |
| 3 | Yes | Yes | 04 | 06 | 2 | Using Mod |
| 4 | Yes | Yes | 04 | 06 | 2 | Using Mod |

In **Mobile Configuration**, set the following port parameters to the desired values:

- **Port Enable?** Keep the Mobile Port enabled. SIMADO GFX44 will route calls through the Mobile Port only if it is enabled.

If you do not want to use the Mobile Port, disable the Mobile Port by selecting **No**.

- **Allow Incoming Calls?** By default, incoming calls are **allowed** on the Mobile Port. If you want to block incoming calls on the Mobile Port, select **No**.
- **Inter Digit Timer (seconds):** Inter Digit Wait Timer signifies the time period between dialing of two consecutive digits while dialing a number on the Mobile Port. You may set the Inter Digit Timer to the desired value. Range: 01–99 seconds. Default: **04 seconds**.
- **First Digit Wait Timer (seconds):** The First Digit Wait Timer signifies the time for which SIMADO GFX44 will wait for the user to dial a digit after the port goes Off-Hook. You may set the First Digit Wait Timer to the desired value. Range: 01–99 seconds. Default: **06 Seconds**.
- **Pause Timer (seconds):** Pause Timer is the time for which SIMADO GFX44 will wait while dialing out DTMF digits on the Mobile Port. This timer is applicable when the character P is configured in the DTMF number string. You may set the Pause Timer to the desired value. Range: 1–9 seconds. Default: **2 seconds**.
- **DTMF Dialing Method during Multistage Dialing:** During Multi-Stage Dialing, you may dial DTMF digits on the Mobile Port either **Using Module Resources** or **Using System Resources**.

Select **Using Module Resources**, if you want the DTMF digits to be dialed using AT Commands. However, this method has certain limitations and therefore not 100% reliable.

Select **Using System Resources**, if you want the DTMF digits to be dialed by the hardware device of the system and controlled by the software of the system. However, this method is also not reliable because it depends upon the network conditions, and during a call, generally there is break in the speech and it may not be detected properly at the remote end.

Default: **Using Module Resources**

- **DTMF Outdial Option:** SIMADO GFX44 supports dialing of DTMF digits from the Mobile Port **Using AT Command** or **In-band**. Select the desired option for DTMF Outdial. Default: **In-band**.
- **DTMF Outdial On Time (msec):** This is the time for which the DTMF digits will remain On while being dialed out by SIMADO GFX44. This timer finds its application in *Multistage Dialing* and in *DTMF Outdialing using AT Commands*. Set DTMF Out Dial ON Time. Range: 50–200 milliseconds. Default: **100 milliseconds**.
- **DTMF Detection:** SIMADO GFX44 supports detection of DTMF Digits **Using DSP** or **Using GSM Engine**. Select the appropriate DTMF Detection option. Default: **Using DSP**.

If your system has Sierra Wireless SL6087 engine and you have selected DTMF Detection Using GSM Engine, you must configure appropriate **DTMF Detection Minimum ON Duration**.



SIMADO GFX44 can detect DTMF Digits using GSM Engine only when Sierra Wireless SL6087 (2G module) or SIMCOM 5218 (3G module) or Quectel GSM Engine (2G/3G) is installed in the System.

- **DTMF Detection Minimum ON Duration (msec):** When a DTMF event is received from the GSM module, SIMADO GFX44 will consider the event as a valid digit, if the duration of the event is equal to or greater than the Minimum ON Duration you configure. Configure appropriate DTMF Detection Minimum ON Duration, if you have selected DTMF Detection option as 'Using GSM Engine'. Range: 20–100 milliseconds. Default: **30 milliseconds**.
- **Inter Digit Timer (milliseconds):** This is the time for which the system waits after dialing each DTMF digit. You may set the DTMF Inter Digit Timer to the desired value. Range: 20–200 milliseconds. Default: **100 milliseconds**.
- **Rx Gain:** You may adjust the Rx Gain (Receive) on the Mobile Port to increase or decrease the volume of the remote party's voice being transmitted to you. Select the required Rx Gain level. Default: **Normal**.
- **Tx Gain (db):** You may adjust the Tx Gain (Transmit) on the Mobile Port to increase or decrease the volume of your voice being transmitted to the remote party. Select the required Tx Gain level. Default: **Normal**.
- **Frequency Band (MHz):** Select the Frequency Band used by the GSM Service Provider(s) in your country. You can select from the following options:
 - 900
 - 1800
 - 1900
 - 850+1900
 - 900+1800
 - All BandsDefault: **All Bands**



Frequency Band Selection is not required if 3G module is installed in SIMADO GFX44.

- **Preferred Network Mode:** When 3G Mobile Port is used in the SIMADO GFX44, the SIM gets registered with either GSM (2G) or UMTS (3G) network, whichever is available. You may select the Network with which the SIM Card should get registered by setting the Preferred Network Mode. You may select the Preferred Network Mode from the following options:
 - **Dual Mode** to register the SIM with 2G (GSM) or 3G (UMTS) network, whichever is available.
 - **GSM** to register the SIM with 2G GSM network.
 - **UMTS** to register the SIM with 3G(UMTS) network.

Default: **Dual Mode**



If your Mobile Port supports only GSM, do not change the default value of this parameter.

- **CLIR:** By default, CLIR is **disabled** on all Mobile Ports. You can hide your identity from the called party by enabling CLIR on the Mobile Port. See [“Calling Line Identification Restriction \(CLIR\)”](#) for more details.
- **Returned Calls to Original Callers (RCOC):** Configure this parameter if you want to enable the RCOC feature on the Mobile port. See [“Returned Calls to Original Callers \(RCOC\)”](#) for more details.

SIMADO GFX44 supports three types of RCOC:

- **On Busy:** SIMADO GFX44 will store the call record when the called party is found busy. By default, RCOC On Busy is **disabled**. Enable it, if you want to use RCOC On Busy.
- **On No-Response:** SIMADO GFX44 will store the call record when there is no response from the called party. By default, RCOC On No-Response is **disabled**. Enable it, if you want to use RCOC On No-Response.
- **On Speech:** SIMADO GFX44 will store the call record when the called party answers the call. By default, RCOC On Speech is **disabled**. Enable it, if you want to use RCOC On Speech.
- **Fixed Dialing:** Configure following parameters, if you want to apply Fixed Dialing on the Mobile Port:
 - **Status:** By default, Fixed Dialing is **disabled**. Enable Fixed Dialing on the FXS Port.
 - **Fixed Destination Number:** Enter the destination number to which you want to route the call. Default: **Blank**.

See [“Fixed Dialing”](#) for more details.

- **Allowed Denied Numbers:** Configure the following parameters, if you want to apply allowed-denied logic on the Mobile Port.
 - **Apply?** By default, it is set to **Yes**. Select **No**, if you do not want to apply allowed-denied logic to the Mobile Port.
 - **Allowed Number List:** Assign allowed number list to the Mobile Port. **Default: 01**.
 - **Denied Number List:** Assign denied number list to the Mobile Port. **Default: 06**.

See [“Allowed-Denied Numbers”](#) for more details.

- **Automatic Number Translation:** Configure following parameters, if you want to apply Automatic Number Translation logic on the Mobile Port.
 - **Apply?** By default, it is set to **Yes**. Select **No**, if you do not want to apply Automatic Number Translation logic to the Mobile Port.
 - **Dialed Number List:** Assign dialed number list to the Mobile Port. **Default: 06**.
 - **Substitute Number List:** Assign substitute number list to the Mobile Port. **Default: 06**.

See [“Automatic Number Translation”](#) for more details.

- **Time Table:** You may assign a Time Table to the Mobile Port. By default, **Time Table 1** is assigned to all Mobile Ports.

To understand and configure a Time Table, see [“Time Table”](#).

- **Time Zone 1:** Configure following parameters for Time Zone 1.
 - **Routing Type:** Select Routing Type for all Mobile Ports for Time Zone 1. By default, it is **Direct**. See [“Routing Type”](#) for more details.
 - **Routing Group:** Select a Routing Group for Time Zone 1. By default, it is **01** for all Mobile Ports. To configure a Routing Group, see [“Routing Group”](#).
- **Time Zone 2:** Configure following parameters for Time Zone 2.
 - **Routing Type:** Select Routing Type for all Mobile Ports for Time Zone 2. By default, it is **Direct**. See [“Routing Type”](#) for more details.
 - **Routing Group:** Select a Routing Group for Time Zone 2. By default, it is **01** for all Mobile Ports. To configure a Routing Group, see [“Routing Group”](#).
- **Time Zone 3:** Configure following parameters for Time Zone 3.
 - **Routing Type:** Select Routing Type for all Mobile Ports for Time Zone 3. By default, it is **Direct**. See [“Routing Type”](#) for more details.
 - **Routing Group:** Select a Routing Group for Time Zone 3. By default, it is **01** for all Mobile Ports. To configure a Routing Group, see [“Routing Group”](#).
- **Time Zone 4:** Configure following parameters for Time Zone 4.
 - **Routing Type:** Select Routing Type for all Mobile Ports for Time Zone 4. By default, it is **Direct**. See [“Routing Type”](#) for more details.
 - **Routing Group:** Select a Routing Group for Time Zone 4. By default, it is **01** for all Mobile Ports. To configure a Routing Group, see [“Routing Group”](#).
- **Call Minutes:** If you service provider offers free minutes for calls. You may enable the Call Minutes feature on the Mobile port, by configuring the following parameters:
 - **Enable?:** Select **Yes** to enable this feature. Default: **No**.

- **Minutes Allowed:** Enter the free minutes allowed by your service provider for each Mobile Port here. Range of Minutes allowed: 0000–9999. Default: **9999**
- **Scheduled Reset?:** If you have enabled Call Minutes on the Mobile Port, you can configure SIMADO GFX44 to reset call minutes allowed and minutes used automatically on a scheduled date. By default, it is set to **Yes**. Select **No**, if you do not want to reset these automatically on a scheduled date.
- **Scheduled Date:** Configure date on which you want the system to reset the minutes allowed and minutes used counter. Range: 01–31. Default: **01**
- **Options when Minutes are Used?:** SIMADO GFX44 provides two options for outgoing calls after the free minutes offered by the service provider are used up. These options are:
 - **Block Outgoing Calls:** If this option is selected, SIMADO GFX44 will not allow any outgoing calls after the free minutes are utilized.
 - **Alert and Allow Outgoing Calls:** If this option is selected, SIMADO GFX44 will allow outgoing calls after notifying the user that the free call minutes are utilized. In this case, all calls made after the free minutes are exhausted are charged as per the regular charges of the service provider.

Default: **Block Outgoing Calls**

- **Manual Reset:** Use this button to reset call minutes allowed and used, manually.

See [“Call Minutes”](#) for more details.

Configuring Mobile Ports by issuing commands

- Enter Programming mode (see [“Configuring SIMADO GFX44 by dialing commands”](#)) and follow the steps given below:

Enable/Disable Mobile Port

- To enable/disable the Mobile Port, dial:
271-Mobile Port-Code-#*
Where,
Mobile Port is from 1 to 4.
Code is:
0 for Disable
1 for Enable

Default: **Enable**

To enable/disable all Mobile Ports, dial:
271-*-Code-#*

Allow/Disallow Incoming Calls

- To allow/disallow Incoming Calls on the Mobile Port, dial:
270-Mobile Port -Code- #*
Where,
Mobile port is from 1-4

Code is
0 for No
1 for Yes

Default: **Yes (allowed)**

To allow / disallow Incoming Calls on all Mobile Ports, dial:
270 *- Code-#*

Inter Digit Wait Timer

- To configure Inter Digit Wait Timer for the Mobile Port, dial:
274-Mobile Port-Inter Digit Wait Timer-#*
Where,
Mobile Port is from 1 to 4.
Inter Digit Wait Timer is from 01 to 99 seconds.

Default: **04 seconds**

To configure the Inter Digit Wait Timer for all Mobile Ports, dial:
274*-Inter Digit Wait Timer-#*

First Digit Wait Timer

- To configure the First Digit Wait Timer for the Mobile Port, dial:
276-Mobile Port-First Digit Wait Timer-#*
Where,
Mobile Port is from 1 to 4.
First Digit Wait Timer is from 01 to 99 seconds.

Default: **06 seconds**

To configure the First Digit Wait Timer for all Mobile Ports, dial:
276*-First Digit Wait Timer-#*

Pause Timer

To configure Pause Timer for the Mobile Port, dial:
275-Mobile Port-Pause Timer-#*
Where,
Mobile Port is from 1 to 4.
Pause Timer is from 1 to 9 seconds.

Default: **2 seconds**

Example: If number string to be dialed out on the Mobile Port is PPP234 and pause timer is 3 seconds, SIMADO GFX44 will dial out digit 2 after P+P+P seconds, that is after 3+3+3=9 seconds.

To configure Pause Timer for all Mobile Ports, dial:
275*-Pause Timer-#*

DTMF Dialing Method during Multi Stage Dialing

To configure DTMF Dialing method for the Mobile Port during Multi Stage Dialing, dial:

282-Mobile Port-Code-#*

Where,

Mobile Port is from 1 to 4.

Code is

1 for Using Module Resources

2 for Using System Resources

Default: **Using Module Resources**

To configure DTMF Dialing method for all Mobile Ports, dial:

282-*-Code-#*

DTMF Outdial Option

- To configure DTMF Outdial Option, dial:
237-Mobile Port- DTMF Outdial Option -#*

Where,

Mobile Port is from 1 to 4

DTMF Outdial Option is

1 for In-band

2 for Using AT Command

Default: **In-band**

To configure DTMF Outdial Option for all Mobile Ports, dial:

237-*- DTMF Outdial Option -#*

DTMF Outdial ON Time

- To configure DTMF Out dial ON Time for the Mobile Port, dial:
283-Mobile Port-Code-#*

Where,

Mobile Port is from 1 to 4.

Code is 01 to 16. (from 50 to 200 milliseconds)

Default: **100 milliseconds**

To configure DTMF Out dial ON Time for all Mobile Ports, dial:

283-*-Code-#*

DTMF Detection Option

- To configure DTMF Detection Option, dial:
226-Mobile Port-DTMF Detection Option-#*

Where,

Mobile Port is from 1 to 4

DTMF Detection Option is

1 for Using DSP

2 for Using GSM Engine

Default: **Using DSP**

DTMF Detection Minimum On Duration

- To configure DTMF Detection Minimum ON Duration, dial:
227-Mobile Port-DTMF Detection Minimum ON Duration-#*
Where,
Mobile Port is from 1 to 4
DTMF Detection Minimum ON Duration is from 20 to 100 milliseconds.

Default: **30 milliseconds**

DTMF Inter Digit Pause Timer

- To configure Inter Digit Pause Time for DTMF Dialing on the Mobile Port, dial:
284-Mobile Port-Code-#*
Where,
Mobile Port is from 1 to 4.
Code is 01 to 19. (from 20 to 200 milliseconds)

Default: **100 milliseconds**

To configure Inter Digit Pause Time for DTMF Dialing on all Mobile Ports, dial:
284-*-Code-#*

Rx Gain

- To configure Rx Gain for the Mobile Port, dial:
272-Mobile Port-Receive Gain-#*
Where,
Mobile Port is from 1 to 4.
Code is
1 for Very Low
2 for Low
3 for Normal
4 for High
5 for Very High

Default: **Normal**

To configure Rx Gain for all Mobile Ports, dial:
272-*-Code-#*

Tx Gain

- To configure Tx Gain for the Mobile Port, dial
273-Mobile Port-Transmit Gain-#*
Where,
Mobile Port is from 1 to 4.
Code is
1 for Very Low
2 for Low
3 for Normal

4 for High
5 for Very High

Default: **Normal**

To configure Tx Gain for all the Mobile Ports, dial:
273-*-Code-#*

Frequency Band

- To configure Mobile Frequency Band for the Mobile Port, dial:
278-Mobile Port-Mobile Frequency Band-#*
Where,
Mobile Port is from 1 to 4.
Mobile Frequency Band is
1 for 900
2 for 1800
3 for 1900
4 for 850+1900
5 for 900+1800
6 for All Bands

Default: **All Bands**

To configure Mobile Frequency Band on all Mobile Ports, dial:
278-*-Mobile Frequency Band-#*

Preferred Network Mode

- To configure Preferred Network Mode for the Mobile Port, dial:
236-Mobile Port-Preferred N/w Mode-#*
Where,
Mobile Port is from 1 to 4.
Preferred N/w Mode is
1 for Dual
2 for GSM
3 for UMTS

Default: **Dual**

To configure Preferred N/w Mode for all Mobile Ports, dial:
236-*-Preferred N/w Mode-#*

CLIR

- To enable/disable CLIR on the Mobile Port, dial:
285-Mobile Port-Code-#*
Where,
Mobile Port is from 1 to 4.
Code is
0 for Disable
1 for Enable

Default: **Disable**

RCOC

- To Enable/Disable RCOC-On Busy on the Mobile Port, dial:
222-Mobile Port-Code-#*

Where,

Mobile Port is from 1 to 4.

0 for Disable

1 for Enable

Default: **Disable**

To enable/disable RCOC-On Busy on all Mobile Ports, dial:

222*-Code-#*

- To Enable/Disable RCOC-No Response on the Mobile Port, dial:
223-Mobile Port-Code-#*

Where,

Mobile Port is from 1 to 4.

0 for Disable

1 for Enable

Default: **Disable**

To enable/disable RCOC-No Response on all Mobile Ports, dial:

223*-Code-#*

- To Enable/Disable RCOC-On Speech on the Mobile Port, dial:
224-Mobile Port-Code-#*

Where,

Mobile Port is from 1 to 4.

0 for Disable

1 for Enable

Default: **Disable**

To enable/disable RCOC-On Speech on all Mobile Ports, dial:

224*-Code-#*

Fixed Dialing

- To enable/disable fixed dialing on the Mobile Port, dial:
175-Mobile Port-Code-#*

Where,

Mobile Port is from 1 to 4.

0 for Disable

1 for Enable

Default: **Enable**

To enable/disable fixed dialing on all Mobile Ports, dial:

175*-Code-#*

- To configure Fixed Destination Number for Fixed Dialing on the Mobile Port, dial:
176-Mobile Port-Number String-#*
Where,
Mobile Port is from 1 to 4.
Number String is of 16 digits. Allowed digits are 0-9, #, *, A, B, C, D, F, P, W and +.

Codes for programming the special digits such as A, B, C, D, etc., are provided in the table below:

| Special Digits | Programming Codes |
|----------------------------|-------------------|
| Flash (F) | #2 |
| Pause (P) | #3 |
| A | #4 |
| B | #5 |
| C | #6 |
| D | #7 |
| + | #1 |
| # | ## |
| * | ** |
| W | *1 |
| End of Programming Command | #* |

To configure fixed destination number for fixed dialing on all Mobile Ports, dial:
176-*-Number String-#*

Allowed Denied Numbers

- To Enable/Disable allowed-denied logic on the Mobile Port, dial:
116-Mobile Port-Code-#*
Where,
Mobile Port is from 1 to 4.
Code is
0 for Disable
1 for Enable

Default: **Enable**

To enable/disable allowed/denied logic on all Mobile Ports, dial:
116-*-Code-#*

- To assign allowed number list to the Mobile Port, dial:
113-Mobile Port-Number List-#*
Where,
Mobile Port is from 1 to 4.
Number List is from 01 to 16.

Default: **01**

To assign an allowed number list to all Mobile Ports, dial:
113-*-Number List-#*

- To assign denied number list to the Mobile Port, dial:
114-Mobile Port-Number List-#*
Where,
Mobile Port is from 1 to 4.
Number List is from 01 to 16.

Default: **06**

To assign denied number list to all Mobile Ports, dial:
114-*-Number List-#*

Automatic Number Translation

- To enable/disable automatic number translation logic on the Mobile Port, dial:
126-Mobile Port-Code-#*
Where,
Mobile Port is from 1 to 4.
Code is
0 for Disable
1 for Enable

Default: **Enable**

To enable/disable automatic number translation logic on all Mobile Ports, dial:
126-*-Code-#*

- To assign a dialed number list to the Mobile Port, dial:
123-Mobile Port-Number List-#*
Where,
Mobile Port is from 1 to 4.
Number List is from 01 to 16.

Default: **06**

To assign a dialed number list to all Mobile Ports, dial:
123-*-Number List-#*

- To assign substitute number list to the Mobile Port, dial:
124-Mobile Port-Number List-#*
Where,
Mobile Port is from 1 to 4.
Number List is from 01 to 16.

Default: **06**

To assign a substitute number list to all Mobile Ports, dial:
124-*-Number List-#*

Time Table

- To assign time table to the Mobile Port, dial:
333-Mobile Port-Time Table-#*

Where,
Mobile Port is from 1 to 4.
Time Table is from 1 to 4.

Default: **1**

- To assign time tables to all Mobile Ports, dial:
333-*-Time Table-#*

Time Zone 1

- To assign Routing Type for Time Zone 1 to the Mobile Port, dial:
185- Mobile Port-Routing-Type-#*

Where,
Mobile Port is from 1 to 4.
Routing Type is
0 for Off
1 for Answer Number Based
2 for Answer Fixed
3 for Direct

Default: **Direct**

To assign Routing Type for Time Zone 1 to all Mobile Ports, dial:
185-*-Routing-Type-#*

- To assign a Routing Group to the Mobile Port for Time Zone 1, dial:
207-Mobile Port-Routing Group-#*

Where,
Mobile Port is from 1 to 4.
Routing Group is from 01 to 16.

Default: **01**

To assign a Routing Group to all Mobile Ports for Time Zone 1, dial:
207-*-Routing Group-#*

Time Zone 2

- To assign Routing Type for Time Zone 2 to the Mobile Port, dial:
186-Mobile Port-Routing-Type-#*

Where,
Mobile Port is from 1 to 4.
Routing Type is
0 for Off
1 for Answer Number Based
2 for Answer Fixed
3 for Direct

Default: **Direct**

To assign Routing Type for Time Zone 2 to all Mobile Ports, dial:
186-*-Routing-Type-#*

- To assign a Routing Group to the Mobile Port for Time Zone 2, dial:
208-Mobile Port-Routing Group-#*
Where,
Mobile Port is from 1 to 4.
Routing Group is from 01 to 16.

Default: **01**

To assign a Routing Group to all Mobile Ports for Time Zone 2, dial:
208*-Routing Group-#*

Time Zone 3

- To assign Routing Type for Time Zone 3 to the Mobile Port, dial:
187-Mobile Port-Routing-Type-#*
Where,
Mobile Port is from 1 to 4.
Routing Type is
0 for Off
1 for Answer Number Based
2 for Answer Fixed
3 for Direct

Default: **Direct**

To assign Routing Type for Time Zone 3 to all Mobile Ports, dial:
187*-Routing-Type-#*

- To assign a Routing Group to the Mobile Port for Time Zone 3, dial:
209-Mobile Port-Routing Group-#*
Where,
Mobile Port is from 1 to 4.
Routing Group is from 01 to 16.

Default: **01**

To assign a Routing Group to all Mobile Ports for Time Zone 3, dial:
209*-Routing Group-#*

Time Zone 4

- To assign Routing Type for Time Zone 4 to the Mobile Port, dial:
188-Mobile Port-Routing-Type-#*
Where,
Mobile Port is from 1 to 4.
Routing Type is
0 for Off
1 for Answer Number Based
2 for Answer Fixed
3 for Direct

Default: **Direct**

To assign Routing Type for Time Zone 4 to all Mobile Ports, dial:

188*-Routing-Type-#*

- To assign a Routing Group to the Mobile Port for Time Zone 4, dial:
210-Mobile Port-Routing Group-#*

Where,

Mobile Port is from 1 to 4.

Routing Group is from 01 to 16.

Default: **01**

To assign a Routing Group to all Mobile Ports for Time Zone 4, dial:

210*-Routing Group-#*

Call Minutes

- To Enable/Disable Call Minutes feature on the Mobile Port, dial:
311-Mobile Port-Flag-#*

Where,

Mobile Port is from 1 to 4.

Code is

0 for Disable

1 for Enable

Default: **Disable**

To enable/disable Call Minutes feature on all Mobile Ports, dial:

311*-Flag-#*

- To configure Minutes Allowed for the Mobile Port, dial:
312-Mobile Port-Minutes Allowed-#*

Where,

Mobile Port is from 1 to 4.

Valid range for minutes allowed is from 0000 to 9999.

Default: **9999**

To configure Minutes Allowed (for free calling) for all Mobile Ports, dial:

312*-Minutes Allowed-#*

- To Enable/Disable Scheduled Reset for Call Minutes for the Mobile Port, dial:
313-Mobile Port-Code-#*

Where,

Mobile Port is from 1 to 4.

Code is

0 for Disable

1 for Enable

Default: **Enable**

To enable/disable Scheduled Reset for all Mobile Ports, dial:

313*-Code-#*

- To configure Date for Scheduled Reset of Call Minutes for the Mobile Port, dial:

314-Mobile port-Date-#*

Where,

Mobile Port is from 1 to 4.

Valid dates are from 01 to 31.

Default: **01**

To configure the date for Scheduled Reset for all Mobile Ports, dial:

314-*-Date-#*

- To configure the option when Minutes Used is equal to or greater than the Minutes configured:

316-Mobile Port-Option-#*

Where,

Mobile Port is from 1 to 4.

Option is

1 for Block Outgoing Calls

2 for Alert and Allow Outgoing Calls

Default: **Block Outgoing Calls**

To configure the option when Minutes Used is equal to or greater than Minutes configured for all Mobile Ports, dial:

316-*-Option-#*

- To Reset Minutes manually for the Mobile Port, dial:

315-Mobile Port-#*

Where,

Mobile Port is from 1 to 4.

To reset Minutes manually for all Mobile Ports, dial:

315-*-#*

- Dial **00-#*** to exit the programming mode.

Mobile Network Selection

At each power ON, the Mobile Port will automatically locate and register with the network that supports the SIM Card installed in it.

However, if the Mobile Port fails to register, it will restart the process of network selection on the expiry of the *Network Registration Retry Timer*¹.

If SIMADO GFX44 is located in an area where more than one Network Operator is available, it is possible that the SIM Card may get registered with another available network and result in *Roaming* charges. To avoid this, you must disable Automatic Network Selection and enable Manual Network Selection. However, if you want to make and receive calls regardless of cost, you must select Automatic Network Selection.

When you enable manual network selection, you must configure the *Network Operator Priority Table*. In this table you need to configure the Network Operator Codes (MCC-MNC)² in the order of priority for a Mobile Port. So, whenever the SIM Card attempts to register with the network manually, the Mobile Port will send a query to the available GSM Network Operators. The network operators will respond to the query with their Network Operator Codes. The Mobile Port will then match the Network Operator Codes it receives with those configured in the Network Operator Priority Table and select the Network Operator that matches in order of priority. If the Mobile Port fails to register, it will restart the process of network selection on the expiry of the *Network Registration Retry Timer*.

If no match is found, the Mobile Port (SIM) will not get registered with any of the available network operators and no calls can be made or received on this port.

Configuring Mobile Network Selection using Jeeves

- Log into the Jeeves. (See “[Configuring SIMADO GFX44 using Jeeves](#)”)
- On the Main Menu, click the **Mobile Network Selection** button.

| Mobile Port Number | Network Selection Mode | Network Operator Code | | | | | | |
|--------------------|------------------------|-----------------------|------------|------------|------------|------------|------------|------------|
| | | Priority 1 | Priority 2 | Priority 3 | Priority 4 | Priority 5 | Priority 6 | Priority 7 |
| 1 | Automatic | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 |
| 2 | Automatic | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 |
| 3 | Automatic | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 |
| 4 | Automatic | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 |

In **Mobile Network Selection**, configure the following parameters:

- Select **Network Selection Mode**. You may select either **Automatic** or **Manual**. Default: **Automatic**.

1. The *Network Registration Retry Timer* defines the time for which the Mobile Port, which has failed to register with the network, should wait before attempting to re-register with the network. Network registration retry timer is 2 minutes and is non-programmable.
2. The *Network Operator Code* comprises of the Mobile Country Code (MCC) appended by the Mobile Network Code (MNC). The MCC is usually a 3-digit code that identifies a country. For example the MCC assigned to India is 404 and it applies to all network operators in the country. MCC for other countries are: USA-310; Canada-302; Australia: 505; Italy: 222.

The MNC is usually a 2/3-digit code. The MCC-MNC combination uniquely identifies the home network of the mobile terminal or the mobile user. For example, Airtel, a GSM network operator in India, has different MNC assigned to its networks in various states. The MNC for Airtel in the state of Maharashtra is 90, while the same for the state of Gujarat is 98.

- Configure **Network Operator Code** in decreasing order of their priority. Default: **00000** for all Priorities.

You may check the name and the code of the network operator with which SIMADO GFX44 is registered in [“Mobile Port Status”](#).

Configuring Mobile Network Selection by dialing commands

- Enter Programming mode (see [“Configuring SIMADO GFX44 by dialing commands”](#)) and follow the steps given below:

- To configure Network Selection Mode, dial:
231-Mobile Port-Network Selection Mode-#*

Where,

Mobile Port is from 1 to 4.

Network Selection Mode is

1 for Automatic

2 for Manual

Default: **Automatic**

To configure Network Selection Mode for all the Mobile Ports, dial:

231-*-Network Selection Mode-#*

- To configure Network Operator's Code with Priority, dial:

232-Mobile Port-Priority-Code-#*

Where,

Mobile Port is from 1 to 4.

Priority is from 1 to 9.

Code is MCC- MNC. It can be of maximum 8 digits. Allowed digits are 0-9, #, *, A, B, C, D, F, P, W and +.

See the table below for configuring the special digits

| Special Digits | Programming Codes |
|----------------------------|-------------------|
| Flash (F) | #2 |
| Pause (P) | #3 |
| A | #4 |
| B | #5 |
| C | #6 |
| D | #7 |
| + | #1 |
| # | ## |
| * | ** |
| W | *1 |
| End of Programming Command | #* |

Default: **00000 for all Priorities.**

To clear Network Operator's Code from the Priority table, dial:

232-Mobile Port-Priority-#*

- Dial **00-#*** to exit the programming mode.

System Parameters

System Parameters are those parameters which are applicable to the entire system. You may configure these parameters using Jeeves or by dialing commands from a phone.

Configuring System Parameters using Jeeves

- Log into the Jeeves. (See [“Configuring SIMADO GFX44 using Jeeves”](#))
- On the **Main Menu**, click the **SIMADO GFX44 Parameters** button.

| COM Port Parameters | |
|---------------------|------------|
| Speed (bps) | 115200 bps |
| Data Bits | 8 |
| Parity | None |
| Stop Bits | 1 |
| Flow Control | None |

In **SIMADO GFX44 Parameters**, configure the following port parameters:

- **End of Dialing Digit:** This parameter appears dimmed as it is non-programmable. End of Dialing digit is a single digit on receipt of which, the system interprets end of the dialed number string and processes the received digits further to reach the dialed destination number. Default: **#**
- **CLIR Feature Access Code:** You can hide your identity from being displayed to the calling party by using the CLIR feature of SIMADO GFX44. The default access code for CLIR is **#31#**. You may change this code to a desired value.

To know more about this feature, see [“Calling Line Identification Restriction \(CLIR\)”](#).

- **SE Password:** To configure SIMADO GFX44, you must enter programming mode using SE Password. By default, SE Password is **1234**. You may change the SE Password, if required.

Also see [“System Engineer \(SE\) Password”](#) for more details.

- **Call Progress Tone Type:** Call Progress Tones (CPT) are audible tones sent to the calling parties to show the status of phone calls. Call Progress Tones are country specific. Select the Call Progress Tone Type depending on the country in which SIMADO GFX44 is installed. Default: **India**.

See [“Call Progress Tones”](#) for more details.

- **Ring Type:** Select the Ring Type that matches the frequency and cadences of the rings supported by the local exchange in the country where SIMADO GFX44 is installed. Default: **India**.
- **Minimum DTMF Detection Level:** You may define the minimum dB Level for detecting the DTMF digits by configuring the Minimum DTMF Detection Level. Default: **-30dBm**.
- **Call Proceeding Tone Type:** Call proceeding tones are the signaling tones generated by the system or network to inform the user of the call establishment in the mobile network. Select the type of Call Proceeding Tone you want SIMADO GFX44 to play. You can select either Network Tone or SIMADO Tone. Default: **Network Tone**.

See [“Call Proceeding Tone”](#) for more details.

- **Returned Calls to Original Callers (RCOC):** The Record Delete Timer is related to the maintenance of call records in the RCOC database. Each entry in the RCOC table will be deleted automatically on the expiry of the record delete timer. See [“Returned Calls to Original Callers \(RCOC\)”](#) for more details.

By default the Record Delete Timer is set to **999 minutes**. You may change the timer to the desired value.

- If you want to clear RCOC table without waiting for the record delete timer, click the **Clear Table** button. The following message will appear on the screen.

“This option will delete all the ‘Return Calls to Original Callers’ records permanently from SIMADO GFX44. Do you wish to continue?”

- Click the **Yes** button to clear all the records in the RCOC table.
- **Replace ‘+’ from CLIP:** The GSM network presents the calling party number with the prefix ‘+’ to the called party. However, not all equipments can present the calling party number containing ‘+’. SIMADO GFX44 enables you to remove the prefix ‘+’ and replace it with an appropriate number string, if required.

If you want the system to replace ‘+’ in the CLI received, select this check box. Default: **Disabled**.

- **Replace or remove ‘+’ character received in CLI:** You may also configure the number string with which ‘+’ is to be replaced in the CLI. Enter the number string with which you want to replace ‘+’ received as prefix of the calling party number.

If you keep the number string field blank, SIMADO GFX44 will remove the ‘+’ sign from the CLI of the calling party and present the remaining digits to the Called Party.

For example:

The number string +919327237228 is received as CLI.

If ‘00’ is configured as the replacement string, the CLI number would be presented as 00919327237228.

If no replacement string is configured (left blank), the CLI number would be presented as 919327237228.

- **Remove Country Code from CLIP received on Mobile Port:** The GSM network presents the country code prefixed with the calling party number to the called party. You may remove country code from the CLIP received on the Mobile Port, before presenting it on the destination port if required.

Keep this check box enabled, if you want SIMADO GFX44 to remove country code from the CLIP. **By default, it is enabled.**

- **Country Code:** If you have kept *Remove Country Code from CLIP received on Mobile Port* check box enabled, configure the country code which you want the system to remove from the CLIP in this field. **By default, it is blank.**
- **COM Port Parameters:** You can view the COM Port Parameters of SIMADO GFX44 here.

You are recommended to set the attributes of the COM Port of the computer, to which you are connecting SIMADO GFX44, to the values displayed on this page.

Configuring System Parameters by dialing commands

- Enter Programming mode (see [“Configuring SIMADO GFX44 by dialing commands”](#)) and follow the steps given below:

CLIR Feature Access Code

- To configure Access Code for CLIR, dial:
110-Access Code-#*
Where,
Access Code can be of maximum 4 digits. Valid digits are 0-9, # and *.

Default: **#31#**

To clear CLIR access code, dial:
110-#*

SE Password

- To change SE Password, dial:
293-New SE Password-#*
Where,
New SE Password is a number string of 4 digits.

Default: **1234**

Call Progress Tone Type

- To configure Call Progress Tone Type for a specific country, dial:
281-Code-#*

For **Code** for each country refer the first column of this table.

| Code | Country | Dial Tone | | Ring Back Tone | | Busy Tone | | Error Tone | | Confirmation Tone | | Prog. Tone | |
|------|--------------|-----------|------------------------------------|----------------|-------------------------------------|-----------|------------------------------------|------------|---------------------|-------------------|-----------------|------------|-----------------|
| | | Freq. | Cadence | Freq. | Cadence | Freq. | Cadence | Freq. | Cadence | Freq. | Cadence | Freq. | Cadence |
| | | Hz | second | Hz | second | Hz | second | Hz | second | Hz | second | Hz | second |
| 01 | Australia | 425*25 | cont. | 400*25 | 0.4on 0.2off 0.4on 2.0off | 425 | 0.375on 0.375off | 425 | 0.375on 0.375off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 02 | Argentina | 425 | cont. | 425 | 1.0on 4.0 off | 425 | 0.3on 0.2off | 425 | 0.3on 0.4off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 03 | Belgium | 425 | cont. | 425 | 1.0on 3.0off | 425 | 0.5on 0.5off | 425 | 0.167on 0.167off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 04 | Brazil | 425 | cont. | 425 | 1.0on 4.0 off | 425 | 0.25on 0.25off | 425 | 0.25on 0.25 off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 05 | China | 450 | cont. | 450 | 1.0on 4.0off | 450 | 0.35 on 0.36off | 450 | 0.7on 0.7off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 06 | Egypt | 425*50 | cont. | 425*50 | 2.0on 1.0off | 425*50 | 1.0on 4.0off | 450 | 0.5on 0.5off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 07 | France | 440 | cont. | 440 | 1.5on 3.5off | 440 | 0.5on 0.5off | 440 | 0.25on 0.25off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 08 | Germany | 425 | cont. | 425 | 1.0on 4.0off | 425 | 0.48on 0.48off | 425 | 0.24on 0.24off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 09 | Greece | 425 | 0.2on 0.3off 0.7on 0.8off | 425 | 1.0on 4.0off | 425 | 0.3on 0.3off | 425 | 0.15on 0.15off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 10 | India | 400*25 | cont. | 400*25 | 0.4on 0.2off 0.4on 2.0off | 400 | 0.75on 0.75off | 400 | 0.25on 0.25off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 11 | Indonesia | 425 | cont. | 425 | 1.0on 4.0off | 425 | 0.5on 0.5off | 425 | 0.25on 0.25off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 12 | Iran | 425 | cont. | 425 | 1.0on 4.0off | 425 | 0.5on 0.5off | 425 | 0.25on 0.25off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 13 | Israel | 400 | cont. | 400 | 1.0on 3.0off | 400 | 0.5on 0.5off | 400 | 0.25on 0.25off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 14 | Italy | 425 | cont. | 425 | 1.0on 4.0off | 425 | 0.5on 0.5off | 425 | 0.2on 0.2off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 15 | Japan | 400 | cont. | 400*20 | 1.0on 2.0off | 400 | 0.5on 0.5off | 400 | 0.25on 0.25off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 16 | Kenya | 425 | cont. | 425 | 0.67on 3.0off 1.5on 5.0off | 425 | 0.2on 0.6off 0.2on 0.6off | 425 | 0.2on 0.6off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 17 | Korea | 350+440 | cont. | 440+480 | 1.0on 2.0off | 480+620 | 0.5on 0.5off | 480+620 | 0.3on 0.2off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 18 | Malaysia | 425 | cont. | 425 | 0.4on 0.2off 0.4on 2.0off | 425 | 0.5on 0.5off | 425 | 0.5on 0.25off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 19 | Mexico | 425 | cont. | 425 | 1.0on 4.0off | 425 | 0.25on 0.25off | 425 | 0.25on 0.25off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 20 | New Zealand | 400 | cont. | 400+450 | 0.4on 0.2off 0.4on 2.0off | 400 | 0.5on 0.5off | 400 | 0.25on 0.25off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 21 | Phillippines | 425 | cont. | 425+480 | 1.0on 4.0off | 480+620 | 0.5on 0.5off | 480+620 | 0.25on 0.25off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 22 | Poland | 425 | cont. | 425 | 1.0on 4.0off | 425 | 0.5on 0.5off | 425 | 0.5on 0.5off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 23 | Portugal | 425 | cont. | 425 | 1.0on 5.0off | 425 | 0.5on 0.5off | 450 | 0.33on 1.0off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 24 | Russia | 425 | cont. | 425 | 0.8on 3.2off | 425 | 0.4on 0.4off | 425 | 0.25on 0.25off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 25 | Saudi Arabia | 425 | cont. | 425 | 1.2on 4.6off | 425 | 0.5on 0.5off | 425 | 0.25on 0.25off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 26 | Singapore | 425 | cont. | 425*24 | 0.4on 0.2off 0.4on 2.0off | 425 | 0.75on 0.75off | 425 | 0.25on 0.25off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |

| Code | Country | Dial Tone | | Ring Back Tone | | Busy Tone | | Error Tone | | Confirmation Tone | | Prog. Tone | |
|------|--------------|-----------|---------|----------------|------------------------------------|-----------|---------------------|------------|---|-------------------|-----------------|------------|-----------------|
| | | Freq. | Cadence | Freq. | Cadence | Freq. | Cadence | Freq. | Cadence | Freq. | Cadence | Freq. | Cadence |
| | | Hz | second | Hz | second | Hz | second | Hz | second | Hz | second | Hz | second |
| 27 | South Africa | 400*33 | cont. | 400*33 | 0.4on 0.2off 0.4on 2.0off | 400 | 0.5on 0.5off | 400 | 0.25on 0.25off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 28 | Spain | 425 | cont. | 425 | 1.5on 3.0off | 425 | 0.2on 0.2off | 425 | 0.25on 0.25off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 29 | Thailand | 400*50 | cont. | 400 | 1.0on 4.0off | 400 | 0.5on 0.5off | 400 | 0.3on 0.3off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 30 | Turkey | 450 | cont. | 450 | 2.0on 4.0off | 450 | 0.5on 0.5off | 450 | 0.2on 0.2off 0.6on 0.2off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 31 | UAE | 350+440 | cont. | 400+450 | 0.4on 0.2off 0.4on 2.0off | 400 | 0.375on 0.375off | 400 | 0.4on 0.35off 0.225on 0.525off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 32 | UK | 350+440 | cont. | 400+450 | 0.4on 0.2off 0.4on 2.0off | 400 | 0.375on 0.375off | 400 | 0.4on 0.35off 0.225on 0.525off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 33 | USA/Canada | 350+440 | cont. | 440+480 | 2.0on 4.0off | 480+620 | 0.5on 0.5off | 480+620 | 0.25on 0.25off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |

In the above table, * refers to modulation of two frequencies (f1 and f2) and + refers to addition of two frequencies. **Cont.** is the abbreviation for *continuous*.

Default: **10 (India)**

Ring Type

- To configure Ring Type for a specific country, dial:
252-Code-#*
For code for each country refer the first column of this table.

| Code | Country | Frequency (Hz) | CADENCE (In Seconds) | | | |
|------|-----------|----------------|----------------------|-------|------|-------|
| | | | ON 1 | OFF 1 | ON 2 | OFF 2 |
| 01 | Australia | 25 | 0.4 | 0.2 | 0.4 | 2.0 |
| 02 | Belgium | 25 | 1.0 | 3.0 | | |
| 03 | Brazil | 25 | 1.0 | 4.0 | | |
| 04 | China | 25 | 1.0 | 3.0 | | |
| 05 | Egypt | 25 | 2.0 | 4.0 | | |
| 06 | France | 25 | 1.5 | 3.5 | | |
| 07 | Germany | 25 | 3.5 | 5.5 | 0.79 | 1.1 |
| 08 | Greece | 25 | 1.0 | 4.0 | | |
| 09 | India | 25 | 0.4 | 0.2 | 0.4 | 2.0 |
| 10 | Israel | 25 | 2.0 | 3.0 | | |
| 11 | Italy | 25 | 1.0 | 4.0 | | |
| 12 | Japan | 25 | 1.0 | 2.0 | | |

| Code | Country | Frequency (Hz) | CADENCE (In Seconds) | | | |
|------|--------------|----------------|----------------------|-------|------|-------|
| | | | ON 1 | OFF 1 | ON 2 | OFF 2 |
| 13 | Korea | 25 | 1.0 | 3.0 | | |
| 14 | Malaysia | 25 | 2.0 | 3.0 | | |
| 15 | New Zealand | 25 | 2.0 | 3.0 | | |
| 16 | Poland | 25 | 2.0 | 3.0 | | |
| 17 | Portugal | 25 | 1.0 | 5.0 | | |
| 18 | Russia | 25 | 1.0 | 3.0 | | |
| 19 | Singapore | 25 | 0.4 | 0.2 | 0.4 | 2.0 |
| 20 | South Africa | 25 | 0.4 | 0.2 | 0.4 | 2.0 |
| 21 | Spain | 25 | 1.5 | 3.0 | | |
| 22 | Thailand | 25 | 2.0 | 3.0 | | |
| 23 | UAE | 25 | 2.0 | 3.0 | | |
| 24 | UK | 25 | 0.4 | 0.2 | 0.4 | 2.0 |
| 25 | USA/Canada | 25 | 2.0 | 4.0 | | |

Default: **09 (India)**

Minimum DTMF Detection Level

- To configure Minimum DTMF Detection Level, dial:
218-Minimum DTMF Detection Level-#*
Where,
Minimum DTMF Detection Level is from 01 to 11.

| Minimum DTMF Detection Level | Meaning |
|------------------------------|---------|
| 01 | 0 dBm |
| 02 | -3 dBm |
| 03 | -6 dBm |
| 04 | -9 dBm |
| 05 | -12 dBm |
| 06 | -15 dBm |
| 07 | -18 dBm |
| 08 | -21 dBm |
| 09 | -24 dBm |
| 10 | -27 dBm |
| 11 | -30 dBm |

Default: **-30dBm (11)**

Call Proceeding Tone Type

- To set Call Proceeding Tone type for the Mobile Port, dial:
277-Call Proceeding Tone-#*

Where,
Call Proceeding Tone is
1 for SIMADO Tone
2 for Network Tone

Default: **Network Tone**

Returned Calls to Original Callers (RCOC)

- To configure Record Delete Timer for RCOC table, dial:
221-Record Delete Timer-#*

Where,
Record Delete Timer is from 001 to 999 minutes.

Default: **999 minutes**

To clear all the entries from the RCOC table, dial:
225-#*

Replace '+' from CLIP

- To replace or remove '+' character received in CLI, dial:
216-Code-#*

Where,
Code is
0 for *Do not make any modification in received CLI*
1 for *Replace '+' from CLI with the programmed replacement string*

Default: **Do not make any modification in received CLI**

To configure the number string to be replaced with '+' in the received CLI, dial:
217-Replacement String-#*

Where,
Replacement string can be of maximum 6 digits.
Valid digits are from 0 to 9.

Default: **Blank**

To clear the replacement string, dial:
217-#*

Remove Country code from CLIP

- To remove the Country Code from the CLIP received on the Mobile Port, dial:
219-Code-#*

Where,
Code is
0 for *Do not remove Country code from CLIP.*
1 for *Remove Country code from CLIP.*

Default: **Remove Country Code from CLIP**

- To configure the Country Code that is to be removed from the CLIP received on the Mobile Port, dial:

220-Country Code-#*

Where,

Country Code can be of maximum 6 digits.

Valid digits are from 0 to 9 and +

Default: **Blank**

- To clear the Country code, dial:
220-#*
- Dial **00-#*** to exit the programming mode.

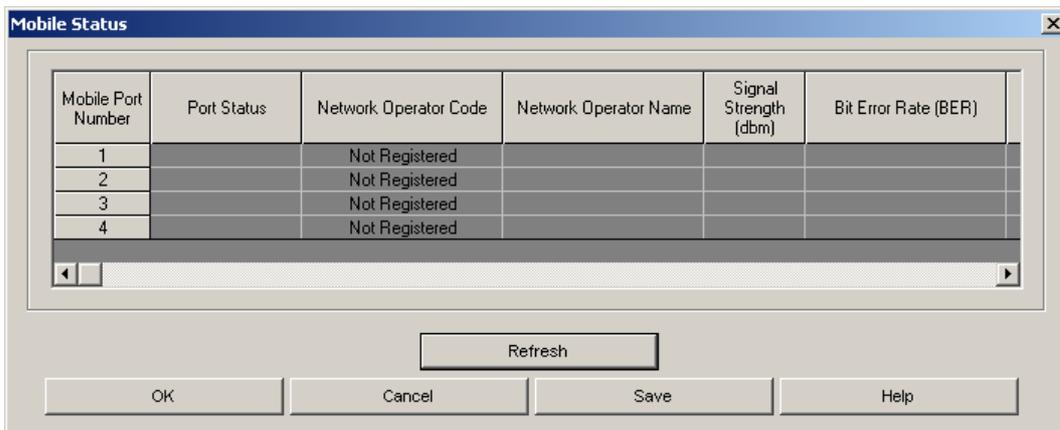
Mobile Port Status

You can view the status of the functioning of each Mobile Port of SIMADO GFX44 as well as the status of certain port parameters such Network Operator Code, Signal Strength, SIM ID, IMSI Number on Jeeves.

You can also view Network Type and Port Status by dialing commands from a phone connected to SIMADO GFX44.

To view Mobile Port Status using Jeeves

- Log into the Jeeves. (See [“Configuring SIMADO GFX44 using Jeeves”](#))
- On the Main Menu, click the **Mobile Status** button.



- In the **Mobile Status**, click the **Refresh** button. The current value of the following parameters will be downloaded to the Jeeves. Click the **OK** button and close the **Download Over** window.
- **Port Status:** The current status of the Mobile Port is displayed in this field. The different status messages that may appear are given in the table below:

| STATUS | DESCRIPTION |
|--------------------|--|
| Disabled | Indicates that the Mobile Port is disabled. |
| GSM Initialization | Indicates that the GSM module is in initialization stage, that is, before SIM detection. |
| SIM Absent | Indicates that the SIM Card is not detected by the system. |
| SIM PIN wrong | Indicates that the wrong SIM PIN is issued. |
| SIM PUK required | Indicates that the SIM PUK is required. |
| Registering | Indicates that the Mobile Port is in registration process with the Network. |
| Idle | Indicates that the Mobile Port is registered with the Network and it is free. |
| Busy | Indicates that the active call is present on the Mobile Port. |

- **Network Operator Code:** Code of the Network Operator (MCC-MNC) with which the Mobile Port of SIMADO GFX44 is currently registered, is displayed in this field.

- **Network Operator Name:** Name of the Network Operator with which the SIM Card of SIMADO GFX44 is registered, is displayed in this field.
- **Signal Strength (-dBm):** Signal Strength of the mobile network, to which the Mobile Port of SIMADO GFX44 is currently registered with, is displayed in this field.
- **Bit Error Rate (BER):** Bit Error Rate of the cell is displayed in this field. BER defines the quality of the channel to which the Mobile Port of SIMADO GFX44 is locked with.
- **SIM ID:** SIM ID of the SIM Card is displayed in this field. SIM Card is internationally identified by its Integrated Circuit Card ID (ICC-ID) printed on the SIM Card body.
- **IMSI:** IMSI number of the Mobile Port is displayed in this field. IMSI is the unique number stored in the SIM Card. It consists of three different parts, MCC (Mobile Country Code), MNC (Mobile Network Code) and MSIN (Mobile Subscriber Identification Number). IMSI can be 14 to 16 digits long.
- **Cell ID:** Cell ID is displayed in this field. Cell ID is a 16-bit identifier that identifies the cell.
- **Location Area Code (LAC):** Location Area Code (LAC) is displayed in this field. LAC uniquely defines a location area (LA) within a Public Land Mobile Network (PLMN)
- **Registered with Network:** The type of network with which your SIMADO GFX44 is registered, is displayed in this field. One of the following network types will be displayed in this field.
 - GSM
 - GSM Compact
 - 3G or UMTS
- **Minutes Allowed:** Total free minutes allowed to the Mobile Port is displayed in this field.
- **Minutes Used:** Free minutes utilized by each Mobile Port are displayed in this field.
- **Firmware Version of Engine:** Current Firmware Version-Revision of the GSM Module/Engine is displayed in this field.

To view Mobile Port Status by dialing command

- Enter Programming mode (see [“Configuring SIMADO GFX44 by dialing commands”](#)) and follow the steps given below:
- To view the Network Type with which the Mobile Port is registered, dial:
239-Mobile Port-#*
Where,
Mobile Port is from 1 to 4.

One of the following will appear on the LCD of the telephone instrument connected to SIMADO GFX44:

| Code | Meaning |
|------|-------------|
| 0 | GSM |
| 1 | GSM Compact |
| 2 | 3G or UMTS |

If CLI type is set as DTMF, display of Network Type will be as under:

000

If CLI type is set as FSK, display of Network Type will be as under:

000

GSM

- To view the Mobile Port status on the display of the phone connected to SIMADO GFX44, dial:
280-Mobile Port-#*
Where,
Mobile Port is from 1 to 4.



The status of the Mobile Port will be displayed only on a telephone instrument that supports FSK, and if FSK is selected as the CLI Type on the FXS Port.

One of the following status messages will be displayed:

- Disabled
 - GSM Initialization
 - SIM Absent
 - SIM PIN wrong
 - SIM PUK required
 - Registering
 - Idle
 - Busy
-
- Dial **00-#*** to exit the programming mode.

Signal Strength

You can check the signal strength of the mobile network with which the Mobile Port of SIMADO GFX44 is registered. Signal strength is measured in dBm and it ranges from -113dBm to -51dBm.

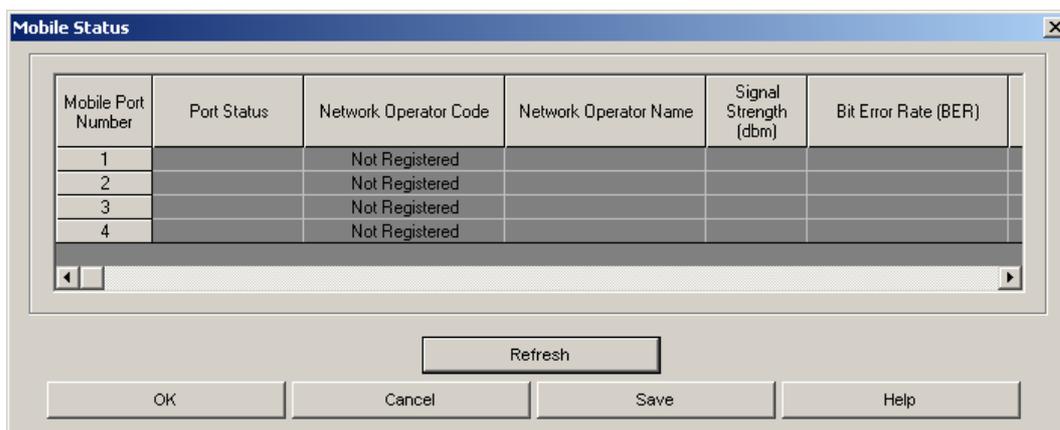
To be able to check the signal strength, make sure that the telephone connected to SIMADO GFX44 has a display and the CLI Type of the FXS Port is configured as either DTMF or FSK. For instructions on configuring CLI Type, see [“FXS Port Parameters”](#).



SIMADO GFX44 will route outgoing calls through Mobile Port only when the available network strength is high or maximum.

To check Signal Strength using Jeeves

- Log into the Jeeves. (See [“Configuring SIMADO GFX44 using Jeeves”](#))
- On the **Main Menu**, click the **Mobile Status** button.



- In **Mobile Status**, click the **Refresh** button. The Signal Strength of the mobile network with which each Mobile Port is registered, will be displayed under **Port Status**.

To check Signal Strength by dialing command

Follow the steps given below:

- Enter Programming mode, see [“Configuring SIMADO GFX44 by dialing commands”](#).
- Go Off-Hook
- Dial **245-Mobile Port Number-#***
Where,
Mobile Port Number is from 1 to 4.
- You will get confirmation tone.
- Go On-Hook
- Signal strength will be displayed on the LCD of your telephone.
- Go Off-Hook again, you will get dial tone.
- Dial **00-#*** to exit the programming mode.

When **FSK CLI** is set as CLI Type on the FXS Port of SIMADO GFX44, the signal strength will be displayed as under:

```
111111111111  
Strength: -xxxdBm
```

The numbers indicate the strength of the network.

When network signal strength is high, the display would be as under:

```
111111111111  
Strength: -063dBm
```

When network signal strength is low, the display would be as under:

```
11111  
Strength: -101dBm
```

When network signal strength is absent, the display would be as under:

```
11111
```

When **DTMF CLI** is set as CLI Type on the FXS Port of SIMADO GFX44, only the numbers will be displayed as follows:

```
111111111111
```

System Engineer (SE) Password

You need System Engineer (SE) password to enter the programming mode and configure SIMADO GFX44. The default SE Password is **1234**. You may change the SE Password to the desired value using Jeeves or by dialing a command through a phone.

To change SE Password using Jeeves

- Log into Jeeves. (See [“Configuring SIMADO GFX44 using Jeeves”](#))
- On the **Main Menu**, click the **SIMADO GFX44 Parameters** button.
- In **SIMADO GFX44 Parameters**, in the **SE Password** box, enter the desired SE Password. Default: **1234**.

| COM Port Parameters | |
|---------------------|------------|
| Speed (bps) | 115200 bps |
| Data Bits | 8 |
| Parity | None |
| Stop Bits | 1 |
| Flow Control | None |

To change SE Password by dialing command

- Enter Programming mode, see [“Configuring SIMADO GFX44 by dialing commands”](#).
- To change the SE Password, dial:
293-New SE Password-#*
Where,
New SE Password is a number string of 4 digits.

Default: **1234**

- Dial **00-#*** to exit the programming mode.

Forgot SE Password?

If you forget the SE Password, you can reset it to its default value by changing the position of jumper **J9**.

To set the SE Password to its default value (**1234**), follow the steps given below:

- Switch Off SIMADO GFX44.
- Open the cover and locate jumper **J9** on the mainboard. The jumper is in **BC** position.
- Change the jumper position to **AB**.
- Switch on the system and wait for 5 minutes.
- Switch off the system after 5 minutes.
- Restore jumper **J9** to its original **BC** position.
- Replace the cover and switch on the system again.
- The SE Password will be set to its default value.

Reinstate the Default Settings

All the configurable parameters of SIMADO GFX44 are assigned preset values, referred to as factory defaults or default settings. Default settings can be altered and customized to match the user's requirements and preferences.

You may also restore the default settings in the system, whenever needed. When you reinstate the default settings, the values of most parameters will set to factory defaults.

Parameters that will remain unchanged when you reinstate default settings are:

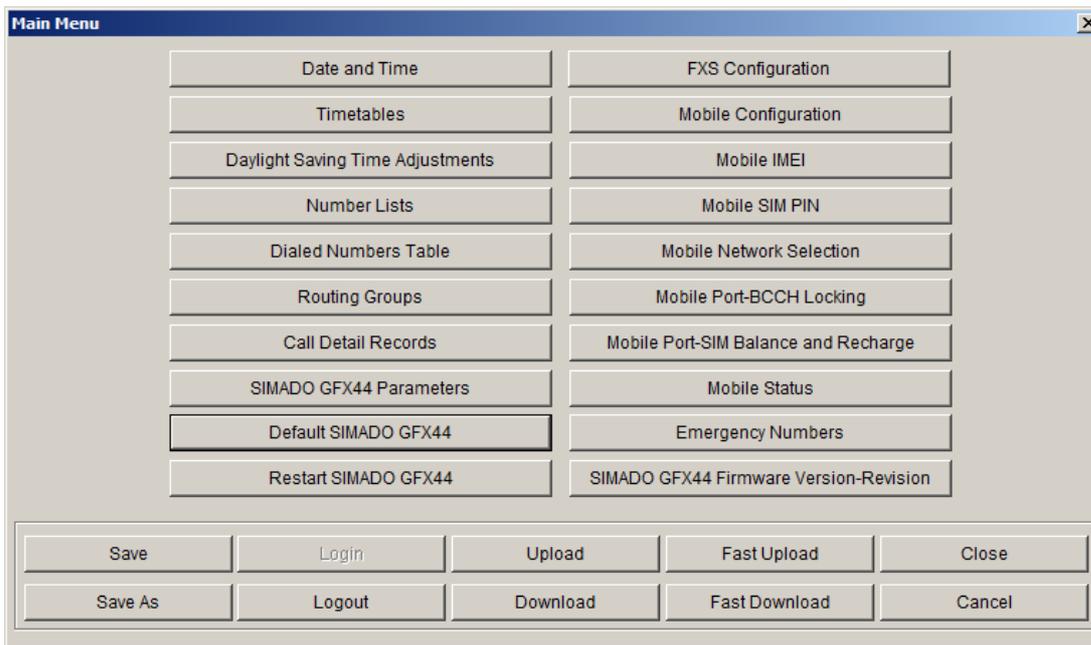
- Call Detail Records (CDR) Buffer
- Date and Time
- SIM PIN value



Make sure, there are no ongoing calls when you reinstate the default settings. SIMADO GFX44 will restart as soon as you reinstate the default settings and all the ongoing calls will be disconnected.

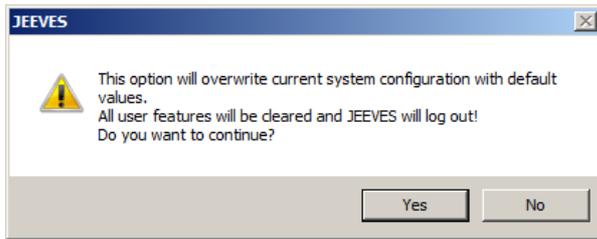
To reinstate Default Settings using Jeeves

- Log into Jeeves. (See [“Configuring SIMADO GFX44 using Jeeves”](#))
- In **Main Menu**, click the **Default SIMADO GFX44** button.



- The following alert will appear on your screen:

"This option will overwrite current system configuration with default values. All user features will be cleared and Jeeves will log out! Do you want to continue?" (Yes/No)



- Click the **Yes** button.
- In the **SE Password** window that appears on your screen, enter the **Reverse SE Password**.

For example, if your SE Password is **1234**, you need to dial **4321** as Reverse SE Password.



- Click the **OK** button.
- The system will restart and all the configurable parameters, except those mentioned at the beginning of this topic, will be assigned their default values.

To reinstate Default Settings by dialing command

Follow the steps given below:

- Enter the Programming mode. (see [“Configuring SIMADO GFX44 by dialing commands”](#))
- To load default configuration in SIMADO GFX44, dial:
292-Reverse SE Password-#*
Reverse SE password is a number string of maximum 4 digits.

For example, if your SE Password is 1234, you need to dial 4321 as Reverse of SE Password.

Restart the System

If you need to restart SIMADO GFX44, you can do it either:

- using Jeeves
- or
- by dialing the command string from any telephone connected to the FXS Port.

You must restart the System when you change the AC Impedance of the FXS port by dialing the command from a phone.

The system will restart automatically in the following conditions:

- When you use **Fast Upload** to upload configuration from Jeeves onto the system.
- When you use **Fast Download** to download configuration from the system to Jeeves.
- When you **Reinstate Default Settings**.

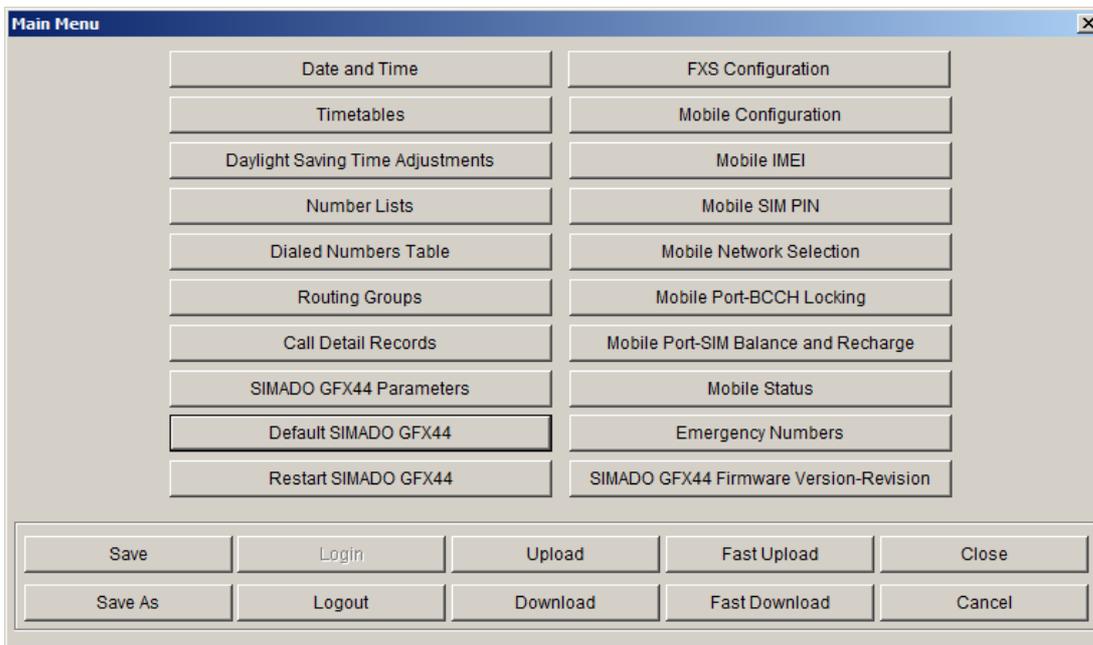


- *System Restart will not affect your system configuration. All the parameters you have configured will remain unchanged.*
- *If you are in the middle of system configuration and you need to restart the system, to prevent the loss of your configuration, you are advised to save your current configuration before you restart the system.*

To restart SIMADO GFX44 using Jeeves

Follow the steps given below:

- Log into the Jeeves. (See [“Configuring SIMADO GFX44 using Jeeves”](#))
- On the **Main Menu**, click the **Restart SIMADO GFX44** button.



- An alert message will appear on your screen: *“This option will restart SIMADO GFX44. All ongoing conversations will be disconnected. Do you wish to continue?” (Yes/No)*

- Click the **Yes** button. SIMADO GFX44 will restart.

To restart SIMADO GFX44 by dialing command

Follow the steps given below:

- Enter the Programming mode. (see [“Configuring SIMADO GFX44 by dialing commands”](#))
- Dial **291-#***
- SIMADO GFX44 will restart.
- You will get dial tone again, once the system attains normal working position.

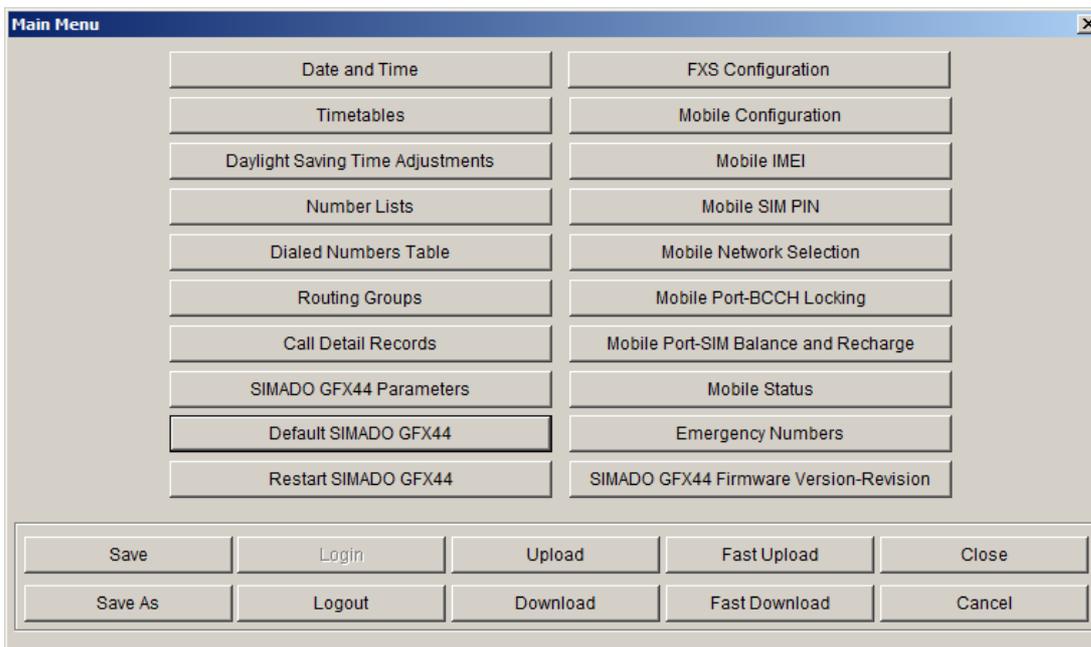
Software Version and Revision Display

You can view the current version-revision of the software installed in SIMADO GFX44 on Jeeves. To view current software version-revision, SIMADO GFX44 must be switched on and have attained normal working condition.

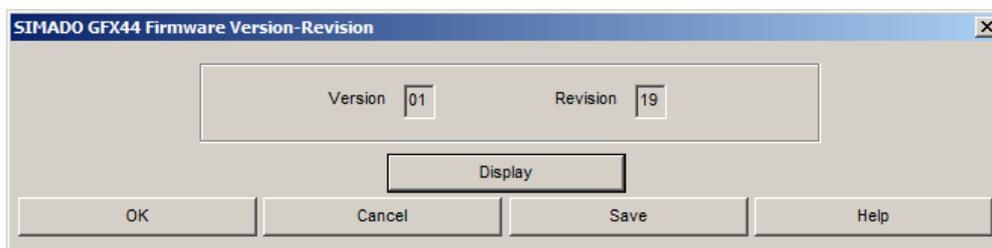
To view Software Version-Revision

Follow the steps given below:

- Log into Jeeves. (See [“Configuring SIMADO GFX44 using Jeeves”](#))
- On the **Main Menu**, click the **SIMADO GFX44 Firmware Version-Revision** button.



- **SIMADO GFX44 Firmware Version-Revision** window will appear on your screen.



- Click the **Display** button. The Version and Revision of the firmware currently installed in the system will be displayed.
- Click the **OK** or **Close** button to return to the Main Menu.

Debug

Debug is a method of recording actions and events occurring in the system. Debugs are the primary record keepers of the system and network activity. Debugging has several benefits, which include troubleshooting, security and system administration.

You can generate Debug reports for the System and for the Mobile port.

In System Debug all call events except Mobile Port events are logged in the system.

To log call events on the Mobile Ports, you need to enable Mobile Port debug along with System Debug.

To generate Debug

Follow these steps:

- Make sure a computer is connected to the COM Port of SIMADO GFX44. The COM Port of SIMADO GFX44 has the following attributes and these are preconfigured.

| | |
|--------------|-----------|
| Baud Rate | 115200bps |
| Stop Bit | 1 |
| Parity | None |
| Data Bits | 8 |
| Flow Control | None |

- Set the attributes of the COM Port of the computer, to which you have connected SIMADO GFX44, to the above values.
- Enter Programming mode from a phone connected to the FXS port. See [“Configuring SIMADO GFX44 by dialing commands”](#) for instructions.

System Debug

- To start/stop System Debug, dial:
309-Code-#*
Where,
Code is
0 for Disable
1 for Enable

Default: **Disable**.

Mobile Port Debug

- To start and stop the Mobile Port Debug,
- Make sure the Mobile port you want to debug is enabled.
- Make sure that System Debug is enabled.
- Dial **279-Mobile Port number-Code-#***
Where,

Mobile Port number is 1 to 4.

Code is

0 for Disable

1 for Enable

Default: **Disable**.

- Dial **00-#*** to exit the programming mode.

Allowed-Denied Numbers

With the Allowed-Denied Numbers feature, you can permit and restrict the dialing of particular numbers from the FXS Port.

The Allowed-Denied Numbers feature makes use of two number lists:

- **Allowed Number List:** This is the list of numbers that can be dialed out from the FXS Port.
- **Denied Number List:** This is the list of numbers that are to be restricted from being dialed out from the FXS Port.

You can configure 16 different Number Lists, having a maximum of 24 numbers in each list.

When you configure the Allowed and Denied Number Lists, for each number dialed from the FXS Port, SIMADO GFX44 will use the best-match-found logic to compare the dialed number string with the numbers configured in the Allowed Number List and the Denied Number List. The system will allow the number to be dialed, if the dialed number:

- matches with both lists.
- matches with Allowed Number list.
- matches with neither the Allowed List nor the Denied List.

The dialed number will be denied, if it matches with the Denied Number list.



If the number dialed from the FXS Port matches with an Emergency number, SIMADO GFX44 will not compare the dialed number string with the Allowed and Denied Number lists.

How to Configure

For this feature to work, you must do the following:

- First configure Allowed Number List and Denied Number List.
- Enable allowed-denied logic on the desired port.
- Assign the Allowed and Denied Number List to the port.

Configuring using Jeeves

- Log into Jeeves. (See [“Configuring SIMADO GFX44 using Jeeves”](#)).
- On the **Main Menu**, click the **Number Lists** button. For each port on which you want to apply this feature, configure an Allowed Number List and a Denied Number List. To know more, see [“Number Lists”](#).

| Number List | Location 01 | Location 02 | Location 03 | Location 04 | Location 05 | Location 06 |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 01 | 0 | 1 | 2 | 3 | 4 | 5 |
| 02 | 0 | 95 | 98 | 94 | 3 | 5 |
| 03 | 0 | 95 | | | | |
| 04 | 0 | | | | | |
| 05 | 00 | | | | | |
| 06 | | | | | | |
| 07 | | | | | | |
| 08 | | | | | | |
| 09 | | | | | | |
| 10 | | | | | | |
| 11 | | | | | | |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | | | | | |

- Return to **Main Menu**, and click the **FXS Configuration** button.

| FXS Port Number | Fixed Dialing | | Allowed-Denied Numbers | | | Timetable |
|-----------------|---------------|--------------------------|------------------------|---------------------|--------------------|-----------|
| | Status | Fixed Destination Number | Apply? | Allowed Number List | Denied Number List | |
| 1 | Disable | | Yes | 01 | 06 | 1 |
| 2 | Disable | | Yes | 01 | 06 | 1 |
| 3 | Disable | | Yes | 01 | 06 | 1 |
| 4 | Disable | | Yes | 01 | 06 | 1 |

- In **FXS Configuration**, scroll to **Allowed Denied Numbers**.
 - By default, Allowed Denied Numbers is applied on all FXS Ports. In **Apply?** keep the default option **Yes**.
Select **No**, if you do not want to apply this logic on the FXS Port.
 - In **Allowed Number List**, assign the Allowed Number List you have configured for the FXS Port. By default, **Number List 01** is assigned to all FXS Ports.

- In **Denied Number List**, assign the Denied Number List to the FXS Port. By default, **Number List 06** is assigned to all FXS Ports.
- Click **Upload Changes** or **Upload Page** button to upload the changes to SIMADO GFX44.
- Click **OK** button to return to the Main Menu.
- To configure Allowed-Denied Numbers on Mobile Ports, on the **Main Menu**, click the **Mobile Configuration** button.

| Mobile Port Number | Allowed-Denied Numbers | | | Automatic Number Translation | | | Timetable |
|--------------------|------------------------|---------------------|--------------------|------------------------------|--------------------|------------------------|-----------|
| | Apply? | Allowed Number List | Denied Number List | Apply? | Dialed Number List | Substitute Number List | |
| 1 | Yes | 01 | 06 | Yes | 06 | 06 | 1 |
| 2 | Yes | 01 | 06 | Yes | 06 | 06 | 1 |
| 3 | Yes | 01 | 06 | Yes | 06 | 06 | 1 |
| 4 | Yes | 01 | 06 | Yes | 06 | 06 | 1 |

Buttons: Upload Changes, Upload Page, Download Page, Default Page, OK, Cancel, Save, Help

- In **Mobile Configuration**, scroll to **Allowed-Denied Numbers**
 - By default, Allowed Denied Numbers is applied on all Mobile Ports. In **Apply?** keep the default option **Yes**.
Select **No**, if you do not want to apply this logic on the Mobile Port.
 - In **Allowed Number List**, assign the Allowed Number List you have configured for the Mobile Port. By default, **Number List 01** is assigned to all Mobile Ports.
 - In **Denied Number List**, assign the Denied Number List to the Mobile Port. By default, **Number List 06** is assigned to all Mobile Ports.
 - Click the **Upload Changes** or the **Upload Page** button to upload the changes to SIMADO GFX44.
 - Click **OK** button to return to the Main Menu.

Configuring by dialing commands

- Enter Programming mode (see [“Configuring SIMADO GFX44 by dialing commands”](#)) and follow the steps given below:
- To configure Number Lists, see [“Number Lists”](#) topic.
- To enable/disable allowed-denied logic on the FXS Port, dial:
115-FXS Port-Code-#*

Where,
FXS Port is from 1 to 4.
Code is
0 for Disable
1 for Enable

Default: **Enabled**

To enable/disable allowed-denied logic on all FXS Ports, dial:
115-*-Code-#*

- To assign Allowed Number List to the FXS Port, dial:
111-FXS Port-Number List-#*
Where,
FXS Port is from 1 to 4.
Number List is from 01 to 16.

Default: **01**

To assign Allowed Number List to all FXS Ports, dial:
111-*-Number List-#*

- To assign Denied Number List to the FXS Port, dial:
112-FXS Port-Number List-#*
Where,
FXS Port is from 1 to 4.
Number List is from 01 to 16.

Default: **06**

To assign Denied Number List to all FXS Ports, dial:
112-*-Number List-#*

- To enable/disable allowed-denied logic on the Mobile Port, dial:
116-Mobile Port-Code-#*
Where,
Mobile Port is from 1 to 4.
Code is
0 for Disable
1 for Enable

Default: **Enabled**

To enable/disable allowed/denied logic on all Mobile Ports, dial:
116-*-Code-#*

- To assign Allowed Number List to the Mobile Port, dial:
113-Mobile Port-Number List-#*
Where,
Mobile Port is from 1 to 4.
Number List is from 01 to 16.

Default: **01**

To assign Allowed Number List to all Mobile Ports, dial:
113*-Number List-#*

- To assign Denied Number List to the Mobile Port, dial:
114-Mobile Port-Number List-#*

Where,

Mobile Port is from 1 to 4.

Number List is from 01 to 16.

Default: **06**

To assign Denied Number List to all Mobile Ports, dial:
114*-Number List-#*

- To exit the programming mode, dial **00-#***

Automatic Number Translation

The Automatic Number Translation (ANT) feature is used to modify the number string dialed by users into a different number string before dialing it out in the network to match the specific route number plan of the destination network or when the network requires adding or stripping off of the prefix of the destination number string.

Automatic Number Translation feature makes use of two Number Lists:

- **Dialed Number List:** This is the list of numbers dialed by users, that is to be modified when dialed out from the system.
- **Substitute Number List:** This is the list of numbers which the system should dial out in place of the dialed number string.

ANT feature is applicable only on the Mobile Port.

To understand this feature, consider the following example.

Out of habit, a user dials a number, 952668263172 from the telephone instrument connected to the FXS Port. SIMADO GFX44 routes this call through the Mobile Port to the desired destination. However, the GSM network does not understand the dialed number string, because it expects the user to dial +912668263712 and rejects the call.

To prevent this from happening, you can apply the ANT logic on the Mobile Port. You must configure 95 in the Dialed Number List and +91 in the corresponding Substitute Number List at the same index and assign these lists to the Mobile Port. Thus, whenever a user dials a number string starting with the digits 95, ANT logic of the system will translate it to +91 and then will route the call to the desired destination number.

Automatic Number Translation also forms the basis of [“Multi-Stage Dialing”](#) feature of SIMADO GFX44.

How to configure

For this feature to work, you must

- configure Dialed Number List and Substitute Number List.
- enable ANT logic on the Mobile Port.
- assign the Dialed and Substitute Number List to the port.

Configuring using Jeeves

- Log into Jeeves. (See [“Configuring SIMADO GFX44 using Jeeves”](#))

- On the **Main Menu**, click the **Number Lists** button. Configure the Dialed Number List and Substitute Number List for each port. See “[Number Lists](#)” for more details.

| Number List | Location 01 | Location 02 | Location 03 | Location 04 | Location 05 | Location 06 |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 01 | 0 | 1 | 2 | 3 | 4 | 5 |
| 02 | 0 | 95 | 98 | 94 | 3 | 5 |
| 03 | 0 | 95 | | | | |
| 04 | 0 | | | | | |
| 05 | 00 | | | | | |
| 06 | | | | | | |
| 07 | | | | | | |
| 08 | | | | | | |
| 09 | | | | | | |
| 10 | | | | | | |
| 11 | | | | | | |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | | | | | |

- Return to the **Main Menu**, click the **Mobile Configuration** button.

| Mobile Port Number | Allowed-Denied Numbers | | | Automatic Number Translation | | | Timetable | |
|--------------------|------------------------|---------------------|--------------------|------------------------------|--------------------|------------------------|-----------|--|
| | Apply? | Allowed Number List | Denied Number List | Apply? | Dialed Number List | Substitute Number List | | |
| 1 | Yes | 01 | 06 | Yes | 06 | 06 | 1 | |
| 2 | Yes | 01 | 06 | Yes | 06 | 06 | 1 | |
| 3 | Yes | 01 | 06 | Yes | 06 | 06 | 1 | |
| 4 | Yes | 01 | 06 | Yes | 06 | 06 | 1 | |

- In **Mobile Configuration**, configure following Automatic Number Translation parameters:
 - By default, Automatic Number Translation is applied on all Mobile Ports. In **Apply?** keep the default option **Yes**.
Select **No**, if you do not want to apply this logic on the Mobile Port.
 - In **Dialed Number List**, assign the Dialed Number List you have configured for the Mobile Port. By default, **Number List 06** is assigned to all Mobile Ports.
 - In **Substitute Number List**, assign the Substitute Number List you have configured for the Mobile Port. By default, **Number List 06** is assigned to all Mobile Ports.
 - Click **Upload Changes** or **Upload Page** button to upload the changes to SIMADO GFX44.

- Click **OK** button to return to the Main Menu.

Configuring by dialing commands

- Enter Programming mode (see [“Configuring SIMADO GFX44 by dialing commands”](#)) and follow the steps given below:

- To configure Number Lists, see [“Number Lists”](#) topic.

- To enable/disable automatic number translation logic on a Mobile Port, dial:

126-Mobile Port-Code-#*

Where,

Mobile Port is from 1 to 4.

Code is

0 for Disable

1 for Enable

Default: **Enabled**

To enable/disable automatic number translation logic on all Mobile Ports, dial:

126-*-Code-#*

- To assign Dialed Number List to a Mobile Port, dial:

123-Mobile Port-Number List-#*

Where,

Mobile Port is from 1 to 4.

Number List is from 01 to 16.

Default: **06**

To assign Dialed Number List to all Mobile Ports, dial:

123-*-Number List-#*

- To assign Substitute Number List to a Mobile Port, dial:

124-Mobile Port-Number List-#*

Where,

Mobile Port is from 1 to 4.

Number List is from 01 to 16.

Default: **06**

To assign Substitute Number List to all Mobile Ports, dial:

124-*-Number List-#*

- To exit the programming mode, dial **00-#***

BCCH Locking

BCCH Locking feature enables you to lock the Mobile Port of SIMADO GFX44 to a particular cell or channel or BTS (Base Transceiver Station) for various reasons such as:

- better network availability.
- minimum call drop due to bad signal/ network failure.



BCCH Locking feature will work only when SIMCOM-2G engine (SIM340-B01 or later) or SIMCOM-3G engine (Version V1.18 or later) or Quectel 2G engine is installed in SIMADO GFX44.

How it works

In the GSM network, each BTS is assigned one particular channel called as ARFCN (Absolute Radio Frequency Channel Number), which is transmitted by BTS in BCCH (Broadcast Control Channel).

When SIMADO GFX44 is switched on, the Mobile Port gets registered with the network on a particular BTS which has the highest signal strength. However, the signal strength is not consistent. It keeps fluctuating, resulting in call drop or poor voice quality.

To prevent this, SIMADO GFX44 enables you to lock the Mobile Port to a particular cell or channel manually after checking Signal Strength and Signal Quality of each cell.

Consider the following example when using this feature:

Problem: SIMADO GFX44 is installed in a roaming area, where more than one network is available, say Network A and B. Mobile Network Selection is set to *Manual* mode and the first priority is programmed as network A and the second priority is programmed as network B.

The Mobile Port gets registered with network A. After registration, the user locks the Mobile Port to one of the cells of network A.

After registration, if the module or the system restarts or gets de-registered from network, module starts registration process again. While re-registering, SIMADO GFX44 tries to lock the Mobile Port to the last selected cell of network A. If network A is unavailable, then the Mobile Port will not get registered with the network.

Solution: In this situation, the user should set manual BCCH locking mode to *No* to register Mobile Port with the suitable network automatically.

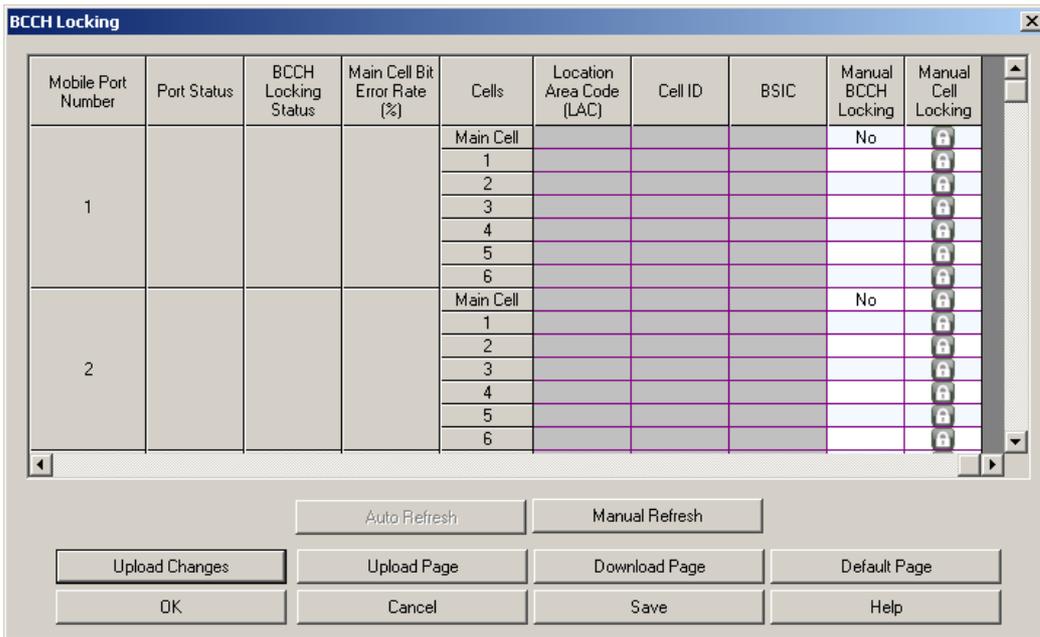
Later, the user can change manual BCCH locking mode to *Yes* and lock the Mobile Port to the desired cell after assessing the cell information.

How to configure

You can lock Mobile Port to a cell or a channel only through Jeeves.

- Log into Jeeves. (See [“Configuring SIMADO GFX44 using Jeeves”](#))

- On **Main Menu**, click the **Mobile Port-BCCH Locking** button.



- In **BCCH Locking**, the following BCCH Selection status parameters will be displayed.
- Mobile Port Number:** This is the number of Mobile Port for which BCCH Selection status is displayed.
- Port Status:** The current state of the Mobile Port is displayed in this field. Given below is the description of various status indication messages, that will appear in this field.

| STATUS | DESCRIPTION |
|--------------------|---|
| Disabled | Displayed when Mobile Port is disabled. |
| GSM Initialization | Displayed when GSM module is in initialization state i.e. before SIM detection. |
| SIM Absent | Displayed when SIM Card is not detected by the system. |
| SIM PIN wrong | Displayed when wrong SIM PIN is issued. |
| SIM PUK required | Displayed when SIM PUK is required. |
| Registering | Displayed when the Mobile Port is in registration process with the Network. |
| Idle | Displayed when the Mobile Port is registered with the Network and it is free. |
| Busy | Displayed when any active call is present on the Mobile Port. |

- BCCH Locking Status:** The current BCCH Locking status of the Mobile Port is displayed in this field. Given below is the description of various BCCH Locking status indication messages, that will appear in this field.

| STATUS | DESCRIPTION |
|----------------|--|
| Trying to Lock | Displayed when user selects Manual BCCH Locking as 'No' from 'Yes' and module is in initialization process after system or module restart. |

| STATUS | DESCRIPTION |
|------------------------------|---|
| Trying to lock on BCCH xxxx | Displayed when BCCH Locking is selected as Manual and the Mobile Port is in the registration process with the Network. xxxx is the BCCH selected by the user for locking the cell. |
| Manually Locked on BCCH xxxx | Displayed when BCCH Locking is selected as Manual and Mobile Port is successfully registered with the Network. xxxx is the BCCH selected by the user for locking the cell. |
| Auto Locked on BCCH xxxx | Displayed when BCCH Locking is selected as Auto and Mobile Port is successfully registered with the Network. xxxx is the BCCH of the Main Cell. xxxx is updated as per the changes in the Main Cell's BCCH. |

- **Main Cell-Bit Error Rate (%):** Bit Error Rate of the Main Cell is displayed in this field. Bit Error Rate (BER) is the percentage of received bits on a digital link that are in error relative to the number of bits received. Bit Error Rate is calculated from the received signal quality.
- **Cells:** Indicates the cells with which the Mobile Port can be locked. You can decide to lock the Mobile Port with a particular cell after considering the following cell related parameters.
 - **BCCH (Broadcast Control Channel):** In this field, the BCCH value of the cell is displayed. BCCH defines the frequency channel number.
 - **Receive Level:** In this field, the Received Signal Strength level of the cell is displayed. It is average Received Signal Strength of the cell. Its value ranges from -110 dBm to -47 dBm.
 - **MCC-MNC:** In this field, MCC-MNC of a cell is displayed. Mobile Country Code (MCC) is a three digit number uniquely identifying a country and Mobile Network Code (MNC) is either a two or three digit number used to identify a given network from within a specific country.
 - **LAC (Location Area Code):** In this field, LAC (Location Area Code) is displayed. LAC uniquely identifies a location area within a GSM PLMN (Public Land Mobile Network). The maximum length of LAC is 16 bits ranging from 0 to 65535. LAC is displayed in hexadecimal characters for SIMCOM-2G engine, which ranges from 0000 to FFFF. For SIMCOM-3G engine, LAC is displayed in decimal digits which ranges from 00000 to 65535.
 - **Cell ID:** In this field, Cell ID is displayed. It is a 16-bit identifier that identifies the cell. Cell ID is displayed in hexadecimal characters for SIMCOM-2G engine, which ranges from 0000 to FFFF. For SIMCOM-3G engine, Cell ID is displayed in decimal digits which ranges from 00000 to 65535.
 - **BSIC (Base Station Identification Code):** In this field, BSIC (Base Station Identification Code) is displayed. BSIC allows a mobile station to distinguish between different neighboring base stations. BSIC is three digit value ranging from 0 to 255.
- To lock a Mobile Port to a particular cell of your preference, scroll to **Manual BCCH Locking**.

By default, manual BCCH locking is set to **No**. When manual BCCH locking is set to **No**, the Mobile Port gets locked to the cell as per the highest signal strength.

If you want to lock the Mobile Port to a particular cell you want, select **Yes**.

- Click the **Manual Cell Locking** button to lock Mobile Port to the cell you selected. When you click the Lock button, an alert message will appear:

"Mobile Port will get registered with the selected cell. Do you want to continue?"

Click **Yes** to lock the Mobile Port to the selected cell.

- All the BCCH Selection status parameters can be refreshed automatically every 15 seconds by activating **Auto Refresh**. By default, Auto Refresh is enabled.
- You can also refresh the BCCH Selection parameters whenever you want by first clicking the **Manual Refresh** button and then clicking the **Download Page** button.
- Click **Upload Changes** or **Upload Page** button to upload the changes to SIMADO GFX44.
- Click **OK** button to return to the Main Menu.

Call Detail Record (CDR)

You can generate Call Details Records (CDR) of SIMADO GFX44. Call Detail Records are useful for different purposes like cost savings, productivity enhancement, security and privacy. CDR gives detailed information of a call such as Call Originating Port, Call Terminating Port, Calling Party Number, Called Party Number, Call Duration.

You can generate CDR reports using the following filters:

- The port from which the calls originate (Source Port)
- The port on which the calls terminate (Destination Port)
- Calls made on particular dates
- Calls made at a particular time
- Calls of a certain duration
- Calls of certain Called Party Numbers
- Calls of certain Calling Party Numbers

The system stores records of matured calls only³ and it generates reports of only those filters that are set. For example, if you have not enabled the filter for **Calls Originated on FXS Ports**, the system will not generate report for calls originated from FXS Ports.

SIMADO GFX44 can store upto 200 entries in Call Detail Records and these entries are stored using First In First Out method. Call records remain stored even when the system is set to default. However, records will be cleared when you change Firmware version of the system.

Call records can be cleared manually at any time using *Clear Buffer* button.



- You will get CDR report with header and footer even if CDR buffer is empty.
- You will get message, 'No records found' if the buffer is empty.

How to configure

Configuring using Jeeves

- Log into Jeeves. (See [“Configuring SIMADO GFX44 using Jeeves”](#))

3. The records will be stored in the system after approximately 5 minutes of call maturity.

- On the Main Menu, click the **Call Detail Records** button.

Setting Filters

- By default, all the filters are **enabled**. You may disable the filter you do not want to use by clearing the related **Apply Filter** check box.
- Set the following filters as required:

- **Calls terminated on FXS Ports:** The system will generate report of calls that are terminated on FXS Ports. To generate report using this filter, set the range of the FXS Ports in the **From** and **To** fields.

You can also generate report for a single FXS Port, by setting the same port number in the **From** and **To** fields.

- **Calls terminated on Mobile Ports:** The system will generate report of calls that are terminated on Mobile Ports. Set the range of ports in the **From** and **To** fields. Set the same port number in both fields, if you want to generate report of calls terminated on a particular Mobile Port.
- **Calls originated on FXS Ports:** The system will generate report of outgoing calls made from the FXS Ports. To generate report using this filter for FXS Ports, set the range of the FXS Ports in the **From** and **To** fields.

You can also generate report of a single FXS Port, by setting the same port number in the **From** and **To** fields.

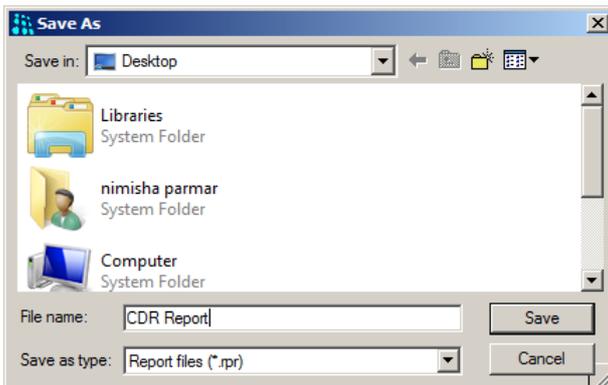
- **Calls originated on Mobile Ports:** The system will generate report of calls originated from Mobile Ports. Set the range of Mobile Ports in the **From** and **To** fields.

You can also generate report of a single Mobile Port by setting the same port number in the **From** and **To** fields.

- **Calls with Calling Party Numbers Matching in Number List:** The system generates report for calls received from specific numbers.

Select a Number List you want to assign to this filter. Make sure that you also configure this Number List with the Calling Party Numbers which you want the system to match. See “[Number Lists](#)” for instructions.

- **Calls with Called Party Numbers Matching in Number List:** Select the Number List you want to assign to this filter. Make sure that you also configure this Number List with the Called Party Numbers which you want the system to match. See “[Number Lists](#)” for instructions.
 - **Calls made between (Date):** The system will generate report of calls made between particular dates. Enter the start date and end date in the relevant fields.
 - **Calls made between (Time):** The system will generate report of calls made between a particular time period. Enter the start time and end time in the relevant fields.
 - **Calls with duration more than (seconds):** Enter the time in seconds in this field. The system will generate report of calls with duration more than the specified time.
- Click the **Capture Report** button. The **Save as** window will appear on your screen. Select the appropriate location and give an appropriate file name to create a file for capturing CDR report. Click the **Save** button to capture report.



A notepad file of CDR report will be created.

Now open the report that is saved on your computer and check.

CALL DETAIL RECORDS REPORT as on 02-Mar-2012 at 17:42:53

Source Port Destination Port NUM LIST : Called - 01 Calling - 01
FXS : 1 To 4 FXS : 1 To 4 DATE : 01-Jan-2007 To 29-Feb-2012
MOB : 1 To 4 MOB : 1 To 4 DUR(sec) : 1 TIME : 00:00 To 23:59

| SR. | S-PORT | D-PORT | CALLED NUMBER | CALLING NUMBER | DATE | TIME | DUR |
|-----|--------|--------|---------------|----------------|-------------|----------|-----|
| 1 | MOB 3 | FXS 2 | | | 08-Feb-2012 | 11:37:54 | 11 |
| 2 | FXS 1 | MOB 2 | 9974098917 | | 08-Feb-2012 | 11:37:46 | 10 |
| 3 | MOB 4 | FXS 3 | | | 08-Feb-2012 | 11:38:28 | 9 |
| 4 | FXS 1 | MOB 2 | 9898036842 | | 08-Feb-2012 | 11:43:58 | 7 |
| 5 | FXS 1 | MOB 3 | 9898036842 | | 08-Feb-2012 | 11:44:18 | 8 |
| 6 | MOB 1 | FXS 1 | | +919898036842 | 08-Feb-2012 | 11:45:55 | 10 |
| 7 | MOB 2 | FXS 2 | | | 08-Feb-2012 | 11:46:33 | 9 |
| 8 | MOB 3 | FXS 3 | | | 08-Feb-2012 | 11:47:12 | 10 |
| 9 | MOB 4 | FXS 4 | | +919898036842 | 08-Feb-2012 | 11:47:53 | 7 |
| 10 | FXS 4 | MOB 4 | 9898036842 | | 08-Feb-2012 | 11:48:29 | 6 |
| 11 | FXS 4 | MOB 1 | 9898036842 | | 08-Feb-2012 | 11:50:03 | 8 |
| 12 | MOB 1 | FXS 1 | | +919898906335 | 22-Feb-2012 | 10:16:08 | 80 |
| 13 | MOB 1 | FXS 1 | | +919898906335 | 22-Feb-2012 | 13:47:06 | 43 |
| 14 | MOB 1 | FXS 1 | | +919898906335 | 22-Feb-2012 | 13:49:44 | 106 |
| 15 | MOB 1 | FXS 1 | | +919898906335 | 22-Feb-2012 | 19:05:55 | 23 |
| 16 | MOB 1 | FXS 1 | | +919898906335 | 22-Feb-2012 | 19:07:25 | 15 |
| 17 | MOB 1 | FXS 1 | | +919898906335 | 22-Feb-2012 | 19:45:15 | 44 |
| 18 | MOB 1 | FXS 1 | | +919898906335 | 22-Feb-2012 | 19:48:15 | 20 |
| 19 | MOB 1 | FXS 1 | | +919898906335 | 22-Feb-2012 | 19:48:45 | 28 |
| 20 | MOB 1 | FXS 1 | | +919898906335 | 22-Feb-2012 | 19:50:46 | 30 |

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- If you want to clear the CDR stored in the buffer, use the **Clear Buffer** button. The following alert message will appear on the screen:

"This option will clear the entire buffer in SIMADO GFX44. Do you wish to continue?"

Click the **Yes** button.



The SE Password window will appear. Enter reverse SE Password and click the **OK** button. Buffer stored in the system will be cleared.



- To revert the filters to their default values, click the **Default Filters** button.

An alert message, *"Do you wish to update this command in GFX44 now?"* will appear on the screen.

Click the **Yes** button. All filters will be set to default values.

- Click **Upload Changes** or **Upload Page** button to upload the changes to SIMADO GFX44.
- Click **OK** button to return to the Main Menu.

Configuring by dialing commands

- Enter Programming mode (see [“Configuring SIMADO GFX44 by dialing commands”](#)) and follow the steps given below:
- To start/stop capturing CDR report, dial:
131-Code-#*
Where,
Code is
0 for Abort Report
1 for Start Report

Default: **Abort Report**
- To clear the CDR buffer, dial:
150-Reverse SE Password-#*
- To enable/disable the filter setting for calls terminated on the FXS Port, dial:
141-Code-#*
Where,
Code is
0 for Disable
1 for Enable

Default: **Enabled**
- To enable/disable the filter setting for calls terminated on the Mobile Port, dial:
142-Code-#*
Where,
Code is
0 for Disable
1 for Enable

Default: **Enabled**
- To enable/disable the filter setting for calls originated from the FXS Port, dial:
143-Code-#*
Where,
Code is
0 for Disable
1 for Enable

Default: **Enabled**
- To enable/disable the filter setting for calls originated from the Mobile Port, dial:
144-Code-#*
Where,
Code is
0 for Disable
1 for Enable

Default: **Enabled**

See the table below for commands to program the various call filters:

| Type of Filter | Command |
|---|--|
| To set filter to print all calls terminated on FXS port | 132-FXS Port-FXS Port-#* |
| To set filter to print all calls terminated on Mobile port | 133-Mobile Port-Mobile Port-#* |
| To set filter to print all calls originated from FXS port | 134-FXS Port-FXS Port-#* |
| To set filter to print all calls originated from Mobile port | 135-Mobile Port-Mobile Port-#* |
| To set filter to print all calls from to date | 136-DD-MM-YYYY-DD-MM-YYYY-#* |
| To set filter to print all calls between time | 137-HH-MM-HH-MM-#* |
| To set filter to print all calls (Called Party Number) matching the Number list | 138-Number List-#* (Default = 01) |
| To set filter to print all calls (Calling Party Number) matching the Number list | 139-Number List-#* (Default = 01) |
| To set filter to print all calls with call duration more than or equal to specified | 140-Seconds-#* (Default = 01) |
| To set default filters | 149-#* |

Where,

FXS Port is from 1 to 4.

Mobile Port is from 1 to 4.

DD is from 01 to 31.

MM is from 01 to 12.

YYYY is from 2007 to 2099.

HH is from 00 to 23.

MM is from 00 to 59.

Number list is from 01 to 16.

Seconds is from 0001 to 9999.

Default Filters for CDR are: **All FXS Ports, All Mobile Ports, Date from 01-01-2007 to Current Date, Time 00:00 to 23:59, Caller Number List 01, Called Number List 01 and Duration more than 0001 second. By default, CDR report is Blank.**

- Dial **00-#*** to exit the programming mode.

CALL DETAIL RECORDS REPORT as on 10-Jan-2012 at 13:00:02

```

-----
Source Port      Destination Port  NUM LIST : Called - 01 Calling - 01
FXS : 1 To 4    FXS : 1 To 4    DATE      : 01-Jan-2012 To 01-Jan-2012
MOB : 1 To 4    MOB : 1 To 4    DUR(sec)  : 1 TIME : 00:00 To 23:59
-----

```

| SR. | S-PORT | D-PORT | CALLED NUMBER | CALLING NUMBER | DATE | TIME | DUR |
|-----|--------|--------|---------------|----------------|-------------|----------|-----|
| 1 | MOB 2 | FXS 2 | | +919898572368 | 01-Jan-2012 | 12:11:26 | 10 |
| 2 | FXS 1 | MOB 1 | 9724341592 | | 01-Jan-2012 | 12:11:15 | 9 |
| 3 | MOB 1 | FXS 3 | | +919724341592 | 01-Jan-2012 | 12:12:00 | 10 |
| 4 | FXS 2 | MOB 2 | 9898572368 | | 01-Jan-2012 | 12:11:49 | 10 |
| 5 | MOB 2 | FXS 4 | | +919724341603 | 01-Jan-2012 | 12:12:47 | 8 |
| 6 | FXS 3 | MOB 3 | 9724341592 | | 01-Jan-2012 | 12:12:36 | 8 |
| 7 | FXS 4 | MOB 4 | 9724341603 | | 01-Jan-2012 | 12:13:15 | 7 |
| 8 | MOB 3 | FXS 1 | | +919974098917 | 01-Jan-2012 | 12:13:26 | 8 |
| 9 | MOB 1 | FXS 2 | | +919898991823 | 01-Jan-2012 | 12:13:58 | 14 |
| 10 | FXS 1 | MOB 3 | 9724341592 | | 01-Jan-2012 | 12:14:51 | 2 |
| 11 | MOB 2 | FXS 3 | | +919724341603 | 01-Jan-2012 | 12:15:02 | 3 |
| 12 | MOB 4 | FXS 1 | | +919898572368 | 01-Jan-2012 | 12:16:06 | 7 |
| 13 | FXS 4 | MOB 1 | 9974098917 | | 01-Jan-2012 | 12:15:56 | 6 |

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Call Minutes

Mobile Service providers offer various schemes to their customers. One of the schemes which most service providers offer to their customers is to provide the first few minutes free every month. The Call Minutes feature of SIMADO GFX44 allows you to benefit from such cost savings schemes.

Let us understand this feature with the help of an example.

SIMADO GFX44 is installed in a company. The service provider offers the first 1000 minutes free every month. The company wants outgoing calls to be made using the free minutes offered by the service provider. The company can use the Call Minutes feature, by enabling it on the Mobile Port and configuring the free minutes allowed by the service provider. Outgoing calls made through the Mobile Port will not be charged. The free call minutes configured on the Mobile Port will be used.

When these free minutes are consumed, SIMADO GFX44 provides you two options:

- **Block Outgoing Calls:** If this option is selected, SIMADO GFX44 will not allow outgoing calls from the Mobile Port after the free minutes allocated to the port are utilized.
- **Alert and allow Outgoing Calls:** If this option is selected, SIMADO GFX44 will first provide indication on an LED⁴ that the free minutes are about to be exhausted and also play an alert tone, before it dials a number on the Mobile Port.

The alert tone and the LED indication will begin when 20 free minutes remain. The tone and the indication will continue until you add free minutes again. All calls made after utilization of the free call minutes will be charged as per the charges set by the service provider.

SIMADO GFX44 also maintains a record of the total minutes used in the form of a *Minute Used Counter*. When an outgoing call is made through the Mobile Port, the system will update the *Minutes Used Counter* simultaneously. While counting call minutes, the fraction of the last minute is rounded up to one minute. For example, if the call duration is of 3 minutes and 56 seconds, the system will round it up as 4 minutes.

SIMADO GFX44 allows you to reset the *Minutes Used Counter* either manually or automatically on a scheduled date. If scheduled reset is enabled, the *Minutes Used Counter* will reset automatically on the set date. In the case of manual reset, you will have to manually reset the *Minutes Used Counter*.



- *The free call minutes will not be used when emergency numbers are dialed.*
- *The Minutes Used Counter will not be cleared when there is power failure. When power is restored, the Minutes Used Counter will have the last updated value before power failure.*

How to configure

Configuring using Jeeves

- Log into Jeeves. (See [“Configuring SIMADO GFX44 using Jeeves”](#))

4. 'RDY' LED is used for indicating Call Minutes. See the LED table under the topic [“Switching ON SIMADO GFX44”](#).

- On the **Main Menu**, click the **Mobile Configuration** button.

| Mobile Port Number | Time Zone 4 | Call Minutes | | | | | |
|--------------------|---------------|--------------|-----------------|------------------|----------------|--------------------------------|--------------|
| | Routing Group | Enable? | Minutes Allowed | Scheduled Reset? | Scheduled Date | Options when Minutes are Used? | Manual Reset |
| 1 | 01 | No | 9999 | Yes | 01 | Block Outgoing Calls | |
| 2 | 01 | No | 9999 | Yes | 01 | Block Outgoing Calls | |
| 3 | 01 | No | 9999 | Yes | 01 | Block Outgoing Calls | |
| 4 | 01 | No | 9999 | Yes | 01 | Block Outgoing Calls | |

- In **Mobile Configuration**, scroll to Call Minutes.
 - To enable Call Minutes on the Mobile Port, in **Enable?**, select **Yes**. Default: **No**.
 - In **Minutes Allowed**, configure free minutes allowed by your service provider for each Mobile Port. Range of Minutes allowed: 0000–9999. Default: **9999**
 - By default, **Scheduled Reset?** is enabled to reset call minutes allowed and minutes used automatically on a scheduled date.

Select **No** only if you do not want scheduled reset.
 - If you have retained the default Scheduled Reset, configure the **Scheduled Date**. This is the date on which you want the minutes allowed and minutes used counter to be reset. Range: 01–31. Default: **01**
 - In **Options when Minutes are Used?**, you may select the course of action for outgoing calls after free minutes offered by the service provider are used up. You may choose either **Block Outgoing Calls** or **Alert and Allow Outgoing Calls**. Default: **Block Outgoing Calls**
 - You can use the **Manual Reset** button to reset call minutes allowed and used whenever you want.
 - Click **Upload Changes** or **Upload Page** button to upload the changes to SIMADO GFX44.
 - Click **OK** button to return to the Main Menu.

To view total free minutes allowed to each Mobile Port and free minutes utilized by each port,

- On the Main Menu, click the **Mobile Status** button.

| Mobile Port Number | Registered with Network | Minutes Allowed | Minutes Used | Firmware Version of Engine |
|--------------------|-------------------------|-----------------|--------------|----------------------------|
| 1 | | 9999 | 0000 | |
| 2 | | 9999 | 0000 | |
| 3 | | 9999 | 0000 | |
| 4 | | 9999 | 0000 | |

- In **Minutes Allowed** the total free minutes allowed to each Mobile Port is displayed.
- In **Minutes Used**, the free minutes utilized by on Mobile Port is displayed.
- Click **OK** button to return to the Main Menu.

Configuring by dialing commands

- Enter Programming mode (see [“Configuring SIMADO GFX44 by dialing commands”](#)) and follow the steps given below:

- To Enable/Disable Call Minutes feature on the Mobile Port, dial:

311-Mobile Port-Flag-#*

Where,

Mobile Port is from 1 to 4.

Code is

0 for Disable

1 for Enable

Default: **Disable**

To enable/disable Call Minutes feature on all Mobile Ports, dial:

311-*-Flag-#*

- To configure Minutes Allowed for the Mobile Port, dial:

312-Mobile Port-Minutes Allowed-#*

Where,

Mobile Port is from 1 to 4.

Valid range for minutes allowed is from 0000 to 9999.

Default: **9999**

To configure Minutes Allowed (for free calling) for all Mobile Ports, dial:

312-*-Minutes Allowed-#*

- To Enable/Disable Scheduled Reset for Call Minutes for the Mobile Port, dial:

313-Mobile Port-Code-#*

Where,

Mobile Port is from 1 to 4.

Code is

0 for Disable

1 for Enable

Default: **Enable**

To enable/disable Scheduled Reset for all Mobile Ports, dial:

313-* -Code-#*

- To configure Date for Scheduled Reset of Call Minutes for the Mobile Port, dial:
314-Mobile port-Date-#*
Where,
Mobile Port is from 1 to 4.
Valid dates are from 01 to 31.

Default: **01**

To configure the date for Scheduled Reset for all Mobile Ports, dial:

314-* -Date-#*

- To configure the option when Minutes Used is equal to or greater than the Minutes configured:
316-Mobile Port-Option-#*
Where,
Mobile Port is from 1 to 4.
Option is
1 for Block Outgoing Calls
2 for Alert and Allow Outgoing Calls

Default: **Block Outgoing Calls**

To configure the option when Minutes Used is equal to or greater than Minutes configured for all Mobile Ports, dial:

316-* -Option-#*

- To Reset Minutes manually for the Mobile Port, dial:
315-Mobile Port-#*
Where,
Mobile Port is from 1 to 4.

To reset Minutes manually for all Mobile Ports, dial:

315-* -#*

- To exit programming mode, dial **00-#***

Viewing Minutes Used on a Telephone

- To view Minutes Used on the telephone instrument connected to the FXS port, enter the Programming mode. (See [“Configuring SIMADO GFX44 by dialing commands”](#).)
- Go Off-Hook.
- Dial **317-Mobile Port-#***
Where,
Mobile Port is from 1 to 4.

- You will get confirmation tone.
- Go On-Hook.
- Minutes Used will be displayed on the LCD of your telephone.
- Go Off-Hook again, you will get dial tone.
- Dial **00##** to exit the programming mode.

If FSK CLI is set on the FXS Port of SIMADO GFX44 then the Minutes Used will be displayed in the format as shown below:

Number field: 0050
Name field: Minutes Used

When DTMF CLI is set on the FXS Port of SIMADO GFX44, only the numbers will be displayed as follows:

Number field: 0050

Call Proceeding Tone

Call Proceeding Tone is the signaling tone generated by the system or the network, to indicate to the user that the call is established in the network.

In SIMADO GFX44, when a user dials a number, it gets routed through one of the Mobile Ports. Many a times, due to silence generated by the mobile network, the user might think that the call has been disconnected. To prevent this silence, it is desirable that some kind of tone is played to the user to indicate the establishment of the call in the network.

SIMADO GFX44 supports two types of Call Proceeding Tones: **Network tone** and **SIMADO tone**.

How it works

When the call is terminated on (routed to) the Mobile Port, the originating port can be fed either SIMADO tone or Mobile Network tone.

- If the originating port is connected to the Mobile network, immediately on end of dialing, the user will hear the tone received from the Mobile network.
- If the originating port is connected to the system tone generator, the user will hear the feature tone till a call progress message is received from the Mobile network.

On receipt of the first Call Progress Message, the originating port is connected to the terminating port.

How to configure

Configuring using Jeeves

- Log into Jeeves. (See [“Configuring SIMADO GFX44 using Jeeves”](#))
- On the **Main Menu**, click the **SIMADO GFX44 Parameters** button.

The screenshot shows the 'SIMADO GFX44 Parameters' configuration window. It includes the following fields and sections:

- End of Dialing Digit:** #
- CLIR Feature Access Code:** #31#
- SE Password:** 1234
- Call Progress Tone Type:** India
- Ring Type:** India
- Minimum DTMF Detection Level:** -30 dBm
- Call Proceeding Tone Type:** Network Tone
- Returned Calls to Original Caller (RCOC):** Record Delete Timer: 999 (minutes)
- Replace '+' from CLIP?:**
- Replace '+' from the CLI with the number string:** [Empty text box]
- Remove Country Code from CLIP received on Mobile Port:**
- Country Code:** [Empty text box]
- COM Port Parameters:**

| | |
|--------------|------------|
| Speed (bps) | 115200 bps |
| Data Bits | 8 |
| Parity | None |
| Stop Bits | 1 |
| Flow Control | None |

Buttons at the bottom: Upload Changes, Upload Page, Download Page, Default Page, OK, Cancel, Save, Help.

- In SIMADO GFX44 Parameters, select the type of **Call Proceeding Tone** you want SIMADO GFX44 to play. You can select either **Network tone** or **SIMADO Tone**. Default: **Network Tone**.
- Click **Upload Changes** or **Upload Page** button to upload the changes to SIMADO GFX44.
- Click **OK** button to return to the Main Menu.

Configuring by dialing commands

- Enter Programming mode (see [“Configuring SIMADO GFX44 by dialing commands”](#)) and follow the steps given below:
- To set Call Proceeding Tone for the Mobile Port, dial:
277-Call Proceeding Tone-#*
Where,
Call Proceeding Tone is
1 for SIMADO Tone
2 for Network Tone

Default: **Network Tone**
- To exit the programming mode, dial **00-#***.

Call Progress Tones

Call Progress Tones (CPT) are audible tones sent to the calling parties to show the status of phone calls, like dial tone, error tone, busy tone. Each tone has a distinctive tone frequency and cadence.

SIMADO GFX44 supports the following Call Progress Tones:

- Dial Tone
- Busy Tone
- Error Tone
- Programming Tone
- Confirmation Tone
- Ring Back Tone

Call Progress Tones are country specific. Tone standards vary from country to country. SIMADO GFX44 enables you to select the Call Progress Tones to match the tone standards of your country.

How to Configure

Configuring using Jeeves

- Log into Jeeves. (See [“Configuring SIMADO GFX44 using Jeeves”](#))
- On the **Main Menu**, click the **SIMADO GFX44 Parameters** button.

| COM Port Parameters | |
|---------------------|------------|
| Speed (bps) | 115200 bps |
| Data Bits | 8 |
| Parity | None |
| Stop Bits | 1 |
| Flow Control | None |

- In **SIMADO GFX44 Parameters**, from the **Call Progress Tone Type** list, select the country in which SIMADO GFX44 is installed. Default: **India**.
- Click **Upload Changes** or **Upload Page** button to upload the changes to SIMADO GFX44.
- Click **OK** button to return to the Main Menu.

Configuring by dialing commands

- Enter Programming mode (see [“Configuring SIMADO GFX44 by dialing commands”](#)) and follow the steps given below:
- To configure Call Progress Tone Type for a specific country, dial:
281-Code-#*
For Codes of countries supported, see the first column in the table below.

| Code | Country | Dial Tone | | Ring Back Tone | | Busy Tone | | Error Tone | | Confirmation Tone | | Prog. Tone | |
|------|-------------|-----------|------------------------------------|----------------|-------------------------------------|-----------|------------------------------------|------------|---------------------|-------------------|-----------------|------------|-----------------|
| | | Freq. | Cadence | Freq. | Cadence | Freq. | Cadence | Freq. | Cadence | Freq. | Cadence | Freq. | Cadence |
| | | Hz | second | Hz | second | Hz | second | Hz | second | Hz | second | Hz | second |
| 01 | Australia | 425*25 | cont. | 400*25 | 0.4on 0.2off 0.4on 2.0off | 425 | 0.375on 0.375off | 425 | 0.375on 0.375off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 02 | Argentina | 425 | cont. | 425 | 1.0on 4.0 off | 425 | 0.3on 0.2off | 425 | 0.3on 0.4off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 03 | Belgium | 425 | cont. | 425 | 1.0on 3.0off | 425 | 0.5on 0.5off | 425 | 0.167on 0.167off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 04 | Brazil | 425 | cont. | 425 | 1.0on 4.0 off | 425 | 0.25on 0.25off | 425 | 0.25on 0.25 off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 05 | China | 450 | cont. | 450 | 1.0on 4.0off | 450 | 0.35 on 0.36off | 450 | 0.7on 0.7off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 06 | Egypt | 425*50 | cont. | 425*50 | 2.0on 1.0off | 425*50 | 1.0on 4.0off | 450 | 0.5on 0.5off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 07 | France | 440 | cont. | 440 | 1.5on 3.5off | 440 | 0.5on 0.5off | 440 | 0.25on 0.25off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 08 | Germany | 425 | cont. | 425 | 1.0on 4.0off | 425 | 0.48on 0.48off | 425 | 0.24on 0.24off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 09 | Greece | 425 | 0.2on 0.3off 0.7on 0.8off | 425 | 1.0on 4.0off | 425 | 0.3on 0.3off | 425 | 0.15on 0.15off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 10 | India | 400*25 | cont. | 400*25 | 0.4on 0.2off 0.4on 2.0off | 400 | 0.75on 0.75off | 400 | 0.25on 0.25off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 11 | Indonesia | 425 | cont. | 425 | 1.0on 4.0off | 425 | 0.5on 0.5off | 425 | 0.25on 0.25off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 12 | Iran | 425 | cont. | 425 | 1.0on 4.0off | 425 | 0.5on 0.5off | 425 | 0.25on 0.25off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 13 | Israel | 400 | cont. | 400 | 1.0on 3.0off | 400 | 0.5on 0.5off | 400 | 0.25on 0.25off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 14 | Italy | 425 | cont. | 425 | 1.0on 4.0off | 425 | 0.5on 0.5off | 425 | 0.2on 0.2off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 15 | Japan | 400 | cont. | 400*20 | 1.0on 2.0off | 400 | 0.5on 0.5off | 400 | 0.25on 0.25off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 16 | Kenya | 425 | cont. | 425 | 0.67on 3.0off 1.5on 5.0off | 425 | 0.2on 0.6off 0.2on 0.6off | 425 | 0.2on 0.6off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 17 | Korea | 350+440 | cont. | 440+480 | 1.0on 2.0off | 480+620 | 0.5on 0.5off | 480+620 | 0.3on 0.2off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 18 | Malaysia | 425 | cont. | 425 | 0.4on 0.2off 0.4on 2.0off | 425 | 0.5on 0.5off | 425 | 0.5on 0.25off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 19 | Mexico | 425 | cont. | 425 | 1.0on 4.0off | 425 | 0.25on 0.25off | 425 | 0.25on 0.25off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 20 | New Zealand | 400 | cont. | 400+450 | 0.4on 0.2off 0.4on 2.0off | 400 | 0.5on 0.5off | 400 | 0.25on 0.25off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 21 | Philippines | 425 | cont. | 425+480 | 1.0on 4.0off | 480+620 | 0.5on 0.5off | 480+620 | 0.25on 0.25off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 22 | Poland | 425 | cont. | 425 | 1.0on 4.0off | 425 | 0.5on 0.5off | 425 | 0.5on 0.5off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |

| Code | Country | Dial Tone | | Ring Back Tone | | Busy Tone | | Error Tone | | Confirmation Tone | | Prog. Tone | |
|------|--------------|-----------|---------|----------------|------------------------------------|-----------|---------------------|------------|---|-------------------|-----------------|------------|-----------------|
| | | Freq. | Cadence | Freq. | Cadence | Freq. | Cadence | Freq. | Cadence | Freq. | Cadence | Freq. | Cadence |
| | | Hz | second | Hz | second | Hz | second | Hz | second | Hz | second | Hz | second |
| 23 | Portugal | 425 | cont. | 425 | 1.0on 5.0off | 425 | 0.5on 0.5off | 450 | 0.33on 1.0off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 24 | Russia | 425 | cont. | 425 | 0.8on 3.2off | 425 | 0.4on 0.4off | 425 | 0.25on 0.25off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 25 | Saudi Arabia | 425 | cont. | 425 | 1.2on 4.6off | 425 | 0.5on 0.5off | 425 | 0.25on 0.25off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 26 | Singapore | 425 | cont. | 425*24 | 0.4on 0.2off 0.4on 2.0off | 425 | 0.75on 0.75off | 425 | 0.25on 0.25off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 27 | South Africa | 400*33 | cont. | 400*33 | 0.4on 0.2off 0.4on 2.0off | 400 | 0.5on 0.5off | 400 | 0.25on 0.25off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 28 | Spain | 425 | cont. | 425 | 1.5on 3.0off | 425 | 0.2on 0.2off | 425 | 0.25on 0.25off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 29 | Thailand | 400*50 | cont. | 400 | 1.0on 4.0off | 400 | 0.5on 0.5off | 400 | 0.3on 0.3off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 30 | Turkey | 450 | cont. | 450 | 2.0on 4.0off | 450 | 0.5on 0.5off | 450 | 0.2on 0.2off 0.6on 0.2off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 31 | UAE | 350+440 | cont. | 400+450 | 0.4on 0.2off 0.4on 2.0off | 400 | 0.375on 0.375off | 400 | 0.4on 0.35off 0.225on 0.525off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 32 | UK | 350+440 | cont. | 400+450 | 0.4on 0.2off 0.4on 2.0off | 400 | 0.375on 0.375off | 400 | 0.4on 0.35off 0.225on 0.525off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |
| 33 | USA/Canada | 350+440 | cont. | 440+480 | 2.0on 4.0off | 480+620 | 0.5on 0.5off | 480+620 | 0.25on 0.25off | 400 | 0.1on 0.1off | 400 | 0.1on 0.9off |

In the above table, * refers to modulation of two frequencies (f1 and f2) and + refers to addition of two frequencies. Cont. is abbreviation for continuous.

Default: **10 (India)**

- To exit the programming mode, dial **00-#***.

Calling Line Identification Restriction (CLIR)

You can use Calling Line Identification Restriction (CLIR) feature to suppress your number and name in the outgoing calls you make from SIMADO GFX44. You can make anonymous calls using CLIR.

CLIR is a Service Provider dependant feature. To use this feature, you must get CLIR facility activated by your service provider.

SIMADO GFX44 supports two types of CLIR:

- **CLIR for all calls (Fixed):** Using this option, you can enable or disable CLIR for all calls. To use this option, you need to Enable CLIR in the system.
- **CLIR on call basis:** Using this option, you can apply CLIR on selected calls.

To invoke CLIR for a selected call, user should dial the CLIR feature access code, before dialing the called party number. The default, CLIR access code is **#31#**. For example, to enable CLIR for 9925033046, user should dial **#31#9925033046**.

The CLIR access code is programmable.

How to Configure

Configuring using Jeeves

- Log into Jeeves. (See [“Configuring SIMADO GFX44 using Jeeves”](#))
- On the **Main Menu**, click the **Mobile Configuration** button.

| Mobile Port Number | TX Gain | Frequency Band (MHz) | Preferred N/w Mode | CLIR | Returned Calls to Original Caller (RCOC) | |
|--------------------|---------|----------------------|--------------------|---------|--|----|
| | | | | | On Busy | No |
| 1 | Normal | All Bands | Dual Mode | Disable | Disable | |
| 2 | Normal | All Bands | Dual Mode | Disable | Disable | |
| 3 | Normal | All Bands | Dual Mode | Disable | Disable | |
| 4 | Normal | All Bands | Dual Mode | Disable | Disable | |

Buttons: Upload Changes, Upload Page, Download Page, Default Page, OK, Cancel, Save, Help

- To apply CLIR on all calls, in **Mobile Configuration**, scroll to **CLIR**.
- Select **Enable**. Default: **Disabled**.
- Click the **Upload Changes** button or the **Upload Page** button to upload the changes to SIMADO GFX44.
- Click **OK** button to return to the Main Menu.

- To change the CLIR Access code, on the **Main Menu**, click the **SIMADO GFX44 Parameters** button.

- In **SIMADO GFX44 Parameters**, change the **CLIR Feature Access Code** to the desired value. Default: **#31#**. Make sure you inform your user about the new access code.
- Click **Upload Changes** or **Upload Page** button to upload the changes to SIMADO GFX44.
- Click **OK** button to return to the Main Menu.

Configuring by dialing commands

- Enter Programming mode (see [“Configuring SIMADO GFX44 by dialing commands”](#)) and follow the steps given below:
- To enable/disable CLIR on the Mobile Port, dial:
285-Mobile Port-Code-#*
Where,
Mobile Port is from 1 to 4.
Code is
0 for Disable
1 for Enable

Default: **Disabled**
- To configure Access Code for CLIR, dial:
110-Access Code-#*
Where,
Access Code can be of maximum 4 digits. Valid digits are 0-9, # and *.

Default: **#31#**

To clear CLIR access code, dial:
110-#*
- To exit the programming mode, dial **00-#***

Date and Time

Various features and facilities of SIMADO GFX44 need the correct date and time for their functioning. SIMADO GFX44 is equipped with a built in Real Time Clock (RTC) circuit. This circuit needs to be set once with the current date and time values. Thereafter, the RTC updates itself regularly. The RTC of SIMADO GFX44 also takes care of leap years.

Since the RTC circuit may drift over a period, it is recommended that you check and reset RTC values at least once every month to correct this drift.



When you default the system, RTC parameters are not set to default. RTC parameters are set to default only when you change the firmware version-revision of the system.

How to configure

Configuring using Jeeves

- The RTC of SIMADO GFX44 is synchronized with the current date and time of the computer to which it is connected. So, make sure the date and time of your computer are correct.
- Log into Jeeves. (See [“Configuring SIMADO GFX44 using Jeeves”](#))
- On the **Main Menu**, click the **Date and Time** button.

The screenshot shows a window titled "Date and Time" with a close button (X) in the top right corner. Inside the window, there is a section labeled "Current Date-Time" containing several input fields:

- Date:** Three fields for "Date", "Month", and "Year" with values "11", "April", and "2012" respectively.
- Time:** Three fields for "Hours", "Minutes", and "Seconds" with values "14", "56", and "45" respectively.
- Day:** A single field with the value "Wednesday".

Below the input fields are three buttons: "Upload Page", "Download Page", and "Default Page". At the bottom of the window are four buttons: "OK", "Cancel", "Save", and "Help".

- In **Date and Time**, click the **Upload Page** button. The current Date and Time of the computer will be uploaded to SIMADO GFX44 and will be displayed on your screen.
- To view the uploaded date and time, click the **Download Page** button.
- Click **OK** button to return to the Main Menu.

Configuring by dialing commands

- Enter Programming mode (see [“Configuring SIMADO GFX44 by dialing commands”](#)) and follow the steps given below:
- To configure current Date in SIMADO GFX44, dial:
296-DD-MM-YYYY-#*
Where,
DD is the date from 01 to 31.
MM is the month from 01 to 12.
YYYY is the year in four digits from 2007 to 2099.

Default Date: **01-01-2007**

- To configure current Time in SIMADO GFX44, dial:
297-HH-MM-SS-#*
Where,
HH is the Hours from 00 to 23.
MM is the Minutes from 00 to 59.
SS is the Seconds from 00 to 59.

Default Time: **09:00:00**

- To configure current Day in SIMADO GFX44, dial:
298-Day-#*
Where,
Day is ranging from 1 to 7.

| Day | Meaning |
|-----|-----------|
| 1 | Sunday |
| 2 | Monday |
| 3 | Tuesday |
| 4 | Wednesday |
| 5 | Thursday |
| 6 | Friday |
| 7 | Saturday |

Default Day: **Monday (2)**

- To exit the programming mode, dial **00-#***.

Daylight Saving Time Adjustment

Daylight Saving Time (DST) is the practice of advancing clocks so that afternoons have more daylight and mornings have less. Typically, clocks are adjusted forward one hour near the start of spring and are adjusted backward in autumn.

Many countries of the world use DST, though the start and end dates of DST vary with location and year. Even within countries, uniform DST may not be observed. Certain countries may observe DST in certain years, while in most countries of Asia and Africa, and in certain countries of South America, DST is not observed at all.

When SIMADO GFX44 is installed in a country/region where DST is used, it is necessary to synchronize the Real Time Clock of SIMADO GFX44 with the local time. So, if you are installing SIMADO GFX44 in a country where DST is used, find out the DST convention currently in use in that country, and adjust DST accordingly.

There are two ways to adjust DST:

1. **Day-Month wise:** In this method, DST will start or end on a specific day of the month. For example, DST starting on 2nd Sunday of March and ending on 1st Sunday of November.
2. **Date-Month wise:** In this method, DST will start or end on a specific date of the month. For example, DST starting on 11th March and ending on 4th November.

How to configure

Configuring using Jeeves

- Log into Jeeves. (See [“Configuring SIMADO GFX44 using Jeeves”](#))
- On the **Main Menu**, click the **Daylight Savings Time** button.

Daylight Saving Time Adjustments

Forward Time Adjustments

Type: None

Day-Month wise

Ordinal: 1st, Day: Sunday, Month: January, Change Time from: 00:00 to 00:00

Date-Month wise

Date: 01, Month: January, Change Time from: 00:00 to 00:00

Backward Time Adjustments

Type: None

Day-Month wise

Ordinal: 1st, Day: Sunday, Month: January, Change Time from: 00:00 to 00:00

Date-Month wise

Date: 01, Month: January, Change Time from: 00:00 to 00:00

Note: If the Backward Time Adjustments happen at 00:00 hours, please use previous date with "from" time = 23:59 and "to" time as required.

Upload Changes, Upload Page, Download Page, Default Page, OK, Cancel, Save, Help

- In **Daylight Saving Adjustments**, set Forward Time (the start of DST). In **Forward Time Adjustments Type**, select the type of DST. You may select **Day-Month Wise** or **Date-Month Wise**.

Default: **None**

- If you select **Day-Month wise** type of DST, configure the following:
 - **Ordinal:** Select the Ordinal number of the day of the month, the 1st, 2nd, 3rd, 4th, 5th day, when DST begins.
 - **Day:** Select the day of the month, Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, when DST begins.
 - **Month:** Select the month when DST begins (January-December).
 - **Change Time from:** Select the time when DST should start. The time mode is 24 hours, with options from 00 to 23 hours and 00 to 59 minutes.
 - **Change Time to:** Select the time by which DST is advanced. The time mode is 24 hours, with options from 00 to 23 hours and 00 to 59 minutes.



- *When the DST of a particular country starts or ends on the Last Sunday or any other day, for example, the last Tuesday, last Friday of the month, always set the Ordinal Number as '5th'.*
- *Wherever time adjustments are made at 00:00 hours, use the previous date and set DST start time (the "Time from") as 23:59 hrs.*
- If you select **Date-Month Wise** type of DST, configure the following:
 - **Date:** Select the date on which DST begins (1-31).
 - **Month:** Select the month when DST begins (January-December).
 - **Change Time From:** Select the time when DST should start. The time mode is 24 hours, with options from 00 to 23 hours and 00 to 59 minutes.
 - **Change Time To:** The time by which DST is advanced. The time mode is 24 hours, with options from 00 to 23 hours and 00 to 59 minutes.
- To set the time back at the end of DST (end of DST and beginning of standard time), go to **Backward Time Adjustments**.
- Select the **Backward Time Adjustments Type** as Day-Month wise or Date-Month wise. Follow the same steps as described earlier for Forward Time Adjustment to set the day/date, month, hours and minutes except, here you must set these parameters according to the time when DST ends.
- Click the **Upload Changes** button or the **Upload Page** button to upload the changes to SIMADO GFX44.
- Click **OK** button to return to the Main Menu.



- *SIMADO GFX44 gives you the flexibility to set different Forward and Backward DST Adjustment Types. For example, you can set the Forward DST Adjustment according to Date-Month, and set the Backward DST Adjustment according to Day-Month. Similarly, the reverse is also possible, Forward DST may be set according to Day-Month, while the Backward DST may be set as Date- Month. This is flexibility is particularly useful for setting DST of countries where the start of DST is defined by date and month, like the First of April, but the end of DST is defined by Day and Month, such as the last Sunday of October.*

Configuring by dialing commands

- Enter Programming mode (see [“Configuring SIMADO GFX44 by dialing commands”](#)) and follow the steps given below:
- To select Forward Time Adjustment Type, dial:
321-DST Forward Time Adjustment Type-#*
Where,
DST Forward Adjustment Type is
0 for None
1 for Day-Month wise
2 for Date-Month wise

Default: **None**

- To configure DST forward parameters for Day-Month wise option, dial:
322-Ordinal Number-Day-Month-Hour-Minute-Hour-Minute-#*
Where,
Ordinal Number is from 1st to 5th.
Day is from 1 to 7 (Sunday is Day 1 and Saturday is Day 7)
Month is from 01 to 12
Hour is from 00 to 23
Minute is from 00 to 59
First Hour-Minute is for current time settings whereas second Hour-Minute is for time to which the clock should be forwarded to.

Default: **Ordinal Number is 1, Day is 1, Month is 01, Hour is 00 and Minute is 00.**

For Example: In New Zealand, the DST starts on Last Sunday of October. The clock changes from 02:00 to 03:00. To affect DST in New Zealand, dial **322-5-1-10-02-00-03-00-#***

- To configure DST forward parameters for Date-Month wise option, dial:
323-Date-Month-Hour-Minute-Hour-Minute-#*
Where,
Date is from 01 to 31
Month is from 01 to 12
Hour is from 00 to 23
Minute is from 00 to 59

Default: **Date is 01, Month is 01, Hour is 00 and Minute is 00.**

For Example: In Cuba, the DST starts on 1st April of every year. The clock changes from 01:00 to 02:00. To affect DST in Cuba, dial **323-01-04-01-00-02-00-#***

- To select Backward Time Adjustment type, dial:
324-DST backward Time Adjustment Type-#*
Where,
DST Backward Adjustment Type is
0 for None
1 for Day-Month wise
2 for Date-Month wise

Default: **None**

- To configure DST backward parameters for Day-Month wise option, dial:

325-Ordinal Number-Day-Month-Hour-Minute-Hour-Minute-#*

Where,

Ordinal Number is from 1st to 5th.

Day is from 1 to 7 (Sunday is Day1 and Saturday is Day7)

Month is from 01 to 12

Hour is from 00 to 23

Minute is from 00 to 59

First Hour-Minute is for current time settings whereas second Hour-Minute is for time to which the clock should be backwarded to.

Default: **Ordinal Number is 1, Day is 1, Month is 01, Hour is 00 and Minute is 00.**

For Example: In New Zealand, the DST ends on Third Sunday of March. The clock changes from 03:00 to 02:00. To affect DST in New Zealand, dial **325-3-1-03-03-00-02-00-#***

- To configure DST backward parameters for Date-Month wise option, dial:

326-Date-Month-Hour-Minute-Hour-Minute-#*

Where,

Date is from 01 to 31

Month is from 01 to 12

Hour is from 00 to 23

Minute is from 00 to 59

Default: **Date is 01, Month is 01, Hour is 00 and Minute is 00.**

For example: In Syria, the DST ends on 1st October of every year. The clock changes from 23:59 (midnight of 1st October) to 23:00. This means that DST should be changed on 30th September at 23:59 to 23:00. To affect DST changes dial: **326-30-09-23-59-22-59-#***

- To exit programming mode, dial **00-#***

Emergency Number Dialing

The Emergency Number Dialing feature enables users to call emergency services such as Ambulance, Fire Brigade, Police from the Mobile Port of SIMADO GFX44.

To use this feature, make sure that the Mobile Ports are enabled and configure the Emergency Number Table in the system.



Emergency number Dialing will not work if Mains power to SIMADO GFX44 fails.

This is how Emergency Number Dialing works:

- A user dials a number.
- SIMADO GFX44 will check the Emergency Number Table first.
- When the dialed number matches with an Emergency Number, SIMADO GFX44 will not check the Allowed and Denied Number Lists or the Automatic Number Translation Table. It will dial out the number.
- ***In System Firmware Version V1R13 and earlier***, the GSM module supports certain fixed Emergency Numbers. You must configure only the numbers supported by the module in the Emergency Number Table. By default, the emergency numbers supported by the GSM module are:
 - 000
 - 08
 - 112
 - 110
 - 911
 - 999

If you configure a number that is not supported by the GSM module in the Emergency Number Table, the system will not recognize this number as an emergency number and will not dial out this number.

SIMADO GFX44 will dial out the emergency number even:

- when SIM is absent
 - when SIM is invalid
 - when wrong SIM PIN is entered
 - when SIM is blocked
 - when GSM module is not registered
- ***In System Firmware Version V1R14 and Later***, if your system has SIMCOM-2G engine (SIM340-B01 and later) or SIMCOM-3G engine (Version V1.18 and later) or Quectel 2G/3G engine installed, you can configure any number in the Emergency Number Table. The system will store the same number on the GSM module and will dial out only those emergency numbers that are configured in the Emergency Number Table.

SIMADO GFX44 will dial out the numbers available in the emergency number table even:

- when SIM is absent
- when SIM is invalid
- when wrong SIM PIN is entered
- when SIM is blocked
- when GSM module is not registered

- **In System Firmware Version V1R19**, when 2G GSM engine Sierra Wireless SL6087 is installed, SIMADO GFX44 will support the following Emergency Numbers with and without SIM present in the system.

Emergency Numbers **with SIM** present in the system:

- 112
- 911
- 000
- 08
- 110
- 999
- 118
- 119

Emergency Numbers **without SIM** present in the system:

- 112
- 911

How to Configure

The Emergency Number Table stores up to 5 numbers against Index 1 to 5. You can configure numbers of your choice in index 1 and 2. Numbers configured in index 3 to 5 are fixed (non-programmable). You must also configure Routing Group for all five Emergency Numbers.



You are recommended to configure the numbers prevalent as Emergency Numbers in your region, in the Emergency Number Table.

Default Emergency Number Table in SIMADO GFX44

| Index | Emergency Number | Routing Group |
|-------|-------------------|---------------|
| 1 | Blank (Editable) | 04 |
| 2 | Blank (Editable) | 04 |
| 3 | 112 (Un-editable) | 04 |
| 4 | 911 (Un-editable) | 04 |
| 5 | 000 (Un-editable) | 04 |

Configuring using Jeeves

- Log into Jeeves. (See [“Configuring SIMADO GFX44 using Jeeves”](#))
- On the **Main Menu**, click the **Emergency Numbers** button.

| Index | Number | Routing Group |
|-------|--------|---------------|
| 1 | | 04 |
| 2 | | 04 |
| 3 | 112 | 04 |
| 4 | 911 | 04 |
| 5 | 000 | 04 |

Buttons: Upload Changes, Upload Page, Download Page, Default Page, OK, Cancel, Save, Help

- Configure emergency numbers of your choice in the first two indexes of the Emergency Number Table. The emergency numbers in the last three indexes of the table are un-editable. Emergency number can be of maximum 3 digits. Digits 0 to 9 are allowed. By default, first two indexes are **blank**.

See default Emergency Number table above for the fixed emergency numbers configured in the table.

- For each Emergency Number in the table, configure the routing group. Emergency number will be dialed out using the routing group configured in the table. SIMADO GFX44 supports 16 routing groups. By default, **Routing Group 04** will be used for routing the emergency numbers.
- Click the **Upload Changes** or the **Upload Page** button to upload the changes to SIMADO GFX44.
- Click **OK** button to return to the Main Menu.

Configuring by dialing commands

- Enter Programming mode (see [“Configuring SIMADO GFX44 by dialing commands”](#)) and follow the steps given below:
- To configure Emergency Number in the emergency number table, dial:
233-Index-Emergency Number-#*
Where,
Index is 1 and 2.
Emergency number can be of maximum 3 digits. Digits allowed are 0 to 9.

Default: **Blank**

- To clear an emergency number at an index in the emergency number table, dial:
233-Index-#*
Where,
Index is 1 and 2.
- To assign a Routing Group to an emergency number at an index in the emergency number table, dial:
234-Index-Routing Group-#*
Where,
Index is from 1 to 5.
Routing Group is from 01 to 16.

Default Routing Group: **04**

- To exit the programming mode, dial **00-#***

Fixed Dialing

You can use Fixed Dialing feature of SIMADO GFX44 to avoid dialing of a frequently called number again and again from a specific port. This feature is applicable for both Mobile and FXS Port.

To use this feature, you must enable it on the desired port and configure the destination number to be dialed out, in the corresponding Fixed Destination Number field. Make sure, the routing type configured on the port is **Answer-Number Based** or **Answer-Fixed**.

Here is an example of how Fixed Dialing works:

- You frequently dial a number 2654227 from the FXS Port 2.
- Enable Fixed Dialing on the FXS Port 2 and configure 2654227 in the corresponding Fixed Destination Number field.
- Now, whenever you go Off-Hook on FXS Port 2, SIMADO GFX44 will dial out the number 2654227 after the expiry of First Digit Wait Timer.
- If you dial any other number before the expiry of First Digit Wait Timer, SIMADO GFX44 will dial out that number.

How to configure

Configuring using Jeeves

- Log into Jeeves. (See [“Configuring SIMADO GFX44 using Jeeves”](#))
- To enable Fixed Dialing on FXS Ports, on the **Main Menu**, click the **FXS Configuration** button.

| FXS Port Number | Fixed Dialing | | Allowed-Denied Numbers | | | Timetable | |
|-----------------|---------------|--------------------------|------------------------|---------------------|--------------------|-----------|--|
| | Status | Fixed Destination Number | Apply? | Allowed Number List | Denied Number List | | |
| 1 | Disable | | Yes | 01 | 06 | 1 | |
| 2 | Disable | | Yes | 01 | 06 | 1 | |
| 3 | Disable | | Yes | 01 | 06 | 1 | |
| 4 | Disable | | Yes | 01 | 06 | 1 | |

Buttons: Upload Changes, Upload Page, Download Page, Default Page, OK, Cancel, Save, Help

- Scroll to the **Fixed Dialing**.
 - For the FXS Port Number on which you want to activate this feature, in **Status**, select **Enable**. Default: **Disabled**.

- In **Fixed Destination Number**, enter the destination number to be dialed out. Call will be routed to this fixed destination number, if user does not dial any number before the expiry of First Digit Wait Timer after going Off-Hook. Default: **Blank**.
- Click **Upload Changes** or **Upload Page** button to upload the changes to SIMADO GFX44.
- Click **OK** button to return to the Main Menu.
- To enable Fixed Dialing on Mobile Ports, on the **Main Menu**, click the **Mobile Configuration** button.

| Mobile Port Number | Returned Calls to Original Caller (RCOC) | | | Fixed Dialing | | Allowed-Denied Numbers |
|--------------------|--|----------------|-----------|---------------|--------------------------|------------------------|
| | On Busy | On No-Response | On Speech | Status | Fixed Destination Number | Apply? |
| 1 | Disable | Disable | Disable | Disable | | Yes |
| 2 | Disable | Disable | Disable | Disable | | Yes |
| 3 | Disable | Disable | Disable | Disable | | Yes |
| 4 | Disable | Disable | Disable | Disable | | Yes |

- Scroll to Fixed Dialing.
- For the Mobile Port Number on which you want to apply this feature, in **Status**, select **Enable**. Default: **Disabled**.
- In **Fixed Destination Number**, enter the destination number to be dialed out. Call will be routed to this fixed destination number, if user does not dial any number before the expiry of the First Digit Wait Timer after going Off-Hook. Default: **Blank**.
- Click **Upload Changes** or **Upload Page** button to upload the changes to SIMADO GFX44.
- Click **OK** button to return to the Main Menu.

Configuring by issuing commands

- Enter Programming mode (see [“Configuring SIMADO GFX44 by dialing commands”](#)) and follow the steps given below:
- To enable/disable Fixed Dialing on the FXS Port, dial:
171-FXS Port-Code-#*
Where,
FXS Port is from 1 to 4.
Code is
0 for Disable
1 for Enable

Default: **Disabled**

To enable/disable Fixed Dialing on all FXS Ports, dial:

171*-Code-#*

- To configure Fixed Destination Number for Fixed Dialing on the FXS Port, dial:

172-FXS Port-Number String-#*

Where,

FXS Port is from 1 to 4.

Number String can be of maximum 16 characters. Allowed characters are 0-9, #, *, A, B, C, D, F, P, W and +

Codes for configuring the special digits such as A, B, C, D is shown below:

| Special Digits | Programming Codes |
|----------------------------|-------------------|
| Flash (F) | #2 |
| Pause (P) | #3 |
| A | #4 |
| B | #5 |
| C | #6 |
| D | #7 |
| + | #1 |
| # | ## |
| * | ** |
| W | *1 |
| End of Programming Command | #* |

To configure Fixed Destination Number for Fixed Dialing on all FXS Ports, dial:

172*-Number String-#*

- To enable/disable Fixed Dialing on the Mobile Port, dial:

175-Mobile Port-Code-#*

Where,

Mobile Port is from 1 to 4.

Code is

0 for Disable

1 for Enable

Default: **Disabled**

To enable/disable Fixed Dialing on all Mobile Ports, dial:

175*-Code-#*

- To configure Fixed Destination Number for Fixed Dialing on the Mobile Port, dial:

176-Mobile Port-Number String-#*

Where,

Mobile Port is from 1 to 4.

Number String can be of maximum 16 characters. Allowed characters are 0-9, #, *, A, B, C, D, F, P, W and +

To configure Fixed Destination Number for Fixed Dialing on all Mobile Ports, dial:

176*-Number String-#*

- To exit the programming mode, dial **00-#***

International Mobile Equipment Identity (IMEI)

Just like mobile handsets, each GSM module has an IMEI (International Mobile Equipment Identity) number printed on its GSM engine. International Mobile Equipment Identity number is a unique 15 or 17 digit code used to identify an individual GSM module to a GSM network. When SIMADO GFX44 is switched on, the IMEI code is transmitted and is verified in the network database called Equipment Identity Register (EIR).

The EIR consists of three lists: White list, Grey list and Black list.

- The White list consists of equipment identities that are fully permitted to access and use the network.
- The Black list contains all the equipment identities that are barred from using the network.
- The Grey list contains those equipment identities that are not barred from using the network services, but are tracked by the network for evaluation purposes.

The Network will allow the GSM module to access the GSM network only if the IMEI code is registered in the White list of EIR. This number is useful in case SIMADO GFX44 is lost or stolen. The network operator can block the IMEI number of the GSM module installed in the system. Thus, important information stored in the system can be protected from misuse.

- The currently used Structure of IMEI number is as follows:

AA-BBBBBB-CCCCCC-D

Where,

AA is Reporting Body Identifier, indicating the GSMA approved group that allocated the Type Allocation Code (TAC).

BBBBBB is the remainder of the TAC.

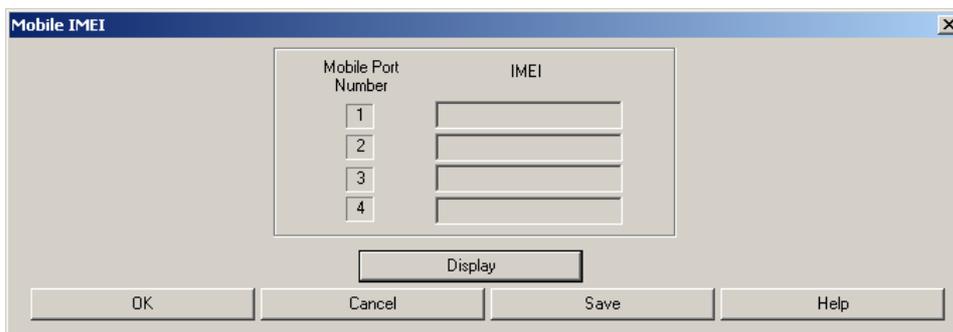
CCCCCC is serial sequence of the configuration.

D is Luhn check digit of the entire configuration or 0. (This is an algorithm that validates the ID number)

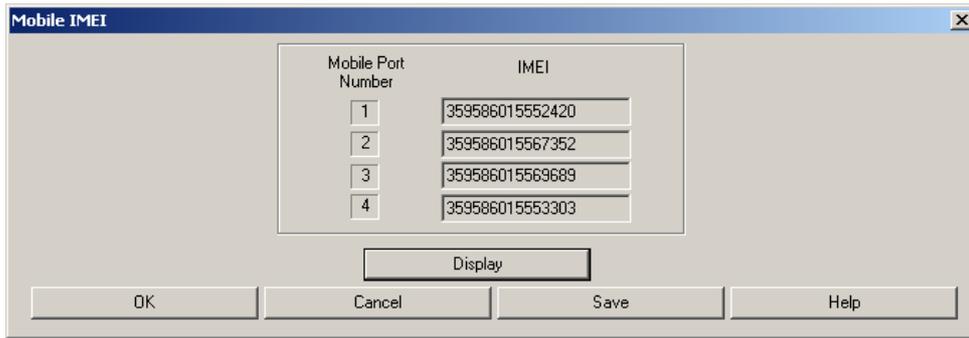
How to check IMEI/ESN Code

You can check IMEI/ESN code only through Jeeves.

- Log into Jeeves. (See [“Configuring SIMADO GFX44 using Jeeves”](#))
- On **Main Menu**, click the **Mobile IMEI** button.



- Click the **Display** button. IMEI number will be downloaded to Jeeves.
- In the **Download Over** window, click **OK** to close the window.



- The IMEI number of the GSM modules in your system will appear on your screen.
- Click **OK** button to return to the Main Menu.

Multi-Stage Dialing

The Multi-stage Dialing feature is used where numbers dialed by users need to be modified, broken into parts, and dialed out in various stages of the call. This feature is typically used in applications like Calling Card, where users are required to dial digits in stages when making a call using a calling card.

Another application where Multi-stage Dialing is used is when SIMADO GFX44 is used as a gateway to connect a PCO and a PBX for GSM-Fixed line network connectivity.

Let us understand how this feature works in such applications with the help of examples.

Example 1: Multi-stage Dialing in Virtual Calling Card application

A typical example of Multi-Stage Dialing is the use of prepaid Calling Cards. Here, the person using a calling card must dial a fixed number string before dialing the actual number. When using a calling card,

- Users must first dial the number of the Calling Card server, for example: **1602233** (7 digits).
- After the call is answered by the Calling Card server, users must dial the PIN provided by the calling card service provider, for example **1132121234**.

Some service providers also prompt the users to select a language before navigating further in the menu.

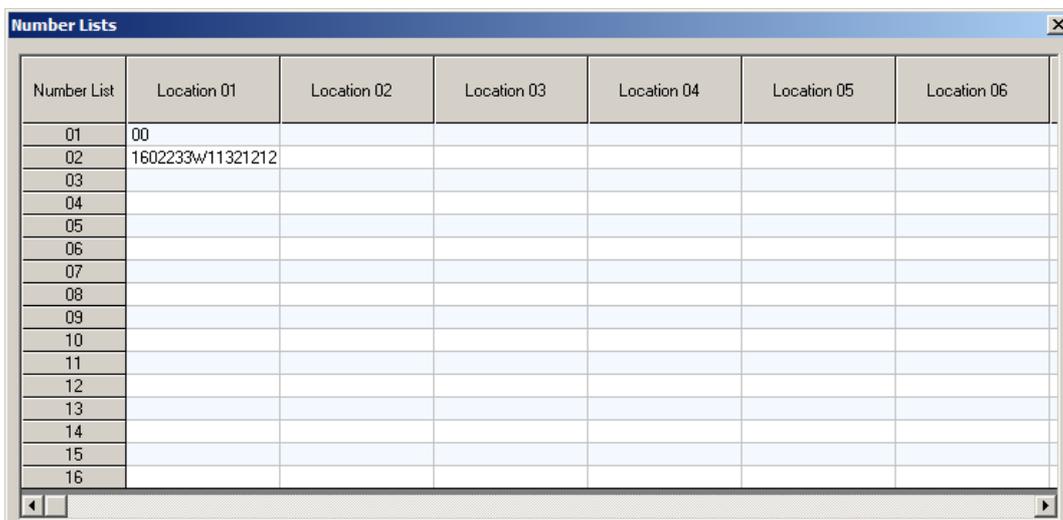
- After dialing the PIN number, users must dial the number they want to call, for example **0014125126508**.

Thus, when using a calling card, users must dial a very lengthy number string, each time they need to make a call using the calling card.

The use of Multi-Stage Dialing saves the time and effort of dialing out lengthy digits in stages. Here, the user dials only the end destination number, the system dials out the calling card number, password and any other prefixes that need to be dialed.

To use this feature for the Calling Card application, you must:

- Enable Automatic Number Translation on the Mobile Port.
- Configure the Dialed Number List and the Substitute Number List as shown below.



| Number List | Location 01 | Location 02 | Location 03 | Location 04 | Location 05 | Location 06 |
|-------------|------------------|-------------|-------------|-------------|-------------|-------------|
| 01 | 00 | | | | | |
| 02 | 1602233w11321212 | | | | | |
| 03 | | | | | | |
| 04 | | | | | | |
| 05 | | | | | | |
| 06 | | | | | | |
| 07 | | | | | | |
| 08 | | | | | | |
| 09 | | | | | | |
| 10 | | | | | | |
| 11 | | | | | | |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | | | | | |

- In the **Dialed Number List**, say Number List 01, configure the prefix that you expect users to dial when they use the Calling Card. In this example, you must configure '00', the prefix for international numbers.
- In the **Substitute Number List**, say Number List 02, configure the number string that the system should dial out in place of the dialed number. In this example, you must configure the Calling Card server number **1602233** and the PIN number **1132121234**.

As the system must wait for the Calling Card server to answer before dialing the PIN, you must configure *Wait for Answer* between the Calling Card server number and the PIN number in the Substitute Number List. *Wait for Answer* is configured using the character '**W**'.

When you configure 'W' in the Substitute Number List, the system will dial out the digits configured before 'W' and will wait for connect message from the Mobile Port. On receiving connect message from the Mobile Port, it will dial out the remaining digits.

You must also insert a delay between the PIN Number and the destination number (the prefix 00), using the character '**P**' and configuring the *Pause Timer*.

When the character 'P' is detected by the system, the system will wait for the duration of the Pause Timer before dialing the next digits.

Therefore, after inserting W and P, the final substitute number string would be:
1602233**W**1132121234**P**00

- Assign the Dialed Number List (01) and the Substitute Number List (02) to the Mobile Port.
- You may also configure the **Call Proceeding Tone**.
- With the above configuration done, when a calling card user dial '00', the system matches the dialed number with the number configured in the Dialed Number List, the number matches with the entry '00'.
- The system dials the Substitute Number string 1602233 (number of the calling card server). It waits for the calling card server to answer the call.

When the calling card server answers the call, the system dials the PIN number 1132121234 and waits for the Pause Timer before dialing the destination '00'.

Now, all that the calling card user needs to do is dial only the desired destination number **14125126508** (without the prefixes).

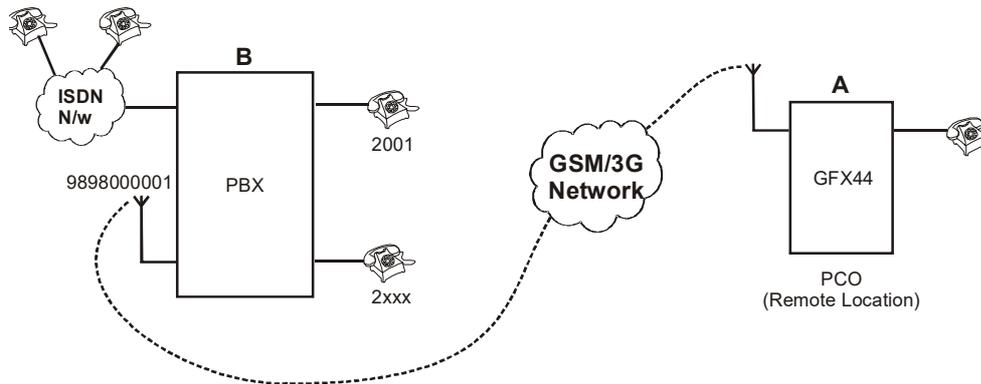
The system substitutes this number by adding the Calling Card server number and PIN number and dials these numbers in two stages.

Example 2: Multi-stage Dialing in PCO application

A PCO owner at a remote rural, hilly area wants to provide telephony services to the residents of this area using SIMADO GFX44 and a PBX located in an urban area where fixed lines CO and ISDN networks are available.

The following illustration shows how SIMADO GFX44 is connected with the PBX. Here, SIMADO GFX44 is located at the PCO in the remote area. The PBX is located in the urban area and has a GSM card installed. The PCO and the PBX have Closed User Group (CUG) services of the GSM service provider. The SIM Cards installed in

SIMADO GFX44 at the PCO and the GSM Card in the PBX are provisioned under CUG for free calling. The fixed line service providers of the PBX offer fixed lines at low rates.



SIMADO GFX44 at the PCO is so configured that whenever a customer makes a call, the call is first made to the Mobile Port of the PBX. Using DISA⁵ services of the PBX, the final destination number dialed by the customer is dialed. However, the customer needs to dial only the destination number, without having to dial the prefixes.

To use Multi-stage dialing for this application,

- the Mobile Port of the PBX at location B should be configured for DID/DISA mode.
- You must configure the following parameters in SIMADO GFX44 at location A (the PCO).
 - Enable ANT on the Mobile Port.
 - Configure the Dialed Number List and Substitute Number List and assign these lists to the Mobile Port.

| Number List | Location 01 | Location 02 | Location 03 | Location 04 | Location 05 | Location 06 |
|-------------|-------------------|-------------|-------------|-------------|-------------|-------------|
| 01 | 0044 | | | | | |
| 02 | 9898012345w/P107E | | | | | |
| 03 | | | | | | |
| 04 | | | | | | |
| 05 | | | | | | |
| 06 | | | | | | |
| 07 | | | | | | |
| 08 | | | | | | |
| 09 | | | | | | |
| 10 | | | | | | |
| 11 | | | | | | |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | | | | | |

Clear Number List

In the Dialed Number List, configure the prefix that PCO customers will dial. For example, **0044**.

5. Direct Inward System Access.

In the corresponding Substitute Number List, configure the number the system should dial in place of the dialed number. In this example, you must configure:

- i. first the number of the Mobile Port of the PBX at location B: **9898012345**.
- ii. second, Wait for Answer and Pause, if required, as the system must wait for the PBX to answer the call and allow access to DISA/DID: **W-P**
- iii. third, the DISA login code, extension number and password: **1079-2001-5656**
- iv. fourth, any other prefix, such as Trunk Access Code and prefix or number dialed by users, as per the PBX settings. Insert Pause if required: **P-0-P-0044**

Therefore, the number to be substituted in place of the dialed number would be:
9898012345**WP**107920015656**P0P0044**

- You may configure **Call Proceeding Tone** for the Mobile Port.
- Now when the customer at PCO dials the number 00449652324256,
 - SIMADO GFX44 installed at Location A would check the Dialed Number List. The dialed number **00449652324256** matches with the entry in the table.
 - The system will check the corresponding Substitute Number in the Substitute Number List.
 - The system will dial out **9898012345**, wait for the PBX to answer, wait for Pause, and dial the DISA Login Code, the extension number and password, **107920015656**.
 - The system will wait for Pause, dial **0**, wait for Pause, dial **0044** and the remaining digits dialed by the customer, **9652324256**.
 - The call will be placed on the dialed destination number.

How to Configure

To use Multi Stage Dialing feature, you must configure:

- Dialed Number List for the Mobile Port
- Substitute Number List for the Mobile Port
- Enable ANT logic and assign Dialed Number List and Substitute Number List to the Mobile Port
- Pause Timer for the Mobile Port
- DTMF Dialing Method for the Mobile Port
- DTMF Out Dial-ON Time for the Mobile Port
- DTMF Out Dial-Inter Digit Timer for the Mobile Port
- Call Proceeding Tone for the Mobile Port

Configuring using Jeeves

- Log into Jeeves. (See [“Configuring SIMADO GFX44 using Jeeves”](#))
- On the Main Menu, click the **Number Lists** button. Configure the Dialed Number List and the Substitute Number List. See [“Number Lists”](#) for details.
- On the Main Menu, click the **Mobile Configuration** button.

- Scroll down to Automatic Number Translation to enable ANT logic on the Mobile Port. Also assign Dialed Number List and Substitute Number List to the Mobile Port. See [“Automatic Number Translation”](#) for more details.
- Configure Pause Timer for the Mobile Port. See [“Mobile Port Parameters”](#) for details.
- Configure DTMF Dialing Method for Multi-stage Dialing. See [“Mobile Port Parameters”](#) for details.
- Configure DTMF Out Dial On Time for the Mobile Port. See [“Mobile Port Parameters”](#) for details.
- Configure DTMF Out Dial - Inter Digit Timer for the Mobile Port. See [“Mobile Port Parameters”](#) for details.
- Click **Upload Changes** or **Upload Page** button to upload the changes to SIMADO GFX44.
- Click **OK** button to return to the Main Menu.
- Click the **SIMADO GFX44 Parameters** button. Select Call Proceeding Tone type. See [“Call Proceeding Tone”](#) for details.

Configuring by dialing commands

- Enter Programming mode (see [“Configuring SIMADO GFX44 by dialing commands”](#)) and follow the steps given below:
- To configure Dialed Number List and Substitute Number List for Automatic Number Translation, see [“Number Lists”](#).
- To assign Dialed Number List and Substitute Number List to the Mobile Port, see [“Automatic Number Translation”](#).
- To configure Pause Timer for the Mobile Port. See [“Mobile Port Parameters”](#).
- To configure DTMF Dialing Method for Multi-stage Dialing. See [“Mobile Port Parameters”](#).
- To configure DTMF Out Dial On Time for the Mobile Port. See [“Mobile Port Parameters”](#).
- To configure DTMF Out Dial - Inter Digit Timer for the Mobile Port. See [“Mobile Port Parameters”](#).
- To configure Call Proceeding Tone Type, see [“Call Proceeding Tone”](#).
- To exit the programming mode, dial **00-#***

Number Lists

A Number List is a data structure consisting of various digits/ string of digits and/ or characters, configured for the functioning of features like Allowed-Denied Numbers and Automatic Number Translation.

SIMADO GFX44 supports 16 number lists, each having total 24 entries. Each entry can be of maximum 40 characters. All ASCII characters are allowed.

You must determine the purpose for which the Number List is to be prepared and then prepare it accordingly.

How to configure

Configuring using Jeeves

- Log into Jeeves. (See [“Configuring SIMADO GFX44 using Jeeves”](#))
- On the **Main Menu**, click the **Number Lists** button.

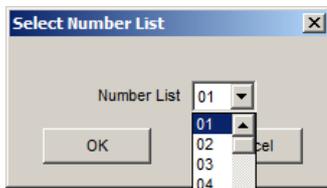
| Number List | Location 01 | Location 02 | Location 03 | Location 04 | Location 05 | Location 06 |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 01 | 0 | 1 | 2 | 3 | 4 | 5 |
| 02 | 0 | 95 | 98 | 94 | 3 | 5 |
| 03 | 0 | 95 | | | | |
| 04 | 0 | | | | | |
| 05 | 00 | | | | | |
| 06 | | | | | | |
| 07 | | | | | | |
| 08 | | | | | | |
| 09 | | | | | | |
| 10 | | | | | | |
| 11 | | | | | | |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | | | | | |

- Enter the desired numbers in the location indexes of the Number Lists. By default, Number Lists 1,2,3,4 and 5 are configured as shown above.
- Click the **Upload Changes** or the **Upload Page** button to upload the changes to SIMADO GFX44.
- Click **OK** button to return to the Main Menu.

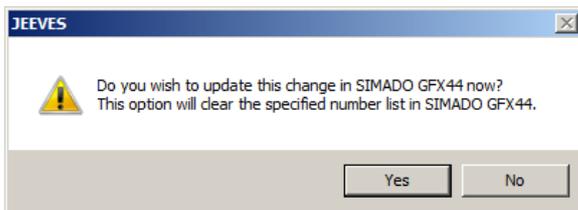


You can prepare different Number Lists for allowed numbers, denied numbers, dialed numbers and substitute numbers for all FXS Ports and Mobile Ports and assign it to the respective ports.

- To assign these Number Lists to the desired FXS Ports and the Mobile Ports, go to the FXS Configuration and the Mobile Configuration respectively. See [“FXS Port Parameters”](#) and [“Mobile Port Parameters”](#).
- To clear any Number List, click the **Clear Number List** button. A **Select Number List** box will appear.



- Select the Number List you want to clear and click the **OK** button. An alert message will appear as follow:



- Click the **Yes** button to clear the selected Number List.
- Click **OK** button to return to the Main Menu.

Configuring by dialing commands

- Enter Programming mode (see [“Configuring SIMADO GFX44 by dialing commands”](#)) and follow the steps given below:
- To configure a number string in the Number List, dial:
101-Number List-Location Index-Number String-#*
Where,
Number List is from 01 to 16.
Location Index is from 01 to 24.
Number string can be of maximum 40 digits. Allowed characters are 0-9, #, *, A, B, C, D, F, W and +

Codes for programming the special digits such as A, B, C, D is shown in the table given below:

| Special Digits | Programming Codes |
|----------------------------|-------------------|
| Flash (F) | #2 |
| Pause (P) | #3 |
| A | #4 |
| B | #5 |
| C | #6 |
| D | #7 |
| + | #1 |
| # | ## |
| * | ** |
| W | *1 |
| End of Programming Command | #* |



- You will get error tone if you use combinations of # and * other than those mentioned in the above table. For example, #0, #1, *2 are invalid strings.
 - If character W is configured in the number string, but the call is not matured, the remaining number will not be dialed out as DTMF digits.
 - To clear a number string from the Number List, dial:
101-Number List-Location Index-#*
- To clear number strings from all the locations of a Number List, dial:
102-Number List-#*
- To exit the programming mode, dial **00-#***

Returned Calls to Original Callers (RCOC)

The outgoing calls made by users of SIMADO GFX44 may go unanswered by the called party. It is possible for the called party to return the call on the basis of the CLI received. In this scenario, when the called party calls back, it is desirable that the call be routed to the same user who originally made the call. Returned Calls to Original Callers (RCOC) feature accomplishes this.

SIMADO GFX44 maintains an internal database for RCOC. When a user initiates a call and the called party is found busy or is not responding, SIMADO GFX44 will store the following information in the RCOC database.

- the calling party's number
- the called party's number
- the source port number

As many as 100 entries get stored in the RCOC database in the following format:

| Calling Party Number | Called Party Number | Source Port Number |
|----------------------|---------------------|--------------------|
| 16 digits | 16 digits | FXS/Mobile |

When the called party returns the call, SIMADO GFX44 compares the calling party's number with the called party's number stored in the RCOC database. If a best match is found, it routes the call to the corresponding source port stored in the RCOC database. Thus the call returned by the called party is routed to the user who originally made the call.

SIMADO GFX44 supports three types of RCOC:

- 1. RCOC- On Busy**
Entry is stored in the RCOC database when SIMADO GFX44 user makes a call and the called party is found busy.
- 2. RCOC- On Speech**
Entry is stored in the RCOC database when SIMADO GFX44 user makes a call and the called party answers the call.
- 3. RCOC- On No Reply**
Entry is stored as RCOC-On No Reply when SIMADO GFX44 user makes a call and there is no reply from the called party.

The call records stored in RCOC database are deleted:

- on expiry of the Record Delete Timer (programmable; default: 999 minutes).
- when you clear the RCOC database table.
- after the called party calls back and the call is answered by the original caller (user of SIMADO GFX44).
- when the called party calls back and the original caller is found busy, and the call is not routed to any other number.

To use this feature, you must enable RCOC on the Mobile Port. If required, you may also change the duration of the Record Delete Timer.

How to configure

Configuring using Jeeves

- Log into Jeeves. (See [“Configuring SIMADO GFX44 using Jeeves”](#))

- On the **Main Menu**, click the **Mobile Configuration** button.

| Mobile Port Number | CLIR | Returned Calls to Original Caller (RCOC) | | | Fixed Dialing | |
|--------------------|---------|--|----------------|-----------|---------------|---------|
| | | On Busy | On No-Response | On Speech | Status | Fixed D |
| 1 | Disable | Disable | Disable | Disable | Disable | |
| 2 | Disable | Disable | Disable | Disable | Disable | |
| 3 | Disable | Disable | Disable | Disable | Disable | |
| 4 | Disable | Disable | Disable | Disable | Disable | |

Buttons: Upload Changes, Upload Page, Download Page, Default Page, OK, Cancel, Save, Help

- In **Mobile Configuration**, scroll to **Returned Calls to Original Caller (RCOC)**.
 - Select the type of RCOC you want to set. You may enable any one or all three types of RCOC- **On Busy**, **On No Response**, **On Speech**. Default: **Disabled**.
 - Click the **Upload Changes** or the **Upload Page** button to upload the changes to SIMADO GFX44.
 - Click **OK** button to return to the Main Menu.
- To configure the Record Delete Timer, return to Main Menu, and click the **SIMADO GFX44 Parameters** button.

End of Dialing Digit: #

CLIR Feature Access Code: #31#

SE Password: 1234

Call Progress Tone Type: India

Ring Type: India

Minimum DTMF Detection Level: -30 dBm

Call Proceeding Tone Type: Network Tone

Replace '+' from CLIP?

Replace '+' from the CLI with the number string: []

Remove Country Code from CLIP received on Mobile Port

Country Code: []

COM Port Parameters

| | |
|--------------|------------|
| Speed (bps) | 115200 bps |
| Data Bits | 8 |
| Parity | None |
| Stop Bits | 1 |
| Flow Control | None |

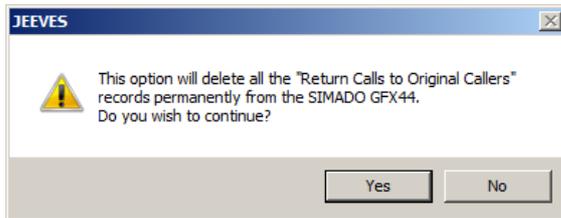
Returned Calls to Original Caller (RCOC)

Record Delete Timer: 999 (minutes) [Clear Table]

Buttons: Upload Changes, Upload Page, Download Page, Default Page, OK, Cancel, Save, Help

Set the **Record Delete Timer** to the desired value. Default: **999 minutes**. Entries stored in the RCOC database will be deleted automatically after the expiry of this timer.

- If you want to clear the RCOC database table, without waiting for the Record Delete Timer to expire, click the **Clear Table** button. An alert message will appear with the warning that the records are about to be deleted.



- Click the **Yes** button. All the entries stored in RCOC database will be cleared.
- Click **Upload Changes** or **Upload Page** button to upload the changes to SIMADO GFX44.
- Click **OK** button to return to the Main Menu.

Configuring by dialing command

- Enter Programming mode (see [“Configuring SIMADO GFX44 by dialing commands”](#)) and follow the steps given below:
- To enable/disable RCOC-On Busy on the Mobile Port, dial:
222-Mobile Port-Code-#*
Where,
Mobile Port is from 1 to 4.
Code is
0 for Disable
1 for Enable

Default: **Disabled.**

To enable/disable RCOC-On Busy on all Mobile Ports, dial:
222*-Code-#*
- To enable/disable RCOC-No Response on the Mobile Port, dial:
223-Mobile Port-Code-#*
Where,
Mobile Port is from 1 to 4.
Code is
0 for Disable
1 for Enable

Default: **Disabled.**

To enable/disable RCOC-No Response on all Mobile Ports, dial:
223*-Code-#*
- To enable/disable RCOC-On Speech on the Mobile Port, dial:
224-Mobile Port-Code-#*
Where,
Mobile Port is from 1 to 4.
Code is

0 for Disable
1 for Enable

Default: **Disabled.**

To enable/disable RCOC-On Speech on all Mobile Ports, dial:
224*-Code-#*

- To set Record Delete Timer, dial:
221-Record Delete Timer-#*
Where,
Record Delete Timer is from 001 to 999 minutes.

Default: **999 minutes.**

To clear RCOC table entries, dial:
225-#*

- To exit the programming mode, dial **00-#***

Routing Group

When a call originates on the source port, it must be routed to the destination port. The call originating on the source port is routed to the destination port as per the routing mechanism configured for the source port. The source port and destination port may be FXS or Mobile.

It might happen that when the call is routed to the destination port, it may go unanswered as the destination port is busy. To prevent this, you may form a group of destination ports, referred to as Routing Group, and assign it to the source port. Thus, when a call originates on a source port, and if one destination port is busy, the call can be routed to another port in the same Routing Group.

The selection of the destination port from a routing group will depend on the member selection method assigned to that routing group.

SIMADO GFX44 supports two methods of selecting a member from a group:

1. **First Free:** In this method, the call is routed to the first free member of the routing group.
2. **Rotation:** In this method, the first call is routed to the first member port, and the subsequent call to the next member port. For example, if a Routing Group has 3 members, the first call will be routed to member 1, if member 1 is busy, the call is routed to member 2. If member2 is also busy, the call is routed to member 3. The next incoming call will be routed to member 2. The third new incoming call will be routed to member 3. Thus for every subsequent call, the call will be routed to the next member port in the Routing Group.

You can configure a maximum of 8 routing groups with four different ports (members) in each group. You can assign different routing groups for different time zones to the source port.

How to configure

Configuring using Jeeves

- Log into Jeeves. (See [“Configuring SIMADO GFX44 using Jeeves”](#))
- On the **Main Menu**, click the **Routing Groups** button.

| Routing Group Number | Member Selection Method | Member 1 | | Member 2 | | Member 3 | | Member 4 | |
|----------------------|-------------------------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|
| | | Port Type | Port No. |
| 01 | Rotation | FXS | 1 | FXS | 2 | FXS | 3 | FXS | 4 |
| 02 | Rotation | FXS | 1 | FXS | 2 | FXS | 3 | FXS | 4 |
| 03 | Rotation | Mobile | 1 | Mobile | 2 | Mobile | 3 | Mobile | 4 |
| 04 | Rotation | Mobile | 1 | Mobile | 2 | Mobile | 3 | Mobile | 4 |
| 05 | Rotation | NULL | NULL | NULL | NULL | NULL | NULL | NULL | NULL |
| 06 | Rotation | NULL | NULL | NULL | NULL | NULL | NULL | NULL | NULL |
| 07 | Rotation | NULL | NULL | NULL | NULL | NULL | NULL | NULL | NULL |
| 08 | Rotation | NULL | NULL | NULL | NULL | NULL | NULL | NULL | NULL |

- In Routing Groups, select the **Member Selection Method** for a Routing Group Number. SIMADO GFX44 will use this method for selecting a member in a group for placing the call. You can select **Rotation** or **First Free**. Default: **Rotation**.
- Select **Port Type** and **Port Number** for each member in a group. Port Type can be FXS or Mobile. Port Number can be from 1 to 4.
- Click **Upload Changes** or **Upload Page** button to upload the changes to SIMADO GFX44.
- Click **OK** button to return to the Main Menu.

Configuring by issuing commands

- Enter Programming mode (see [“Configuring SIMADO GFX44 by dialing commands”](#)) and follow the steps given below:
- To configure a Routing Group, dial:
201-Routing Group-Member Index-Port Type-Port Number-#*
Where,
Routing Group is from 01 to 16.
Member Index is from 1 to 4.
Port Number is from 1 to 4.
Port Type is
0 for Null
1 for FXS
2 for Mobile

Default Routing Group Table is as under:

| Sr. No. | Member Selection Method | Member 1 | | Member 2 | | Member 3 | | Member 4 | |
|---------|-------------------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|
| | | Port Type | Port Number |
| 1 | Rotation | FXS | 1 | FXS | 2 | FXS | 3 | FXS | 4 |
| 2 | Rotation | FXS | 1 | FXS | 2 | FXS | 3 | FXS | 4 |
| 3 | Rotation | Mobile | 1 | Mobile | 2 | Mobile | 3 | Mobile | 4 |
| 4 | Rotation | Mobile | 1 | Mobile | 2 | Mobile | 3 | Mobile | 4 |
| 5 | Rotation | Null | Null | Null | Null | Null | Null | Null | Null |
| 6 | Rotation | Null | Null | Null | Null | Null | Null | Null | Null |
| 7 | Rotation | Null | Null | Null | Null | Null | Null | Null | Null |
| 8 | Rotation | Null | Null | Null | Null | Null | Null | Null | Null |

- To configure Member Selection Method for a Routing Group, dial:
202-Routing Group-Member Selection Method-#*
Where,
Routing Group is from 01 to 16.
Member Selection Method is
1 for First Free
2 for Rotation

Default: **Rotation**

- To assign a Routing Group to the FXS Port for Time Zone1, dial:
203-FXS Port-Routing Group-#*
Where,
FXS Port is from 1 to 4.
Routing Group is from 01 to 16.

Default: **04**.

To assign a Routing Group to all FXS Ports for Time Zone1, dial:
203*-Routing Group-#*

- To assign a Routing Group to the FXS Port for Time Zone 2, dial:
204-FXS Port-Routing Group-#*
Where,
FXS Port is from 1 to 4.
Routing Group is from 01 to 16.

Default: **04**

To assign a Routing Group to all FXS Ports for Time Zone 2, dial:
204*-Routing Group-#*

- To assign a Routing Group to the FXS Port for Time Zone 3, dial:
205-FXS Port-Routing Group-#*
Where,
FXS Port is from 1 to 4.
Routing Group is from 01 to 16.

Default: **04**

To assign a Routing Group to all FXS Ports for Time Zone 3, dial:
205*-Routing Group-#*

- To assign a Routing Group to the FXS Port for Time Zone 4, dial:
206-FXS Port-Routing Group-#*
Where,
FXS Port is from 1 to 4.
Routing Group is from 01 to 16.

Default: **04**

To assign a Routing Group to all FXS Ports for Time Zone 4, dial:
206*-Routing Group-#*

- To assign a Routing Group to the Mobile Port for Time Zone 1, dial:
207-Mobile Port-Routing Group-#*
Where,
Mobile Port is from 1 to 4.
Routing Group is from 01 to 16.

Default: **01**

To assign a Routing Group to all Mobile Ports for Time Zone 1, dial:
207*-Routing Group-#*

- To assign a Routing Group to the Mobile Port for Time Zone 2, dial:
208-Mobile Port-Routing Group-#*
Where,
Mobile Port is from 1 to 4.
Routing Group is from 01 to 16.

Default: **01**

To assign a Routing Group to all Mobile Ports for Time Zone 2, dial:
208*-Routing Group-#*

- To assign a Routing Group to the Mobile Port for Time Zone 3, dial:
209-Mobile Port-Routing Group-#*
Where,
Mobile Port is from 1 to 4.
Routing Group is from 01 to 16.

Default: **01**

To assign a Routing Group to all Mobile Ports for Time Zone 3, dial:
209*-Routing Group-#*

- To assign a Routing Group to the Mobile Port for Time Zone 4, dial:
210-Mobile Port-Routing Group-#*
Where,
Mobile Port is from 1 to 4.
Routing Group is from 01 to 16.

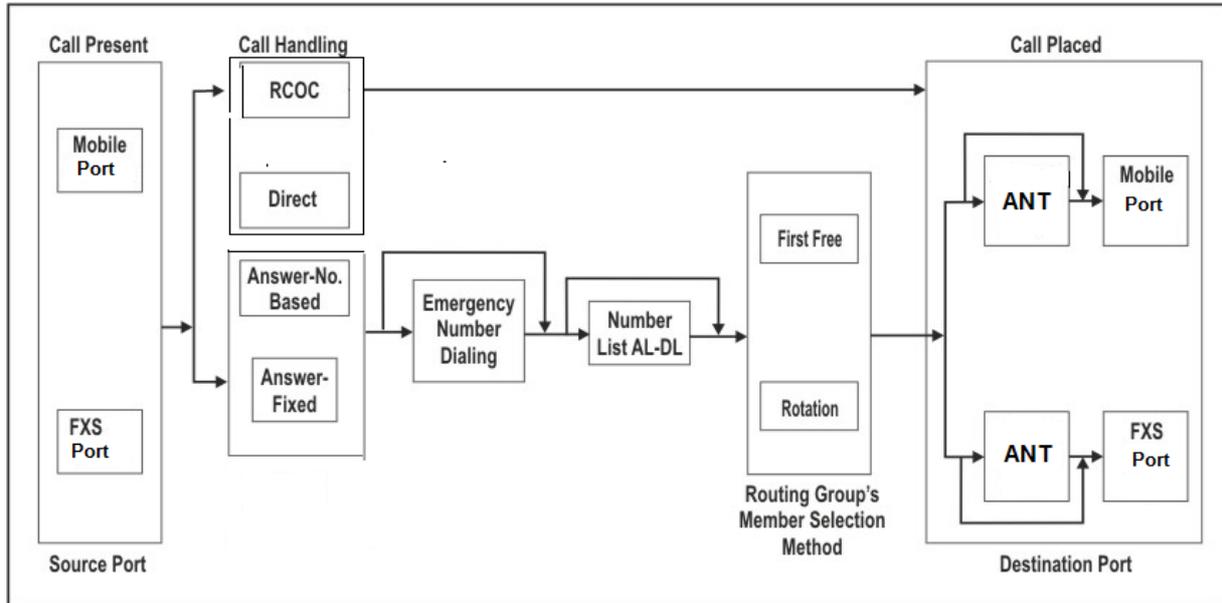
Default: **01**

To assign a Routing Group to all Mobile Ports for Time Zone 4, dial:
210*-Routing Group-#*

- To exit programming mode, dial **00-#***

Routing Type

When the call originates on the source port, it is routed to the destination port as per the routing mechanism configured for the source port. Call Routing in SIMADO GFX44 takes place as shown in the illustration below.



SIMADO GFX44 supports the following types of call routing:

1. Answer Number Based Routing

In this Routing Type, the calls are routed to the destination number depending on the number dialed by the user. For this type of routing, you must configure all the numbers you expect users to dial in the *Dialed Numbers Table*. You can store maximum 250 entries in the Dialed Numbers Table.

In this type of routing, when the call originates on the source port, SIMADO GFX44 will give dial tone to the caller. When the caller dials desired digits,

- SIMADO GFX44 will check the Emergency Number Table first.
- If the dialed number matches the Emergency Number, SIMADO GFX44 will route the call to the destination port configured in the Routing Group assigned to that number in the Emergency Number Table.
- If the dialed number does not match any Emergency Number, SIMADO GFX44 will check Allowed and Denied Number List. If the dialed number matches Denied Number List, SIMADO GFX44 will give error tone to the caller and disconnect the call.
- If the dialed number matches Allowed Number List or does not match any list or match both the lists, SIMADO GFX44 will check Dialed Numbers Table.
- If the dialed number string matches with the number configured in the Dialed Numbers Table, SIMADO GFX44 will route the call to the destination port configured in the Routing Group assigned to that number in the Dialed Number Table, after applying ANT logic, if enabled on the destination port.

- If the dialed number string does not match with the numbers configured in the Dialed Number table, SIMADO GFX44 will route the call to the destination port configured in the Routing Group assigned to the source port according to the time zone.



If the destination port is not free, then the user gets busy tone for the duration of the Busy Tone Timer, followed by Error tone for the duration of the Error Tone Timer.

If the source port is FXS, the call will get disconnected, if the user goes On-Hook. If the source port is Mobile, the call will get disconnected after the expiry of the Busy and Error Tone timers.

2. Answer Fixed Routing

In this Routing Type, the calls are routed to the fixed Routing Group configured for the source port according to the time zone.

In this type of routing, when the call originates on the source port, SIMADO GFX44 will give dial tone to the caller. When the caller dials the desired digits,

- SIMADO GFX44 will check Emergency Number Table first.
- If the dialed number matches the Emergency Number, SIMADO GFX44 will route the call to the destination port configured in the Routing Group assigned to that number in the Emergency Number Table.
- If the dialed number does not match any Emergency Number, SIMADO GFX44 will check Allowed and Denied Number List. If the dialed number matches Denied Number List, SIMADO GFX44 will give error tone to the caller and disconnect the call.
- If the dialed number matches allowed number list or does not match any list or match both the lists, SIMADO GFX44 will route the call to the destination port configured in the Routing Group assigned to the source port after applying Alternate Number Translation logic, if applicable.



If the destination port is not free, then the user gets busy tone for the duration of the Busy Tone Timer, followed by Error tone for the duration of the Error Tone Timer.

If the source port is FXS, the call will get disconnected, if the user goes On-Hook. If the source port is Mobile, the call will get disconnected after the expiry of the Busy and Error Tone timers.

3. Direct Routing

This is the simplest method of call routing. In this type of routing, SIMADO GFX44 does not check the Emergency Number Table, Allowed-Denied Numbers Table, Automatic Number Translation table and Dialed Number Table.

When this type of routing is configured for the FXS Port or the Mobile Port, SIMADO GFX44 will directly route the call to the destination port, without answering the call.



In Direct Routing,

- *if the source port is FXS, the call cannot be routed to the Mobile Port as the mobile network cannot process the call with a blank string.*
- *if both source port and destination port are Mobile, the call will be dropped by the mobile network as it cannot process the call with a blank string.*

- if the source port is FXS and the destination port is busy, the user will get busy tone till expiry of Busy Tone Timer followed by error tone till the expiry of the error tone timer. If the user goes On-Hook, the call will get disconnected.
- if the source port is Mobile, the user will get Ring Back Tone of the mobile network.

How to configure

Configuring using Jeeves

- Log into Jeeves. (See [“Configuring SIMADO GFX44 using Jeeves”](#))
- To configure Answer-Number Based Routing,
 - First, make a list of numbers and decide the Routing Group for these numbers.
 - Configure a Routing Group for the numbers. For instructions, see [“Routing Group”](#).
- On the **Main Menu**, click the **Dialed Numbers Table** button.

| Index | Dialed Number | Routing Group |
|-------|---------------|---------------|
| 001 | | 4 |
| 002 | | 4 |
| 003 | | 4 |
| 004 | | 4 |
| 005 | | 4 |
| 006 | | 4 |
| 007 | | 4 |
| 008 | | 4 |
| 009 | | 4 |
| 010 | | 4 |
| 011 | | 4 |
| 012 | | 4 |
| 013 | | 4 |
| 014 | | 4 |
| 015 | | 4 |
| 016 | | 4 |
| 017 | | 4 |
| 018 | | 4 |
| 019 | | 4 |
| 020 | | 4 |
| 021 | | 4 |

Default Dialed Numbers Table

Upload Changes Upload Page Download Page Default Page

OK Cancel Save Help

- In **Dialed Numbers**, enter the numbers that you expect your users to dial frequently. Default: **Blank**.
- In **Routing Group**, select the routing group for the dialed numbers. SIMADO GFX44 will route the calls to the destination port configured in this routing group.
- Click the **Upload Changes** or the **Upload Page** button to upload the changes to SIMADO GFX44.
- Click **OK** button to return to the Main Menu.

- To apply a Routing Type on FXS/Mobile Port,
 - On the **Main Menu**, click the **FXS Configuration** button and scroll to the Time Zones.

| FXS Port Number | Time Zone 1 | | Time Zone 2 | |
|-----------------|--------------|---------------|--------------|---------------|
| | Routing Type | Routing Group | Routing Type | Routing Group |
| 1 | Answer-Fixed | 04 | Answer-Fixed | 04 |
| 2 | Answer-Fixed | 04 | Answer-Fixed | 04 |
| 3 | Answer-Fixed | 04 | Answer-Fixed | 04 |
| 4 | Answer-Fixed | 04 | Answer-Fixed | 04 |

- In each **Time Zone** (Time Zone 1, 2, 3, 4), select the **Routing Type** and **Routing Group**. Default Routing Type is **Answer-Fixed** and Routing Group is **04** for all Time Zones.
- Click the **Upload Changes** or the **Upload Page** button to upload the changes to SIMADO GFX44.
- Click **OK** button to return to the Main Menu.
- On the **Main Menu**, click the **Mobile Configuration** button and scroll to the Time Zones.

| Mobile Port Number | Time Zone 1 | | Time Zone 2 | |
|--------------------|--------------|---------------|--------------|---------------|
| | Routing Type | Routing Group | Routing Type | Routing Group |
| 1 | Direct | 01 | Direct | 01 |
| 2 | Direct | 01 | Direct | 01 |
| 3 | Direct | 01 | Direct | 01 |
| 4 | Direct | 01 | Direct | 01 |

- In each **Time Zone** (Time Zone 1, 2, 3, 4), select the **Routing Type** and **Routing Group**. Default Routing Type is **Direct** and Routing Group is **01** for all Mobile Ports.
- Click the **Upload Changes** or the **Upload Page** button to upload the changes to SIMADO GFX44.
- Click **OK** button to return to the Main Menu.

Configuring by dialing commands

- Enter Programming mode (see [“Configuring SIMADO GFX44 by dialing commands”](#)) and follow the steps given below:
- To configure the number string in the Dialed Numbers Table, dial:
151-Index-Number String-#*
Where,
Index is from 001 to 250.
Number string can be of maximum 8 digits. Valid characters are 0-9, #, *, A, B, C, D, F, P, W and +

Default Dialed Number table is **Blank**.

The codes to configure Special Digits are given below:

| Special Digits | Code |
|----------------|------|
| Flash (F) | #2 |
| Pause (P) | #3 |
| A | #4 |
| B | #5 |
| C | #6 |
| D | #7 |
| + | #8 |
| # | ## |
| * | ** |
| W | *1 |

To clear the dialed number string configured in the Dialed Numbers Table, dial:

151-Index-#*

Where,

Index is from 001 to 250.

- To configure the routing group for the dialed number configured in the Dialed Numbers Table, dial:
152-Index-Routing Group-#*
Where,
Index is from 001 to 250.
Routing Group is from 1 to 8.

Default: **04**.

To default the entire Dialed Number Table, dial:

160-#*

- To assign a Routing Type to the FXS Port for Time Zone 1, dial:
181-FXS Port-Routing-Type-#*
Where,
FXS Port is from 1 to 4.
Routing Type is
0 for Off
1 for Answer Number Based
2 for Answer Fixed
3 for Direct

Default: **Answer Fixed.**

To assign a Routing Type to all FXS Ports for Time Zone 1, dial:
181*-Routing-Type-#*

- To assign a Routing Type to the FXS Port for Time Zone 2, dial:
182-FXS Port-Routing-Type-#*
Where,
FXS Port is from 1 to 4.
Routing Type is
0 for Off
1 for Answer Number Based
2 for Answer Fixed
3 for Direct

Default: **Answer Fixed.**

To assign a Routing Type to all FXS Ports for Time Zone 2, dial:
182*-Routing-Type-#*

- To assign a Routing Type to the FXS Port for Time Zone 3, dial:
183-FXS Port-Routing-Type-#*
Where,
FXS Port is from 1 to 4.
Routing Type is
0 for Off
1 for Answer Number Based
2 for Answer Fixed
3 for Direct

Default: **Answer Fixed.**

To assign a Routing Type to all FXS Ports for Time Zone 3, dial:
183*-Routing-Type-#*

- To assign a Routing Type to the FXS Port for Time Zone 4, dial:
184-FXS Port-Routing-Type-#*
Where,
FXS Port is from 1 to 4.
Routing Type is
0 for Off
1 for Answer Number Based
2 for Answer Fixed
3 for Direct

Default: **Answer Fixed.**

To assign a Routing Type to all FXS Ports for Time Zone 4, dial:
184*-Routing-Type-#*

- To assign a Routing Type to the Mobile Port for Time Zone 1, dial:
185-Mobile Port-Routing-Type-#*
Where,
Mobile Port is from 1 to 4.
Routing Type is
0 for Off
1 for Answer Number Based
2 for Answer Fixed
3 for Direct

Default: **Direct.**

To assign a Routing Type to all Mobile Ports for Time Zone 1, dial:
185*-Routing-Type-#*

- To assign a Routing Type to the Mobile Port for Time Zone 2, dial:
186-Mobile Port-Routing-Type-#*
Where,
Mobile Port is from 1 to 4.
Routing Type is
0 for Off
1 for Answer Number Based
2 for Answer Fixed
3 for Direct

Default: **Direct.**

To assign a Routing Type to all Mobile Ports for Time Zone 2, dial:
186*-Routing-Type-#*

- To assign a Routing Type to the Mobile Port for Time Zone 3, dial:
187-Mobile Port-Routing-Type-#*
Where,
Mobile Port is from 1 to 4.
Routing Type is
0 for Off
1 for Answer Number Based
2 for Answer Fixed
3 for Direct

Default: **Direct.**

To assign a Routing Type to all Mobile Ports for Time Zone 3, dial:
187*-Routing-Type-#*

- To assign a Routing Type to the Mobile Port for Time Zone 4, dial:
188-Mobile Port-Routing-Type-#*
Where,
Mobile Port is from 1 to 4.
Routing Type is
0 for Off
1 for Answer Number Based
2 for Answer Fixed

3 for Direct

Default: **Direct**.

To assign a Routing Type to all Mobile Ports for Time Zone 4, dial:
186*-Routing-Type-#*

- To exit the programming mode, dial **00-#***

SIM Balance and Recharge

Using the SIM Balance and Recharge feature, you can check the balance of the prepaid SIM Card installed in SIMADO GFX44 and recharge it, if required. This feature depends on the network and the services provided by the service provider.

How to configure

Configuring using Jeeves

- Log into Jeeves. (See [“Configuring SIMADO GFX44 using Jeeves”](#))
- On the **Main Menu**, click the **SIM Balance and Recharge** button.

The screenshot shows a window titled "SIM Balance and Recharge" with a table and a control panel. The table is divided into two main sections: "Balance Inquiry" and "Recharge".

| Mobile Port Number | Balance Inquiry | | | Recharge | | |
|--------------------|-----------------|---------|------------|----------|-----|---|
| | Number | Request | USSD Reply | Number | PIN | F |
| 1 | | ? | | | | |
| 2 | | ? | | | | |
| 3 | | ? | | | | |
| 4 | | ? | | | | |

Below the table is a control panel with the following buttons:

- Upload Changes
- Upload Page
- Download Page
- Default Page
- OK
- Cancel
- Save
- Help

- For SIM Balance Inquiry.
 - In **Balance Inquiry Number**, enter the number provided by your service provider for checking the balance of your SIM Card. Balance Inquiry Number can be upto 8 characters. Characters 0 to 9, # and * are allowed.
 - Click the **Balance Inquiry - Request** button to make a request to the network to check the balance of the SIM Card installed in SIMADO GFX44.
 - The Status of network response to your balance check request will be displayed in **USSD Reply**.
 - Click the **Upload Changes** or the **Upload Page** button to upload the changes to SIMADO GFX44.
 - Click **OK** button to return to the Main Menu.

| Mobile Port Number | Recharge | | | |
|--------------------|----------|-----|---------|------------|
| | Number | PIN | Request | USSD Reply |
| 1 | | | ← | |
| 2 | | | ← | |
| 3 | | | ← | |
| 4 | | | ← | |

- For SIM Recharge,
 - In **Recharge Number**, enter the number provided for recharging the SIM Card by your service provider. You can add balance to your prepaid SIM Card using this number. Recharge number can be of maximum 8 characters. Characters 0 to 9, # and * are allowed.
 - In **Recharge PIN**, enter the PIN number printed on the Recharge Voucher. You must configure # at the end of the Recharge PIN number. Recharge PIN can be of maximum 20 characters. Characters 0 to 9, # and * are allowed.
 - Click the **Request** button to make a request to add balance in the SIM Card.
 - The status of the network response to the SIM Card recharge request will be displayed in **USSD Reply**.
 - Click **Upload Changes** or **Upload Page** button to upload the changes to SIMADO GFX44.
 - Click **OK** button to return to the Main Menu.

Configuring by dialing commands



- *SIMADO GFX44 will execute your commands to make balance inquiry and recharge only if the Mobile Port is enabled, registered and idle.*
- *Balance Inquiry and Recharge response will be displayed on the phone connected to the FXS Port, only if the CLI type configured on that FXS Port is FSK.*
- Enter Programming mode (see [“Configuring SIMADO GFX44 by dialing commands”](#)) and follow the steps given below:

- To configure the Balance Inquiry Number for a Mobile Port, dial:
191-Mobile Port-Balance Inquiry Number-#*
Where,
Mobile Port is from 1 to 4.
Balance Inquiry number can be of maximum 8 characters. Characters 0 to 9, # and * are allowed.

Default: **Blank.**

To configure the Balance Inquiry number for all Mobile Ports, dial:
191*-Balance Inquiry Number-#*

- To make Balance Inquiry for a Mobile Port, dial:
192-Mobile Port-#*
Where,
Mobile Port is from 1 to 4.
- To configure the Recharge Number for a Mobile Port, dial:
193-Mobile Port-Recharge Number-#*
Where,
Mobile Port is from 1 to 4.
Recharge Number can be of maximum 8 characters. Characters 0 to 9, # and * are allowed.

Default: **Blank.**

To configure the Recharge Number for all Mobile Ports, dial:
193*-Recharge Number-#*

- To configure the Recharge PIN for a Mobile Port, dial:
194-Mobile Port-Recharge PIN-#*
Where,
Mobile Port is from 1 to 4.
Recharge PIN can be of maximum 20 characters. Characters 0 to 9, # and * are allowed.

Default: **Blank.**

- To make a Recharge Request for a Mobile Port, dial:
195-Mobile Port-#*
Mobile Port is from 1 to 4.
- To exit programming mode, dial **00-#***

SIM PIN

SIM PIN is the security feature used by the GSM network to prevent unauthorized use of the SIM Card. You are recommended to enable the PIN Protection in the SIM Card.

To enable PIN protection,

- Get a mobile handset. Insert the SIM Card into the mobile handset.
- From the mobile handset, enable PIN Protection on the SIM.
- Change the SIM PIN to **1234**. This is the default SIM PIN of SIMADO GFX44.
- If your SIMADO GFX44 has a 3G module, you must also disable Call Waiting on the SIM Card. This will prevent current calls from being disconnected whenever there is a waiting call on the Mobile Port.
- Remove the SIM from the mobile handset and insert it in the SIM Holder of SIMADO GFX44.

How SIM PIN protection works

- At every Power On, the GSM module will send SIM PIN request to the application.
- Application will send the SIM PIN to the module. The module gets registered with the network, only if correct SIM PIN is issued.



GSM module gets initialized only if the SIM PIN of the SIM Card matches with the one stored in SIMADO GFX44.

- If wrong SIM PIN is issued thrice, the SIM Card will be locked.
- To unlock the card, PUK number is required. This is indicated by LED behavior of SIMADO GFX44. (Also see, "[Switching ON SIMADO GFX44](#)").
- You must acquire the PUK number from your service provider to unlock the card.
- Remove SIM Card from the system and insert it in the mobile instrument. Enter the PUK number on request. You will be prompted to enter new SIM PIN. Enter 1234 (Default SIM PIN). Again, enter the new SIM PIN to confirm. The SIM Card will be unlocked.
- Insert the SIM in SIMADO GFX44. After the SIM gets registered with the network, change the default SIM PIN to the desired value.

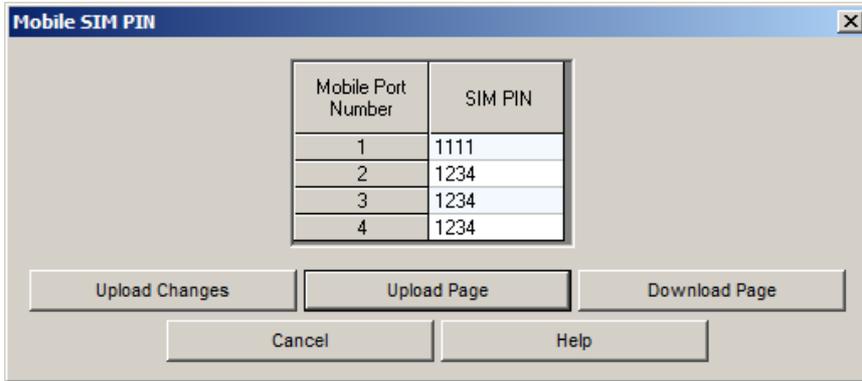


SIM PIN is not set to default, if SIMADO GFX44 is set to default or software version revision is changed.

How to Configure

Configuring using Jeeves

- Log into Jeeves. (See [“Configuring SIMADO GFX44 using Jeeves”](#))
- On the **Main Menu**, click the **Mobile SIM PIN** button.



| Mobile Port Number | SIM PIN |
|--------------------|---------|
| 1 | 1111 |
| 2 | 1234 |
| 3 | 1234 |
| 4 | 1234 |

Upload Changes Upload Page Download Page

Cancel Help



You must click the **Download Page** button to view the current SIM PIN of SIMADO GFX44.

- In **SIM PIN**, change the default SIM PIN to the desired value, if required.
- Click the **Upload Changes** or the **Upload Page** button to upload the changes to SIMADO GFX44.
- Click the **Download Page** button to download the new SIM PIN of SIMADO GFX44 to Jeeves.

Configuring by dialing commands

- Enter Programming mode (see [“Configuring SIMADO GFX44 by dialing commands”](#)) and follow the steps given below:
- To change the SIM PIN of a Mobile Port, dial:
243-Mobile Port-New SIM PIN-#*
Where,
Mobile Port is from 1 to 4.
New SIM PIN can be of minimum 4 digits and maximum 8 digits.
Valid digits for SIM PIN are 0 to 9.

Default: **1234**
- To exit programming mode, dial **00-#***

Time Table

You can configure four different timetables in SIMADO GFX44. Each timetable is divided into four time zones. You can assign different routing types and routing groups to each time zone in a timetable and assign it to the desired port. When a call originates on the source port, it gets routed to the destination port as per the routing mechanism configured for that time zone in a timetable. By default, Timetable 1 is assigned to all ports.

How to configure

To configure Timetables, first define a timetable with the different time zones and then assign the timetable to the ports.

Configuring using Jeeves

- Log into Jeeves. (See [“Configuring SIMADO GFX44 using Jeeves”](#))
- On the **Main Menu**, click the **Timetables** button.

| Timetable Number | Day | Time Zone 1 | | | | Time Zone 2 | | | | F |
|------------------|-----------|-------------|----|----------|----|-------------|----|----------|----|---|
| | | Start Time | | End Time | | Start Time | | End Time | | |
| | | HH | MM | HH | MM | HH | MM | HH | MM | |
| 1 | Sunday | 00 | 00 | 23 | 59 | 00 | 00 | 23 | 59 | C |
| | Monday | 00 | 00 | 23 | 59 | 00 | 00 | 23 | 59 | C |
| | Tuesday | 00 | 00 | 23 | 59 | 00 | 00 | 23 | 59 | C |
| | Wednesday | 00 | 00 | 23 | 59 | 00 | 00 | 23 | 59 | C |
| | Thursday | 00 | 00 | 23 | 59 | 00 | 00 | 23 | 59 | C |
| | Friday | 00 | 00 | 23 | 59 | 00 | 00 | 23 | 59 | C |
| | Saturday | 00 | 00 | 23 | 59 | 00 | 00 | 23 | 59 | C |
| 2 | Sunday | 00 | 00 | 23 | 59 | 00 | 00 | 23 | 59 | C |
| | Monday | 00 | 00 | 23 | 59 | 00 | 00 | 23 | 59 | C |
| | Tuesday | 00 | 00 | 23 | 59 | 00 | 00 | 23 | 59 | C |
| | Wednesday | 00 | 00 | 23 | 59 | 00 | 00 | 23 | 59 | C |
| | Thursday | 00 | 00 | 23 | 59 | 00 | 00 | 23 | 59 | C |
| | Friday | 00 | 00 | 23 | 59 | 00 | 00 | 23 | 59 | C |
| | Saturday | 00 | 00 | 23 | 59 | 00 | 00 | 23 | 59 | C |
| | Sunday | 00 | 00 | 23 | 59 | 00 | 00 | 23 | 59 | C |

- Configure **Start Time** and **End Time** for each day of the week in a Timetable, as required. You can configure total four different Timetables. Default Start Time is **00:00 (HH:MM)** and default End Time is **23:59 (HH:MM)**.
- Click the **Upload Changes** or the **Upload Page** button to upload the changes to SIMADO GFX44.
- Click **OK** button to return to the Main Menu.

- On the **Main Menu**, click **FXS Configuration** button and scroll down to Timetable.

| FXS Port Number | Allowed-Denied Numbers | | | Timetable | Time Zone 1 | |
|-----------------|------------------------|---------------------|--------------------|-----------|--------------|------------|
| | Apply? | Allowed Number List | Denied Number List | | Routing Type | Routing Gr |
| 1 | Yes | 01 | 06 | 1 | Answer-Fixed | 04 |
| 2 | Yes | 01 | 06 | 1 | Answer-Fixed | 04 |
| 3 | Yes | 01 | 06 | 1 | Answer-Fixed | 04 |
| 4 | Yes | 01 | 06 | 1 | Answer-Fixed | 04 |

Buttons: Upload Changes, Upload Page, Download Page, Default Page, OK, Cancel, Save, Help

- Assign Timetable to the FXS Port. By default, **Timetable 1** is assigned to all FXS Ports.
- Click the **Upload Changes** or the **Upload Page** button to upload the changes to SIMADO GFX44.
- Click **OK** button to return to the Main Menu.
- On the **Main Menu**, click the **Mobile Configuration** button and scroll to Timetable.

| Mobile Port Number | Automatic Number Translation | | | Timetable | Time Zone 1 | |
|--------------------|------------------------------|--------------------|------------------------|-----------|--------------|----|
| | Apply? | Dialed Number List | Substitute Number List | | Routing Type | Rc |
| 1 | Yes | 06 | 06 | 1 | Direct | |
| 2 | Yes | 06 | 06 | 1 | Direct | |
| 3 | Yes | 06 | 06 | 1 | Direct | |
| 4 | Yes | 06 | 06 | 1 | Direct | |

Buttons: Upload Changes, Upload Page, Download Page, Default Page, OK, Cancel, Save, Help

- Assign Timetable to the Mobile Port. By default, **Timetable 1** is assigned to all Mobile Ports.
- Click the **Upload Changes** or the **Upload Page** button to upload the changes to SIMADO GFX44.
- Click **OK** button to return to the Main Menu.

Configuring by dialing commands

- Enter Programming mode (see [“Configuring SIMADO GFX44 by dialing commands”](#)) and follow the steps given below:

- To configure Time Zones in a Timetable, dial:
331-Time Table-Day-Time Zone-Start Time-End Time-#*
Where,
Timetable is from 1 to 4.
Day is from 1 (Sunday) to 7 (Saturday).
Time Zone is from 1 to 4.
Start Time is in HH:MM format. HH is from 00 to 23. Default: **00:00**
End Time is in HH:MM format. MM is from 00 to 59. Default: **23:59**
- To assign a Timetable to the FXS Port, dial:
332-FXS Port-Time Table-#*
Where,
FXS Port is from 1 to 4.
Timetable is from 1 to 4.

Default: **1**

To assign Timetable to all FXS Ports, dial:
332-*-Time Table-#*
- To assign a Timetable to the Mobile Port, dial:
333-Mobile Port-Time Table-#*
Where,
Mobile Port is from 1 to 4.
Timetable is from 1 to 4.

Default: **1**

To assign Timetable to all Mobile Ports, dial:
333-*-Time Table-#*
- To exit the programming mode, dial **00-#***

Appendix

Acronyms

| | |
|-----------------|--|
| ANT | Automatic Number Translation |
| COM Port | Communication Port |
| CLIP | Calling Line Identification and Presentation |
| CPT | Call Progress Tones |
| DST | Daylight Savings Time |
| DTMF | Dual Tone Multi-Frequency |
| FXS | Foreign Exchange Subscriber |
| GSM | Global System for Mobile (Communication) |
| HH | Hours |
| IMEI | International Mobile Equipment Identity |
| ITU | International Telecommunication Union |
| LED | Light Emitting Diodes |
| MCC | Mobile Country Code |
| MNC | Mobile Network Code |
| MM | Minutes |
| Ms | milliseconds |
| PBX | Private Branch Exchange |
| PIN | Personal Identification Number |
| PSTN | Public Switched Telephone Network |
| PWR | Power |
| RCOC | Returned Calls to Original Callers |
| RTC | Real Time Clock |
| SE | System Engineer |
| SIM | Subscriber Identification Module |

Product Specifications

Configuration/Capacity:

| Description | Application | GFX44 |
|----------------------|---------------------------|-------|
| Maximum Mobile Ports | GSM/3G Network | 4 |
| Maximum FXS Ports | Analog Phone Connectivity | 4 |
| Antenna Port | Antenna Connection | 1 |
| COM Port-RS232C | Computer Connectivity | 1 |

GSM Parameters:

| | 2G | 3G |
|--------------------|--|---|
| GSM Frequency Band | : GSM: 850/900/1800/1900 | GSM: 850/900/1800/1900 UMTS: 800/850/900/1900/2100 |
| SIM Card | : One SIM per GSM Port | One SIM per GSM Port |
| SIM Interface | : 1.8V, 3V | 1.8V, 3V |
| Transmission Power | : Class 4 (2W) at EGSM900 and GSM850 MHz band Class 1 (1W) at DCS1800 and PCS1900 MHz band | Class 4 (33dBm ± 2dB) for GSM850 and EGSM900 Class 1 (30dBm ± 2dB) for DCS1800 and PCS1900 Class E2 (27dBm ± 3dB) for GSM850 and EGSM900 8-PSK Class E2 (26dBm + 3/-4dB) for DCS1800 and PCS1900 8-PSK Class 3 (24dBm + 1/-3dB) for UMTS800/850/900/1900/2100 |

Antenna Parameters:

| | 2G | 3G |
|-------------------|--|--|
| Type of Antenna | : Fixed Omni Directional Swivel Antenna Roof-Top antenna with flexible cable of 3mtrs. (optional) | Fixed Omni Directional Swivel Antenna Roof-Top antenna with flexible cable of 3mtrs. (optional) |
| Antenna Gain | : 1.8dBi | 2.0dBi |
| Antenna Connector | : SMA (Male), 50Ω Impedance | SMA (Male), 50Ω Impedance |

FXS (SLT) Port Parameters:

| | |
|----------------------------|--|
| Connection | : RJ11 |
| Off Hook Line Impedance | : 600Ω (programmable) |
| Loop Limit | : 1200Ω (Max.) Excluding telephone set |
| Loop Feed | : 39mA (Max.) |
| Ringing Voltage | : 55Vrms @ 25Hz, 3 REN |
| Pulse Dialing | : 10pps and 20pps @ 1:2, 2:3 and 1:1 |
| DTMF Dialing and Reception | : ITU-T Q.23 and Q.24 |
| CLIP | : DTMF, FSK ITU-T V.23 and FSK Bellcore 202A |
| Flash Timer | : 83-999 msec. (Programmable) |

| | | |
|-----------------------------|---|---|
| Answer Signaling on FXS | : | None, Polarity (Battery) Reversal |
| Disconnect Signaling on FXS | : | None, Polarity (Battery) Reversal, Open Loop Disconnect |

Power Supply:

| | | |
|--------------|---|--|
| Power Supply | : | 12VDC, 2A Through External Adaptor (100-240VAC, 50/60Hz) |
|--------------|---|--|

Power Consumption:

| | | |
|-------------------|---|--------------|
| Power Consumption | : | 8W (Typical) |
|-------------------|---|--------------|

Interface:

| | | |
|--------------------|---|--------------------------------|
| Communication Port | : | DB9 Connector (Male) (RS-232C) |
|--------------------|---|--------------------------------|

LED Indication:

| | | |
|---------------------|---|--|
| Number of LEDs | : | 9 (4 Mobile, 4 FXS, 1 Power) |
| Power Supply Status | : | Power ON |
| Network Status | : | Present, Absent, SIMPIN Faulty, PUK Required |
| GSM Module Status | : | Module Fail |

Environmental:

| | | |
|-----------------------|---|-----------------------------------|
| Operating Temperature | : | -10°C to +50°C (14°F to 122°F) |
| Storage Temperature | : | -40°C to +85°C (40°F to 185°F) |
| Operating Humidity | : | 5-90% RH (Non-Condensing) |
| Storage Humidity | : | 0-90% RH (Non Condensing) at 40°C |

Packaging:

| | | |
|------------------------|---|---|
| Dimensions (W x H x D) | : | 163 mm x 230 mm x 55 mm (6.42" x 9.06" x 2.17") |
| Unit Weight | : | 0.740kg (1.63lbs) |
| Shipping Weight | : | 1.875kg (4.13lbs) |
| Installation | : | Wall Mountable, Desk-Top |

System Commands

| Description | Programming Commands |
|--|---------------------------------------|
| To enter into SE mode | *-19-SE Password |
| To exit SE mode | 00-#* |
| Allowed and Denied Lists | |
| To assign allowed number list to the FXS Port | 111-FXS Port-Number List-#* |
| To assign allowed number list to all FXS Ports | 111-*-Number List-#* |
| To assign denied number list to the FXS Port | 112-FXS Port-Number List-#* |
| To assign denied number list to all FXS Ports | 112-*-Number List-#* |
| To assign allowed number list to the Mobile Port | 113-Mobile Port-Number List-#* |
| To assign allowed number list to all Mobile Ports | 113-*-Number List-#* |
| To assign denied number list to the Mobile Port | 114-Mobile Port-Number List-#* |
| To assign denied number list to all Mobile Ports | 114-*-Number List-#* |
| To enable/disable allowed-denied logic on FXS Port | 115-FXS Port-Code-#* |
| To enable/disable allowed-denied logic on all FXS Ports | 115-*-Code-#* |
| To enable/disable allowed-denied logic on Mobile Port | 116-Mobile Port-Code-#* |
| To enable/disable allowed-denied logic on all Mobile Ports | 116-*-Code-#* |
| Automatic Number Translation | |
| To assign dialed number list to the Mobile Port | 123-Mobile Port-Number List-#* |
| To assign dialed number list to all Mobile Ports | 123-*-Number List-#* |
| To assign substitute number list to the Mobile Port | 124-Mobile Port-Number List-#* |
| To assign a substitute number list to all Mobile Ports | 124-*-Number List-#* |
| To enable/disable Automatic Number Translation logic on Mobile Port | 126-Mobile Port-Code-#* |
| To enable/disable Automatic Number Translation logic on all Mobile Ports | 126-*-Code-#* |
| Call Detail Recording (CDR) | |
| To Start/Stop capturing CDR Report | 131-Code-#* |
| To set filter to print all calls terminated on FXS Port | 132-FXS Port-FXS Port-#* |
| To enable/disable the filter for calls terminated on the FXS Port | 141-Code-#* |
| To set filter to print all calls terminated on Mobile Port | 133-Mobile Port-Mobile Port-#* |
| To enable/disable the filter for calls terminated on the Mobile Port | 142-Code-#* |
| To set filter to print all calls originated from FXS Port | 134-FXS Port-FXS Port-#* |

| Description | Programming Commands |
|--|---|
| To enable/disable the filter for calls originated on the FXS Port | 143-Code-#* |
| To set filter to print all calls originated from Mobile Port | 135-Mobile Port-Mobile Port-#* |
| To enable/disable the filter for calls originated on the Mobile Port | 144-Code-#* |
| To set filter to print all calls from to date | 136-DD-MM-YYYY-DD-MM-YYYY-#* |
| To set filter to print all calls between time | 137-HH-MM-HH-MM-#* |
| To set filter to print all calls (Called Party Number) matching the Number list | 138-Number List-#* |
| To set filter to print all calls (Calling Party Number) matching the Number list | 139-Number List-#* |
| To set filter to print all calls with call duration more than or equal to specified | 140-Seconds-#* |
| To set default filters | 149-#* |
| To clear CDR buffer | 150-Reverse SE Password-#* |
| Call Minutes | |
| To enable/disable Call Minutes on the Mobile Port | 311-Mobile Port-Flag-#* |
| To enable/disable Call Minutes on all Mobile Ports | 311-*-Flag-#* |
| To configure free Minutes Allowed for the Mobile Port | 312- Mobile Port-Minutes Allowed- #* |
| To configure free Minutes Allowed for all Mobile Ports | 312-*-Minutes Allowed- #* |
| To enable/disable Scheduled Reset for the Mobile Port | 313-Mobile Port-Flag-#* |
| To enable/disable Scheduled Reset for all Mobile Ports | 313-*-Flag-#* |
| To configure the date for Scheduled Reset for the Mobile Port | 314-Mobile port-Date-#* |
| To configure the date for Scheduled Reset for all Mobile Ports | 314-*-Date-#* |
| To reset Minutes manually for the Mobile Port | 315-Mobile Port-#* |
| To reset Minutes manually for all Mobile Ports | 315-*-#* |
| To configure the option when Minutes Used is equal to or greater than Minutes Allowed | 316-Mobile Port-Option-#* |
| To configure the option when Minutes Used is equal to or greater than Minutes Allowed for all Mobile Ports | 316-*-Option-#* |
| To display Minutes Used on the telephone instrument | 317-Mobile Port-#* |
| Call Proceeding Tone | |
| To set call proceeding tone for Mobile | 277-Call Proceeding Tone-#* |
| Call Progress Tones (CPT) | |
| To configure CPT for a country | 281-Code-#* |

| Description | Programming Commands |
|---|---|
| Calling Line Identification Restriction | |
| To enable/disable CLIR on the Mobile Port | 285-Mobile Port-Code-#* |
| To configure CLIR Access Code | 110-Access Code-#* |
| To clear CLIR access code | 110-#* |
| Date and Time | |
| To configure the current date | 296-DD-MM-YYYY-#* |
| To configure the current time | 297-HH-MM-SS-#* |
| To configure the day of the gateway | 298-Day-#* |
| Daylight Saving Time Adjustment | |
| To select DST Forward Time Adjustment Type | 321-DST Forward Time Adjustment Type-#* |
| To select DST Forward Parameters for Day-Month wise | 322-Ordinal No-Day-Month-HH-MM-HH-MM-#* |
| To select DST Forward Parameter for Date-Month wise | 323-Date-Month-HH-MM-HH-MM-#* |
| To select DST Backward Time Adjustment Type | 324-DST Backward Time Adjustment Type-#* |
| To select DST Backward Parameter for Day-Month wise | 325-Ordinal No-Day-Month-HH-MM-HH-MM-#* |
| To select DST Backward Parameter for Date-Month wise | 326-Date-Month-HH-MM-HH-MM-#* |
| Emergency Number Dialing | |
| To configure the emergency number in the table | 233-Index-Emergency Number-#* |
| To clear the emergency number at an index from the table | 233-Index-#* |
| To assign a routing group to an emergency number at an index in the table | 234-Index-Routing Group-#* |
| Fixed Dialing | |
| To enable/disable fixed dialing on the FXS Port | 171-FXS Port-Code-#* |
| To enable/disable fixed dialing on all FXS Ports | 171-*-Code-#* |
| To configure fixed destination number for fixed dialing on the FXS Port | 172-FXS Port-Number String-#* |
| To configure fixed destination number for fixed dialing on all FXS Ports | 172-*-Number String-#* |
| To enable/disable fixed dialing on the Mobile Port | 175-Mobile Port-Code-#* |
| To enable/disable fixed dialing on all Mobile Ports | 175-*-Code-#* |
| To configure fixed destination number for fixed dialing on the Mobile Port | 176-Mobile Port-Number String-#* |
| To configure fixed destination number for fixed dialing on all Mobile Ports | 176-*-Number String-#* |
| International Mobile Equipment Identity | |
| To read IMEI number of mobile port | By Jeeves |

| Description | Programming Commands |
|---|---|
| Mobile Network Selection | |
| To configure Network Selection Mode for the Mobile Port | 231-Mobile Port-Mode-#* |
| To configure Network Selection Mode for all Mobile Ports | 231-*-Mode-#* |
| To configure Network Operator's Code in the Priority table | 232-Mobile Port-Priority-Code-#* |
| To clear Network Operator's Code from the Priority table | 232-Mobile Port-Priority-#* |
| To view Network Operator Code for the Mobile Port | By Jeeves |
| Mobile Port Status | |
| To view the Network Type with which the Mobile Port is registered | 239-Mobile Port-#* |
| To view the Mobile Port status on the LCD of the telephone instrument | 280-Mobile Port-#* |
| Multi-Stage Dialing | |
| To configure Pause Timer for the Mobile Port | 275-Mobile Port-Pause Timer-#* |
| To configure Pause Timer for all Mobile Ports | 275-*-Pause Timer-#* |
| To configure DTMF Dialing method for the Mobile Port during Multi Stage Dialing | 282-Mobile Port-Code-#* |
| To configure DTMF Dialing method for all Mobile Ports | 282-*-Code-#* |
| To configure DTMF Out dial ON Time for the Mobile Port | 283-Mobile Port-Code-#* |
| To configure DTMF Out dial ON Time for all Mobile Ports | 283-*-Code-#* |
| To configure Inter Digit Pause Time for DTMF Dialing on the Mobile Port | 284-Mobile Port-Code-#* |
| To configure Inter Digit Pause Time for DTMF Dialing on all Mobile Ports | 284-*-Code-#* |
| Number Lists | |
| To configure a number string at an index in the Number List | 101-Number List-Location Index-No. String-#* |
| To clear a number string from the Number List | 101-Number List-Location Index-#* |
| To clear number strings from all the locations of a Number List | 102-Number List-#* |
| Port Parameters-FXS | |
| To enable/disable the FXS Port | 251-FXS Port-Code-#* |
| To enable/disable all FXS Ports | 251-*-Code-#* |
| To configure Inter Digit Wait Timer for the FXS Port | 253-FXS Port-Inter Digit Wait Timer-#* |
| To configure Inter Digit Wait Timer for all FXS Ports | 253-*-Inter Digit Wait Timer-#* |
| To configure Flash Timer for the FXS Port | 254-FXS Port-Flash Timer-#* |

| Description | Programming Commands |
|---|---|
| To configure Flash Timer for all FXS Ports | 254-<i>-Flash Timer-#</i>* |
| To configure First Digit Wait Timer for the FXS Port | 255-FXS Port-First Digit Wait Timer-#* |
| To configure First Digit Wait Timer for all FXS Ports | 255-<i>-First Digit Wait Timer-#</i>* |
| To configure Disconnect Signaling on the FXS Port | 256-FXS Port-Disconnect Signal-#* |
| To configure Disconnect Signaling on all FXS Ports | 256-<i>-Disconnect Signal-#</i>* |
| To configure Open Loop Disconnect Timer on the FXS Port | 257-FXS Port-Open Loop Disconnect Timer-#* |
| To configure Open Loop Disconnect Timer on all FXS Ports | 257-<i>-Open Loop Disconnect Timer-#</i>* |
| To configure Transmit Gain for the FXS Port | 258-FXS Port-Code-#* |
| To configure Transmit Gain for all FXS Ports | 258-<i>-Code-#</i>* |
| To configure Receive Gain for the FXS Port | 259-FXS Port-Code-#* |
| To configure Receive Gain for all FXS Ports | 259-<i>-Code-#</i>* |
| To configure AC Impedance for the FXS Port | 260-FXS Port-Code-#* |
| To configure AC Impedance for all FXS Ports | 260-<i>-Code-#</i>* |
| To configure Answer Signaling on the FXS Port | 261-FXS Port-Answer Signal-#* |
| To configure Answer Signaling on all FXS Ports | 261-<i>-Answer Signal-#</i>* |
| To configure Minimum Current for Off-hook detection for the FXS Port | 262-FXS Port-Code-#* |
| To configure Minimum Current for Off-hook detection for all FXS Ports | 262-<i>-Code-#</i>* |
| To configure On-hook detection current on the FXS Port | 263-FXS Port-Code-#* |
| To configure On-hook detection current on all FXS Ports | 263-<i>-Code-#</i>* |
| To configure CLIP Type for the FXS Port | 161-FXS Port-CLIP Type-#* |
| To configure CLIP Type for all FXS Ports | 161-<i>-CLIP Type-#</i>* |
| Port Parameters-Mobile | |
| To enable/disable the Mobile Port | 271-Mobile Port-Code-#* |
| To enable/disable all Mobile Ports | 271-<i>-Code-#</i>* |
| To Allow/Disallow Incoming Calls on the Mobile Port | 270-Mobile Port-Code-#* |
| To Allow/Disallow Incoming Calls for all Mobile ports | 270 -<i>-Code-#</i>* |
| To configure Receive Gain for the Mobile Port | 272-Mobile Port-Receive Gain-#* |
| To configure Receive Gain for all Mobile Ports | 272-<i>-Receive Gain-#</i>* |
| To configure Transmit Gain for the Mobile Port | 273-Mobile Port-Transmit Gain-#* |
| To configure Transmit Gain for all Mobile Ports | 273-<i>-Transmit Gain-#</i>* |
| To configure Inter Digit Wait Timer for the Mobile Port | 274-Mobile Port-Inter Digit Wait Timer-#* |
| To configure Inter Digit Wait Timer for all Mobile Ports | 274-<i>-Inter Digit Wait Timer-#</i>* |

| Description | Programming Commands |
|---|--|
| To configure First Digit Wait Timer for the Mobile Port | 276-Mobile Port-First Digit Wait Timer-#* |
| To configure First Digit Wait Timer for all Mobile Ports | 276-*-First Digit Wait Timer-#* |
| To configure Mobile Frequency Band for the Mobile Port | 278-Mobile-Mobile Frequency Band-#* |
| To configure Mobile Frequency Band for all Mobile Ports | 278-*-Mobile Frequency Band-#* |
| To configure Preferred Network Mode for the Mobile Port | 236-Mobile Port-Preferred N/w Mode-#* |
| To configure Preferred Network Mode for all Mobile Ports | 236-Preferred N/w Mode-#* |
| To configure DTMF Outdial Option for the Mobile Port | 237-Mobile Port- DTMF Outdial Option -#* |
| To configure DTMF Outdial Option for all Mobile Ports | 237-*- DTMF Outdial Option -#* |
| To configure DTMF Detection Option for the Mobile Port | 226-Mobile Port-DTMF Detection Option-#* |
| To configure DTMF Detection Minimum ON Duration for the Mobile Port | 227-Mobile Port-DTMF Detection Minimum ON Duration-#* |
| Reinstate the Default Settings | |
| To load default configuration in SIMADO GFX44 | 292-Reverse SE Password-#* |
| Restart the System | |
| To restart SIMADO GFX44 | 291-#* |
| Returned Calls to Original Callers (RCOC) | |
| To set Record Delete Timer | 221-Record Delete Timer-#* |
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| Description | Programming Commands |
|--|--|
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| Description | Programming Commands |
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Warranty Statement

Matrix warrants that its products will be free from defects in material and workmanship, under normal use and service for a period of twelve (12) months from the date of installation.

Matrix warrants the replacement or repair of any product or component(s) found to be defective during the applicable period and return the same, or grant a reimbursement credit with respect to the product or component. Parts repaired or replaced will be under warranty throughout the remainder of the original warranty period only. In case of software program design defect(s) that prevents the program from performing the specified functionality, affecting service and beneficial use of the product, Matrix reserves the right to incorporate solutions in its new release of the software and make it available to the customer within a reasonable period of time. The above said with regard to the software design defect, constitutes the sole obligation of Matrix and its authorized installer with respect to the product.

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2. If the product is not maintained under proper environmental conditions.
3. If the product is subjected to abuse, damage, misuse, neglect, fire, power flow, acts of God, accident.
4. If the product is installed or used in combination or in assembly with the products that are not supplied or authorized by Matrix or are of inferior quality or design than Matrix supplied products, which may cause reduction or degradation in functionality.
5. If the product is operated outside the product's specifications or used without designated protections.
6. If the completely filled warranty cards have not been received by Matrix within 15 days of the installation.

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This warranty is not transferable and applies only to the original user of the Product. All legal course of action subjected to Vadodara (Gujarat, India) jurisdiction only.

Regulatory Information

Federal Communications Commission Statement

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

DECLARATION OF CONFORMITY

Manufacturer's Name: Matrix Telecom Pvt. Ltd

Manufacturer's Address: 38-39, GIDC, Waghodia,
Dist Vadodara 391 760

Declares that the products

Product : GSM Gateway

Model Type: Simado GFX44

Trade Name: MATRIX

Product Options This declaration covers all options of the
above products

Conforms to the following product specification.

EMI/EMC:

Standard

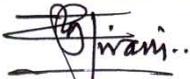
CISPR 22 Edition 5/ 5.2 2006-03 (Edition 5:2005 consolidated with amendment 1:2005 & 2:2006)
IEC 61000-3-2 Edition 2.2 2004-11 (Edition 2:200 consolidated with amendment 1:2001 and 2:2004)
IEC 61000-3-3 Edition 1.1 2002-03 (Edition 1:1994 consolidated with amendment 1:2001)
IEC 61000-4-2 Edition 1.2 2001-04 (Edition 1:1995 consolidated with amendment 1:1998 and 2:2000)
IEC 61000-4-3 Edition Third 2006-02
IEC 61000-4-4 Edition Second 2004-07
IEC 61000-4-5 Edition 1.1 2001-04 (Edition 1:1995 consolidated with amendment 1:2000)
IEC 61000-4-6 Edition 2.1 2004-11 (Edition 2:2003 consolidated with amendment 1:2004)
IEC 61000-4-8 Edition 1.1 2001-03 (Edition 1:1993 consolidated with amendment 1:2000)
IEC 61000-4-11 Edition Second 2004-03

SAFETY

IEC 60950 -1: 2001 first Edition.

Supplementary Information:

The Product herewith comply with the requirement of the Low Voltage Directive 73/23/EEC and the EMC Directive 89/336/EEC and carry the CE-marking accordingly.



Mr. Ganesh Jivani
Director

Date: 18th Oct 2008 Vadodara



Declaration of Conformity (RoHS Declaration)

We, Matrix Telecom Private Limited hereby declare that the product listed below, to which this Declaration of Conformity relates, is in the conformity with the requirement of the following European Union Directive for RoHS compliance:

| Document No. | Title | Edition/Date of Issue |
|---------------|-------------------------------------|-----------------------|
| EN 2002/95/EC | Restriction of Hazardous Substances | 27 January 2003 |

Type of Equipment : GSM Gateway
Equipment Name : Simado
Equipment Models : GFX44

Manufacturer's Name : Matrix Telecom Private Limited
Address : 39 – GIDC
Waghodia – 391 760
Dist: Vadodara, India

Additional Information:

The text of EU Directive 2002/95/EC may be found at the following website:
http://europa.eu.int/eur-lex/pri/en/oj/dat/2003/l_037/l_03720030213en00190023.pdf

Date : 15th May 2007
Place : Vadodara, India



Ganesh Jivani
(Director)
Matrix Telecom Private Limited



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MATRIX COMSEC

Head Office

394-GIDC, Makarpura, Vadodara - 390010, India.

Toll Free No: 18002587747

E-mail: Customer.Care@MatrixComSec.com

www.MatrixTeleSol.com