i-Page Server Manual



WiPath Communications Ltd

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Introduction

I-Page System is a messaging software for the dispatching of paging, email and text messages to a variety of wireless messaging devices. It is designed as a networked client/server system.

The central piece of the system is i-Page Server. It can communicate to a number of local or remote carriers, using various <u>protocols</u> and mediums. It stores all the users settings and all of the sent messages.

Every user must have an <u>account</u> created on the server to be able to access the server. Levels of access are controlled by the <u>users' rights</u>, set by the system administrator.

Once they have an account, every user can create their own list of <u>contacts</u> and <u>message</u> <u>templates</u>. They can also create their own <u>contact groups</u> to allow them to send a single message to multiple contacts in one hit. The group can consist of contacts of different types connected to different carriers. For even higher level of functional grouping, the user can create <u>folders</u>. The folder can consists of groups and/or contacts. To send one or more messages according to their plans, users can create <u>message schedules</u>. Every user can also create different <u>reports</u> on sent messages.

The system administrator can create contacts, contact groups, folders, message templates, schedules and reports that are visible to all accounts. The users can use those objects in the same way as their own, but they cannot edit or delete them.

All contacts, contact groups, folders, message templates, schedules and reports are stored on the server.

i-Pa	i-Page Server also allows the administrator to:		
		Set the server clients' connections and system parameters	
		Set users' accounts	
		Set <u>devices</u>	
		Set <u>carriers</u>	
		Set central <u>database</u>	
		Delete archived messages	
		Monitor connections	
		Monitor communications to devices and carriers	
		See communication log	
	П	See the password changes log	

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Client Connections

The server also exposes different connections to enable clients to communicate with it. The clients can select a connection type suitable for them.

COM (Component Object Model) Connection

Language-neutral binary-interface standard for inter-process communication, that enables another application (client) to talk to the server and control its functionality. See <u>COM Connection</u>

TCP/IP Connection

TCP/IP connection enables any client anywhere on the LAN or WAN to access i-Page Server. See TCP/IP Connection

TCP/IP Connection Simple

The "TCP/IP simple connection" allows any client application anywhere on the LAN or WAN to connect to i-Page Server and send a page message. See IP Messaging

System File Connection

A client application can connect to i-Page Server through the file system, send paging, SMS and email messages and receive a result. See <u>File Interface Connection</u>

Serial Port Connection

Serial Port Connection functionality allows any client application to connect to i-Page Server through a serial port and send a page, email and SMS message. See <u>Serial Port Messaging</u>

HTTP Connection

Under reconstruction. See HTTP

Communications Protocols

The following communications interface protocols are supported by i-Page:

TAP (PET) analogue modem dial-up protocol

TAP Direct Serial direct connection protocol

SNPP simple network paging protocol

SMTP email protocol

GSM SMS serial direct cellular device interface protocol

Server Registration

The i-Page Server application comes with a 30 day free trial period. This period starts after the first run of the application. During the trial, the functionality of the application is not limited in any way. In that period, the server needs to be registered.

To enter the registration data and to register i—Page Server you must be logged on to the machine as an administrator or you must have one of the machine administrator passwords at your disposal.

The application is registered per machine and the registration is valid for any user that can log on to that computer.



Entering User Data

Enter your name into the "User" box.

Enter your company name into the "Company" box.

Enter your email address into the "Email" box.

Creating License Key

Tools in the "Create License Key" group of controls are used when the user wants to change the number of clients the server is registered for.

Enter the number of clients that you want the server to be registered for into the "No Of Clients" box.

If you increase the number of clients, the "Calculate" key becomes enabled.

Press the "Calculate" key.

A newly calculated license key appears in the "License Key" box.

Obtaining Registration Key

Press the "Send" button.

Note: The "Send" button becomes enabled only after you have entered all the above data.

If you have an email client installed on the machine (Outlook, Thunderbird, etc.) your default email program will open and an email will be created with all your data, the license key and the vendor's address already entered. Send that email to the vendor and you will receive a matching registration key.

If you do not have an email client on the machine, you will have to obtain the registration key from the vendor by some other means.

Registering

Enter the registration key into the "Registration Key" box.

You can either copy-paste the key or type it into the box.

Press the "Register" button.

Note: The "Register" button becomes enabled only after you have entered all the above data, including the registration key.

You will be advised whether the registration was successful.

Changing Number of Clients

You can change the number of clients the server is registered for at any time. To do so you need to <u>create a new license key</u>.

After that, repeat the whole <u>registration procedure</u>. If the server is already registered it will continue to run with the existing number of clients as long as you do not obtain a new <u>registration key</u> from the vendor and use it to <u>register the application</u>.

Changing User's Data

You can change the user's data (the user's name, company name and email) at any time, even after the application is registered.

Click on any of the labels that display the user's data and it will turn into an editable window. Enter new data. As soon as you close the "Register" dialog, all data will be saved.

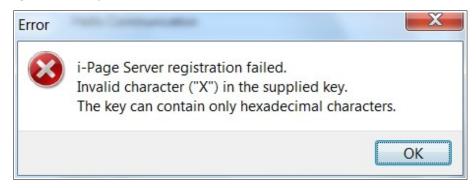
Registration Key

The re	gistration key for i-Page Server consists of:
	25 characters
	Characters are divided into 5 groups of 5 characters
	Groups are separated by hyphens ("-")
	Only hexadecimal characters are allowed $(A - F \text{ and } 0 - 9)$
Wa	rning: Typing the key in manually often results in typing errors.
	gistration engine will attempt to correct some errors that usually occur while entering the ation key. It will do this by ensuring that:
	Spaces are removed
	Characters are converted into uppercase
	Hyphens are removed
	Lowercase "L" characters are replaced by the number "1"
	Lower and uppercase "O" characters are replaced with the number "0" (zero)
	Characters are checked to be hexadecimal characters
	errors that the engine cannot resolve it will display an informative error message and the ation will fail.

Registration Errors

Invalid Character Error

The registration key contains a character that is not a hexadecimal character.



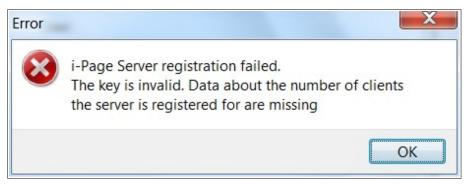
Application Type Error

The registration key does not belong to the i-Page Server application type.



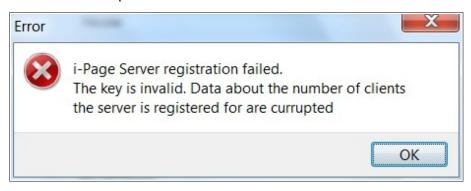
Client Data Missing Error

The registration key does not have embedded the number of clients that the registration is requested for.



Client Data Corrupted Error

The number of clients in the registration key that the registration is requested for has been tempered with or corrupted.



i-Page Server Manual Setup - Setup

Setup

Requirements

Operating System: Windows XP / Windows Vista / Windows 7 / Windows 8 / Windows 10

Disc Space: 29.9 MB

Hardware:

Hardware:	
	☐ Internet Connection
Paging (TAP)	☐ Internal or external modem
	☐ Serial port or USB-to-Serial
	☐ Phone connection
Paging (Direct TAP)	□ SitePage
	☐ Serial port or USB-to-Serial
SMS (GSM) Messaging	☐ GSM Modem
	☐ Serial port or USB-to-Serial

Installation

To install i-Page Server, use one of the i-Page installers¹:

IPageServer4Setup.exe	Installs i-Page Server Professional
IPagePersonal4Setup.exe	Installs i-Page Server PE (Personal Edition) and i-Page Client PE (Personal Edition)
IPageServerUpdate.exe	Updates any i-Page Server V3 or V4 to the latest server version and if the server is not installed installs a new copy.
IPagePersonalUpdate.exe	Updates any i-Page Server (PE) and i-Page Client (PE) V3 or V4 to their latest versions and if they are not installed installs new copies

¹ All of the installers can be found on the WiPath Communications official website.

Main Program

The i–Page Server application does not display any window when it is running. It runs in the background and the only way the user can see that it is running is its icon in the system tray.



There two types of the icon and they indicate the server state.



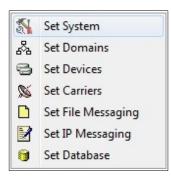
To access any functionality of the server, right-click on its icon in the system tray and select an option from the server pop-up menu.

Main Menu



Submenus

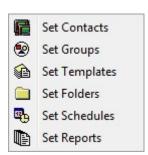
System Menu



Accounts Menu



Message Objects Menu



You cannot access any functionality before you log on to the server. After that, accessibility of the options on the menu depends on the rights that your account has.

Start i-Page Server

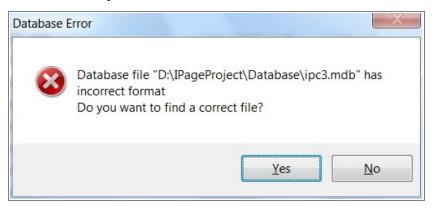
During start-up, the application will check some basic settings.

If the application does not find all the necessary files, you will get an error message.

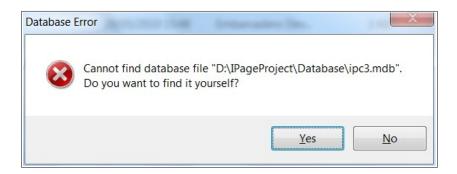
Database Error

If you have deleted the database, changed its name, moved it to another folder, or corrupted it in any way, you will get the 'Database error' message:

Current file is corrupted



Database moved or its name changed

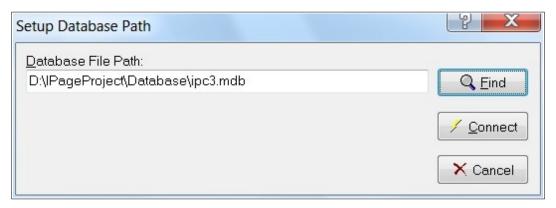


The message will offer you the choice to find the correct database file.

If you answer 'Yes', you will get a dialog box which will help you to find the database.

If you answer 'No', the application will terminate.

Correct Database Error



Click on the 'Find' button to open the 'Find File' dialog.

In the dialog title you will see the name of the database file that the system is expecting to find. Find that file and click the '**Open**' button to return to the previous dialog.

Select the 'Connect' button. If you get the 'Success' message, just click the 'OK' button to continue with the loading of the application. Otherwise, try to find another file.

Log In

Before the users can access any of the server's functionalities, i–Page server will require them to complete the authentication process.



Log In to the System

- ☐ Enter your user name in the "User Name" control not case sensitive
- ☐ Enter your password in the "Password" control case sensitive
- ☐ Press the "**Log In**" button or the **Enter** key.

Default login for the administrator:

☐ User Name: Admin

☐ Password: admin

Default login data for other users are assigned by the administrator.

It is strongly recommended that you change your password as soon as you log in to the system for the first time.

After you log in to the i–Page Server, the system will set all your rights according to the account rights set by the administrator.

Login Errors

If the login procedure is not successful, the application displays an error message along with the remaining number of trials allowed. The current default is three unsuccessful trials, before the application terminates.

Incorrect user name and/or password

You have entered either the wrong user name or the wrong password.

Check the password for upper and lowercase letters.

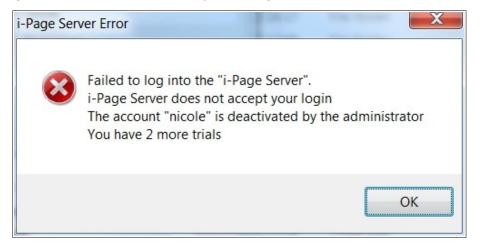
If you have forgotten your password, please contact your administrator



Account Deactivated

The system administrator can temporary deactivate any account.

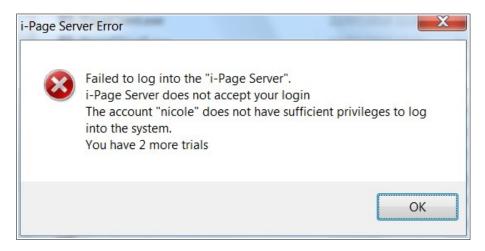
If you get this error, please contact your i-Page Server administrator.



Insufficient Rights

To log into i-Page Server you need the "Log on i-Page Server" right.

Please, contact your administrator.



Quick Log In

If only one person will be using i–Page Server on a particular computer, the "**Remember Me**" check box on the "Login" dialog may be checked after entering the user name and password. The next time you start the application, your login data will already be entered and all you need to do is to select the "**Log In**" button or press the "**Enter**" key.

The system can remember only one user at a time, so the last one will overwrite the previous. All authentication data is stored in a secure way.

No Login

If i-Page Server is used on a private machine and you always log in as an administrator, you can select the option to bypass the authentication procedure. See "System Options – Automatic Login".

Warning: Be aware that the "Quick Log In" procedure and bypassing the authentication pose a security risk.

Log In as a Different User

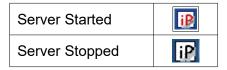
Select "Log Off <userName>" from the main pop-up menu.

A new login procedure will be initiated, where you can login as a different user.

Run Server

i-Page clients are not able to connect to i-Page Server until the server is launched and started.

The server state is indicated by its icon in the system tray:



Start Server

To start i–Page Server right-click on the <u>main pop-up menu</u> and select "**Start**", or just **double-click** on the server icon in the system tray.



If the server is successfully started its icon changes to the running is state and the call-out balloon appears pointing to the icon.



Stop Server

To stop i–Page Server right-click on the <u>main pop-up menu</u> and select "**Stop**", or just **double-click** on the server icon in the system tray.



When the server stops its icon changes to the stopped state and the call-out balloon appears pointing to the icon.



Before it stops, i-Page Server:

☐ Sends a broadcast message to all the clients advising them that it is going down.	
☐ Logs out all accounts that are currently logged in.	
☐ Disconnects all connections (COM and TCP/IP) to all the clients.	

- ☐ Releases all devices.
- ☐ Disconnects from all carriers.
- ☐ Stores all messages that are waiting to be sent to carriers in the database.
- ☐ Stores all report messages that are waiting to be sent back to clients in the database.

Note: You do not need to stop the server to change any of its settings.

Auto Start

To start the server as soon as the program loads see "System Options – Server Auto start".

Warning: Double-clicking on the server icon has a toggle effect. It will start the server if it is stopped, but it will also stop the server if it is started.

Connections

The server offers a huge range of different connections to enable clients to communicate with it. The clients can select a connection type suitable for them.

The connection engine provides the mechanism for opening, closing and managing a connection between clients and the server, using required technology. This is the server's syntax layer and it knows how to communicate using particular technology and how to translate and format client's information into the message understandable to the server. Every message is turned into the system message, regardless the communication technology that is used to receive it.

The clients can also request a return message about the success/failure of the original message. In that case the connection engine reverses the process – translates the system message into the format required by the technology and sends it back to the client.

COM (Component Object Model)

Component Object Model (COM) is a language-neutral binary-interface standard for inter-process communication created by Microsoft. It enables another application (client) to talk to the server and control its functionality.

i-Page Server is created as an automation out-of-process server. Access to the server and its services are defined in the i-Page COM Library manual².

To access i-Page Server from WiPath Clients, select the "**local**" server. The client must be located on the same machine as the server.



To connect to the server the client must pass the authentication. The client can change most of the settings on the server, send a message and receive a response.

COM Technology allows the client to:

- ☐ Set connection to the server
- ☐ Connect to the server
- ☐ Log in to the server
- ☐ Create, edit and delete their own
- 2 The "i-Page COM Library.pdf" can be downloaded from the WiPath Communications web site

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- Groups of contacts
- Folders
- Message templates
- Schedules
- Reports

Assign to their accounts system-wide contacts, contact groups, folders, message templates, schedules and reports
Create a message
Send the message to different carriers
See message results
See reports on sent messages

TCP/IP

TCP/IP connection enables clients anywhere on the network to access i-Page Server. The server machine must be visible to the clients, meaning that the server's IP must be accessible to the client machines.

The connection and communication between the server and clients is defined by i-Page Client/Server Protocol (iPP)³. It is an application level protocol that runs over TCP/IP and defines the functions to be performed by the protocol and the program that implements it.

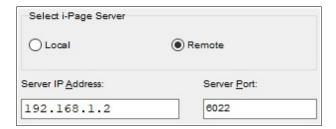
iPP uses TCP as its transport protocol and IP as its network (routing) protocol.

Protocol Stack

Application Layer	iPP
Transport Layer	TCP
Network Layer	IP
Data-link Layer	Device driver and interface card

To access i-Page Server from WiPath Clients, select the "**remote**" server. The client can be located anywhere on the LAN or WAN.

3 The "i-Page Protocol.pdf" file can be downloaded from the WiPath Communications web site



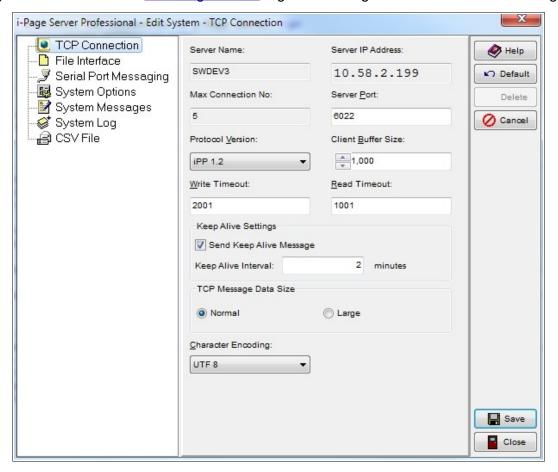
To connect to the server the client must pass the authentication. The client can change most of the settings on the server, send a message and receive a response.

TCP/IF	o co	onnection allows the client to:
	Se	et connection to the server
	Co	onnect to the server
	Lc	ng in to the server
	Cr	reate, edit and delete their own
	0	Contacts
	0	Groups of contacts
	0	Folders
	0	Message templates
	0	Schedules
	0	Reports
		ssign to their accounts system-wide contacts, contact groups, folders, message mplates, schedules and reports
	Cr	reate a message
	Se	end the message to different carriers
	Se	ee message results
	Se	ee reports on sent messages

TCP/IP Settings

To set values that are used by the i-Page Server TCP/IP connection, select "**System** | **Set System**" on the <u>main pop-up menu</u> and then select the "**TCP Connection**" item in the tree view on the left-hand side.

Only an account with the "Set i-Page Server" right can change the TCP connection settings.



TCP/IP Server Data

"Server Name" and "Server IP Address" are read-only controls, and they display the name and IP address of the machine that i-Page Server is running on.

Number of Clients

The "Max Connection No" control shows how many clients are allowed to connect to the client simultaneously. The value is read-only and it is set through the server registration process.

TCP/IP Server Port

Enter a TCP port number into the "Server Port" control.

This is the TCP port that i-Page Server uses to listen for new client connections. Every client initially connects to this port.

Port numbers can range from 0 to 65,535. Be aware that ports in the range 0 to 1,023 are reserved ports, so if you use them make sure that they are not conflicting with another application that runs on the same machine as i-Page Server.

You may also need to change the settings of the firewall that runs on the server machine.

Before selecting a server port we recommend that you consult your network administrator.

iPP Protocol

This is an application level protocol that i-Page Client uses to talk to i-Page Server. Select a protocol version that you want to use. In most cases you would select the highest one. Which one will be actually used, depends on the capabilities of each client.

The server can run simultaneously different versions of the protocol for each client.

Note: In the current version of i-Page, either the "iPP 1.1" or "iPP 1.2" protocol can be used.

TCP Buffer Size

i-Page Server has additional memory buffers to store messages intended for the clients, while waiting on TCP connection to come through. One buffer is created for each client and they are used to prevent the loss of messages due to lower speed or congestion of the network, or to control memory used by the messaging system.

If you suspect that some messages may be lost due to slow network traffic, increasing the buffer size may help. On the other hand, if the computer is low on memory, decreasing the buffer size could lower memory consumption.

Enter into the "Client Buffer Size" control the **number of messages** that the server can store for each client TCP/IP connection.

Minimum: 200

Maximum: 10,000

Default: 1,000

TCP Read and Write Timeouts

Read timeout indicates the number of milliseconds that the connection should wait on the client socket, before checking if there is any server message to send to the client.

Default: 1,000 milliseconds.

Write timeout indicates the number of milliseconds that the connection should wait on the server message, before checking if there is any message received from the client.

Default: 2,000 milliseconds.

Keep Alive

If required, i-Page Server can send "keep alive" messages to the client in regular time intervals.

To enable the server to send "keep alive" messages, check the "Send Keep Alive Message" check box.

Default: false.

Enter an interval within which the messages will be sent, into the "Keep Alive Interval" control. The interval value is entered in **minutes**.

Default: 2 minutes.

TCP Message Data Size

iPP protocol expects every message to be in a certain range size. It allows two different ranges to be used in a communication between the server and the client. Most of messages fit into the "normal" size and it is recommended to the user to use the "Normal" data size settings.

It could happened during the objects download or during report queries that the message goes over that size. If that happen, the server will truncate the message on the boundaries of the last object that fit into the required size. If the user notice that frequently all expected objects (contacts, schedules, etc.) are not loaded, they can increase this settings to the "Large" data size.

Warning: Make sure that the "TCP data Size" on the client is set to the same value.

TCP Character Encoding

iPP protocol allows the client and the server to use different character encoding to encode a TCP message.

To set the character encoding, select one of the options from the "Character Encoding" combo box.

Character Encoding Options	Description
ASCII	Uses characters from the basic 7-bit ASCII encoding set
ANSI	Uses characters from the extended 8-bit ASCII set, defined as the current computer's code page

Character Encoding Options	Description
UTF-8	Uses UTF-8 Unicode character encoding
Unicode	Uses UTF-16LE Unicode character encoding (little-endian byte order)
Unicode BE	Uses UTF-16BE Unicode character encoding (big-endian byte order)

Make sure that the "Character Encoding" on the server is set to the same value.

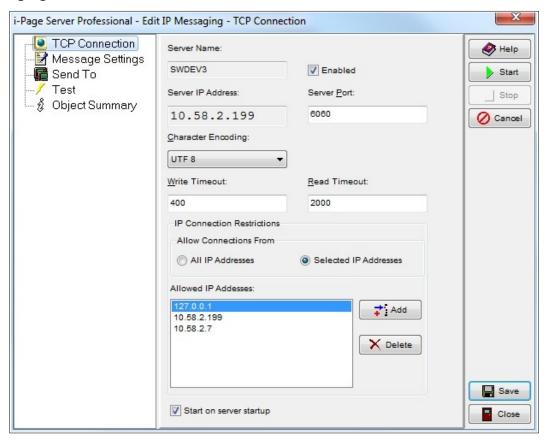
Warning: Both, the server and the client must have the same settings for the "TCP Message Size" and "Character Encoding". Otherwise, the client may not be able to connect to the server at all.

35

IP Messaging

The "IP Messaging" connection allows any client application to connect to i-Page Server and send a page message. The connection is established through the server's TCP/IP socket. The client does not have to implement any proprietary protocol or pass i–Page Server authentication.

To set the IP messaging connection, on the <u>main pop-up menu</u> select the "System | Set IP Messaging" item.



TCP Connection

Enable IP Messaging

To enable the IP Messaging connection, check the "**Enabled**" check box. If the connection is not enabled, you will not be able to start the connection or set i-Page Server to start IP Messaging on its startup.

IP Messaging Server Data

"Server Name" and "Server IP Address" are read-only controls, and they display the name and IP address of the machine that i-Page Server is running on.

IP Messaging Server Port

Enter a TCP port number into the "Server Port" control.

This is the TCP port that i-Page Server uses to listen for new IP messaging client connections. Every client connects to this port.

Default: 6060

Port numbers can range from 0 to 65,535. Be aware that ports in the range 0 to 1,023 are reserved ports, so if you use them make sure that they are not conflicting with another application that runs on the same machine as i-Page Server.

You may also need to change the settings of the firewall that runs on the server machine.

Before selecting a server port we recommend that you consult your network administrator.

IP Messaging Character Encoding

IP messaging connection allows the client to send a message, using different character encoding.

To set the character encoding, select one of the options from the "Character Encoding" combo box.

Default: ASCII

Character Encoding Options	Description
ASCII	Uses characters from the basic 7-bit ASCII encoding set
ANSI	Uses characters from the extended 8-bit ASCII set, defined as the current computer's code page
UTF-8	Uses UTF-8 Unicode character encoding
Unicode Uses	UTF-16LE Unicode character encoding (little-endian byte order)
Unicode BE	Uses UTF-16BE Unicode character encoding (big- endian byte order)

IP Messaging Read and Write Timeouts

Read timeout indicates the number of milliseconds that the connection should wait on the client socket, before checking if there is any server message to send to the client.

Default: 400 milliseconds

Write timeout indicates the number of milliseconds that the connection should wait on the server message, before checking if there is any message received from the client.

Default: 2,000 milliseconds

IP Connection Restrictions

To connect to the IP Messaging TCP port, the client does not have to pass authentication or to conform to the proprietary i-Page Client/Server Protocol (iPP). In some cases such connection may pose a security risk. "IP Connection Restriction" group of controls gives the i-Page server administrator opportunity to limit clients that can connect to IP Messaging connection.

To allow every client to send a message through the IP Messaging interface, in the "Allow Connections From" group of controls, select the "All IP Addresses" radio button.

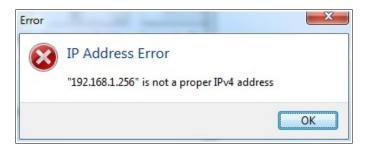
To allow only clients from certain IP addresses to send a message through the IP Messaging interface, in the "Allow Connections From" group of controls, select the "Selected Addresses" radio button. In that case the "Allowed IP Addresses" window and the "Add" button become enabled.

To add an allowed address press the "Add" button (shortcut: Ctrl+Ins).



In the "IP Address" dialog enter a valid IPv4 address. Select "OK" or just press the "Enter" key and the address will be added to the "Allowed IP Addresses" window.

Note: If you enter an invalid IP address, you will get an error message and the address will not be added to the "Allowed IP Addresses" window.



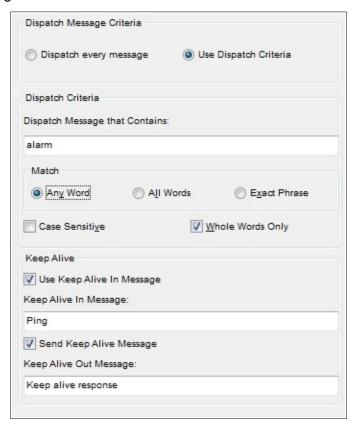
To delete an IP address from the "Allowed IP Addresses" window, select the address and press the "**Delete**" button (shortcut: **Ctrl+Del**).

IP Messaging Auto Start

If you want the IP Messaging connection to start automatically every time i-Page Server starts, check the "Start on server startup" check box.

IP Messaging Message Settings

To set the messaging criteria, select the "Message Settings" item on the left-hand side of the dialog.



Dispatch Message Criteria

The "Dispatch Message Criteria" group of controls sets criteria for a message that will be re-paged by the server.

To re-page every message that the server receives on the IP Messaging connection, select the "Dispatch every message" option.

To re-page only messages that comply to the certain criteria, select the "Use Dispatch Criteria" option.

To set the criteria, enter a text string that the message must contain to be re-paged into the "Dispatch Message that Contains" control. The text can be a single word, a phrase or several unrelated words.

Select a type of search in the "Match" control.

- 1. Any Word The message will be re-paged if any word from the search string is found in the message.
- 2. All Words –The message will be re-paged only if all words from the search string are found in the message, but not necessarily in the same order.
- 3. Exact Phrase The message will be re-paged only if all words from the search string are found in the message and in the same order.

If you wish to have the search text to be case sensitive, check the "Case Sensitive" check box.

If you check the "Whole Words Only" check box, then the server will look only for stand-alone words from the search phrase.

Example: the word "gun" would not be recognized in the word "gunmen".

Otherwise, the server will look for any partial match in any word in a message.

Keep Alive Message

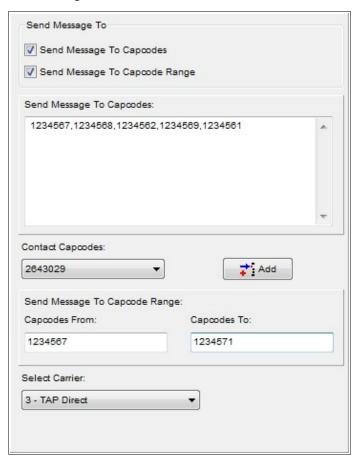
To make sure that their TCP connection is still alive and/or to prevent inactivity timeouts, some clients send a special message in regular intervals.

If clients that connect to the IP Messaging connection are doing that, check the "Use Keep Alive In Message" check box and enter such message into the "Keep Alive In Message" control. i-Page Server will treat such message separately and will not re-page it.

If your clients expect a response on the "keep alive" message, check the "Send Keep Alive Response" check box and enter the message that the clients expect into the "Keep Alive Out Message" control. In that case, as soon as the server receives the "keep alive in" message it will send the "keep alive out" message back to the client.

IP Messaging Send To

To set pager id's that the message will be re-page to, select the "Send To" item on the left-hand side of the dialog.



IP Messaging Capcodes

To re-page the message to the individual, non adjacent capcodes, check the "Send Message To Capcodes" check box and enter all capcodes into the "Send Message To Capcodes" control.

If you enter more than one capcode, separate entries by:

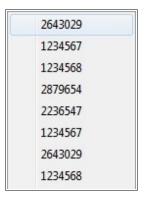
space $('\cdot')$, coma (','), semicolon (','), colon (','), forward slash (',') or back slash (',') character – or any combination of them. You can use these characters with or without a space before or after them.

Example:

1234560 • 1234567 , 1234562 ; 1234563 / 1234564

IP Messaging Contacts

If you have set i-Page Server contact (see <u>Message Objects – Contacts</u>), their capcodes will appear in the "Contact Capcodes" control. To add a capcode, position the cursor in the "Send Message To Capcodes" window, select the capcode in the "Contact Capcodes" combo and press the "**Add**" button (shortcut: **Ctrl+Ins**).



You can also right-click in the "Send Message To Capcodes" window and from the pop-up menu select the capcode.

Capcode Range

You can also enter a range of adjacent capcodes that the message will be re-paged to. To do that, check the "Send Message To Capcode Range" check box.

Enter a capcode that starts the range into the "Capcodes From" control and a capcode that ends the range into the "Capcodes To" control.

The system will re-send the message to all the capcodes in the range, including the capcodes entered into the "Capcodes From" and "Capcodes To".

Note: If some of the individual capcodes, entered into the "Send Message To Capcodes" control, overlap with capcodes in the range, the server will not duplicate the message. The message to such capcodes will be re-paged only once.

IP Messaging Carrier

A carrier represents a service provider and a protocol that i-Page Server uses to send different types of messages (see <u>Carriers</u>). All carriers, defined in the i-Page system, appear in the "Select Carrier" combo box. To set the carrier that will be used for re-paging messages, select it from the "Select Carrier" control.

The system will allow you to save only a carrier option that can be used for paging messages.

Test IP Messaging

To test you settings and complete IP Messaging functionality, select the "**Test**" item on the left-hand side of the dialog.



In the "Connection" window, you can see:

- Status of the IP Messaging server (with its IP address and listening port)
- Status of every client connection (with its IP address and port)
- Message that is sent to a client
- Message received from the client
- Keep alive message received from the client
- Keep alive response sent to the client

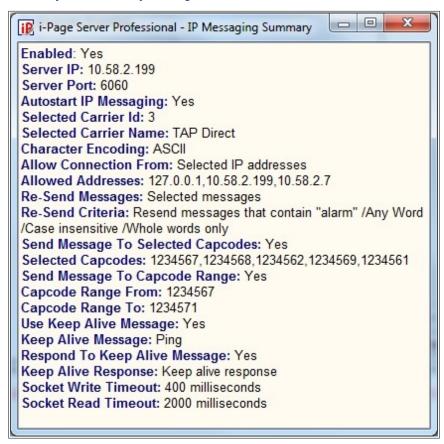
To send a message to all connected clients, enter a message text into the "Send Test Message" control and press the "Send" button (shortcut: F5).

Warning: The "Send" button is disabled if there is no contacts connected to the IP Messaging connection and there is no text in the "Send Test Message" control.

IP Messaging Summary

To see detailed info about your settings for the IP Messaging connection, either click on the "Object Summary" item in the left-hand side panel, or use the shortcut **Ctrl+I**.

See also "Object Summary Dialog".



Start IP Messaging

To start the IP Messaging connection, select the "Start" button in the control panel of the dialog (on the right-hand side).

Shortcut: F6

Warning: IP Messaging will not start if the "Enabled" check box is not checked.

Note: If you want IP Messaging to start automatically, see <u>Auto Start</u>.

Stop IP Messaging

To stop the IP Messaging connection, select the **"Stop"** button in the control panel of the dialog (on the right-hand side).

Shortcut: Ctrl+F6

Warning: When you stop the IP Messaging connection, all connected client will be "gracefully" disconnected (means that the server will send a disconnect message to all the clients).

File Interface Connection

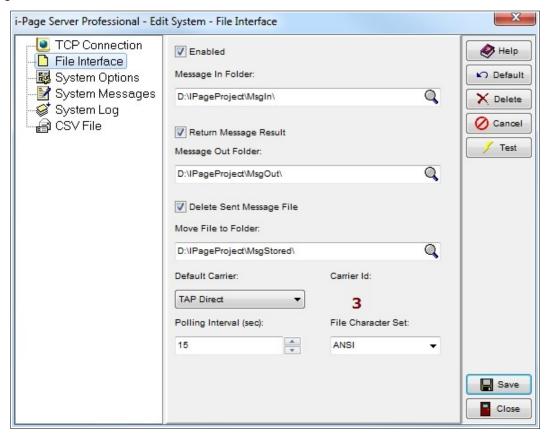
A client application can connect to i-Page Server through the file system. It can send paging, SMS and email messages and receive a result by placing and retrieving message files into and from designated folders.

The format and the structure of the message files are defined in "i-Page File Connection Protocol4":

Message In File

Message Result File

To set the file interface connection, on the <u>main pop-up menu</u> select the "System | Set System" item. On the "Edit System" dialog select the "File Interface" item on the left-hand side of the dialog.



File Send Messages

To send a message, place a file with the message into the "Message In Folder".

4 "i-Page File Connection Protocol.pdf" file can be found on the WiPath Communications web site

To set the folder, either type the full path to the folder into the "Message In Folder" control or click on the 'find' icon a inside the control and find the folder through the usual "Browse For Folder" dialog.

File Message Result

If you want to receive a <u>file with the send message result</u>, check the "Return Message Result" check box.

To set the folder in which files with result messages will be placed, either type the full path to the folder into the "Message Out Folder" control or click on the 'find' icon inside the control and find the folder through the usual "Browse For Folder" dialog.

Save Sent Messages

After the server reads a message from the message in folder, the message file is automatically deleted.

If you want to save the send message file, UNCHECK the "Delete Sent Message File" check box and select a folder to store the sent messages in.

To set the folder, either type the full path to the folder into the "Move File to Folder" control or click on the 'find' icon inside the control and find the folder through the usual "Browse For Folder" dialog.

If you do NOT want to save sent messages, check the "Delete Sent Message File" check box (**default**).

Default Carrier

The carrier field in the <u>message file</u> is an optional field. If the user does not enter a value for the message carrier, the system will use the default carrier.

To set the default carrier, select a carrier from the "Default Carrier" control.

File Encoding

To set a character encoding of the message file, select between the options in the "File Character Set" control.

File Encoding Options

ASCII	Uses characters from the basic 7-bit ASCII encoding set
ANSI	Uses characters from the extended 8-bit ASCII set, defined as the current computer's code page
UTF-8	Uses UTF-8 Unicode character encoding

If the file is formatted using UTF-8, then the first 3 bytes on the first line are: 0xEF 0xBB 0xBF. It is required by many text processing and spreadsheet applications in order to recognise UTF-8 format.

File Messages

For the format of file messages see "File Message In" and "File Message Out"

Polling Interval

To set the interval in which i-Page Server will check the message in folder for new messages, enter a number of seconds into the "Polling Interval" control.

Min: 5 seconds

Max: 600 seconds (10 minutes)

Default: 10 seconds

Enable File Connection

To enable the file connection, check the "**Enabled**" check box. As soon as the file connection is enabled, the server will start checking the message in folder for new messages in every polling interval.

Warning:

- The system will not allow you to save the enabled file connection if any of the 3 folders (message in, message result, saved messages) have the same value.
- The value of the message result folder is not checked if the "Return Message Result" is not selected.
- The value of the saved messages folder is not checked if the "Delete Sent Messages" is selected.

Test File Connection

i-Page Server includes a tool for a complete test of the file connection. During the testing, a message file is created and stored into a 'message in' folder. It is then retrieved, decoded and processed. An actual message is sent, through a selected carrier to a selected address. A result message is created and stored into the 'result message' folder.

To test the file connection, press the "**Test**" button on the right-hand side of the "Edit File Interface" dialog. The "Message File Interface Test" dialog pops up.



Enter the receiver's address of the message you want to send into the "Enter Address" control.

Select a message format. There are five message type options to choose from:

- Complete with header
- Partial with header
- Complete without header
- Partial without header
- Basic message

If you select any of the partial options, the "Use Message Fields" control becomes enabled.

Select fields you want to include into the message.

Note: Required message fields are always selected and you cannot unselect them.

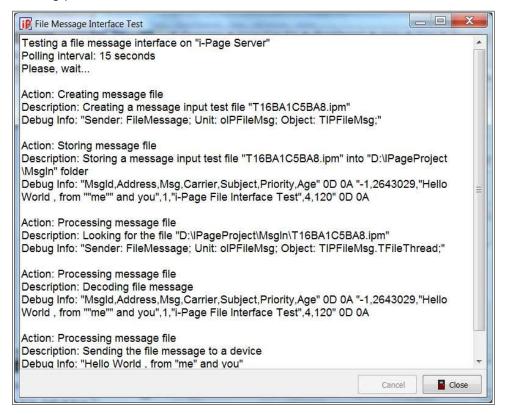
Select a carrier from the "Select Carrier" control.

Type a message into the "Message" window. Your message can include any printable character. It can also include quotations and you can insert one or more line breaks.

To see the actual formatted message, press the "Show" button.

To send the message to the selected address through the file interface, press the "**Send**" message.

The "File Message Interface Test" display window will pop-up and you will be able to follow the whole testing process in real time.



Delete Message Files

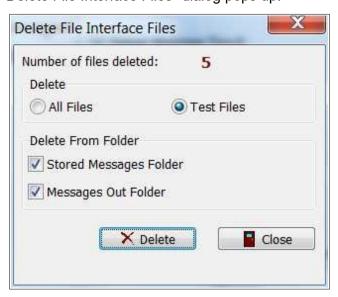
According to the "i-Page File Connection Protocol", i-Page Server is responsible for maintenance of the "Message In" folder. All message files from that folder are deleted automatically as soon as the server retrieves them.

Message files from the "Result Message" and "Saved Sent Messages" folders are used by the file client application, which is also responsible to maintain these folders.

If this is not possible, the server administrator has an ability to delete files in these two folders.

To delete the files, select the "Delete" button on the right-hand side of the "Edit File Interface" dialog.

The "Delete File Interface Files" dialog pops up.



Select a type of a file you want to delete. Options are:

- All files deletes all files in the selected folder
- Test Files deletes only file created during the test procedure the server can tell apart test files from the user's files

Select folders that you want to delete files from. Options are:

- Stored Message Folder (saved sent messages)
- Message Out Folder (result messages)
- Both

Click on the "Delete" button.

A warning message pops up:



Click on the "Yes" button and all the files of the selected type from all the selected folders are deleted.

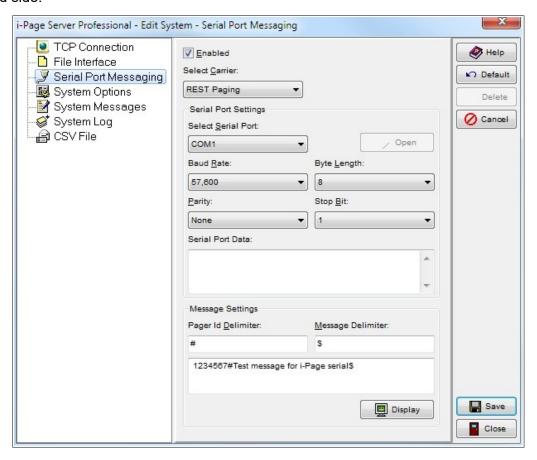
On the top of the "Delete File Interface Files" dialog you will see the number of deleted files.

Serial Port Messaging

Serial Port Messaging feature allows any client application to connect to i–Page Server through a serial port and send a page, email and SMS message. The client does not have to implement any proprietary protocol or pass i–Page Server authentication.

It is also possible to connect a device to the port that will actually create a message and send it to the serial port.

To set the serial port messaging connection, on the <u>main pop-up menu</u> select the "System | Set System" and on the "Edit System" dialog, select the "Serial Port Messaging" item on the left-hand side.



Enable

To enable the "Serial Port Messaging" functionality, check the "**Enable**" check box. It will set and open the selected serial port and the server will start listening on the port for messages.

The system will save enabled functionality only if the port and message settings are correct.

Warning: When you click the "Save" button with the "Enable" check box checked, the server will check:

- · Whether the port settings are correct
- · Whether it can open the selected serial port
- Whether the "Message Settings" are correct

If any of above settings are not correct, you will get an error and the "Serial Port Messaging" functionality will be disabled.

Select Carrier

A carrier represents a service provider and a protocol that i-Page Server uses to send different types of messages (see <u>Carriers</u>). All carriers, defined in the i-Page system, appear in the "Select Carrier" combo box. To set the carrier that will be used for sending messages, select it from the "Select Carrier" control.

Serial Port

To select the serial port that the server will use to listen for the message data, select the port in the "Select Serial Port" control.

Note: The control lists only ports that are registered with the operating system.

Serial Port Settings

To be able to communicate with the port and to a device that could be connected to the port, you must set some port settings:

Baud Rate

- Default: 57,600

Byte Length

- Default: 8

Parity

- Default: None

Stop Bit

- Default: 1

Serial Port Message Settings

To enable the server to correctly read messages from the selected serial port, it is necessary to delimit the address of the mobile device that the message will be sent to and the message text that will be sent.

Pager Id Delimiter

Set the pager id delimiter that will separate the device address and the text message.

The id delimiter must be present and must be different than the "Message Delimiter".

Note: If the message is sent by a device, the same setting must be present on the device.

Message Delimiter

Set the message delimiter that will separate the message from the device address and all other messages on the serial port.

The message delimiter must be present and must be different than the "Pager Id Delimiter".

Note: If the message is sent by a device, the same setting must be present on the device.

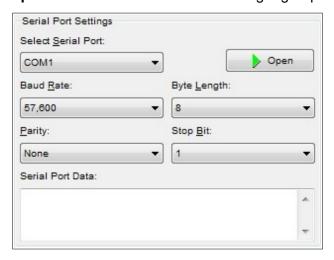
Test Serial Port

Serial Port Test

To test the selected serial port, you have to disable the "Serial Port Messaging" functionality.

Make sure that the "Enable" check box is not checked and, if necessary, save the settings.

The "Open" button in the "Serial Port Settings" group of controls becomes enabled.



Click on the button and you will get a message either that the port is opened successfully or that there is an error in accessing the port.

If the port is opened, the button will change to the "Close" button and anything that is send to the port will be visible in the "Serial Port Data" window.

To finish the serial port test, just click on the **"Close"** button.

Message Settings Test

To test the message settings, Select the "**Display**" button in the "Message Settings" group of control.



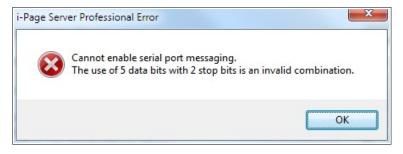
The formatted message will be displayed in the "Message Settings" window.

Serial Port Messaging Errors

The following errors will occur only if you try to save the enabled serial port messaging functionality:

Serial Port Settings

Incorrect serial port settings



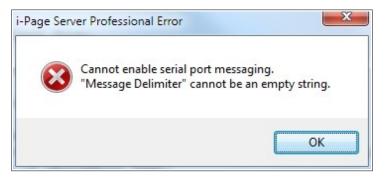
Error accessing the port

Message Settings

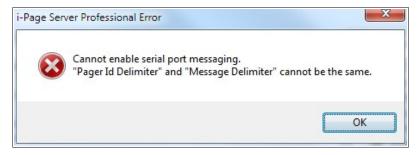
Missing pager id delimiter



Missing message delimiter



Pager id and message delimiters have the same value



HTTP

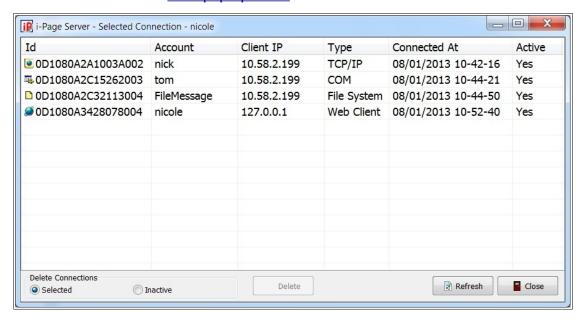
The HTTP connection is currently under construction with substantial changes being introduced.

Monitoring Connections

The "Connections" dialog allows the user to see and delete all active and inactive server connections.

Only an account with the "See Server Connections" right can see all the connections.

Select "Connections" on the main pop-up menu.



For each connection the server displays:

Connection Id	Unique session id assigned by the server when the connection is created
Account	Id of the account that uses the connection
Client IP	IP address of the machine that the account uses to connect to the server
Type of Connection	Shows the type of connection
Connected At	Time at which the client connected to the server.
Active	Whether the connection is still active (connected and logged on)

Types of Connection



Refreshing Display

If a new connection is accepted by the server or status of any existing connection changes the display is refreshed automatically.

To be sure that the display is up-to-date, the user can also press the "**Refresh**" button (shortcut: **F5**).

Removing Connection

Active Connection

The administrator can forcibly disconnect any of the clients:

- ☐ Check the "Selected" radio-button
- ☐ Select the connection you want to disconnect
- ☐ Press the "**Delete**" button (shortcut **Ctrl+Del**)

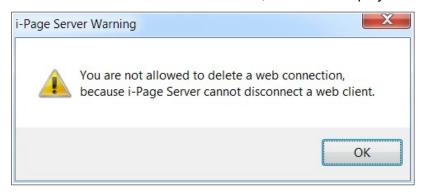
The server will gracefully disconnect and send a message to the client.



Web Connection

The administrator is not allowed to delete a web connection. i-Page Server cannot send any unsolicited message neither to the web server or browser and it is not possible to disconnect a web client gracefully. If the connection is deleted it could result in unpredictable behaviour.

If the user tries to delete the web connection, the server displays a warning



and connection is not deleted.

Inactive Connection

The administrator can also clear all inactive connections:

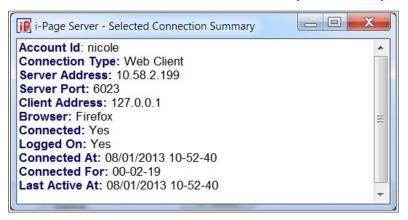
- ☐ Check the "Inactive" radio-button
- ☐ Press the "Delete" button (shortcut Ctrl+Del)

All inactive connections will be removed from the system.

Note: i-Page Server automatically removes inactive connections periodically.

Connection Summary

If you want to see more information about the connection just double-click on the connection or select it and use the shortcut: **Ctrl+I**. See also "<u>Object Summary Dialog</u>".

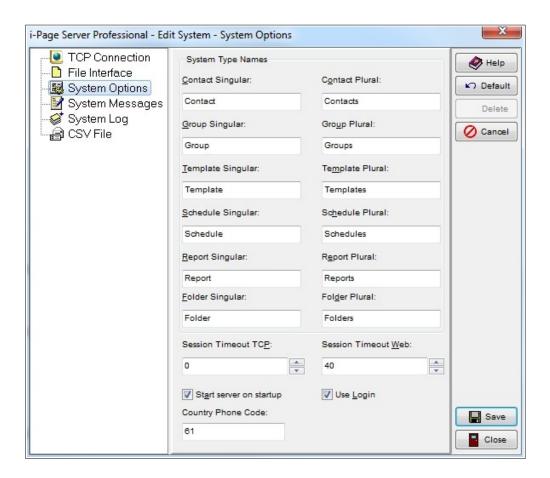


System Settings

System Settings are settings that are used for the whole i-Page System. Some of them need to be set before running the system. All of them have standardised default values which usually meet most of the user demands.

System Options

Sets i-Page Server options. Some of the options, like "System Type Names", are used throughout i-Page System.



System Type Names

i-Page allows the user to create contacts, contact groups, message templates, folders, schedules and reports for faster and easier message sending and manipulation. These message objects are displayed in the WiPath applications, like i-Page Client, i-Page Web Client and i-Page Server forms

and dialogs under default names - "Contact", "Group", "Template", "Folder", "Schedule" and "Report". If you would like i-Page System to use different names for them (e.g. "Officer", "Crew", "Message Blueprint", "Area", "Plan", etc.) you can change them here.

i-Page will change all references to the "contact", "group", "template", "folder", "schedule" and "report" words (singular and plural) in the program and the changes will propagate to all the clients. Next time the client logs into i-Page Server, all displays on all client windows will be updated with the new type names.

Note: Grid column titles in WiPath client applications will not be changed, because they are set by the user.

Warning: If you do not enter anything in the "Plural Form" control, the system will create a regular plural by adding "s" to the respective singular form. So, be careful that you do not end up with an irregular plural form (e.g. policemans) on your display.

Contact Display Names

In the "Contact Display Names" group of controls, enter the singular and plural form of the names that i-Page will use for "contact".

Group Display Names

In the "Group Display Names" group of controls, enter the singular and plural form of the names that i-Page will use for "group".

Template Display Names

In the "Template Display Names" group of controls, enter the singular and plural form of the names that i-Page will use for "template".

Schedule Display Names

In the "Schedule Display Names" group of controls, enter the singular and plural form of the names that i-Page will use for "schedule".

Report Display Names

In the "Report Display Names" group of controls, enter the singular and plural form of the names that i-Page will use for "report".

Folder Display Names

In the "Folder Display Names" group of controls, enter the singular and plural form of the names that i-Page will use for "folder".

Client Inactivity Timeout

The administrator can set the server to automatically disconnect inactive clients. If the client does not access the server within the "session timeout" time, its session will be cancelled and its connection to the server closed. Both inactivity timeout values are express in **minutes**.

TCP Session Timeout

To set the inactivity timeout for remote (TCP/IP) clients, enter a number of **minutes** into the "Session Timeout TCP" control.

i-Page Server will close the connection gracefully, which means that it will send a disconnect message to an inactive client with an appropriate explanation.

If you want to disable the inactivity checking, just set the value of the "Session Timeout TCP" control to '0'.

Max: 600 minutes (10 hours)

Min: 0 minutes

Default: *0 minutes* – inactivity check is disabled.

Web Session Timeout

To set the inactivity timeout for web (HTTP) clients, enter a number of **minutes** into the "Session Timeout Web" control.

The session for Web clients is controlled and maintained by the i-Page module, installed into the respective web server. It controls browser connections to the web server. If the user's browser does not access the web server within the "timeout" time, its session is terminated. Next time the same user tries to access the server the "Log In" page will be returned.

To start a new session, the user will have to pass the authentication procedure again.

The inactivity check for web users CANNOT be disabled.

Max: 600 minutes (10 hours)

Min: 5 minutes

Default: 400 minutes

Server Auto start

If you would like i-Page Server to start automatically when the application is launched, check the "Start server on startup" box.

Automatic Login

Before the user can access any of the server's functionalities, i—Page server will require her/him to complete the authentication process.

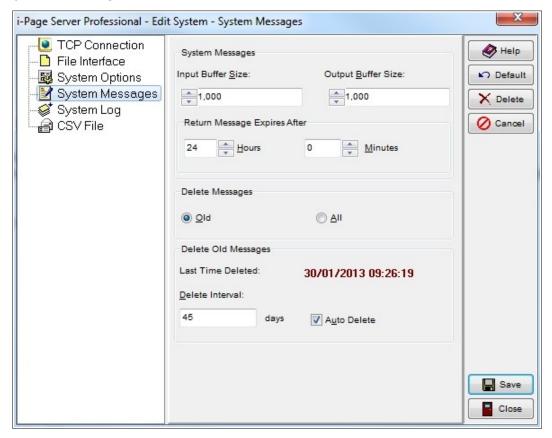
If you always use i-Page Server as an administrator on a private machine, you can bypass the login procedure by unchecking the "**Use Login**" check box. In that case the program will bypass the authentication on start up and log the user automatically as an administrator.

Warning: Be aware that bypassing the authentication may pose a security risk.

System Messages

Sets parameters used to control processing, storing, archiving and deleting of user messages and feedback messages that are returned to the client.

On the <u>main pop-up menu</u> select "System | Set System" and on the "Edit System" dialog select the "System Messages" item.



Message Management

All messages that are received from clients are stored in the database and put into the input buffer to wait to be processed by i-Page Server and sent to carriers. Message results (success or error) are stored in the database and then put into the output buffer to wait to be sent back to clients. Every message result is sent only to the account that sent the message. After the message result is returned to its account, the message is archived and its memory image destroyed.

If the server crashes or is closed down, on its restart both buffers are reloaded from the database.

To set the **number of messages** received from clients that the server can store in its input buffer, enter the value into the "Input Buffer Size" control.

To set the **number of messages** waiting to be returned to clients that the server can store in its output buffer, enter the value into the "Output Buffer Size" control.

If the message in the output buffer cannot be returned to the account that initiated it (e.g., the account is no longer connected to the server) the server will wait for the account to connect and will then return its message to it.

To set a time interval that the server will wait for the account to connect, enter values in hours and minutes into the "Return Message Expires After" group of controls.

If the account does not connect again in that time interval, the message will be archived and its memory image destroyed.

Warning: The result message is not returned necessarily to the same client but to the same account.

Deleting Messages

Controls deletion of archived messages. Active messages, still in processing, cannot be deleted by the user.

Select a delete option in the "Delete Messages" group of radio-buttons.

All Messages	All messages from all clients archived in the server database will be deleted
Old Messages	All messages from all clients archived in the server database that are older than the number of days in "Delete Interval" will be deleted

Press the "Delete" button or use the shortcut: Ctrl+Del.

You will get an appropriate warning with the option to cancel the delete operation.



Delete Old Messages

Old messages may be deleted manually or the program can be set to delete them automatically.

The "Last Time Deleted" control shows the last time old messages were deleted.

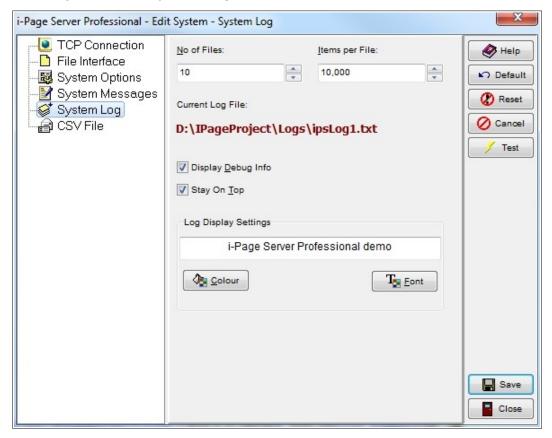
In the "**Delete Interval**" control, enter a number of **days** that the program will keep archived messages in the database. All messages older than that interval will be deleted.

If you select the "Auto Delete" control, every time the program starts it will delete all messages older than the delete interval. If the program runs continuously, every day between midnight and 2:00 AM it will check for old messages and delete them.

System Log

i-Page Server logs all events and their results created during communication with carriers and devices.

To set the system log, on the <u>main pop-up menu</u> select "System | Set System" and on the "Set System" dialog select the "System Log" item.



Log data are stored in the "<IPageServer Folder>\Logs" folder

Example:

"C:\Program Files\IPageServer3\Logs\"

and it is named "ipsLog<log number>.txt"

You can open that file with any text editing tool (e.g. Notepad) or you can use the <u>log viewer</u> tool that comes with i–Page.

Log File

The log file stores all data in the following format:

```
☐ Log Item: <item_no> (<date> <time>)
☐ Action: <action_performed>
☐ Description: <action_description_and_result>
☐ Debug Info: <additional_info>

Example:
Log Item: 421 (21/07/2010 12:18:19)
Action: Initialising "Device Modem" device
Description: Initialising "Dial-up Modem" type device
Debug Info: "ATQOVIMIEOX4&D2" OD
```

Log Settings

To set the number of distinctive entries that will be stored in one log file, enter a value in the "Items per File" control.

When the number of items per file is reached, i-Page Server will switch to a new log file.

To set the number of separate files that i-Page Server will maintain, enter a value in the "No of Files" control.

When the *number* of files is reached, i-Page Server will start overwriting the first file.

The control "Current Log File" displays the name and the path of the log file that i-Page Server is currently using. This control is read-only.

Reset

Selecting the "Reset" button will reset all log counters. The system will switch to the first file and start counting items in this file from '1'.

Log Display Settings

i-Page includes a <u>log viewer</u> – tool that allows the user to see all the entries in the log file in real time.

If you would like to see more information about server/carriers/devices communication that is logged in that file, check the "Display Debug Info" box.

Note: If that communication works without problems, it is better to uncheck this control, because debug data makes the log harder to follow and may be confusing for an every day user.

If you want the log display to always stay on top of all the other forms in the program, select "Stay On Top".

To set the background colour of the viewer, select the "Colour" button.

Shortcut: Ctrl+C

To set a font for the viewer select the **"Font"** button.

Shortcut: Ctrl+F

All changes to the font and colour will display in the text box above buttons.

Test Log

To test current log display settings, select the "Test" button.

Shortcut: Ctrl+T

The application will open the system log with its current settings.

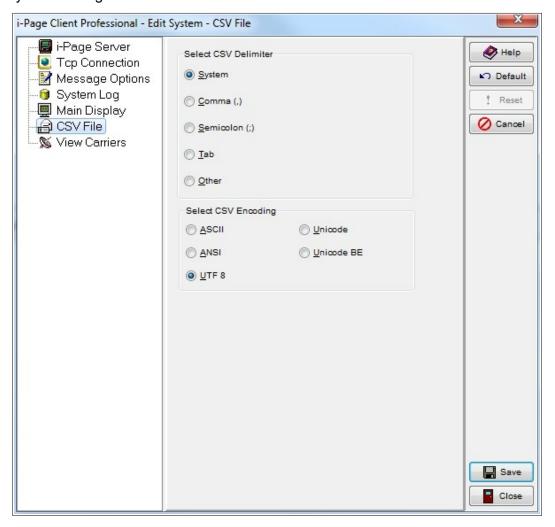
System CSV File

i-Page uses a CSV format to copy sent messages from different displays, to export reports to a file and to send report result as an attachment to an email.

CSV is a common, relatively simple file format that is supported by large number of applications. A CSV file can contain any number of records, separated by a line break. Each record contains fields, separated by some character as delimiter. Usually, all records have an identical sequence of fields.

Different programs use different variations of CSV format. That is why i-Page allows the user to set some parameters of the CSV format so that the user can make it compatible with a desired application.

To set i-Page CSV format, on the <u>main pop-up menu</u> select "System | Set System" and on the "Set System" dialog select the "CSV File" item.



i-Page CSV File Format

In practice CSV is not a single, well-defined format. The term is usually used for a large family of formats, which differ in many ways.

To make it more portable, the i-Page system defines CSV format which is followed by most implementations:

- 1. The file contains records of data that are divided into fields.
- 2. Each record is located on a separate line, delimited by line break characters **CR** (0xD; #13) **LF**(0xA; #10). Line break characters on the last line are optional.
- **3.** The first line of the file contains a header.
- **4.** Each record is divided into fields, separated by the delimiter character.
- **5.** The last field in the record is never followed by the delimiter.
- **6.** Each record has the same number of fields.
- **7.** The header contains names that corresponds to the fields in the file and has the same number of fields as the records in the rest of the file
- **8.** A field can be empty it means that only the delimiter character is entered.
- **9.** If a field contains line break characters (*CRLF*), the delimiter or double-quotes ("), it must be enclosed in double-quotes. If a double-quote appears in the field then it must be duplicated.
- **10.** All fields contain a plain text, which means that data within fields is interpreted as a sequence of characters, not as a sequence of bits or bytes.
- **11.** The text in the field can be formatted using ASCII, ANSI (default machine code page), Unicode UTF-8 and Unicode UTF-16LE character set.
- 12. The field delimiter character is always an ASCII character.
- 13. If the file is formatted using UTF-8, then the first 3 bytes on the first (header) line are: OxEF OxBB OxBF. It is required by many text processing and spreadsheet applications in order to recognise UTF-8 format.
- **14.** If the file is formatted using UTF-16LE, then the first 2 bytes on the first (header) line are: **OxFE* OxFE*. This is called BOM (Byte Order Mark) and it is required by many text processing and spreadsheet applications in order to recognise UTF-16LE format.

CSV Delimiter

To set a character that will delimit fields in one record, select between the options in the "Select CSV Delimiter" control.

Field Delimiter Options

System The "List Separator" option, from the computer's "Control Panel | Region and

Language" settings is used

Comma ASCII character 'comma' - "," is used (0x2C - #44)

Semicolon ASCII character 'semicolon' - ";" is used (0x3B - #59)

Tab ASCII control character 'Horizontal tab'' is used (0x09 - #9)

Other The user can enter any printable ASCII character

CSV Encoding

To set a character encoding of the CSV file, select between the options in the "Select CSV Encoding" control.

CSV Encoding Options

ASCII Uses characters from the basic 7-bit ASCII encoding set

ANSI Uses characters from the extended 8-bit ASCII set, defined as the

current computer's code page

UTF-8 Uses UTF-8 Unicode character encoding

Unicode Uses UTF-16LE Unicode character encoding (little-endian byte order)

Unicode BE Uses UTF-16BE Unicode character encoding (big-endian byte order)

Note: If you select the "Unicode" option (UTF-16LE) and you intend to open a CSV file in current versions of MS Excel, please select the "Tab" delimiter option. Otherwise, Excel will not be able to parse fields properly and you will have to do it manually.

System Database

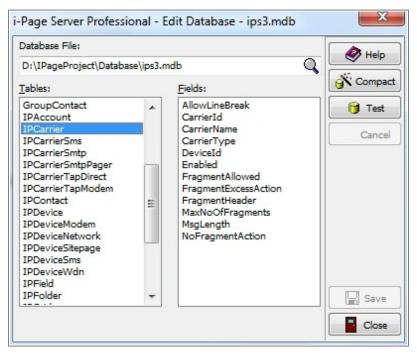
i-Page Server stores all information about objects, system settings, messages and all settings for every account and client program in its database.

The default file is "ips3.mdb" and it is is stored in the "<INSTALL FOLDER>\Database\" folder:

Default: C:\Program Files\IPageServer\Database\ips3.mdb

The account with the <u>Set Database</u> right can change the system database.

Select "System | Set Database" on the main pop-up menu.



The "Database File" control shows a full path to the current database file the system is using.

The "Tables" window shows all tables in the database.

If you select any table in the "Tables" control, all the fields in the respective table are shown in the "Fields" window.

Changing Database

Find Database

To change the system database file, select the "Find" button.

Shortcut: Ctrl+F

Use the usual open file dialog to find a new file.

After you select a new file, it is shown in the "Database File" control.

Cancel Operation

To cancel the operation, select the "Cancel" button. This button becomes enabled only after you select a different database file.

Shortcut: Ctrl+Q

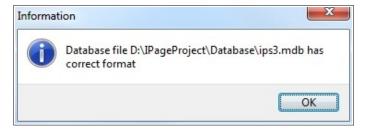
Save Changes

To change the system database permanently (and to enable the "Save" button), you must check that the new file has required structure and is not corrupted.

To do that, select the "Test" button.

Shortcut: F9

If the file is correct, you will get a confirmation message from the system.



Tables from the new database are shown in the "Tables" window and the "Save" button becomes enabled.

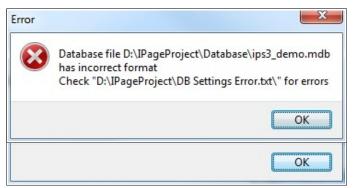
Click on the "Save" button.

Shortcut: Ctrl+S

Warning: You must close down and restart i-Page Server for changes to take effect.

When you close the "Edit Database" dialog, you will get the following warning:

If you select an incorrect database file, you will get an error message.



For detailed information about errors, check the "DB Settings Error.txt" file. It is created in the server installation folder.

Default: "C:\Program Files\IPageServer\DB Settings Error.txt"

Compact and Repair Database

If you notice that the database has grown too large even after you deleted all the messages or there is a suspicion that the file is corrupted, you can try to repair and compact it.

Find the database you want to compact and select the "Compact" button.

Shortcut: Ctrl+X

Note: You need to stop i-Page Server first. As long as the server is running, the "Compact" button is disabled.



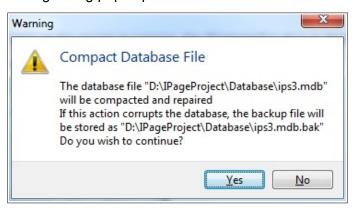
In the "Compact and Repair Database" dialog the name of the database file that you want to compact is already entered in the "Database File Name" control.

The "Old File Size", read-only control shows the size of the file.

Select the "Compact" button.

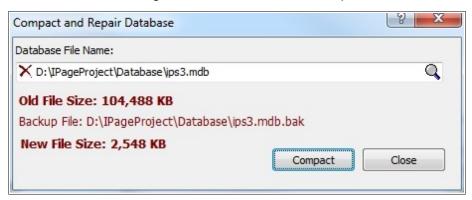
Shortcut: F9

The warning dialog pops up.

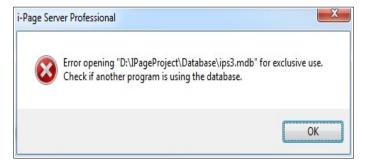


If you want to continue with the operation, select "Yes" or just press the "Enter" key.

After few moments the dialog will show the result of the operation.



If an error occurs during the compact and repair operation, you will get a descriptive error message. The most common error is shown bellow:



Close any program (E.g. MS Access) that are using the same database file.

If you want to revert back to the old file, just remove the new one and delete a backup extension ".bak" from the backup file.

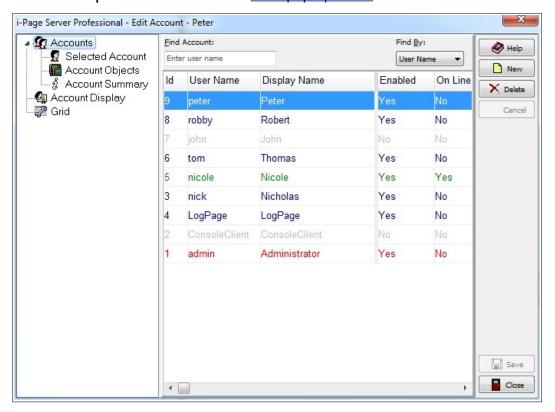
Accounts

To log into i-Page Server the user must have her/his account created on the server.

User accounts can be created, edited and deleted only by the system administrator and users that have "<u>Set Accounts</u>" right assigned by the administrator.

Other users have some limited rights to edit their own account. See Change Personal Account

Select "Accounts | Set Accounts" on the main pop-up menu.



Find Account

"Edit account" page has a search tool that helps the user to find an account.



The account can be located in the grid by its user name or display name.

Select one of these options in the "Find By" combo box.

Default: user name.

Start typing the account's user name or display name into the "Find Account" window. If the match is found the account in the grid will be selected and moved at the top of the grid.

New Account

Click on the "New" button in the 'Edit Account' dialog box.

Shortcut: Ctrl+N



Enter the user's account name in the "New Account" window.

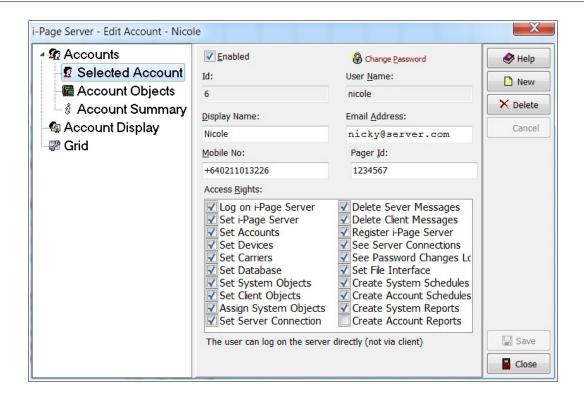
The user will use that name as a 'user name' to log into i-Page Server. The system will also create a first-time-login password identical to the user name. The administrator can change the account's password.

Warning: User names are unique to the i-Page System and cannot be changed after you create the user.

Edit Account

Select the account in the grid.

Select the "Selected Account" node to get the panel with the account's settings, or just double-click on the account in the grid.



Enter a name in the "Display Name" control. This is the name that the system will use in its messages and displays referring to this account.

Enter a properly formatted email address into the "Email" control (optional).

Enter a properly formatted mobile number into the "Mobile No" control (optional).

Enter a pager number into the "Pager Id" control (optional).

Set user's rights in the "Access Rights" control, by checking a check box next to the right you wish to assign to the user.

Note: If you position the mouse over any of the rights, its explanation will appear beneath the "Access Rights" control.

Access Rights

Right	Explanation
Log on i-Page Server	The user can log in directly to the server application (not via client)
Set i-Page Server	The user can change some server system settings
Set Accounts	The user can create, edit and delete accounts
Set Devices	The user can create, edit and delete devices
Set Carriers	The user can create, edit and delete carriers
Set Database	The user can change the system database file
Set System Objects	The user can create, edit and delete system wide contacts, groups and templates on i-Page Server
Set Client Objects	The user can create, edit and delete its own contacts, groups and templates on i-Page Client
Assign System Objects	The user can assign system wide contacts, groups and templates to themselves on i-Page Client
Set Server Connection	The user can change server TCP/IP connection settings on i-Page Server
Delete Server Messages	The user can delete messages archived on the server
Delete Client Messages	The user can delete its own subset of messages stored on the server
Register i-Page Server	The user can register the server and change the registration type (number of allowed client connections)
See Server Connections	The user can see and disconnect all clients connected to the server
See Password Changes Log	The user can see all password changes and save them to a file
Set File Interface	The user can create, edit, delete, start and stop client file interface on the server
Create System Schedules	The user can create, edit and delete system wide schedules on i-

Right	Explanation
	Page Server and disable and delete accounts' schedules
Create Account Schedules	The user can create, edit and delete its own schedules on i-Page Client
Create System Reports	The user can create, edit and delete reports on any account's messages
Create Account Reports	The user can create, edit and delete reports but only on their own messages

Note: If the selected user is "admin", the "Access Rights" control is disabled, because the admin account has all rights assigned to it and that cannot be changed.

Enable Account

By unchecking the "Enable" box the administrator can temporarily disable any account without deleting it. The disabled account cannot log into i-Page Server and cannot connect to the server via any type of client.

To enable the account check the "Enable" box.

Change Account's Password

To change the account's password, click on the "Change Password" button.

Hot keys: Alt+P



Enter a new password into the "New Password" control.

Enter the new password again into the "Confirm New Password" control.

Click the "Save" button or press the Enter key.

Delete Account

To delete selected account, select the "Delete" button.

Shortcut: Ctrl+Del

You will get a warning from the system that the account will be deleted permanently and the option of whether to delete it or not. If you choose to delete it anyway, the account will be deleted permanently.

Warning: If you delete the account, all contacts, groups, templates, folders, schedules and reports created and owned by that account will be deleted as well.

Note:	
	It is not possible to delete the "admin" account.
	It is not possible to delete the account that is currently directly logged in to the i-Page
	Server application. This means you cannot delete yourself
	It is not possible to delete any account that is online – logged on to i-Page Server via i-
	Page Client.

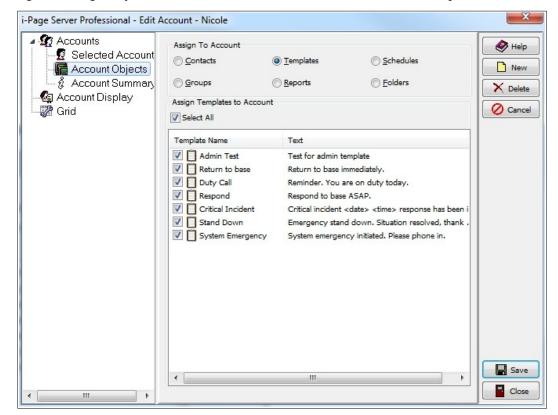
Assign Message Objects

The system administrator can assign system wide message objects to the account.

☐ If you select any account from above, the "Delete" button becomes disabled.

Message objects are objects that the user uses to send a message. There are 6 types of message objects:

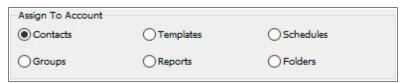
Contacts
Contact groups
Message templates
Schedules
Reports
Folders



To assign message objects to the selected account, select "Account Objects" item.

Select Object Type

To select the object type that you want to assign to your account, click on one of the radio-buttons in the "Assign To Account" group of controls.



An appropriate page for that type of the object will open in the middle panel.

Assign Object

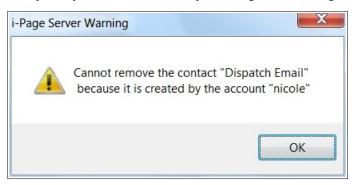
The list displays all objects of that type – system-wide objects and ones owned by the account. All objects that are already assigned to the selected account are checked.

If you want to assign an object to the account, check the box in front of the object.

If you want to assign all objects of the selected type to the account at once, check the "Select All" check box.

If you want to remove (unassign) an object from the account, uncheck the box in front of the object.

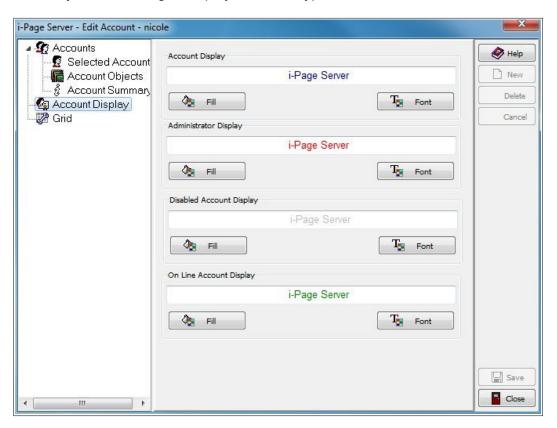
You cannot remove objects that are created by the account (via client). All such objects appear blurred. If you try to uncheck them you will get a warning message.



Note: If you want to see all properties of the object, just double-click on its entry in the displayed list.

Account Display

Sets the way the account grid displays different types of accounts.



Account Types

Account	Regular account, which is enabled and not currently connected
Administrator Account	Default administrator ("admin")
Disabled Account	Account temporary disabled by the administrator
On Line Account	Account logged into i-Page Server through i-Page Client

Click on the "Fill" button for the appropriate type and select default background colour for that type.

Click on the "Font" button for the appropriate type and select default font colour for that type.

The new selection will display in the text box above the selection buttons.

Save Account

None of the changes you make to any of the pages are saved automatically. Saving changes works separately for each page.

Example

If you have entered some changes on one of the pages, the "Save" button will become enabled but only when you are on that page. If you move to another page it will resume the value for that page. Your changes on another page will not be lost, so you can always go back and save or cancel changes.

If you wish to save some changes, go to the respective page and save them by clicking the "Save" button or the "Enter" key.

Shortcuts: Ctrl+S or Enter

Warning: If you close the dialog box without saving changes on any of the pages, you will get a warning and another opportunity to save your changes. If you choose 'Yes' to save changes on exit, all changes on all pages will be saved.

Cancel Changes

If you are not satisfied with changes to the account and wish to return to all previous settings, you can cancel all the changes at once by selecting the "Cancel" button.

The cancel button works the same way as the "Save" button, i.e. its functionality is always associated only with the currently opened page.

Shortcut: Ctrl+Q

Note: You can cancel only unsaved changes.

Account Summary

To see detailed info about the selected account, either click on the "Account Summary" item in the left-hand side panel, or use the shortcut **Ctrl+I**.



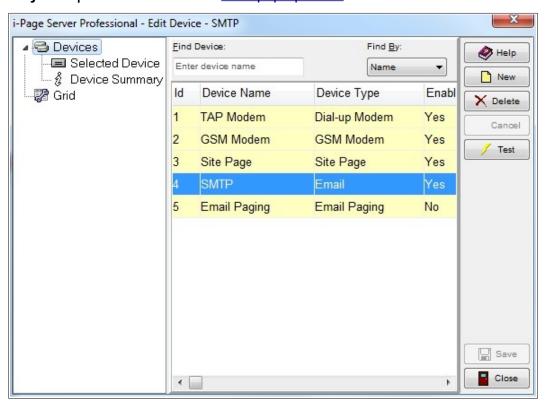
See also "Object Summary Dialog".

Devices

A device represents a piece of hardware that i-Page Server uses to connect to carriers.

Only an account with the "Set Devices" right can change the device settings.

Select "System | Set Devices" on the main pop-up menu.



Find Device

"Edit device " page has a search tool that helps the user to find a device.



The device can be located in the grid by its name or ID.

Select one of these options in the "Find By" combo box.

Default: name

Start typing the device name or ID into the "Find Device" window. If the match is found the device in the grid will be selected and moved at the top of the grid.

New Device

Click on the "New" button in the 'Edit Device' dialog box.

Shortcut: Ctrl+N

Select a device type in the "New Device" dialog.



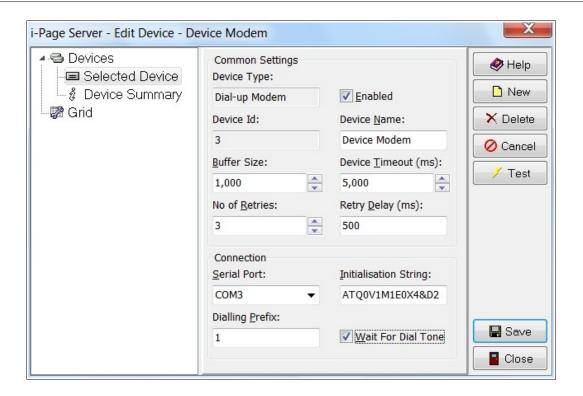
Click the "Create" button or press Enter (or just double-click on the device type).

A new device of the selected type is created with the default settings for that type.

Edit Device

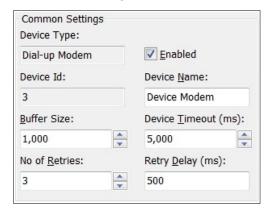
In the device grid, select the device you wish to edit.

Select the "Selected Device" node or just double-click on the device in the device grid to get the panel with device data.



Device Common Settings

There are some settings that are common to all types of devices.



Controls "Device Type" and "Device Id" are read-only. Their values are set when the device is created and cannot be changed.

Name

In the "Device Name" control, enter a name that will identify the device. Choose some name that will be easily recognisable to you. The name is case sensitive.

Buffer Size

Every device maintains its own memory buffer to store messages that are waiting to be processed by the device and sent to its carrier. The buffer is designed as a priority queue (messages with higher priority are always put at the top of the gueue).

Enter a maximum number of messages that the device queue can hold into the "Buffer Size" control.

Minimum: 200

Maximum: 10,000

Default: 1,000 messages

Timeout

Every device, while processing the message and communicating with a carrier, can encounter an error. Such an error could lock the device and make it inaccessible permanently. To prevent this from occurring, i-Page Server times out the device at a certain time interval. If the protocol that the device is using to communicate with the carrier defines such timeout intervals, the server will use values from the protocol. Otherwise a value entered in the "Device Timeout" control will be used.

To set the device timeout, enter a value in milliseconds into the "Device Timeout" control.

Minimum: 0

Maximum: 20,000

Default: 5,000

Retries

If the device encounters a temporary error in its own functioning or communication with the carrier, the user can set the device to retry the whole operation.

To set a number of times that the device will try to send a message, enter a value into the "No Of Retries" control.

Minimum: 1

Maximum: 25

Default: 1

Retry Delay

The system needs some time to reset the device between retries.

Enter a value for the retry delay in milliseconds into the "Retry Delay" control.

Default: 300.

Enable Device

To enable the device, check the **"Enabled"** box. The server disregards devices that are not enabled.

You cannot enable the device if you do not assign unique resource address to it (COM port or server address and port number).

Delete Device

To delete the selected device, select the "Delete" button.

Shortcut: Ctrl+Del

You will get a warning from the system that the device will be deleted permanently and the option of whether or not to delete it. If you choose to delete it anyway, the device will be deleted permanently.

You will not be able to delete a device that is already assigned to one or more carriers. In that case you will get an error message and the delete operation will be cancelled.



If you still want to delete the device, you must first assign all the carriers associated with it to another device of the same type.

Save Device

If you wish to save changes to the device, click the "Save" button or hit the "Enter" key.

Shortcuts: Ctrl+S or Enter

When you try to save the device settings, if the device is enabled, the program will check that:

- $\hfill \square$ the device has a resource address assigned to it
- ☐ the same address is not already assigned to another device

If the device does not have a unique address assigned to it, the program will save all other settings but it will disable the device. The user will get an appropriate error message.



Warning: If you close the dialog box without saving changes, you will get a warning and another opportunity to save your changes.

Cancel Changes

If you do not wish to save your changes to any of the settings and wish to return to previous settings, you can cancel all the changes by selecting the "**Cancel**" button.

Shortcut: Ctrl+Q

Note: You can cancel only unsaved changes.

Device Types

Dial-Up Modem



Modem Resource Address

In the "Serial Port" control, select a serial (COM) port that the modem is connected to.

Initialisation String

Initialisation string (init string) is a group of AT commands issued to the modem by a communications program at the beginning of a communication session, which establishes an active modem configuration.

Some modems need an initialisation string to work properly. Check your modem documentation for this and enter a string recommended by the modem producer (if any) into the "Initialisation String" control.

i-Page Server uses the initialisation string to set the modem to respond to the server commands in the expected way.

It is very easy to make an error while entering the initialisation string.

To make sure that the string is acceptable to the modem and to i-Page Server, press the "**Test**" button. In the Test Display you will be able to see whether the modem has accepted the initialisation string. If it is not accepted the testing will be stopped.

Some errors can lock the modem and some can make it work in the a way that is unacceptable to the server.

If the error is critical, the system will warn the user and reject the entry or, if possible, automatically correct the error.

Dialling Prefix

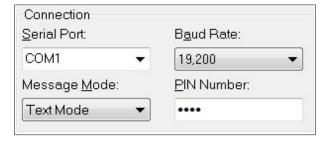
If your modem is connected to the external phone line via PABX (not directly), it is necessary to dial a number for an outside line, wait for a dial tone, and then dial the telephone number of the remote modem.

Enter the number that you need to dial to get the public line into the "Dialling Prefix" window.

Wait For Dial Tone

If you check the "Wait For Dial Tone" check box, your modem will, after dialling a special PABX number for an outside line, wait for the dial tone from the public line before it starts to dial the recipient's number. If no dial tone is detected in the specified time (depends on the modem settings – the range is usually 30 to 50 seconds), the modem hangs up.

GSM Modem



GSM Resource Address

In the "Serial Port" control, select a serial (COM) port that the modem is connected to.

GSM Baud Rate

In the "Baud Rate" control, select a baud rate that the modem is set to.

Note: i-Page Server cannot change the modem baud rate. If you do not select the same baud rate the modem is set to, you will not be able to communicate with the modem.

Message Mode

The SMS specification has defined two modes in which a GSM modem or mobile phone can operate. They are:

- 1. SMS text mode
- 2. SMS PDU mode (PDU stands for Protocol Data Unit)

Note: SMS PDU mode is more commonly supported by GSM/GPRS modems and mobile phones than SMS text mode.

If you press the "**Test**" button in the Test Display you will be able to see which modes are supported by your modem.

PIN Number

Enter your SIM card PIN number into the "PIN Number" control.

During the test, the server will also check if the modem PIN security feature is active (if the SIM card requests the PIN number). If it is, the server will use the PIN number from the "PIN Number" control to unlock the modem. You may need to run the test twice to get a successful result.

Warning: If the modem PIN security feature is active and you have entered the wrong PIN, running the test more than three times can lock either the SIM card, the device or both.

You will then have to use some other software (Hyperterminal) to enter a PUC (PIN Unlock Code) or PUK (PIN Unlock Key), provided by the service operator. If the wrong PUC (PUK) is entered ten times in a row, the device may become permanently blocked and unrecoverable, requiring a new SIM card.

SitePage and SitePage Scope



SitePage Resource Address

In the "Serial Port" control, select a serial (COM) port that SitePage is connected to.

SitePage Baud Rate

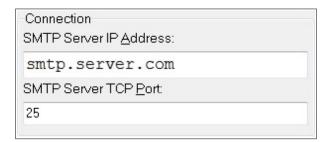
In the "Baud Rate" control, select a baud rate that SitePage is set to.

Note: i-Page Server cannot change SitePage baud rate. If you do not select the same baud rate SitePage is set to you will not be able to communicate with the device.

SitePage Scope is a SitePage device with the "Scope" protocol. The i-Page Server settings are the same as for the SitePage running the "TAP Direct" protocol.

It is recommended for the SitePage Scope device that the "Device Timeout" control is set to at least 9,000 milliseconds (9 seconds).

Email And Email Pager



Email Resource Address

Enter IP address of your SMTP server into the "SMTP Server IP Address" control. This is the server that your network is using for sending emails.

Enter the port number that your server is using into the "SMTP Server TCP Port" control. The usual port for SMTP messages is *25*.

SNPP (Simple Network Paging Protocol)



SNPP Resource Address

Enter IP address of your SNPP server into the "SNPP Server IP Address" control. This is the server that your provider is using for sending paging messages over the Internet.

Enter the port number that your server is using into the "SNPP Server TCP Port" control. The usual port for SNPP messages is 444.

Default: 444

Device Timeout Default: 20,000

Note: Most of providers will require a pretty large value for the "Device Timeout". The usual value is 20,000 milliseconds (20 seconds).

REST Device



REST Resource Address

Enter the host name of your REST server into the "HTTP Host Address" control. This is the server that you will send page messages to.

If your REST provider requests that the HTTP connection to their server is protected with the SSL/TLS encryption, check the "Use SSL" check box.

Use SSL Default: true

Note: If you check the "Use SSL" check box then your message will be send over the "https" connection, otherwise the server will use the "http" connection.

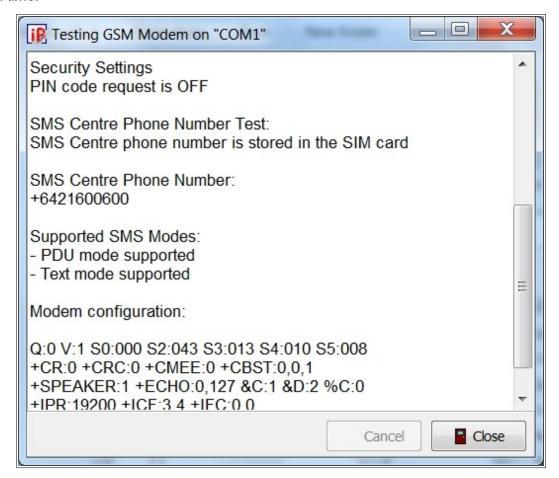
Test Device

To test the selected device settings, press the "**Test**" button.

Shortcut: Ctrl+T.

Note: You need to save the settings before you can test them.

The "Test Display" window will pop-up and you will be able to follow the whole testing process in real time.



The i-Page Server test feature performs different sets of tests on different device types.

Dial-Up Modem Test

- 1. Tests a connection to the modem
- 2. Tests the initialisation string

- 3. Retrieves information about a modem model
- 4. Retrieves information about a modem producer
- 5. Retrieves stored modem configuration
- 6. Retrieves stored phone numbers

GSM Modem Test

- 1. Tests a connection to the modem
- 2. Retrieves information about a modem model
- 3. Retrieves information about a modem producer
- 4. Tests if the modem has a SIM card
- 5. Tests whether the modem requests a PIN number
 - If it does, sets the PIN number
- 6. Tests the modem security settings
- 7. Tests if the SMS Centre phone number is already stored in the SIM card
- 8. Retrieves the SMS Centre phone number
- 9. Retrieves SMS modes that the modem supports (Text and/or PDU)
- 10. Retrieves stored modem configuration
- 11. Retrieves stored phone numbers

SitePage Test

1. Tests a connection to the device

Email Test

- 1. Pings the SMTP server
- 2. Connects to the SMTP server
- 3. Disconnects from the SMTP server

SNPP Test

- 1. Connects to the SNPP server
- 2. Disconnects from the SNPP server
- 3. The test is considered successful if i-Page server is able to connect to and disconnect from SNPP server successfully.

REST Test

A connection to a REST server cannot be tested, because most of providers request a full authentication to access the server. The authentication data can be set only on the respective carrier level. That is why all REST connection tests are performed on the REST type of the carrier.

Device Summary

To see detailed info about the selected device, either click on the "Device Summary" item in the left-hand side panel, or use the shortcut Ctrl+I.



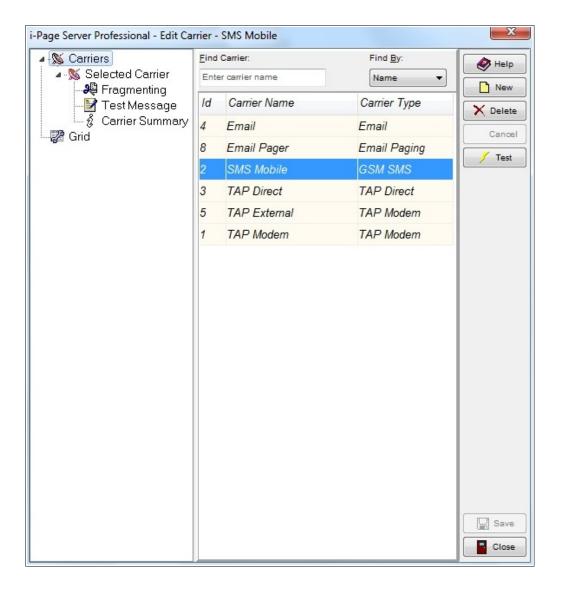
See also "Object Summary Dialog".

Carriers

A carrier represents a service provider and a protocol that i-Page Server uses to send different types of messages.

Only an account with the "Set Carriers" right can change the carrier settings.

Select "System | Set Carriers" on the main pop-up menu.



Find Carrier

"Edit carrier " page has a search tool that helps the user to find a carrier.



The carrier can be located in the grid by its name or ID.

Select one of these options in the "Find By" combo box.

Default: name.

Start typing the carrier name or ID into the "Find Carrier" window. If the match is found the carrier in the grid will be selected and moved at the top of the grid.

New Carrier

Click on the "New" button in the 'Edit Carrier' dialog box.

Shortcut: Ctrl+N

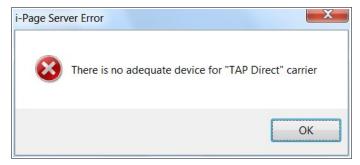
Select a carrier type in the "New Carrier" dialog.



Click the "Create" button or press Enter (or just double-click on the carrier type).

A new carrier of the selected type is created with the default settings for that type.

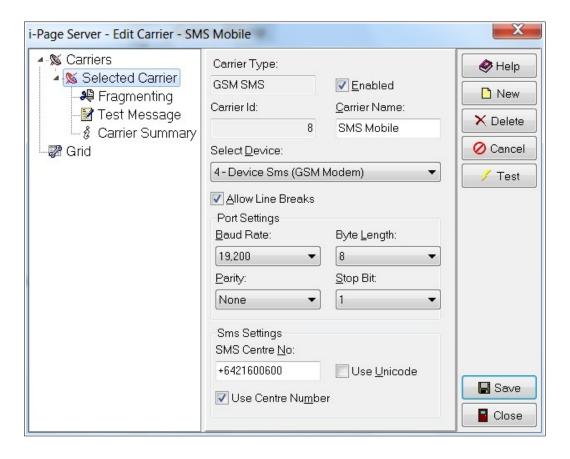
The system will try to find a device that matches the selected type of carrier. If it cannot find one, it will display an error message and cancel the operation. A new carrier will not be created.



Edit Carrier

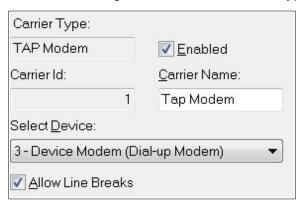
In the carrier grid, select the carrier you wish to edit.

Select the "Selected Carrier" node or just double-click on the carrier in the carrier grid to get the panel with carrier data.



Carrier Common Settings

There are some settings that are common to all types of carriers.



Controls "Carrier Type" and "Carrier Id" are read-only. Their values are set when the carrier is created and cannot be changed.

Name

In the "Carrier Name" control, enter a name that will identify the carrier. Choose some name that will be meaningful to you. The name is case sensitive.

Select Device

From the "Select Device" combo, select a device that the carrier will be assigned to. Multiple carriers can be assigned to the same device.

The device type must be compatible with the carrier type.

Allow Line Breaks

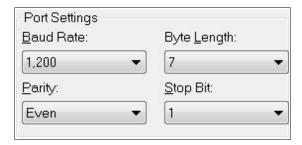
If you want the system to preserve line breaks in a message text, check the "Allow Line Breaks" box. The system will format line breaks according to the protocol the carrier is using.

Message Length

To set the message length, select the "Fragmenting" node in the left-hand side panel. See "Message Fragmenting"

Serial Port Settings

All carriers which use devices that are connected to serial ports require the user to enter port settings.



For port settings consult your carrier provider documentation.

Enable Carrier

To enable the carrier check the "Enabled" box.

Delete Carrier

To delete the selected carrier, select the "Delete" button.

Shortcut: Ctrl+Del

You will get a warning from the system telling you that the carrier will be deleted permanently, and you will be given the option of whether or not to delete it. If you choose to delete it anyway, the carrier will be deleted permanently.

You will not be able to delete a carrier that is already assigned to one or more contacts. In that case you will get an error message and the delete operation will be cancelled.



If you still want to delete the carrier, you must first assign all the contacts associated with it to another carrier.

Save Carrier

None of the changes you make to any of the pages are saved automatically. Saving changes works separately for each page.

Example

If you have entered some changes on one of the pages, the "Save" button will become enabled but only when you are on that page. If you move to another page it will resume the value for that page. Your changes on another page will not be lost, so you can always go back and save or cancel changes.

If you wish to save some changes, go to the respective page and save them by clicking the "Save" button or hitting the "Enter" key.

Shortcuts: Ctrl+S or Enter

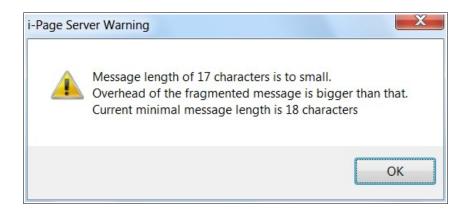
Selected Carrier Device

When you try to save the carrier settings, the program will check whether the device type that the carrier is assigned to is compatible with the carrier type. If not, the program will save all other settings except the selected device and you will get an appropriate error message.



Fragmenting Page

When you try to save the carrier's maximum message length the program will check whether the length is bigger than the calculated minimum message length. If not, the program will save all other settings except the new maximum message length and you will get an appropriate warning message. The maximum message length will be re-set to the default value for that type of carrier.



Warning: If you close the dialog box without saving changes, you will get a warning and another opportunity to save your changes. If you choose 'Yes' to save changes on exit, all changes on all pages will be saved.

Cancel Changes

If you do not wish to save your changes to any of the settings and wish to return to previous settings, you can cancel all the changes by selecting the "**Cancel**" button.

The cancel button works the same way as the "Save" button, i.e. its functionality is always associated only with the currently opened page.

Shortcut: Ctrl+Q

Note: You can cancel only unsaved changes.

Test Carrier

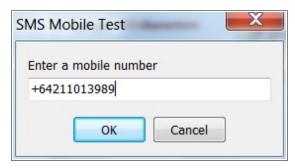
To test the selected carrier settings, press the "**Test**" button.

Shortcut: Ctrl+T.

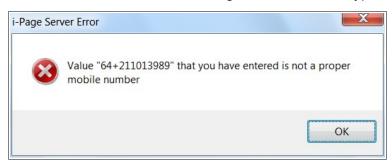
Note: You need to save the settings before you can test them.

The program tests the carrier by sending a real message to the selected address.

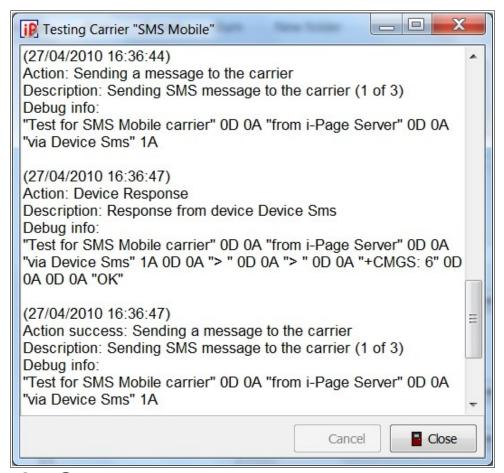
The user is prompted to enter an appropriate address.



All addresses are checked to be valid against the address type that the selected carrier is using.

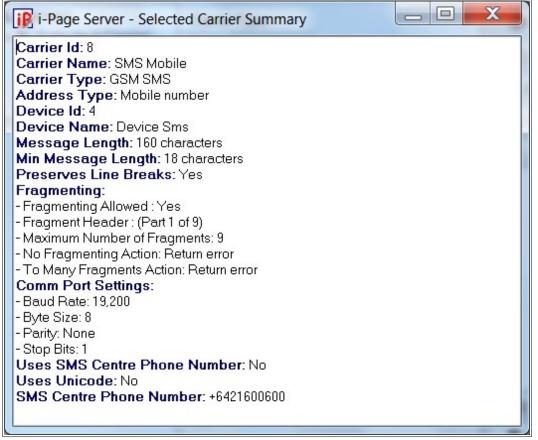


The "Test Display" window will pop-up and you will be able to follow the whole testing process in real time.



Carrier Summary

To see detailed info about the selected carrier, either click on the "Carrier Summary" item in the left-hand side panel, or use the shortcut Ctrl+I.



See also "Object Summary Dialog".

Carrier Types

TAP Modem



Enter a provider's phone number into the "Carrier Phone No" control.

If your provider requires a password, check the "Use Password" box. This will enable the "Password" box. Enter your password into the "Password" control.

GSM SMS



SMS centre number is a telephone number of the service centre through which your SMS messages will be sent. It is formatted using the ISDN / telephony numbering plan (ITU E.164/E.163).

Example:

+6423600500

The correct service centre number is usually pre-set in the default settings stored in the SIM card. You can check that and get the number through the SMS device tests (see Set Device – Test).

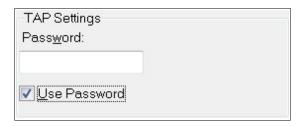
If the SMS centre address is not pre-set in the SIM cart or you want to overwrite the default settings, check the "Use Centre Number" box. It will enable the "SMS Centre No" box. Enter the SMS centre address into the "SMS Centre No" control.

If you need to use Unicode (UCS2) character encoding in your messages, check the "Use Unicode" box.

A Unicode SMS can only contain 70 characters. In i-Page Server every Unicode message switches GSM modem to the PDU Mode.

Note: Not all mobile networks support Unicode SMS. For example, Unicode SMS is not supported for most US mobile number destinations.

TAP Direct



If your SitePage is set to require a password, check the "Use Password" box. It will enable the "Password" box. Enter your password into the "Password" control.

Scope



If your SitePage is set to use the "Scope" protocol, you can choose between two types of page messages:

□ Alphanumeric

□ Numeric

To set the SitePage to send an alphanumeric message, select "Alphanumeric" as a message type. For numeric messages, select the "Numeric" message type.

Email Carrier

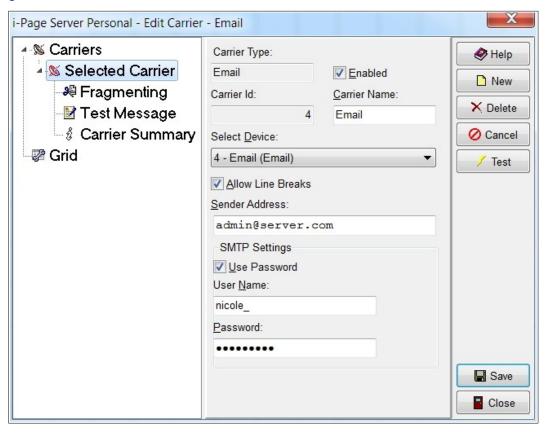
i-Page Server provides interface for sending email messages to SMTP server, using both types of connections, unsecured and secured.

For secure connection the server uses libraries developed by the OpenSSL Project, that use strong cryptography which could be restricted in some countries. If these libraries (files

'libeay32.dll' and 'ssleay32.dll') are not installed with the server installation, the server will display interface for unsecured connection settings. To change that, the user can always download these files from the "https://www.openssl.org/" site and put it in the server's installation folder.

Unsecure Connection

The first part of the settings are common to all carriers. For more info see "Carrier Common Settings".



Sender Address

Enter the sender's email address into the "Sender Address" control.

This address will be used as the sender's address in all email messages sent by i-Page Server.

It would be a good idea to use the email address of the i-Page Server administrator for this, although any properly formatted email address will do.

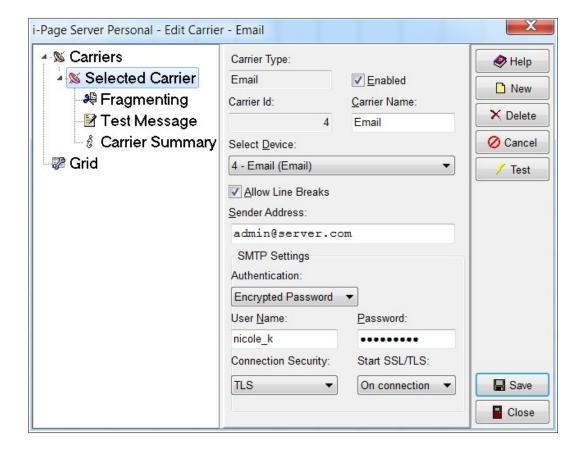
Authentication

If your SMTP server requires authentication, you will need a valid account on the server.

- ☐ Check the "Use Password" control
- ☐ Enter the account's user name in the "User Name" control
- ☐ Enter the account's password into the "Password" control.

Secure Connection

The first part of the settings are common to all carriers. For more info see "<u>Carrier Common Settings</u>".



Sender Address

Enter the sender's email address into the "Sender Address" control.

This address will be used as the sender's address in all email messages sent by i-Page Server.

It would be a good idea to use the email address of the i-Page Server administrator for this, although any properly formatted email address will do.

Authentication

Select the type of authentication from the "Authentication" control. You can select one of the following options:

None	Select this option when no authentication is required by the SMTP server.
Normal Password	Select this option when the SMTP server requires authentication, but authentication data are sent in a palin text. You will need a valid account on the server.
	 Enter the account's user name in the "User Name" control
	 Enter the account's password into the Password control.
Encrypted Password	Select this option when the SMTP server requires authentication, but authentication data are sent in a secure manner to the server. The SMTP server must support some of SASL mechanisms for a secure authentication. You will need a valid account on the server.
	 Enter the account's user name in the "User Name" control
	 Enter the account's password into the Password control.
	i-Page Server will negotiate the SASL mechanism with the SMTP server.

Note:

SASL stands for "Simple Authentication and Security Layer". It is an IETF standard based on RFC 4422. It defines a framework for authentication and data security in Internet protocols.

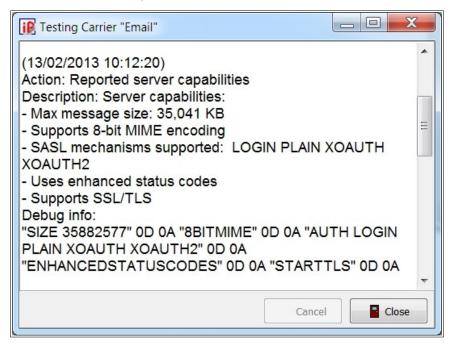
The framework is implemented through different SASL mechanisms. Each of those mechanisms defines a level of encryption and series of challenges and responses that are exchanged between the SMTP server and a client during the authentication. SASL mechanisms are registered with IANA.

i-Page Server implements several of SASL mechanisms:

- CRAM-MD5 defined in IETF standard <u>RFC 2195</u>
- CRAM-SHA1 defined in IETF standard <u>RFC 2195</u>
- DIGEST-MD5 defined in IETF standard RFC 2617
- PLAIN defined in IETF standard RFC 4616

LOGIN – basic LOGIN mechanism used by SMTP

When you <u>test</u> the selected carrier, the server obtains SMTP server capabilities and displays them as a part of the test display. Some of that capabilities are SASL mechanisms that are supported.



Connection Security

Select the type of connection security from the "Connection Security" control. You can select one of the following options:

None	The whole communication between the i-Page and SMTP server, including an email message, is carried out in a plain text.
SSL	The whole communication or a part of it (depends on the settings in "Start_SSL/TLS") is encrypted according to the SSL (Secure Socket Layer) specifications. i-Page Server implements versions SSL 2.0 and SSL 3.0, which is defined in IETF historic document RFC 6101.
	During the SSL negotiation with the SMTP server, i-Page will first try to use SSL 3.0 and if it does not work, it will downgrade to SSL 2.0.
TLS	The whole communication or a part of it (depends on the settings in "Start SSL/TLS") is encrypted according to the TLS (Transport Layer Security) specifications.

	i-Page Server implements versions TLS 1.0, 1.1 and 1.2, which is defined as IETF standard RFC 5246
Auto	The whole communication or a part of it (depends on the settings in "Start SSL/TLS") is encrypted according to the SSL or TLS specifications.
	i-Page Server negotiates with the SMTP server which cryptographic protocol they are going to use during their communication. Its starts with TLS 1.2 and if the server does not implement it, continues down the line with 1.1, 1.0, SSL 3.0 and SSL 2.0 (in that order).

Start SSL/TLS

Since SMTP protocol can be used either with or without TLS (or SSL), it is necessary to indicate to the SMTP server whether the i-Page is making a TLS (SSL) connection or not. There are two main ways of achieving this:

- 1. SMTP server uses a different port number for TLS (SSL) connections (usually port 465).
- 2. SMTP server uses the regular port number (usually port 25) and, during the connection, i— Page requests that the server switch to TLS (SSL).
 - **A.** To accomplish that, i-Page implement STARTTLS protocol extension, defined in IETF standard RFC 3207.

If you select any of the secure options from the "Connection Security" control, the "Start SSL/TLS" control becomes enabled.

To set whether the connection will be encrypted immediately or on the client request, select from the "Start SSL/TLS" control one of the following options:

- 1. On connection
- 2. On request

Note: Most likely the server will use port **465** for TLS connection and port **587** when implementing STARTTLS protocol extension.

Email Example

Here are some examples of settings for the popular Web based SMTP servers. At the time of writing, there were no charges for their services.

Gmail

Gmail is a free email service provided by **Google**.

To use Gmail SMTP server you need to open a Gmail account. This is a normal email account, and it is free.

Device

On the "Edit Devices" dialog create a new device of the "Email" type.

Device Name	Gmail
SMTP Server IP Address	smtp.gmail.com
SMTP Server TCP Port	465

Carrier

On the "Edit Carriers" dialog create a new carrier of the "Email" type.

Carrier Name	Gmail
Select Device	Gmail
Sender Address	Any valid email address
Authentication	Encrypted Password
User Name	Full email address of your Gmail account
Password	Your Gmail password
Connection Security	TLS
Start SSL/TLS	On connection

Yahoo

Yahoo!Mail is a free email service provided by Yahoo!.

To use Yahoo SMTP server you need to open a Yahoo account. This is a normal email account, and it is free.

Device

On the "Edit Devices" dialog create a new device of the "Email" type.

Device Name	Yahoo
SMTP Server IP Address	smtp.mail.yahoo.com
SMTP Server TCP Port	465

Carrier

On the "Edit Carriers" dialog create a new carrier of the "Email" type.

Carrier Name	Yahoo
Select Device	Yahoo
Sender Address	Any valid email address
Authentication	Encrypted Password
User Name	Full email address of your Yahoo account
Password	Your Yahoo password
Connection Security	TLS
Start SSL/TLS	On connection

Email Pager

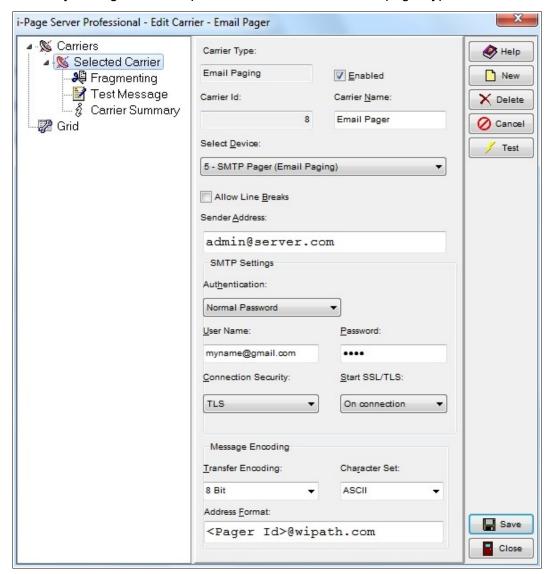
Contains settings that allows i-Page Server to send page messages to the paging terminal via email.

The first part of the settings are common to all carriers. For more info see "<u>Carrier Common Settings</u>".

Most of the other settings are common to all email type carriers. For more info see "Email Carrier".

Email Pager Settings

Describes only settings that are specific to carriers of the email pager type.



Transfer Encoding

Refers to a MIME content transfer encoding that is used in emails. This is an encoding that is used on the top of other encoding and converts all bytes into ASCII characters (binary-to-text encoding). It is used to transmit 8-bit data over a 7-bit data path or, generally, over a medium which is not 8-bit clean.

Options:

7 Bit	Suitable for messages that only use the alphabetic, numeric, and punctuation characters commonly used in English
	□ Only ASCII characters allowed (ASCII code #1 − #127) - #0 not allowed
	☐ 998 octets per line
	☐ CR (#13) and LF (#10) codes are only allowed to appear as part of a CRLF line ending
8 Bit	Suitable for messages that also use characters not commonly used in English. The SMTP server must support the 8BITMIME SMTP extension.
	☐ All characters from the extended ASCII character set allowed (#1 - #255) - #0 not allowed
	☐ 998 octets per line
	☐ CR (#13) and LF (#10) codes are only allowed to appear as part of a CRLF line ending
Binary	The SMTP server must support the BINARYMIME SMTP extension
	☐ Any sequence of octets is allowed
	☐ No line length limits
	☐ <i>CRLF</i> characters, if appear, do not mean end of the line
Quoted Printable	Suitable for text messages that use data consisting primarily of US-ASCII printable characters but also containing a small proportion of bytes with values outside that range.
	☐ All ASCII printable characters (#33 - #126) are left as they are
	☐ All ASCII non-printable characters (#1 - #32) are escaped with the '=' character
	☐ All characters outside ASCII range (higher than #126) are also escaped by the '=' character

Base 64	Suitable for text messages that frequently use non-US-ASCII characters.
	☐ All bytes are converted into the subset of 64 ASCII characters
	☐ The subset contains characters: "a - z", "A - Z", "0 - 9", "+" and "/"
	☐ The message is padded with "# <i>0</i> " on the 24-bit boundary
	☐ One or two "=" characters are used to mark the padding

Only quoted printable and base 64 actually perform encoding of the message. They could be used if you notice that the message has been constantly corrupted by mail transport or when you know that either SMTP server or a channel that you are using do not understand 8-bit characters.

Character Set

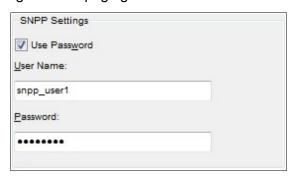
To set a character encoding of the message, select between the options in the "Character Set " control.

Character Set Options

ASCII	Uses characters from the basic 7-bit ASCII encoding set
ANSI	Uses characters from the extended 8-bit ASCII set, defined as the current computer's code page
UTF-8	Uses UTF-8 Unicode character encoding
Unicode	Uses UTF-16LE Unicode character encoding (little-endian byte order)

SNPP Carrier

SNPP (Simple Network Paging Protocol) is a protocol that allows the server to send paging messages to the paging terminal over the Internet, using TCP/IP as its transport/routing protocol.



If your SNPP provider requires a password:

- ☐ Check the "Use Password" check box. The "User Name" and "Password" controls become enabled.
- ☐ Enter the user name that is registered with the provider, in the "User Name" control.
- ☐ Enter the password into the "Password" control. The password is case-sensitive.

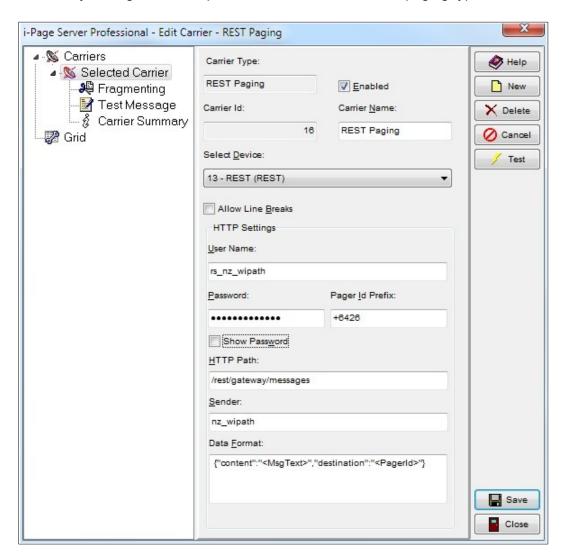
REST Paging

Contains settings that allows i-Page Server to send paging messages to the paging terminal over the Internet, using HTTP as its transport protocol.

The HTTP message body uses REST (Representational state transfer) architectural style to transfer paging messages to the terminal. The whole HTTP message can be encrypted using SSL/TLS encryption and send to the secure server port.

The first part of the settings are common to all carriers. For more info see "Carrier Common Settings".

Describes only settings that are specific to carriers of the REST paging type.



HTTP Settings

REST Authentication

Most of the REST web service providers request the sender to authenticate themself before they are allowed to use the service.

User Name

Enter your user name into the "User Name" control. The user name needs to be registered with the service provider.

Password

Enter your password into the "Password" control. The password needs to be registered with the service provider.

If you want to check your password, you can select the "Show Password" check box and the password will be visible as a plain text.

Note: The system remembers the "Show Password" control settings.

Pager Id Prefix

Pager ids in "i-Page Server" are stored as contacts, without their network prefix. Some providers request a full pager phone number to be sent to them.

Pager id prefix contains:

	International prefix ('+')
	Country code (e.g. '64')
	Network code (e.g. $^{\prime}026^{\prime}$) - if the network code starts with $^{\prime}0^{\prime}$, it should be omitted.
Examp	le:
+642	26

HTTP Path

Enter a path to the REST web service functionality. The path is the part after your provider host name. Usually you will get the full URL from your provider:

https://restserver.com/rest/gateway/messages

Your path in above example is the text in red. (The blue part is a schema and the green one is a host name).

Sender Email

Enter your email address that the service provider knows about, into the "Sender" control. You can also enter your "customer name" given to you by the provider.

REST Data Format

The data format describes the content of the body of the HTTP message that is used to send your page message data to the provider. It is defined by the provider and it complies to the REST architectural style.

Type the format of a page message exactly as defined by the provider. In the place where a pager id/number is required, enter PagerId and in the place of a page message actual text, enter <msg Text</pre>.

You can also place the cursor in the "Data Format" control, right-click and from the pop-up menu select "Message Text" or "Pager Number" and the correct text will be entered at the cursor position.



During runtime, the system will replace the <PagerId> with a real pager number and the <Msg Text> with a page message text.

Message Objects

Message objects are objects that the user uses to send a message:

Contacts

Contact Groups

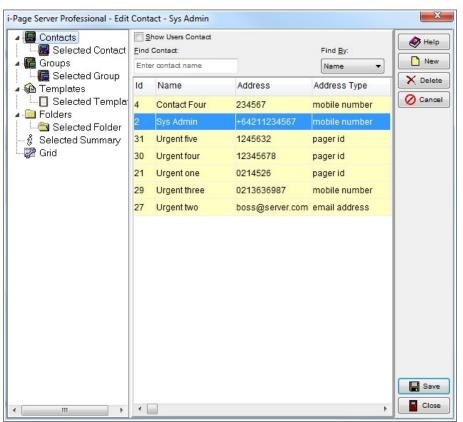
Message Templates

Folders

The system administrator can create message objects that are visible to all accounts. They can be assigned to any account.

Select "Message Objects" on the main pop-up menu and from the submenu select the object type you want to edit.

Only the system administrator and an account with the "<u>Set Server Objects</u>" right can create, edit and delete these objects.



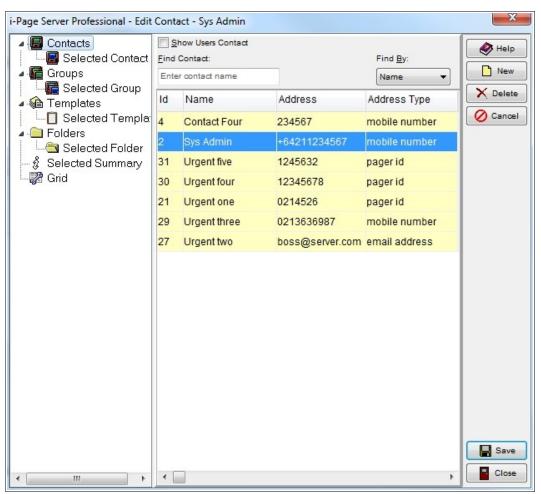
Object Types

To set a system message object, the system administrator must first select the object type. To select the object type that you want to create, edit or delete, click on one of the items in the left-hand side panel:

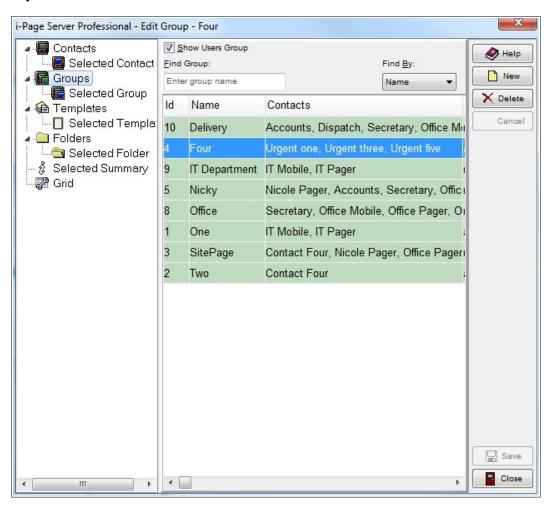
- □ Contacts
- ☐ Groups
- □ Templates
- ☐ Folders

A page with all objects of that type already created by the system administrator opens in the middle panel.

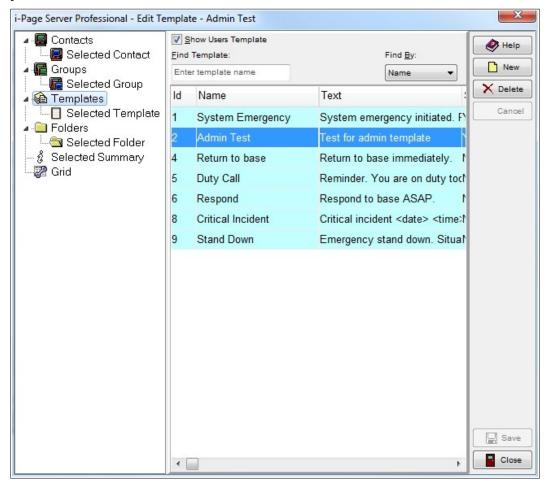
Contacts



Groups



Templates

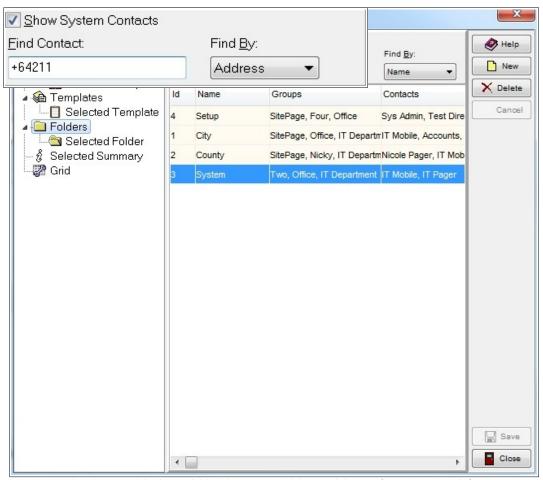


Folders

If you also want to see all users' objects of that type, check the "Show Users Contacts/Groups/Templates/Folders" above the grid.

Find Object

Every page for every object type has a search tool that helps the user to find an object.



The object can be located in its grid by its name, id or address (contacts only).

Select one of these options in the "Find By" combo box.

Default: name.

Start typing the object's name, id or address into the "Find Contact" window. If the match is found the object in the grid will be selected and moved at the top of the grid.

New Object

Select an object type.

Click on the "New" button in the 'Edit Object' dialog box.

Shortcut: Ctrl+N

Note: All objects are created and stored on i-Page Server.

Select the "Selected Contact/Group/Template" node to see the panel with object settings.

Enter an object name in the "Contact/Group/Template Name" box.

Note: Object names are not unique and you can assign the same name to a different object of the same type. The names in the system are case sensitive.

Edit Object

Selecting Object for Editing

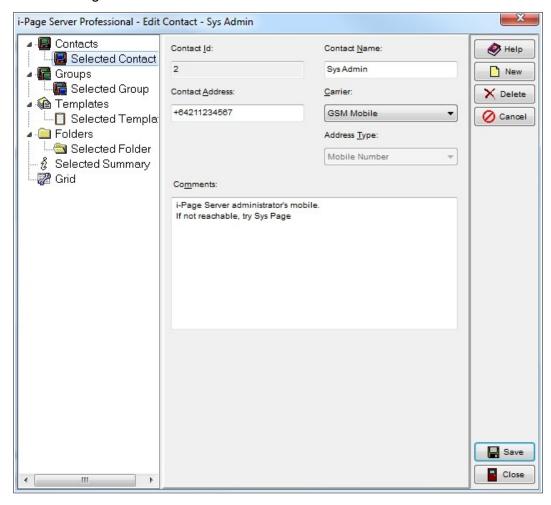
Select an object type.

Select the object in its respective grid.

If you have a problem finding the object you can use the object's search tool.

Edit Contact

Select the "**Selected Contact**" node to get the panel with contact settings, or just double-click on the contact in the grid.



To change the contact name, enter a new name into the "Contact Name" control.

Select its carrier type in the "Carrier" combo. As soon as you change the carrier type, a value in the "Address Type" will change to the type of the address that the selected carrier is using. The "Address Type" control is read-only.

Note: If you are not sure which carrier to use, you can find more information about each carrier in the "<u>Carriers</u>" dialog.

Enter a contact Address into the "Contact Address" box.

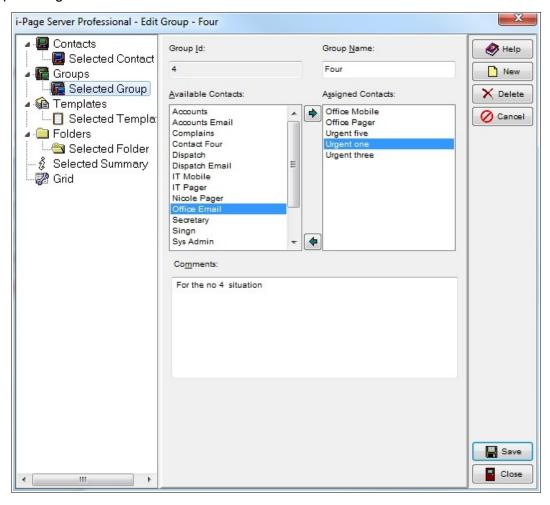
The address must be of the type shown in the "Address Type" control. If you enter an address of the wrong type the system will warn you and you will not be able to save your settings.



If you want, you can also enter some additional comments about the contact in the "Comments" window.

Edit Group

Select the "**Selected Group**" node to get the panel with group settings, or just double-click on the group in the grid.



To change the group name, enter a new name into the "Group Name" control.

There are two lists with contact names displayed. The list on the left-hand side with the title "Available Contacts" shows all available contacts that are not yet assigned to the selected group. The list on the right side with the title "Assigned Contacts" shows all contacts already assigned to the selected group.

To add a new contact to the group, select it in the "Available Contacts" list and press the "Assign contacts" button , or just double-click on it. The contact will be moved from the "Available Contacts" to the "Assigned Contacts" list.

Shortcut: Ctrl+Right (arrow)

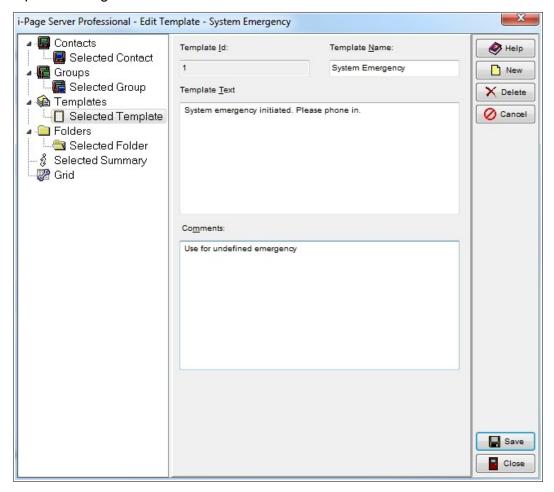
To remove a contact from the group, select it in the "Assigned Contacts" list and press the "Remove Contacts" button , or just double-click on it. The contact will be moved from the "Assigned Contacts" to the "Available Contacts" list.

Shortcut: Ctrl+Left (arrow)

If you want you can also enter some additional comments about the group into the "Comments" window.

Edit Template

Select the "**Selected Template**" node to get the panel with template settings or just double-click on the template in the grid.



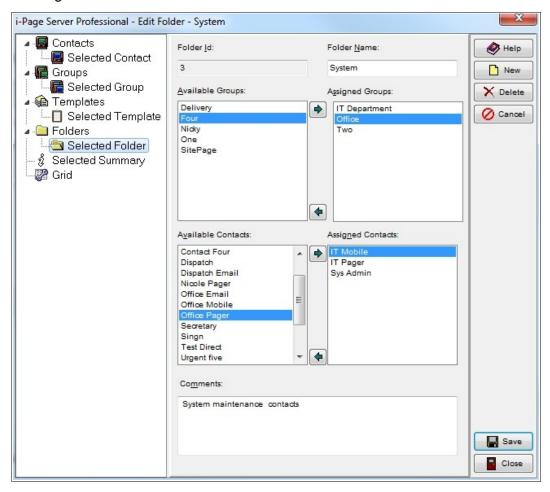
To change the template name, enter a new name into the "Template Name" control. The system will preserve new line settings.

Enter a template text into the "Template Text" box.

If you want you can also enter some additional comments about the template into the "Comments" window.

Edit Folder

Select the "Selected Folder" node to get the panel with folder settings, or just double-click on the folder in the grid.



To change the folder name, enter a new name into the "Folder Name" control.

The dialog contains two groups of controls with two lists in each group.

Set Groups

The list on the left-hand side with the title "Available Groups" shows all the account's groups, that have not yet been assigned to the selected folder. The list on the right-hand side with the title "Assigned Group" shows all the groups already assigned to the selected folder.

To add a new group to the folder, select it in the "Available Groups" list and press the "**Assign group**" button , or just double-click on it. The group will be moved from the "Available Groups" to the "Assigned Groups" list.

Shortcut: Ctrl+Right (arrow)

To remove a group from the folder, select it in the "Assigned Groups" list and press the "**Remove group**" button , or just double-click on it. The group will be moved from the "Assigned Groups" to the "Available Groups" list.

Shortcut: Ctrl+Left (arrow)

Set Contacts

The list on the left-hand side with the title "Available Contacts" shows all the account's contact, that have not yet been assigned to the selected folder. The list on the right-hand side with the title "Assigned Contacts" shows all the contacts already assigned to the selected folder.

To add a new contact to the folder, select it in the "Available Contacts" list and press the "Assign contacts" button , or just double-click on it. The contact will be moved from the "Available Contacts" to the "Assigned Contacts" list.

Shortcut: **Shift+Ctrl+Right (arrow)**

To remove a contact from the folder, select it in the "Assigned Contacts" list and press the "Remove contacts" button , or just double-click on it. The contact will be moved from the "Assigned Contacts" to the "Available Contacts" list.

Shortcut: Shift+Ctrl+Left (arrow)

If you want, you can also enter some additional comments about the folder in the "Comments" window.

Save Changes

To save your changes, press the "Save" button.

Shortcut: Ctrl+S or Enter.

The save command will save changes only for the selected object type.

Warning: If you close the dialog box without saving changes for any of the object types, you will get a warning and another opportunity to save your changes. If you choose 'Yes' to save changes on exit, all changes for all object types will be saved.

All changes are saved on the server to its central database. The client does not store any settings for any of the message objects.

Cancel Changes

If you do not wish to save your changes and want to return to previous settings, you can cancel all the changes for the selected object type by selecting the "Cancel" button.

The cancel command works the same way as the save command, i.e. its functionality is always associated only with the currently selected object type.

Shortcut: Ctrl+Q

Note: You can cancel only unsaved changes.

Delete Object

To delete the selected object, press the "**Delete**" button.

Shortcut: Ctrl+Del.

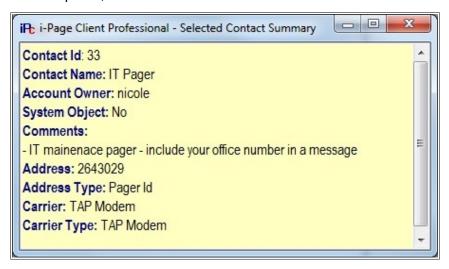
You will get a warning from the system that the object will be deleted permanently and the option to either delete it or not. If you choose to delete it anyway, the object will be deleted permanently.

Note: You can delete only a system object. If the selected object is created by an account (on the client), the "Delete" button will be disabled.

Warning: The deleted object will be removed from all accounts. If the selected object is a contact, it will be also removed from all groups and folders. If the select object is a group, it will be removed from all folders.

Message Object Summary

To see detailed info about the selected object either click on the "Selected Summary" item in the left-hand side panel, or use the shortcut Ctrl+I.



See also "Object Summary Dialog".

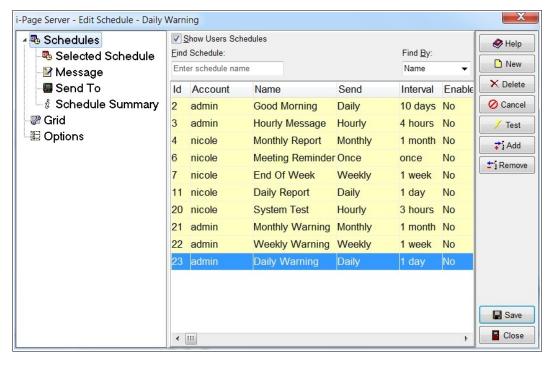
Scheduling

The user can schedule any message to be send (one or more times) in the future. The message can be send only once or in hourly, daily, weekly or monthly intervals.

The account with the "Create System Schedules" right can create system-wide schedules, visible to all accounts. They are created only on the server and 'owned' by the default "admin" account.

The account with the "<u>Create Account Schedules</u>" right can create their own schedules, that are visible only to the account that has created them.

To access the scheduling functionality, select "Message Objects | Set Schedules" on the main pop-up menu.

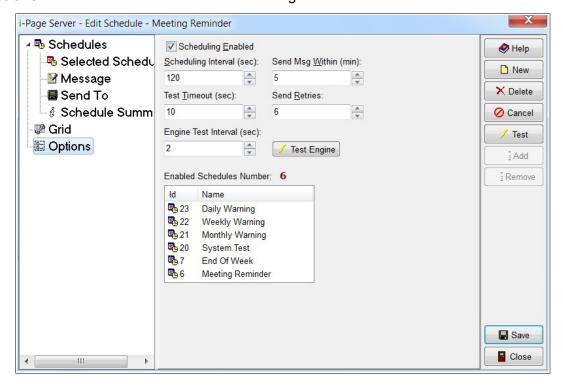


Scheduling Options

The "Scheduling Options" dialog contains settings for the scheduling engine and information about the state of the scheduling functionality.

It can be set only on the server.

Select "Message Objects | Set Schedules" on the <u>main pop-up menu</u> and then select the "Options" item on the left-hand side of the dialog.



Start/Stop Scheduling Engine

To start the scheduling engine, check the "Enable Scheduling" option. The scheduling can be enabled even if there is no enabled schedules.

To stop the scheduling engine, uncheck the same option.

Scheduling Interval

Scheduling interval is a time interval in which the scheduling engine checks all enabled schedules to see if there is any message that can be sent.

To set the interval, enter a number into the "Scheduling Interval" edit box. All values are expressed in seconds.

Min: 10 seconds

Max: 7,200 seconds (2 hours)

Default: 30 seconds

Send Time Tolerance

The scheduling engine polls enabled schedules every "scheduling interval" and, because the next send date for the scheduled message is calculated up to millisecond, it is not very likely that the polling interval will fall on the exact time of the message. The engine then looks in the past for the "send time tolerance" and sends all the messages that fit into this interval.

To set the "send time tolerance", enter a number into the "Send Msg Within" control. All values are expressed in minutes.

Min: 1 minute

Max: 120 minutes (2 hours)

Default: 5 minutes

Send Retries

To set how many times will the scheduling engine try to send the message, enter a number into the "Send Retries" control.

Min: 1
Max: 25
Default: 6

User Test Timeout

Every user can test any schedule that is visible to them. The test is performed by the scheduling engine. It does not affect normal functioning of the engine. It is still possible that some scheduling settings create an endless loop and never return any result.

To prevent that, enter a number into the "Test Timeout" control. All values are expressed in seconds.

Min: 5 seconds

Max: 3 600 seconds (1 hour)

Default: 10 seconds

If the test does not finish in that time, the scheduling engine will cancel the test and return an appropriate message to the user.

Admin Test Interval

Only the administrator on the server can perform the complete test of the scheduling engine. The admin test interval emulates a scheduling interval during the real scheduling process.

To set the admin test interval, enter a number into the "Engine Test Interval" control. All values are expressed in seconds.

Min: 1 second

Max: 60 seconds

Default: 2 seconds

Scheduling Info

The dialog displays the number and the list of schedules currently enabled. Those are the schedules that the engine are using to send scheduling messages.

If you want to see more information on any of displayed schedules, just double-click on it.

See "Schedule Summary".

Set Schedules

The system administrator and every account with the "<u>Create System Schedules</u>" right can create, edit and delete system-wide schedules that are visible to all accounts. They can also disable and delete (but not edit) schedules created by any account.

The system-wide schedules are created only on the server and 'owned' by the default "admin" account. They can be assigned to any account.

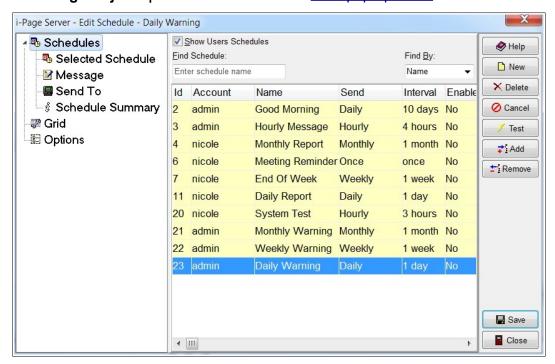
The account schedules are created on the client and 'owned' by the account that created them. They can be edited only by that account, but they can also be disabled and deleted by the system administrator on the server.

There are 5 types of schedules:

- 1. Send Once
- **2.** Hourly
- 3. Daily
- 4. Weekly
- 5. Monthly

To set schedules on the server:

Select "Message Objects | Set Schedules" on the main pop-up menu.



Find Schedule

"Edit Schedule" page has a search tool that helps the user to find a schedule.



The schedule can be located in the grid by its name or id.

Select one of these options in the "Find By" combo box.

Default: name.

Start typing the schedule's name or id into the "Find Schedule" window. If the match is found the schedule in the grid will be selected and moved at the top of the grid.

If you want to see all schedules created by all accounts, check the "Show Users' Schedules". Otherwise only system-wide schedules, created by the administrator will be displayed in the grid.

New Schedule

Click on the "New" button in the 'Edit Schedule' dialog box.

Shortcut: Ctrl+N

Select the "Selected Schedule" node to see the panel with schedule settings.

Enter a schedule name in the "Schedule Name" box.

Warning: The schedule name is required by the scheduling engine and cannot be an empty string.

Note: Schedule names are not unique and you can assign the same name to a different schedule. The names in the system are case sensitive.

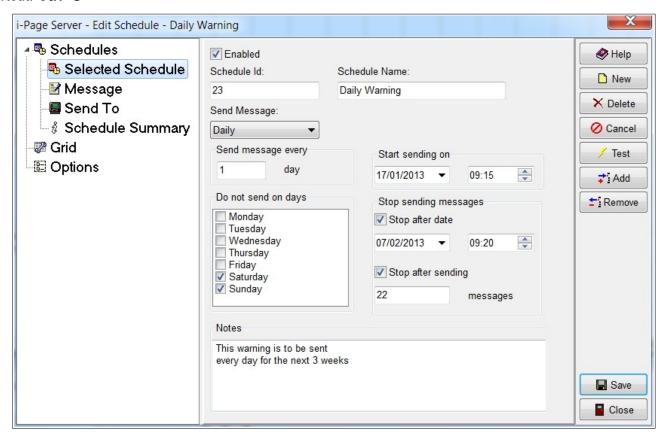
Edit Schedule

Select the schedule in the grid.

If you have a problem finding the schedule you can use the schedule's search tool.

Select the "Selected Schedule" node to get the panel with the schedule settings, or just doubleclick on the schedule in the grid.

Shortcut: Ctrl+O



Schedule Name

To change the schedule name, enter a new name into the "Schedule Name" control.

The schedule name is required by the scheduling engine and you will not be able to enable the schedule without a name.

Schedule Type

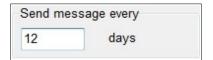
In the "Send Message" control, select a schedule type.



When the type is changed, the dialog will display different set of controls to enable the user to enter data that are required for that type of schedule.

Send Interval

Every type of the schedule (except "Send Once") requires an interval. The interval is a period of time in which the message will be repeatedly scheduled.



To set scheduling interval, enter a number of hours/days/weeks/months into the "Send message every" control.

Wording of the control display ("hours", "days", "weeks", "months") depends, of course on the type of the schedule.

The interval must have a value bigger than 'o', otherwise you will not be able to enable the schedule.

Schedule Start Date

A start date is a date on which the scheduling engine will start to calculate next message.

For the "Send Once" type it is the date on which the message will be sent, so it displayed as "Send Message On" and must be latter than the current date.

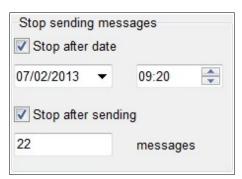


For all other types it is displayed as "Start sending on" and can be any date. If the value is earlier than the current date, the engine will keep calculating intervals until it reaches the current date. First message that will be scheduled is the message with date latter or equal to the current date.



Schedule End Conditions

Every schedule (except "Send Once") must have its end conditions defined.



To stop scheduling messages after certain date and time, check the "Stop after date" check box and select the end date and time in the end date controls.

The schedule end date must be latter than the schedule start date and the current date and time.

To stop scheduling messages after certain number of messages has been sent, check the "Stop after sending" check box and enter a number of messages into the text box. The number of messages must be bigger than 'o'.

If you select both end conditions, the scheduling will stop when the first of them is met.

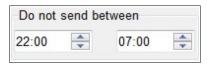
If none of conditions is selected, the scheduling engine will report an error and will not allow you to enable the schedule.

Sending Limits

Every schedule (except "Send Once") can limit sending of messages in certain intervals. The settings depend on the type of schedule.

Hourly

The user can prevent sending of the messages between certain hours of the day.



Use the first control to set the start of the period and the second one to set the end of the period of the day when i-Page will pause sending messages.

All values are expressed in the 24 hour values.

If the first value is smaller, the interval falls within the same day.

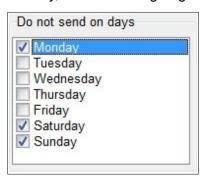
If the first value is bigger, the interval spans two days.

Example:

22:00 to 07:00 – the messages will pause from 10 p.m. of the one day to 7 a.m. the next day

Daily

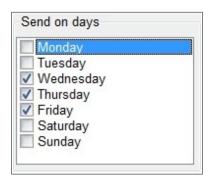
The user can exclude certain days from sending of the messages. If the daily interval falls on the excluded day, the scheduling engine will move it to the next allowed (not selected) day.



If you select all days, the scheduling engine will report an error and you will not be able to enable the schedule.

Weekly

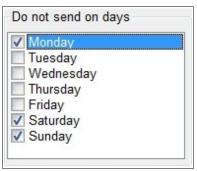
In a weekly scheduling, the user can select the day(s) of the week on which the message will be scheduled.



The engine will increase the next scheduling date for the number of weeks defined in the "Scheduling Interval" and start sending messages on every selected day in that week.

Monthly

The user can exclude certain days from sending of the messages. If the monthly interval falls on the excluded day, the scheduling engine will move it to the next allowed (not selected) day.



If you select all days, the scheduling engine will report an error and you will not be able to enable the schedule.

Enable Schedule

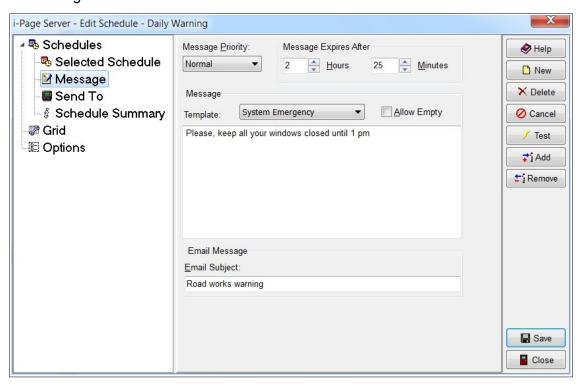
To enable the schedule, check the "Enabled" check box.

When you try to save the enabled schedule, the scheduling engine will check the schedule settings for errors. If there are errors, the engine will disable the schedule and report all the errors.

Schedule Message

Schedule message is the actual message that will be scheduled and sent to the designated contacts.

To define the message that the scheduling engine will use for the scheduled message, select the schedule in the grid and select the "Message" node in the left–hand side panel in the "Edit Schedule" dialog.



Message Priority

Select a message priority from the "Message Priority" control.

Options:

- Critical (1)
- Urgent (2)
- High (3)
- Normal (4)
- Lower (5)
- Low (6)

This option is used by i-Page Server to order clients' messages in its message queue. All messages with higher priority will be dispatched first.

Note: Messages with a lower number have a higher priority.

Default: Normal.

Message Age

Set the message expiry time in the "Message Expires After" group of controls. After that period of time, if the message is not sent for whatever reason, the server will discard the message.

Default: 2 hours.

Create Message

Enter a message in the "Message" control.

To speed up entering the message, you can also use message template.

Allow Empty Message

If the "Allow Empty" is checked, the scheduling engine will send a message even if no message text is set. This option is mainly used to send the message to tone-only pagers.

Note: If the "Allow Empty Message" is not checked and the "Message" control does not contain any text, the scheduling engine will not allow the user to enable the schedule.

Email Subject

Enter an email subject into the "Email Subject" control.

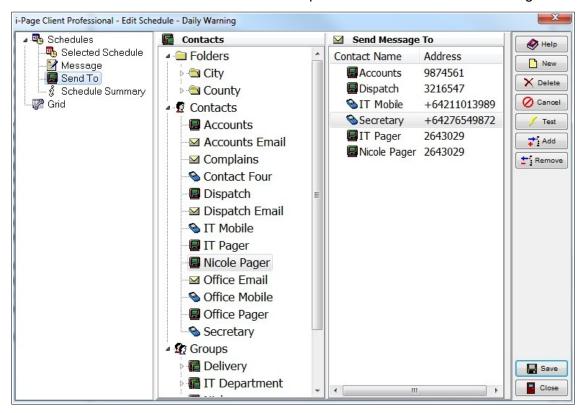
This setting will be used only by email messages.

For information on how to set the message, see "Schedule Message" page.

Schedule Contacts

Schedule contacts are the contacts that the scheduled message will be sent to.

To define contacts that the scheduling engine will send message to, select the schedule in the grid and select the "Send To" node in the left–hand side panel in the "Edit Schedule" dialog.



All contacts and contact groups that are accessible to the user currently logged on, are displayed in the "Contacts" list (left panel). All the contacts that the scheduling engine will send the message to must be placed into the "Send Message To" list (middle top panel).

Warning: If there are no contacts in the "Send Message To" list the scheduling engine will not allow the user to enable the schedule.

Add Contact

To select the contact to send the message to:

Select a contact or a group in the left panel.

Press the "Add" button in the right panel.

Shortcut: Ctrl+=

You can also:

- double-click on the contact/group in the left panel, or
- drag the contact/group to the send to list.

Note: Whichever method above you choose, the program will take care not to enter duplicate contacts into the "Send Message To" list.

Remove Contact

To remove a contact from the send to list:

Select the contact in the list.

- You can select more than one contact.
- To select non-contiguous contacts, hold down the CTRL key and click on every contact you want to select
- To select contiguous contacts, click on the first one, hold down the Shift key and click on the last one. All contacts in between will be selected.

Press the "Remove" button in the right panel.

Shortcut: Ctrl+-

You can also double-click on the individual contact to remove it from the send to list.

Scheduling Errors

If the scheduling engine cannot schedule any message from the user's settings it reports a scheduling error and disables the schedule.

There are two types of scheduling errors:

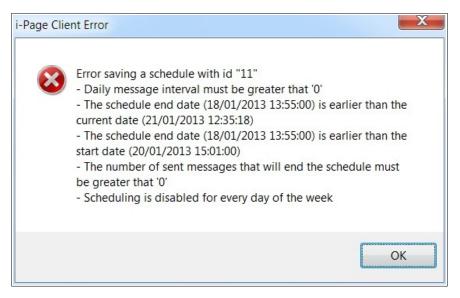
- Settings error
- Runtime error

Settings Errors

Error	Description	Schedule Types
Schedule Name	Schedule name cannot be an empty string	All
Message	Schedule message cannot be an empty string unless the "Allow Empty Message" is selected	All
Contacts	At least one contact must be assigned to the schedule	All
Send Date	Send date and time must be latter than the current date and time	Send Once
Interval	Scheduling interval must be greater than 0	All – except Send Once
End Conditions	At least one of the end conditions must be set	All – except Send Once
End Conditions – End Date	If the "Stop after date" is selected, than the end date must be latter that the start and current date	All – except Send Once

Error	Description	Schedule Types
End Conditions – Number Of Messages	If the "Stop after sending" is selected, than the number of messages sent must be bigger than 0	All – except Send Once
Do Not Send On Days	All days cannot be selected (excluded from sending)	Daily, Monthly

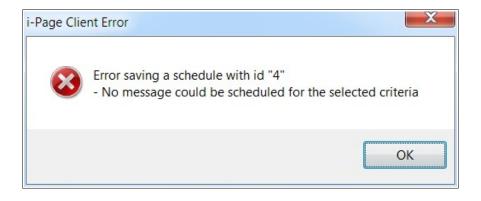
If one or more of above errors happen, the scheduling engine disables the schedule and reports all the errors.



Runtime Error

If all the settings are correct, the scheduling engine checks if it is possible to schedule at least one message from the schedule settings in the given time interval.

If this is not possible, the engine disables the schedule and reports the error.



Save Changes

To save your changes, press the "Save" button.

Shortcut: Ctrl+S or Enter.

If you enable the schedule and try to save the changes, the scheduling engine will test the schedule for errors. If one or more errors are detected, the engine will disable the schedule. All other changes, even if they contain settings errors, will be saved.

The save command always saves all changes on all pages of the "Edit Schedule" dialog.

Warning: If you close the dialog box without saving changes for the schedule, you will get a warning and another opportunity to save your changes. If you choose 'Yes' to save changes on exit, all changes for that schedule will be saved.

All changes are saved on the server to its central database. The client does not store any settings for any of the schedules.

Cancel Changes

If you do not wish to save your changes and want to return to previous settings, you can cancel your changes by selecting the "Cancel" button.

The functionality of the cancel command is always associated only with the currently selected page of the "Edit Schedule" dialog.

Shortcut: Ctrl+Q

Note: You can cancel only unsaved changes.

Delete Schedule

To delete the schedule, press the "Delete" button.

Shortcut: Ctrl+Del.

You will get a warning from the system that the schedule will be deleted permanently and the option to either delete it or not. If you choose to delete it anyway, the schedule will be deleted permanently.

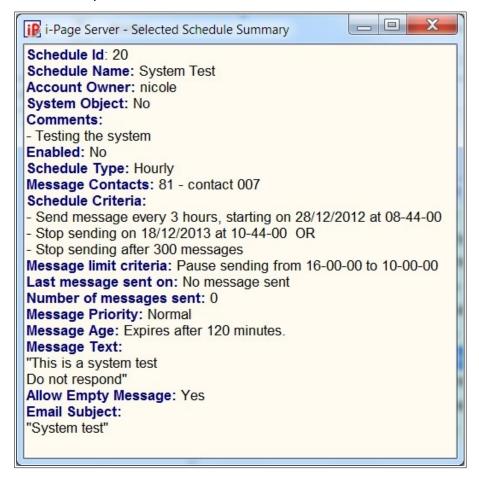
Note:

- On the client, you can delete only schedule 'owned' by the account currently logged on (non-system schedule)
- On the server, you can delete any schedule (system-wide and owned by any of accounts).

Warning: The deleted schedule will be removed from all accounts.

Schedule Summary

To see detailed info about the selected schedule either click on the "**Schedule Summary**" item in the left-hand side panel, or use the shortcut **Ctrl+l**.



For more info, see "Object Summary Dialog".

Testing Scheduling

User's Test

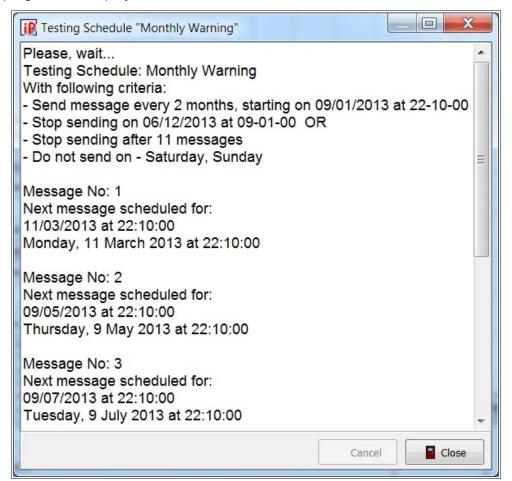
Every user can test any schedule that is visible to them (either created by or assigned to the account).

To test the schedule, select it in the "Edit Schedule" dialog and press the "**Test**" button (shortcut: **Ctrl+T**).

The user can test only one schedule at the time.

Test Result

The program will display the test result.



The test result displays:

- Schedule name
- Schedule criteria
- All messages that can be scheduled OR
- All errors reported by the scheduling engine

Every message is marked with ordering number and displays the date when it will be sent.

The date is displayed in two formats: short and long date and time format. Both formats are localised – displayed according to the machine "Region and Language" settings. The long date format is useful for following schedules that exclude certain days of the week from sending messages.

If you do not want a long date format to be displayed, right-click on the display and on the pop-up menu unselect the "Debug Info" item.

Storing Test Result

The user can copy any part or the whole test result and paste it in any text editing program.

To copy the part of the test result:

- Select the part you want to copy
- Press Ctrl+C OR from the pop-up menu select "Copy"

To copy the whole test result:

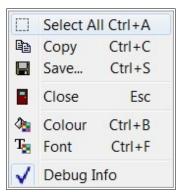
- Press Ctrl+A OR from the pop-up menu select "Select All"
- Press Ctrl+C OR from the pop-up menu select "Copy"

To store the test result directly to a file, from the pop-up menu select the "Save" item. In the "Save" dialog select a folder and the file name.

Test Result pop-up Menu

Every test result displays its pop-up menu that allows the user to perform copy and save operations and to change the display settings.

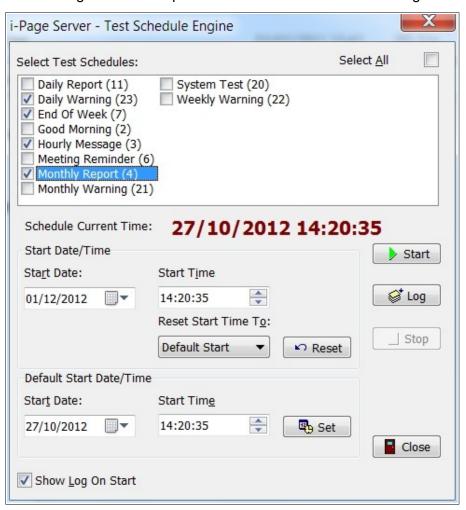
To invoke the menu, right-click anywhere in the summary display.



Administrator's Test

This test can be performed only on the server and by users with the "<u>Create System Schedules</u>" right. They can test all the schedules, system-wide and ones created by an account.

From the server <u>main pop-up menu</u> select "**Message Objects | Set Schedules**". On the "Edit Schedules" dialog select the "Options" item and click on the "Test Engine" button.

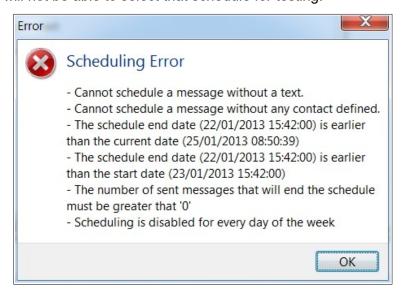


Selecting Schedules

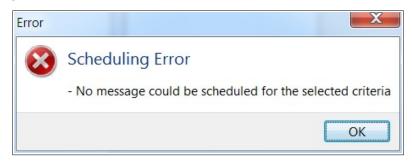
The administrator's test can test one or more schedules at the time. To select schedule(s) for testing, check the check box next to the schedule name and id in the "Select Test Schedules".

If you want to see more info about a particular schedule, just double-click on it and you will see its summary info displayed. For more details see also "Object Summary Dialog".

If the schedule that you have checked contains settings error, you will get an error message and you will not be able to select that schedule for testing.



If the schedule settings are correct but the schedule engine cannot schedule any message from those settings, you will get an error message and you will not be able to select that schedule for testing.



To select/unselect all schedules at once, check/uncheck the "Select All" check box.

Start Date/Time

To set a date and time that the scheduling engine will use as a starting point for calculating date and time of the next scheduled message, select a date in the "Start Date" control and time in the "Start Time" control.

You can also use preset start dates. Select one of the options in the "Reset Start Time To" control and press the "Reset" button (shortcut: Ctrl+R). The "Start Date" and the "Start Time" control will be set to the selected preset option.

Options

Default Start You can set a default date and time for the start of the testing in the

"Default Start Date/Time" group of controls

Last Start Date and time used as a schedule start time during the last test.

Current Time Current computer date and time

Set Default Start Date/Time

To set the default date and time for the test start date, in the "Default Start Date/Time" group of controls, set the date in the "Start Date" and time in the "Start Time" controls and press the "Set" button (shortcut: Ctrl+S).

Running Test

To start the schedule test, press the "Start" button (shortcut: F5).

When the test starts, the "Stop" button becomes enabled. You can cancel the test at any time by pressing the "Stop" button (shortcut: **F6**).

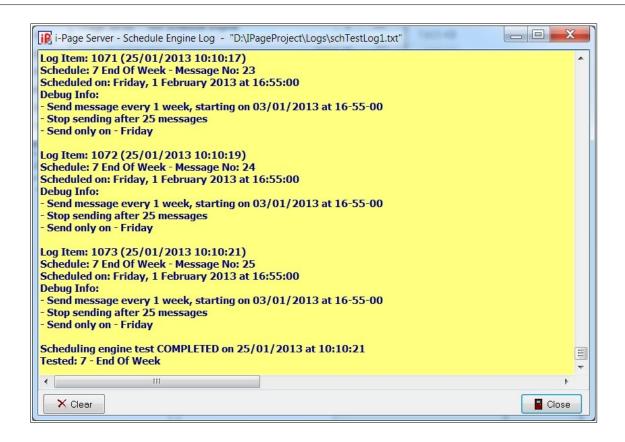
Schedule Test Log

The scheduling engine logs the test result into "schTestLog1.txt" log. To see the log while the test is running, press the "Log" button (shortcut: Ctrl+L).

You will see the logging of scheduled messages in real time.

If you want the log displayed automatically when the test starts, select the "Show Log On Start" check box.

It is possible to change some display setting of the log viewer. See "Log Viewer" for more details.



Reports

i-Page Server has an inbuilt reporting engine that allows the user to set report query values, to generate reports, display the results, save the report to a CSV file and send emails with the report CSV file as an attachment.

Any report can be also set to be generated automatically by the program at the user's defined time interval and sent as an email attachment to the defined email addresses.

To open the i-Page Server Reports program, on the <u>main pop-up menu</u> select "**Message Objects** | **Set Reports**"

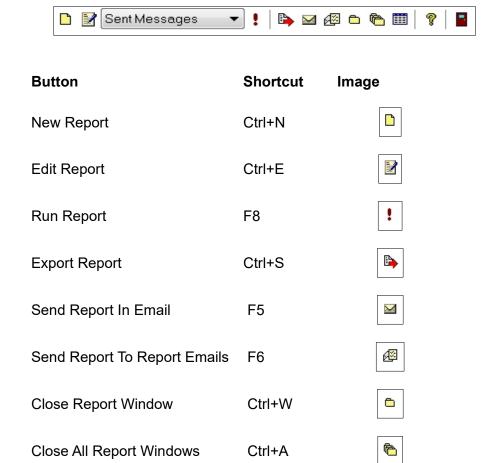
The reporting software opens in a separate window and can be managed in parallel with the application. Running reports does not stop usual functionality of the server and does not interfere with it in any way.

When the report program opens, it will display an empty window and all existing report templates in the combo box on the toolbar. If there are no reports already created, you will see the text 'No Reports' in the combo.



Report Toolbar

The report program features most used commands in the main toolbar.



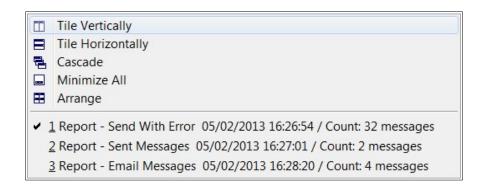
Select Report

Set Report Window

To select a report when you have more then one report displayed:

F2

- Click on the report window
- Select the report in the combo box on the toolbar Sent Messages
- Go to the report menu, select the "Windows" item, and from the list of the opened reports displayed at the bottom of the menu pop up, select the report



When the report is selected in any of above ways, its window becomes focused (even if it was minimized).

Create New Report

To create a new report, select 'Report | New' or click the "New" button on the toolbar



Shortcut: Ctrl+N

Hot Keys: Alt+R,N

All above commands will open the "Edit Report" dialog. Once the dialog opens, you can use its features to create new reports.

Edit Existing Report

Select the report.

Select 'Report | Edit', or click on the "Edit" button on the toolbar



Shortcut: Ctrl+E

Hot Keys: Alt+R,E

All above commands will open the "Edit Report" dialog. Once the dialog opens, you can use its features to change the report you are editing.

Run Report

Select the report.

Select 'Report | Run', or click on the "Run" button on the toolbar



Shortcut: F8

Hot Keys: Alt+R,R

You can also run your report directly from the "Edit Report" dialog, by selecting the "Run" node.

After the reporting engine generates the report, result is displayed in a separate report window inside the main window.

Export Report

Once the report is created and displayed, the "Export To File" button becomes enabled.

Select the report.

Select 'File | Export to File', or click on the "Export to File" button on the toolbar



Shortcut: Ctrl+S

Hot Keys: Alt+F,F

In the "File Save" dialog box enter the file name in the "File Name" control (you do not need to enter a file extension) and press the "Save" button or the "Enter" key.

All files are saved as Comma Separated Values (CSV) files which may be opened in a spreadsheet or database application.

The user can set some parameters for CSV files i-Page is using. For more information about settings and the format of CSV files, see "System CSV File".

The report is exported exactly as it is displayed on the screen with all the columns and rows in the same order.

Send Report In Email

Once the report is created and displayed, the "Send Report In Email" button becomes enabled.

To send email with the selected report, attached as a CSV file, select the report.

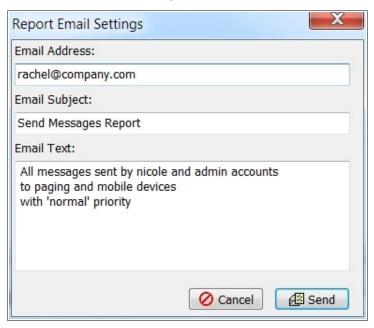
Select 'File | Send In Email', or click on the "Send Report In Email" button on the toolbar ■



Shortcut: F5

Hot Keys: Alt+F,E

The "Send Report Email" dialog pops up.



- 1. Enter an email address into the "Email Address" control.
 - You can enter more than one address.
 - In that case separate addresses by:
 Space ('''), coma ('', '), semicolon (''; '), colon ('':'), forward slash (''') or back slash (''') character or any combination of them. You can use these characters with or without a space before or after them.
 - Every address you enter must be a properly formatted email address. If not, you will
 get an error and an email will not be sent to that address. It will not prevent i-Page
 Report to send emails to other valid addresses.
- 2. Enter an email subject to the "Email Subject" control.
- 3. Enter an email text into the "Email Text" control. The text can have more lines.
- 4. Press the "Send" button.

i-Page Report will create an email message, a CSV file with your report and attach the file to the email. The file will not be saved.

You will get a message for every address that will advise you whether the email has been sent successfully. The message will also display the address of the receiver and the name of the attached CSV file.

Send Report To Report Emails

To send email with the selected report, attached as a CSV file, to all email addresses defined in the report, <u>select</u> the report.

Select 'File | Send To Report Emails' or click on the "Send Report To Report Emails" button



Shortcut: F6

Hot Keys: Alt+F,R

If the selected report does not have any emails defined, this button will be disabled.

Otherwise, the report will be sent as attached CSV file to all defined report addresses.

You will get a message for every address that will advise you whether the email has been sent successfully. The message will also display the address of the receiver and the name of the attached CSV file.

Close Report Window

To close the selected report window, select 'Report | Close' or click on the "Close Report

Window" button

Shortcut: Ctrl+W

Hot Keys: Alt+R,C

If you want to close a report that is not selected, select the report first and then use any of above ways to close it.

Close All Report Windows

To close all displayed report windows, select 'Report | Close All' or click on the "Close All Report

Windows" button

Shortcut: Ctrl+A

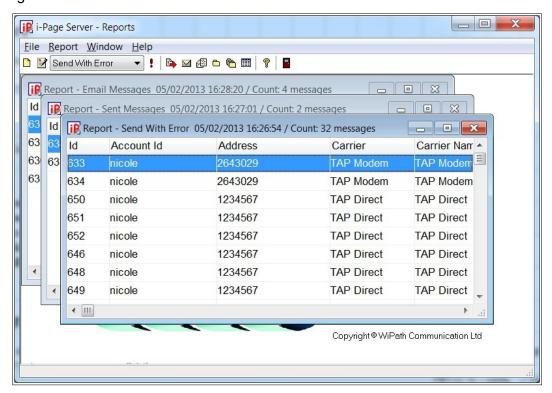
Hot Keys: Alt+R,A

Report Window

After you create the report, the result will be displayed in a grid in a new window, and its name will be selected in the combo box on the toolbar.



You can run multiple reports at the same time. They will be opened as separate windows within the report generator.



Report Window

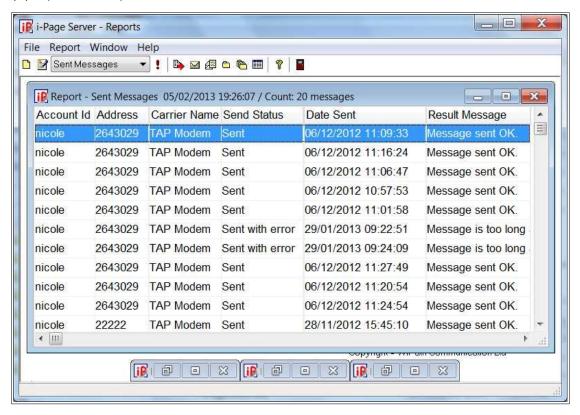
The report window runs inside the i-Page Server Report Program.

In its title it displays the name of the report, date and time when the report was run and number of messages that has met the report criteria.

Format of the title:

```
Report · - · <report_name> · <run date> · <run_time> · / · Count: · <number> ·
messages
```

A dot (·) represent a space character.



Set Report Window

To set the way your reports will be displayed, select the "**Report Window**" button on the toolbar

Shortcut: F2

This will open the "Edit Grid" dialog.

It will enable you to set:

- Report background colour (default for all reports)
- Report columns to be displayed, their title, width and position
- Report font type, size and colour

All above settings will be used as a template for all reports created in future.

If you have some reports already displayed, their settings will be changed accordingly.

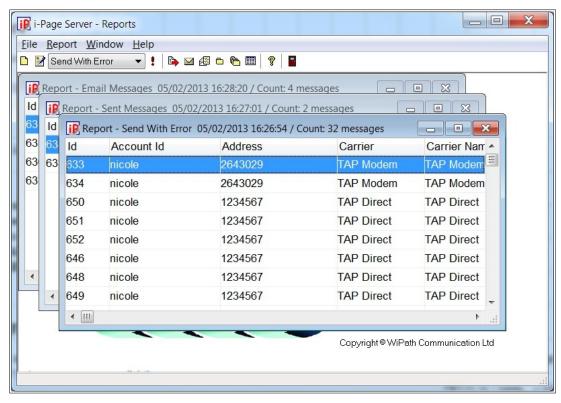
Sort Displayed Report

Displayed report data can be sorted on every column in ascending or descending order.

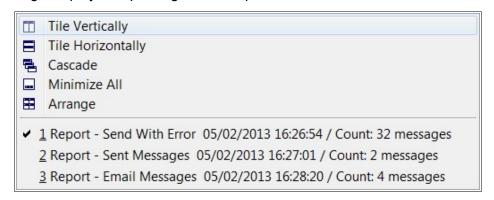
For more information, see "Grids - Sorting Grid".

Arranging Reports

You can arrange all open reports in different ways to make them more accessible.



To arrange displayed reports, go to the report main menu and select the "Window" menu item.



Menu options:

Menu Option	Action
Tile Vertical	Arranges displayed report windows as vertical tiles
Tile Horizontal	Arranges displayed report windows as horizontal tiles
Cascade	Arranges displayed report windows in a cascading order
Minimize All	Minimizes all displayed report windows
Arrange All	Arranges icons of the minimized displayed report windows

Closing Report Program

If you close the reporting program, the application will remember all open reports and their arrangement but only for the duration of the program session so you can later return to finish what you have started.

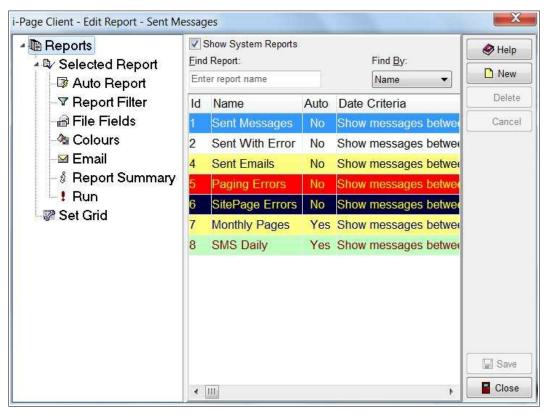
If you close the main program the reporting program will be closed as well.

Editing Reports

The system administrator and every account with the "<u>Create System Reports</u>" right can create, edit and delete system-wide reports that are visible to all accounts. The system-wide reports are created only on the server and 'owned' by the default "admin" account. They can be assigned to any account.

The account reports are created on the client and 'owned' by the account that created them. They are visible only to account that created them and they can be edited only by that account.

To access the "Edit Report" dialog on the server, select "Message Objects | Set Reports" on the main pop-up menu.



Edit Report Dialog Layout

The "Edit Report" dialog consists of three panels. The left panel is a tree-like list of all report settings available. The middle panel shows values for the selected setting. The right panel contains editing command buttons.

Selected Node (left panel)	Feature (middle panel)
Reports	Displays all existing reports and some of their setting values in the grid
Selected Report	Basic settings for the selected report: date boundaries, sorting criteria and email carrier
Auto Report	Basic settings for the auto report: auto report type, report interval and send (start) time
Report Filter	Criteria for further filtering the report by message types, message data and message text
File Fields	Settings for fields used in a CSV file attached to the report email
Colours	Background and font colours for the selected report
Email	Email messages settings for the report: email addresses, subjects and email message texts
Report Summary	Displays summary of the selected report settings
Run	Run selected report
Report Window	Settings for the window the report will be displayed in - available only on the server
Set Grid	Customizing grid that displays all existing reports

Find Report

"Edit Report " page has a search tool that helps the user to find a report.

Show Users Reports	
Find Report:	Find By:
Enter report name	Name ∨

The report can be located in the grid by its name or id.

Select one of these options in the "Find By" combo box.

Default: name.

Start typing the report's name or id into the "Find report" window. If the match is found the report in the grid will be selected and moved at the top of the grid.

If you want to see all reports created by all accounts, check the "Show Users' reports". Otherwise only system-wide reports, created by the administrator will be displayed in the grid.

New Report

Click on the "New" button in the 'Edit Report' dialog box.

Shortcut: Ctrl+N

Select the "Selected Report" node to see the panel with report settings.

Enter a report name in the "Report Name" box.

Note: Report names are not unique and you can assign the same name to a different report.

The names in the system are case sensitive.

Edit Report

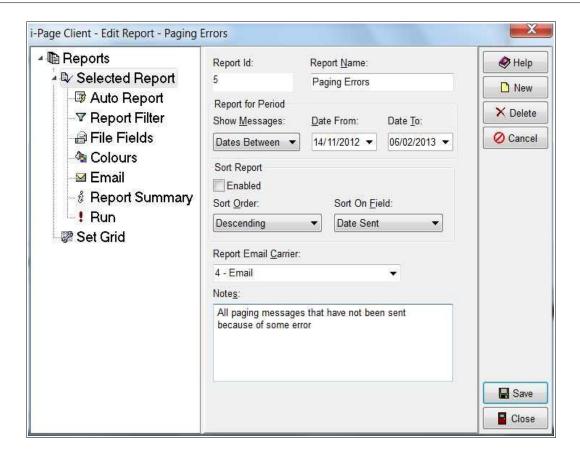
Select the report in the grid.

If you have a problem finding the report you can use the report's search tool.

Basic Settings

Select the "Selected report" node to get the panel with the report settings, or just double-click on the report in the grid.

Shortcut: Ctrl+O



Report Name

To change the report name, enter a new name into the "Report Name" control.

You can use any printable characters for the name and it can contain spaces. Report names are not unique and you can assign the same name to a different report

Report Period

To select stored messages by their sent date, select an option from the "Show Messages" control:

Option	Result
All Messages	All messages, regardless of their date
Dates Between	All messages between dates selected in the "Date From" (inclusive) and "Date To" (inclusive).
Dates Before	All messages before date selected in the "Dates Before" (exclusive) control.

Option	Result	
Dates After	All messages after date selected in the "Dates After" (exclusive) control.	

Every option (except 'All Messages') will display additional controls for entering additional data, required for that type of a query.

Enter required values into those controls.

Sort Report

If you wish your report to be sorted in any particular order, select the "Enabled" check box in the "Sort Report" group of control.

Select a sort order in the "Sort Order" control to sort your report either in the ascending or descending order.

Select a field in the "Sort On Field" control on which values you want your report to be sorted.

Note: If sorting is enabled it will be applied whether you run your report manually or automatically.

Report Email Carrier

After the reporting engine on the server creates the report, it converts it into the CSV format and sends it as an email attachment to every email address defined in the report.

To set an email carrier, select it from the "Email Carrier" control. It displays all email carriers defined and set on the server.

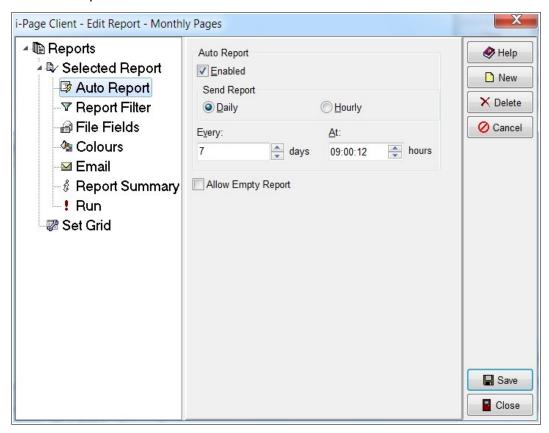
Report Notes

The "Notes" control is used for entering some notes, comments and remarks about the report.

Auto Report

i-Page Server can also create and send reports automatically.

When the auto report is enabled, the whole "Report for Period" group of controls are disabled. That is because the auto report engine does not use these settings. Every auto report is always generated for the period between two runs.



To start the auto report functionality for the selected report, check the "**Enabled**" control in the "Auto Report" group of controls.

Daily Auto Report

To create auto report on a daily basis:

- Select the "Daily" control
- Enter a day interval into the "Every" control

Min: 1 day

Max: 365 days (1 year)

Default: 1 day

Enter the time the report should be generated and sent into the "At" control.

The report will be generated and sent every daily interval at the selected time

Hourly Auto Report

To create auto report on an hourly basis:

- Select the "Hourly" control
- Enter an hour interval into the "Every" control
- Enter the time the system should start to generate and send reports into the "Start At" control.

The report will be generated and sent every hourly interval, starting with the selected time.

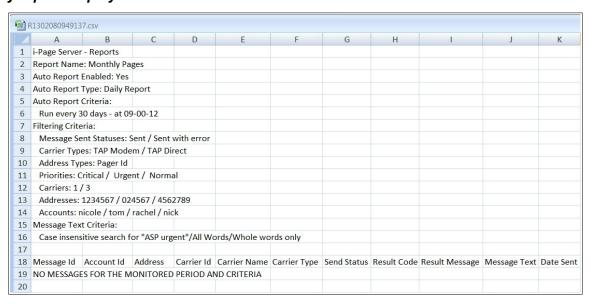
Empty Report

It is very likely that within some of the report's intervals, there will be no users' messages recorded. In that case i-Page server does not create the report and does not send emails to the email addresses defined in the report template.

If you want the server to create the (empty) report anyway, and send it to all defined email addresses, check the "Allow Empty Report" check box.

The created report will have the header with all its basic and filtering settings displayed and a warning that there are no messages in a report interval period.

Empty report displayed in MS Excel



Report Filter

The collection of messages, returned for the selected period of time, can be further narrowed down by defining more query conditions.

The message can be filtered by its:

- Send status
- Address type
- Carrier type
- Priority
- Receiver address
- Carrier id
- Account id
- Message text

To filter messages on chosen conditions, select the "Report Filter" node.

To makes it easier, the conditions are divided into three broad areas, displayed on three different panels.

Filter By Message Types
Filter By Message Data
Filter By Message Text

To open/close the panel, click on its title.



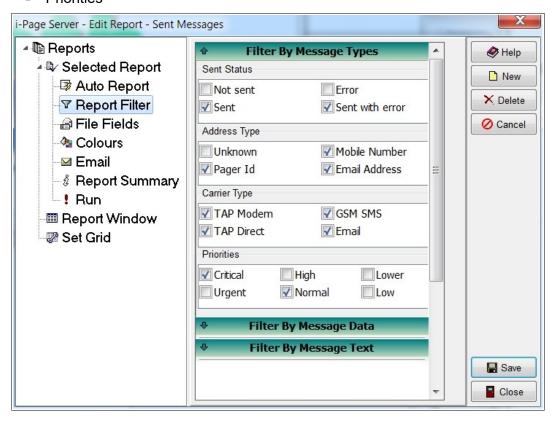
When you open a panel, the already opened panel will close. Only one panel can be opened at time.

Message Types

Messages can be filtered by:

Send status

- Address type
- Carrier type
- Priorities



To filter a message by a particular type:

- Check the option you want the message is checked against
- You can check more than one option of the same type
- If you do not check any option of the type, the message will not be filtered for that type
- If you check all options of the same type, the result is the same as if you do not check any – the message will not be filtered for that type

Message Data

Messages can be filtered by:

- Receivers' addresses
- Carriers' ids that handled the message
- Accounts' ids that sent the message

Receiver's Address

To select only messages that are sent to a chosen address:

- Enter the address into the "Sent To Addresses" control
- The address can be: pager id, mobile number or email address
- You can enter more than one address and any combination of address types from above

Carriers

To select only messages that are handled by a chosen carrier:

- Enter the carrier id (as defined on the server) into the "Sent To Carriers" control
- To enter the carrier id, you can also select a carrier form the "Select Carrier" control and press the "Add" button next to it
- You can enter more than one carrier

Accounts

To select only messages that are sent by a chosen account:

- Enter the account id (as registered on the server) into the "Sent By Accounts" control
- To enter the account id, you can also select an account form the "Select Account" control and press the "Add" button next to it
 - This option is only available on the server, because, for security reasons, clients cannot have the list of all registered accounts
- You can enter more than one account id, but only if your account has the "Create System Reports" right.
 - Accounts with that right are allowed to see messages from all users.
 - If you do not have that right, the "Sent By Accounts" control is disabled and your account id is already entered

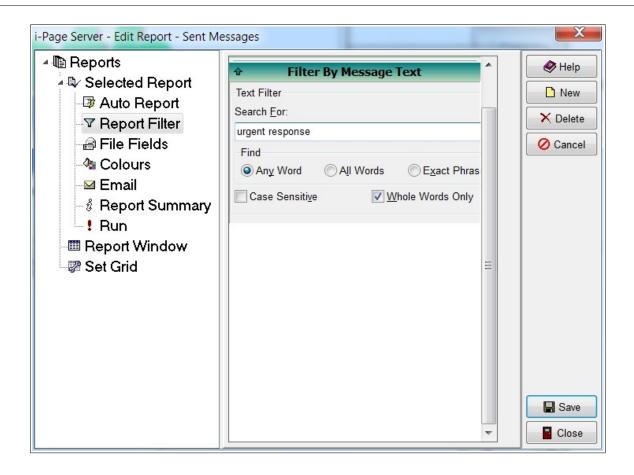
Entering more than one entry

If you enter more than one address, carrier id or account id into their respective controls, separate entries by:

space ('''), coma ('''), semicolon ('''), colon ('''), forward slash (''') or back slash (''') character – or any combination of them. You can use these characters with or without a space before or after them.

Message Text

You can also filter messages by any text that appears in their message payload.



Enter a text string you are searching for into the "Search For" control.

The string can be a single word, a phrase or several unrelated words.

Select a type of search in the "Find" control.

Type of search Conditions

Any Word	filtering criteria will be met if any word from the search string is found in the message.
All Words	filtering criteria will be met only if all words from the search string are found in a message, but not necessarily in the same order.
Exact Phrase	filtering criteria will be met only if all words from the search string are found in a message and in the same order.

If you wish to have the search text to be case sensitive, check the "Case Sensitive" check box.

If you check the "Whole Words Only" check box, then the filter will look only for stand-alone words from the search phrase

Example:

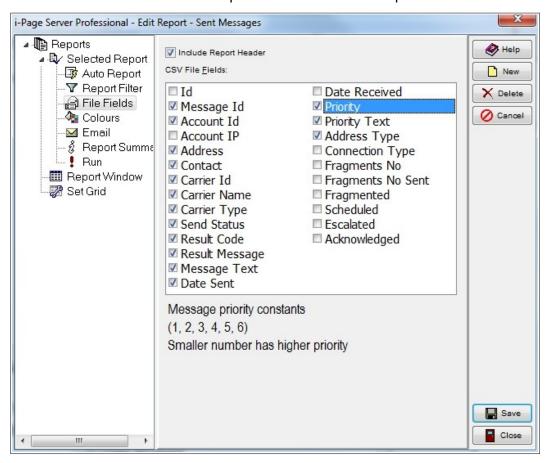
The word "gun" would not be recognized in the words "gunmen", gunpoint", "handgun", "guns", etc.

Otherwise, the filter will look for any partial match in any word in a message.

Report Fields

The report contains values for some or all message fields that are stored for every message. The user can select which fields will appear in the generated report file.

The user can also select whether the report file will contain the report header.



The server creates the report file with the header. If you do not want the header to appear in the file, uncheck the "Include Report Header" control.

To select a field which value will appear in the report, check the check box next to the field name.

If you hoover the mouse over the field's name, a brief description of the field will appear in the window beneath.

Report File

The report file consists of:

Application Title (if the header is included)

- Report Header (if the header is included)
- Selected field names and their values, formatted as a CSV File.

Application Title

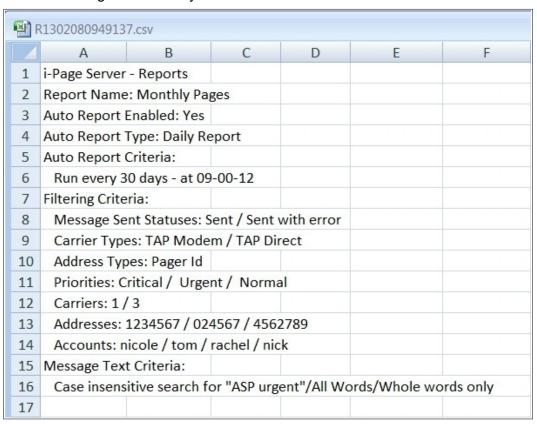
In this version:

i-Page Server - Reports

Report Header

Auto-report header contains:

- Report name
- Auto report type
- Auto report criteria
- All filtering criteria set by the user



Ordinary report header contains:

- Report name
- Date criteria

All filtering criteria set by the user

F F	R1302081258	3309.csv					
	Α	В	С	D	E	F	G
1	i-Page Sen	ver - Repor	ts				
2	Report Na	me: Weekl	y Messages				
3	Auto Repo	rt Enabled:	No				
4	Date Crite	ria:					
5	Show me	essages bet	ween 20/1:	1/2012 and	08/02/2013	3	
6	Filtering Criteria:						
7	Message Sent Statuses: Not sent / Error						
8	Carrier Types: TAP Modem / GSM SMS / Email						
9	Address Types: Pager Id / Mobile Number / Email Address						
10	Priorities: Critical / Urgent / Normal						
11	Carriers:	1/2/4					
12	Addresses: 025864 / +64211012369 / 0221699546 / nicky@server.com						
13	Accounts: nicky / tom / nick / rachel						
14	Message Text Criteria:						
15	Case sensitive search for "report memo"/All Words/Whole words only			ds only			
16							

Selected Field Names And Values

This part of the file contains multiple lines and their number depends of the number of returned messages.

The first line contains the selected field names, separated by the <u>CSV delimiter</u>.

All other lines contain field values – one line for every message. Values are separated by the <u>CSV</u> <u>delimiter</u>. The position of every field value corresponds to the position of its field name.

All lines are delimited by line break characters - CRLF.

File Character Encoding

Every report file is formatted according to the user's setting on the "Set CSV File" form.

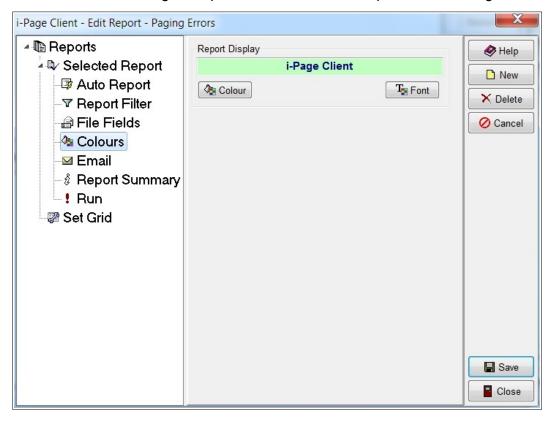
For more about the report file character encoding, see "CSV Encoding" topic.

Colours

Every report can be assigned a different background and font colour.

These colours display in the report grid entry and on the server as colours of the report window.

Select the "Colours" node to get the panel with the selected report colour settings.



Click on the "Fill" button and select a background colour for that report.

Shortcut: Ctrl+C

Click on the "Font" button and select a font settings for that report.

Shortcut: Ctrl+F

You can set the font type, size, colour and style (regular, bold, italic, underlined).

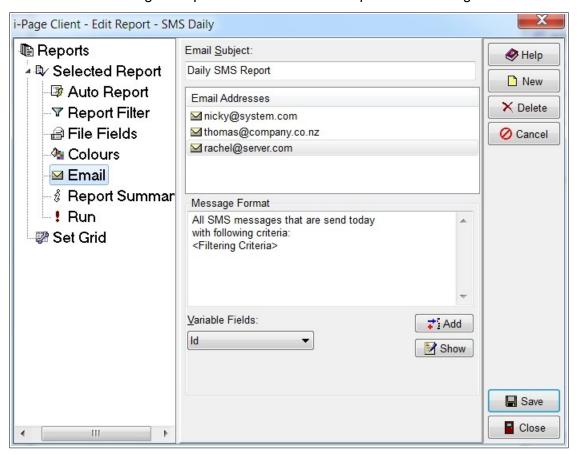
You can see how these colours match in the text box above the button.

Report Email

When the auto report is created, it will be saved to a temporary file, and the report engine will generate email messages for every set report address, attach the file to the messages and remove the file from the hard drive afterwards.

When the user runs report and presses the "<u>Send Report To Report Emails</u>" button, the generated report will be send to all set report addresses.

Select the "Email" node to get the panel with the selected report email settings.



Warning: When you select the "Email" node, all editing controls in the right panel (buttons "New", "Cancel", "Delete") refer to the email functionality not to the selected report.

New Email

Click on the "**New**" button to add an email address to the list. Enter an email address in the pop-up dialog.

Shortcut: Ctrl+N



Click on the "OK" button.

All email addresses are checked to ensure they are properly formatted email addresses.

i-Page does not impose any limits on the number of email address assigned to the report. You should be aware that sending to many email messages at once could be a burden for your SMTP server and it can reject to process them. If you are not sure about that, talk to your network administrator.

Delete Email

To delete the email address from the list, select it and click the "Delete" button.

Shortcut: Ctrl+Del

Edit Email

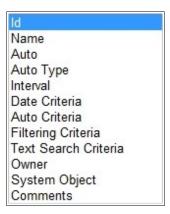
To create or edit an email message for the respective email address, select the address in the "Email Address" control.

The message is a combination of literal text entered by the user and variable fields filled in by the system at run time.

To create a message:

- Enter the text that you wish to appear in the message.
- Position the cursor where you want a variable field to appear in the text.
- Select a field in the "Variable Fields" control.
- Click on the "Add" button.

Steps 3 and 4 can be replaced by right-clicking into the editing control and selecting the field name from the pop-up menu.



The name of the field appears in the text, surrounded by tags (e.g.<field_name>). Leave it as it is because those tags tell the system that it is dealing with the field name and that it has to replace that name with the current system value.

You can also type the whole message (including variable fields) directly. But you must be aware of few things:

- You can use only field names displayed in the "Variable Fields" control
- Spelling must be correct (including spaces)
- Field name must be surrounded with tags
- Case does not matter

The system will honour any space or new line that you have entered, so you can format the message any way you like.

You can also create the email subject field in the same way. Just position the cursor into the "Email Subject" control instead.

To test formatting result, select the "**Show**" button. The whole message, with variable fields replaced by test data, will pop-up in a separate window.

Save Email

To save the email changes, click the "Save" button or press the "Enter" key.

Shortcuts: Ctrl+S or Enter

If you select another email without saving changes, your modifications will be lost.

Cancel Changes

If you wish to return to your previous email settings, you can cancel all the changes at once by selecting the "Cancel" button.

Shortcut: Ctrl+Q

Save Report

None of changes you make to the report settings are saved automatically. If you have entered some changes, the "Save" button will become enabled. If you wish them to take effect in the report, you must save them by clicking the "Save" button or the "Enter" key.

Shortcuts: Ctrl+S or Enter

Warning:

- If you select another report without saving changes, your modifications will be lost.
- If you close the dialog box without saving changes, you will get a warning and another opportunity to save your changes.

Delete Report

To delete selected report, select the "Delete" button.

Shortcut: Ctrl+Del

You will get a warning from the system that the report will be deleted permanently and the option to delete it or not. If you choose to delete it anyway, the report will be deleted permanently.

Cancel Report Changes

If you are not satisfied with changes to the report and wish to return to all previous settings, you can cancel all the changes at once by selecting the "**Cancel**" button.

Shortcut: Ctrl+Q

Note: You can cancel only unsaved changes.

Test Run Report

To run report immediately from the "Report Edit" form, select the "Run" node.

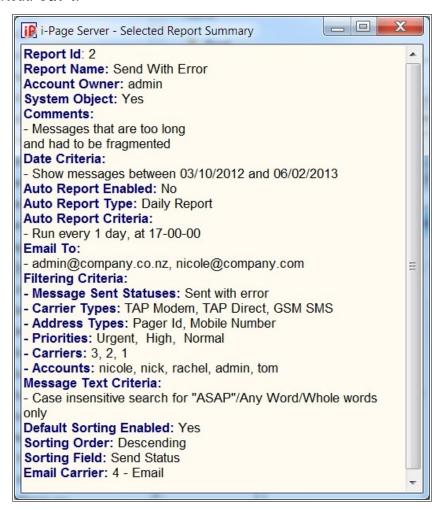
The "Report Edit" form will be closed and the report result will be shown in the new "Report Window".

You can also run your report directly from the "Reports" program.

Report Summary

Displays the summary of all settings for the selected report.

Shortcut: Ctrl+I.



The "Report Summary" window allows you to copy all information to the clipboard. To do so, right-click in the window and from pop-up menu first select "Select All" then "Copy", or use shortcuts: **Ctrl+A** and then **Ctrl+C**.

For more info, see "Object Summary Dialog".

Domains

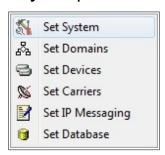
Domains are used only on i-Page Server Web version of the server. They offer a way to organise user accounts in groups that are not visible or accessible to each other. Each group of accounts behaves as it has server for itself.

Every domain has its 'administrator' account that has all rights for that domain. All other objects, like contacts, group of contacts, folders, templates, schedules, reports and user messages are visible, accessible and editable only inside the domain where they are created. When the object is created on the server it is considered domain-wide object and it is owned by the domain administrator and can be edited or deleted only by accounts that have rights to edit respective system objects. It can be assigned to or used by any account inside the domain. If the object is created on the client it belongs to the account that created it and can be edited or deleted only by that account.

All permissions work the same as on the regular server with the difference that the system permissions are limited to the domain objects.

Every server has a default domain, called "Main" and the default administrator account with the user name "admin". In the Web version of the server, that account is the main administrator account. Only the "admin" account can create, edit and delete domains.

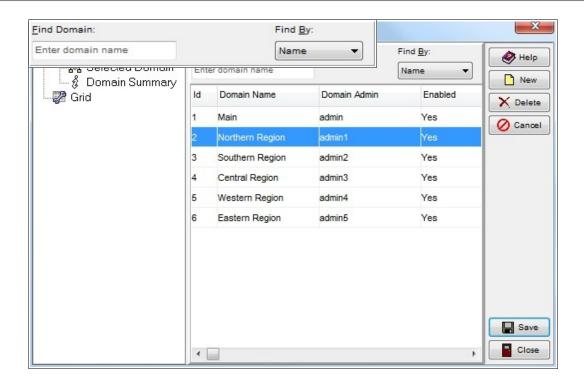
Select "System | Set Domains" on the main pop-up menu.



This menu option is visible only on i-Page Server Web version and only to the main administrator account.

Find Domain

"Edit Domain" page has a search tool that helps the user to find a domain.



The domain can be located in the grid by its name or ID.

Select one of these options in the "Find By" combo box.

Default: name.

Start typing the domain name or ID into the "Find Domain" window. If the match is found the domain in the grid will be selected and moved at the top of the grid.

Add New Domain

Click on the "New" button in the 'Edit Domain' dialog box.

Shortcut: Ctrl+N

A new domain is created with the default settings. The system also creates a new administrator account for the domain. The user name for the account is "admin" with a domain id as a suffix.

Example:

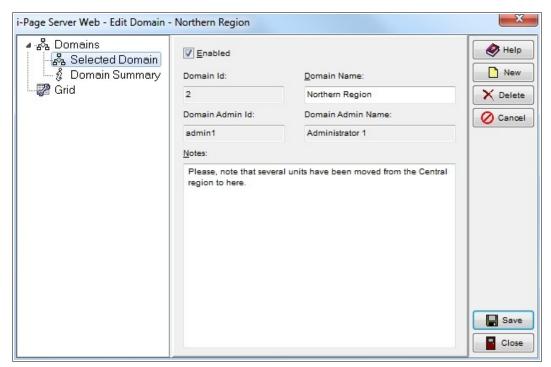
admin1, admin2, admin3, etc.

The domain admin user name cannot be changed. If you want to change other settings for that account, see "Accounts".

Edit Domain

In the domain grid, select the domain you wish to edit.

Select the "Selected Domain" node or just double-click on the domain in the domain grid to get the panel with domain data.



Enter a name in the "Domain Name" control. This is the name that the system will use in its messages and displays referring to this domain.

You can also enter some additional comments about the domain in the "Notes" window.

If you want to change the domain admin account settings, see "Accounts".

Delete Domain

To delete the selected domain, select the "Delete" button.

Shortcut: Ctrl+Del

You will get a warning from the system that the domain will be deleted permanently and the option of whether or not to delete it. If you choose to delete it anyway, the domain will be deleted permanently.

Warning: If you delete the domain, you will also delete:

- All accounts created for the domain
- All contacts, groups, folders, templates, schedules and reports created by any account from the domain
- All stored messages, sent by accounts from the domain

Save Domain Changes

To save your changes, press the "Save" button.

Shortcut: Ctrl+S or Enter.

Warning: If you close the dialog box without saving changes for the domain, you will get a warning and another opportunity to save your changes. If you choose 'Yes' to save changes on exit, all changes for that domain will be saved.

Cancel Changes

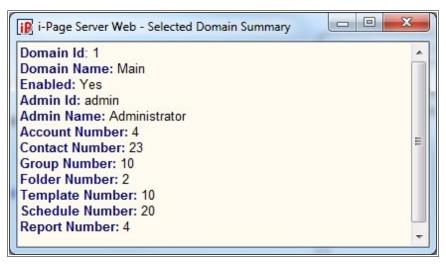
If you do not wish to save your changes and want to return to previous settings, you can cancel your changes by selecting the "Cancel" button.

Shortcut: Ctrl+Q

Note: You can cancel only unsaved changes.

Domain Summary

To see detailed info about the selected domain, either click on the "Domain Summary" item in the left-hand side panel, or use the shortcut **Ctrl+I**.



See also "Object Summary Dialog"

Appendix A

Log Viewer

Log Viewer is a tool that is included as a part of the i-Page system and allows the user to see different log files maintained by the system. Currently i–Page maintains two log files: i-Page Client log and i-Page Server log

The Log Viewer does not allow editing of the log files.

The Log Viewer displays its respective file in real time, which means that when the viewer is opened, any new entry in the file will be added to the display of existing entries.

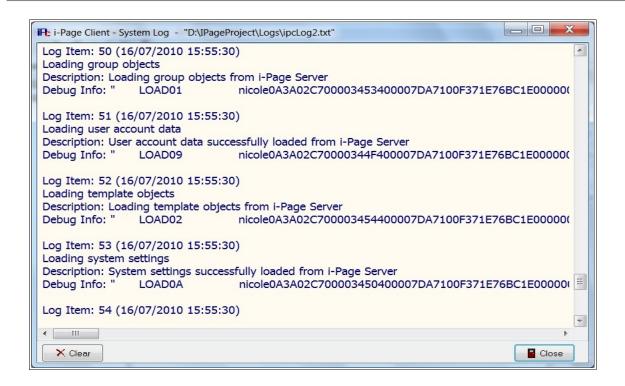
Warning: While i-Page is running, you will not be able to open any of its log files in another editing tool

In its title the viewer shows:

Application name
Type of the log file (System Log)
The path and name of the currently used file

For example, in the screen shot below, you can see that the name of the application is "i-Page Client", the type of the file displayed is "System Log" and the path of the file is:

"C:\IPageProject\Logs\ipcLog2.txt"



Display Settings

To clear the log display, select the "Clear" button (or the "Clear" menu item in the pop-up menu).

Shortcut: Ctrl+Del

It will clear the display but will not delete the log file.

To close the viewer, press the "Close" button, or the "Esc" key.

For more available commands, right-click on the display and select the appropriate command from the pop-up menu.



To move to the beginning of the file select "Go To Start" (Ctrl+Home), and to move to the end select "Go To End" (Ctrl+End).

If you want the log display to always stay on top of all the other forms in the program, select "Stay On Top". If this option is selected, the menu item will have a check mark displayed.

To change the background colour of the viewer select "Settings | Colour" (Ctrl+B) and to set the font select "Settings | Font" (Ctrl+F).

You can also select any part of the text and copy it to the clipboard.

All changes to the log viewer settings are stored automatically.

Open i-Page Client Log Viewer

i-Page Client Log Viewer displays a file that is used to log its communication with i-Page Server. It can be opened from the i-Page Client main screen.

Select "File | Show Log"

Shortcut: Ctrl+L

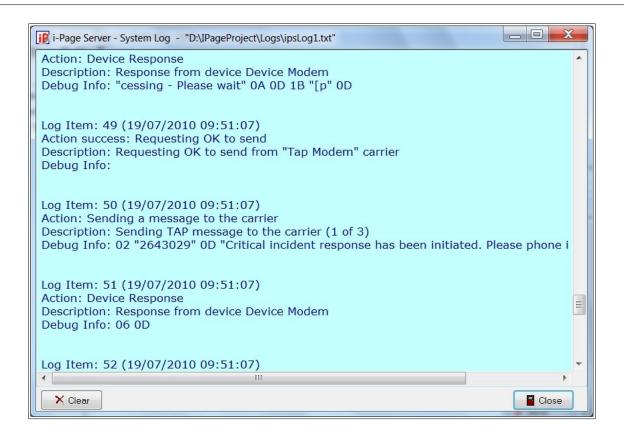
Hot Keys: Alt+F,L

All the above commands will open the "i-Page Log Viewer" for the client application.

Open i-Page Server Log Viewer

i-Page Server Log Viewer displays a file that is used to log its communication with carriers and devices. It can be opened from the i-Page Server main pop-up menu.

Right-click on the server icon in the system tray and select the "System Log" menu item.

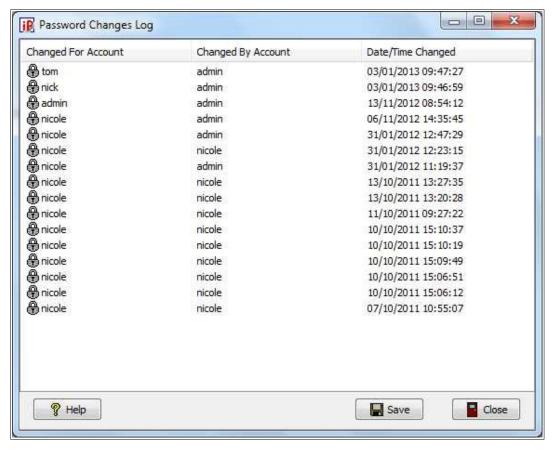


Password Changes Log

Every account has right to change its own password. The account with the "<u>Set Account</u>" right can change a password for every other account.

i-Page Server stores all password changes for the future reference. Only accounts with the "Password Changes Log" right can see the password changes log.

Select "Accounts | Password Changes Log" on the main pop-up menu.



The "Password Changes Log" displays all password changes as read-only. They cannot be edited or deleted.

The column "Changed For" displays the account which password was changed, the column "Changed By" displays the account which changed the password, and the column "Date/Time Changed" displays the date and time when the password was changed.

The log can be saved to the file in the following formats:

☐ Text File (txt)

HTML File (html)
Rich Text Format File (rtf)
CSV File (csv)

To save the log, click on the "Save" button and on the "Save As" dialog select the file type from the "Save As Type" control.

Log Saved In Different Formats

Log In TXT Format (Displayed in Notepad)

i-Page Server Password Changes Log 16/01/2013 13:15:14		
Changed For	Changed By	Date/Time
tom nicole nicole nicole nick admin nicole	admin admin admin admin admin admin admin nicole	03/01/2013 09:47:27 31/01/2012 11:19:37 31/01/2012 12:47:29 06/11/2012 14:35:45 03/01/2013 09:46:59 13/11/2012 08:54:12 07/10/2011 10:55:07 10/10/2011 15:06:12 10/10/2011 15:06:51 10/10/2011 15:09:49 10/10/2011 15:10:19 10/10/2011 15:10:37 11/10/2011 09:27:22 13/10/2011 13:20:28 13/10/2011 13:27:35 31/01/2012 12:23:15

Log In RTF Format (Displayed in WordPad)

i-Page Server Password Changes Log

Changed For	Changed By	Date/Time
tom	admin	03/01/2013 09:47:27
nicole	admin	31/01/2012 11:19:37
nicole	admin	31/01/2012 12:47:29
nicole	admin	06/11/2012 14:35:45
nick	admin	03/01/2013 09:46:59
admin	admin	13/11/2012 08:54:12
nicole	nicole	07/10/2011 10:55:07
nicole	nicole	10/10/2011 15:06:12
nicole	nicole	10/10/2011 15:06:51
nicole	nicole	10/10/2011 15:09:49
nicole	nicole	10/10/2011 15:10:19
nicole	nicole	10/10/2011 15:10:37
nicole	nicole	11/10/2011 09:27:22
nicole	nicole	13/10/2011 13:20:28
nicole	nicole	13/10/2011 13:27:35
nicole	nicole	31/01/2012 12:23:15

Log In HTML Format (Displayed in Chrome)

i-Page Server

Password Changes Log

16/01/2013 13:15:22

Changed For	Changed By	Date/Time
tom	admin	03/01/2013 09:47:27
nicole	admin	31/01/2012 11:19:37
nicole	admin	31/01/2012 12:47:29
nicole	admin	06/11/2012 14:35:45
nick	admin	03/01/2013 09:46:59
admin	admin	13/11/2012 08:54:12
nicole	nicole	07/10/2011 10:55:07
nicole	nicole	10/10/2011 15:06:12
nicole	nicole	10/10/2011 15:06:51
nicole	nicole	10/10/2011 15:09:49
nicole	nicole	10/10/2011 15:10:19
nicole	nicole	10/10/2011 15:10:37
nicole	nicole	11/10/2011 09:27:22
nicole	nicole	13/10/2011 13:20:28
nicole	nicole	13/10/2011 13:27:35
nicole	nicole	31/01/2012 12:23:15

Log In CSV Format (Displayed in MS Excel)

	А	В	С
1	i-Page Server		
2	Password Changes Log		
3	16/01/2013 13:15		
4	Changed For	Changed By	Date/Time
5	tom	admin	03/01/2013 09:47
6	nicole	admin	31/01/2012 11:19
7	nicole	admin	31/01/2012 12:47
8	nicole	admin	06/11/2012 14:35
9	nick	admin	03/01/2013 09:46
10	admin	admin	13/11/2012 08:54
11	nicole	nicole	07/10/2011 10:55
12	nicole	nicole	10/10/2011 15:06
13	nicole	nicole	10/10/2011 15:06
14	nicole	nicole	10/10/2011 15:09
15	nicole	nicole	10/10/2011 15:10
16	nicole	nicole	10/10/2011 15:10
17	nicole	nicole	11/10/2011 09:27
18	nicole	nicole	13/10/2011 13:20
19	nicole	nicole	13/10/2011 13:27
20	nicole	nicole	31/01/2012 12:23

Shortcuts

All dialogs that are used for creating, editing and deleting objects in i-Page System, have some common features and use the same shortcut keys to perform those functionalities.

Edit Dialogs

New	Ctrl+N
Delete	Ctrl+Del
Cancel	Ctrl+Q
Save	Ctrl+S or Enter
Selected Object Settings	Ctrl+O
Display All Objects	Ctrl+A
Selected Object Summary	Ctrl+I
Close	Escape

Used in the following dialogs:

Edit Devices

Edit Carriers

Edit Accounts

Edit Message Objects

Edit Schedules

Edit Reports

Edit Domains

Appendix B

Grids

Some edit dialogs in i-Page Server use grids to display all editable objects and some of their properties.

Edit Devices

Edit Carriers

Edit Accounts

Edit Message Objects

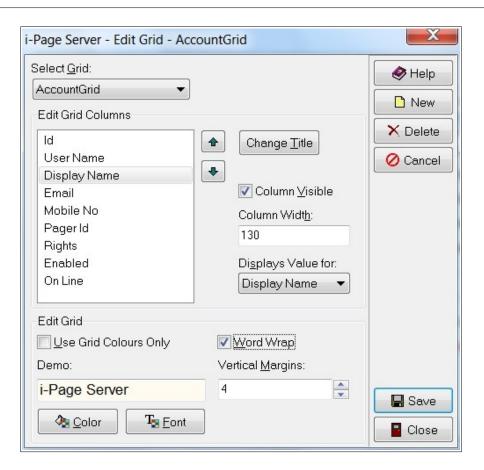
Edit Schedules

Edit Reports 56

Edit Domains

Grids that they are using can be set from within these dialogs by selecting the "Grid" item in the left-hand side panel. They can all be set in the same way.

The "Select Grid" control displays the name of the grid that you are editing.



New Column

The number of columns that you can create in i-Page grid is limited by the number of distinct information that is available for the editing object. The application will warn you if you set two columns to show the same type of data.

All of the types of data that can be displayed for each object are listed in the "Displays Value for" combo box.



To create a new column, press the "New" button.

Shortcut: Ctrl+N

By default the application will create a column with the next available type of data and suggest an appropriate name for the column.

In the pop-up dialog enter a name for the new column and click "OK".



The name may be up to 30 characters long and it may consist of one or more words. It can contain any printable character. If the name is longer than 30 characters, it will be truncated.

This name will be displayed as a column title on the grid title bar.

Edit Column

In the "Edit Grid Columns" control, select the column you wish to edit.

Changing Column Position

The "Edit Grid Columns" control shows columns on the same position as in the grid title. Click on the "Up" or "Down" button to move the column up or down until you are satisfied with its position. See Grid Display/Changing Column Position

These changes are saved automatically. If you have the respective grid opened, you will see the changes immediately.

Changing Column Title

Click on the "Change Title" button. In the pop-up dialog enter a new name for the selected column and click "OK". (For naming see <u>New Column</u>)

Those changes are saved automatically. If you have the respective grid opened, you will see the changes immediately.

Showing/Hiding Columns

Check or uncheck the "Column Visible" check box. Its respective icon in the "Edit Grid Columns" control will change accordingly. See Grid Display/Displaying/Hiding Columns

This change is not saved automatically.

Changing Column Width

Enter the desired column width into the "Column Width" control. The column width is expressed in pixels. If you do not feel comfortable working with pixels, see Grid Display/Resizing Columns.

This change is not saved automatically.

Changing Display Data Type

Each column displays data obtained from every object displayed. You can change what data each column displays by selecting from the "Displays Value for" combo box.

If you try to set two columns to display the same data, you will get a warning message.

This change is not saved automatically.

Save Column

If you have entered some changes into the column that are not saved automatically, the "Save" button will become enabled.

To save changes to the column, press the "Save" button or the "Enter" key.

Shortcuts: Ctrl+S or Enter

Warning:

- 1. If you select another column, without saving changes to the previously selected column, the modifications to that column will be lost.
- 2. If you close the dialog box without saving changes, you will get a warning and another opportunity to save your changes.

Delete Column

In the "Edit Grid Columns" control, select the column you wish to delete.

Select the "Delete" button.

Shortcut: Ctrl+Del

You will get a warning from the system that the column will be deleted permanently and the option to either delete it or not. If you choose to delete it anyway, the column will be deleted permanently and removed from the grid, with all its data, instantly.

Note: Deleting a column from the display does not affect the programming object whose properties the grid is displaying.

Warning:

- Deleting is not the same as hiding a column.
- You cannot delete the "ID" column.

Set Grid Display

Grid Default Colour

Click on the "Color" button and select the default background colour for that grid.

Shortcut: Ctrl+C

Hot Keys: Alt,C

Click on the "Font" button and select the default font colour for that grid.

The new selection will display in the text box above the selection buttons.

Use Grid Colours Only

Not used in this version of i-Page.

Word Wrap

If this control is checked, the grid display engine will force all text to fit within the defined margins of the grid cell. If the length of the text is greater then the width of the cell, the text will be split and placed into the next line and the height of the cell (and the whole grid row) will be increased accordingly. This process will continue until the whole text is displayed within the grid cell. No word will ever be split between two lines. Word wrap will also occur after the user changes the margins of the grid manually.

The word wrap feature does not change the content of the original text displayed in the cell.

Grid Font

Click on the "Font" button.

Shortcut: Ctrl+F

Hot Keys: Alt,F

In the Font Dialog you can select a font type from the "Font" control. You can use any font that is installed on the machine.

You can also select a font size (from the "Size" control) and a font colour (from the "Color" control).

A font style (bold, italic, strikeout, underline) is also supported by the grid display engine.

All changes to the font will display in the text box above the button.

Vertical Margins

The "Vertical Margins" control allows the user to set margins between the text in the grid and the grid cell top and bottom edges. This feature works only when the "Word Wrap" feature is turned off. The value is expressed in pixels and the default value is 4.

Save Grid Display

To save grid display changes, press the "Save" button or Enter key.

Shortcuts: Ctrl+S or Enter

Cancel Changes

If you are not satisfied with changes to the grid and wish to return to all previous settings, you can cancel all the changes at once by selecting the "Cancel" button.

Shortcut: Ctrl+Q

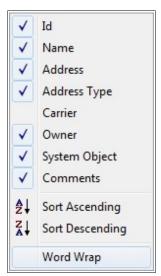
Note: You can cancel only unsaved changes.

Sorting Grid

Displayed grid data can be sorted in some columns (where it makes sense) in ascending or descending order.

To sort a grid column, just click on its title. If the column is sortable, every time you click on it, it will toggle between ascending and descending sorting order.

If you want more control over the sorting order, right click on the column title and select the "Sort Ascending" or the "Sort Descending" item from the pop-up menu.



If those items are disabled, that means that the selected column is not sortable.

Grid Display

Displaying/Hiding Columns

Right-click on any of the grid column headings to bring up a pop-up menu that shows the names of all columns created for that grid and in the same order as they are displayed in the grid. All visible columns have a check mark next to their name.



To hide a visible column or to show a hidden column, click on its name in the pop-up menu.

Resizing Columns

Move the mouse pointer to the grid title bar.

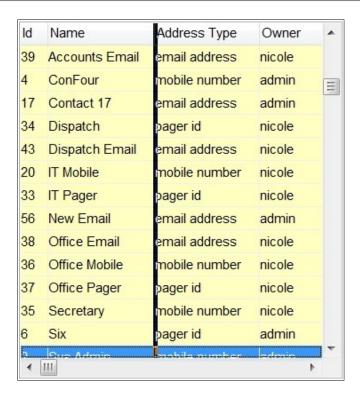
Position the mouse over the edge of the column you wish to resize. The mouse pointer cursor changes into the resizing cursor.

Hold the main mouse button down and resize the column by moving the mouse pointer.

Changing Column Position

Move the mouse pointer to the grid title bar.

Position the mouse over the column you wish to move. Click and hold the main (left) mouse button and drag the column to the new position at which you wish for it to appear.



All changes will be stored automatically and retrieved the next time you open i-Page Application.

Object Summary Dialog

Every object in i-Page System displays a dialog with the summary of its settings.

To invoke the dialog, select the object in its respective edit page and press **Ctrl+I** (I - for Info). Some edit pages have a separate "Summary" item that can be selected and some allow the user to invoke the summary by double-clicking the object.

Objects With Summary

Devices

Carriers

Domains

Accounts

Contacts

Groups

Templates

Schedules

Reports

Folders

File Messaging

IP Messaging

Connections

Summary Example

All object summaries are displayed as read-only and cannot be changed.

Copy Summary

The user can copy any part or the whole summary and paste it in any text editing program.

To copy the part of the summary:



- ☐ Select the part you want to copy
- ☐ Press **Ctrl+C** OR from the pop-up menu select "**Copy**"

To copy the whole summary:

- ☐ Press Ctrl+A OR from the pop-up menu select "Select All"
- ☐ Press **Ctrl+C** OR from the pop-up menu select "**Copy**"

Pop-up Menu

Every summary display has its pop-up menu that allows the user to perform a copy operation and to change the display settings.



To invoke the menu, right-click anywhere in the summary display.

Display Settings

To change the colour of the display, select "Colour" from the pop-up menu (shortcut Ctrl+B).

From the colour dialog select a desired colour.

To change the display font, select "Font" from the pop-up menu (shortcut Ctrl+F).

From the font dialog select: font type, style and size.

Save Summary

To save the summary into a file, select "Save" from the pop-up menu (shortcut Ctrl+S).

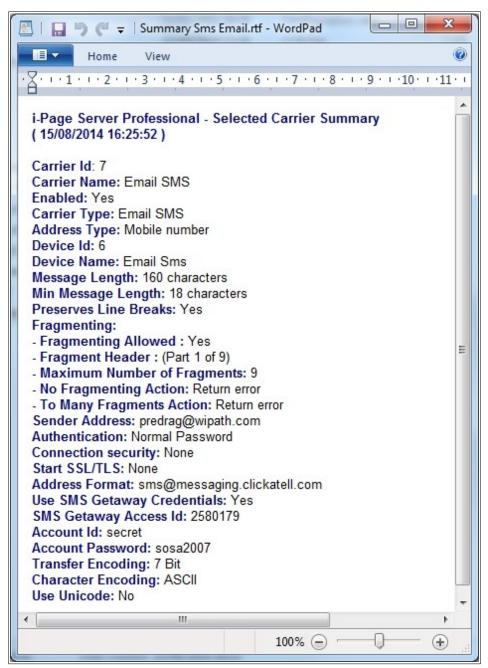
On the save dialog in the "Save as type" control select a type of file. The summary can be saved into 2 types of file:

Text file (. txt)	
Rich Text Format ((.rtf)

Enter a file name and press "Save".

Note: Rich Text Format will preserve all the formatting from the display.

One of the summaries, saved in the RTF format and opened in "WordPad".



Appendix C

File Message In

Describes a structure and content of the file that contains a message sent by a client application to i-Page Server, through the server's file interface connection. The server retrieves the file, decodes the message and sends it to a designated carrier.

File Fields

Definition

The file has 7 fields and they are defined as follows:

Position	Name	Required	Value Required
1	Msgld	Yes	No
2	Address	Yes	Yes
3	Msg	Yes	Yes
4	Carrier	No	No
5	Subject	No	No
6	Priority	No	No
7	Age	No	No

A required field must be present in every message.

A field with required value must have a valid value. The other fields can be empty.

Content

Name	Content	Values
Msgld	Contains transaction id, assigned by the sender	Default: 0
Address	Pager id, mobile number or email address of the receiver	Must have valid value
Msg	Actual paging, SMS or email message text	Cannot be empty
Carrier	System assigned id of a carrier.	Default : carrier id set by the

Name	Content	Values
		administrator
Subject	A subject of an email message	Used only for email messages
Priority	The server's message queue priority	Default: Normal (4)
Age	Time in minutes that the server will keep an unsent message before it is discarded	Default: 120 minutes

The message id ("Msgld") field is assigned by the client. If the client wants to follow up on the messages it sends, it can use it as a message identifier and match the sent message to its result. The server always returns the same message id in the result message.

Otherwise, it can be empty (must be present) or 'o'.

Warning: Negative numbers cannot be used as message identifiers. It could result in unpredictable behaviour because the server uses negative numbers for its test messages.

The message field ("Msg") can contain any character found in the selected encoding character set.

If the message field contains a comma or a double-quote character, it must be enclosed in double-quotes. In that case any double-quote in the message must be duplicated.

If the message contains line breaks characters (CRLF), they must be replaced with " \n " (without quotes.

Message Types

The server accepts 5 different types of messages:

Complete With Header

- 1. File has two lines of text, delimited by line break characters **CR** (\$\(\mathcar{D}\); #13) **LF**(\$\(\mathcar{A}\); #10)
- 2. The first line is a file header, and contains names of the fields, delimited with the comma character ',' (\$2C #44)
- 3. All field names must be present.

- 4. The second line contains fields values, delimited with the comma character ',' (\$2C #44)
- 5. All field values must be present, but some of them can contain empty values.
- 6. Fields can be entered in any order, but the header field names position must correspond to the position of field values.

Example

"Subject" field is empty

```
Msgld, Address, Msg, Carrier, Subject, Priority, Age<CRLF>
456, 1234567, "Hello world, from ""WiPath"" programmers.", 2,,4,120
```

All fields have values

```
Msgld, Address, Msg, Carrier, Subject, Priority, Age<CRLF>
456, john@company.com, "Hello world, from ""WiPath"" programmers.", 4, Hello Message, 4, 120
```

Partial With Header

- 1. File has two lines of text, delimited by line break characters CR (\$D; #13) LF(\$A; #10
- 2. The first line is a file header, and contains names of the fields, delimited with the comma character ',' (\$2C #44)
- 3. Only required field names must be present and all other are optional and depend on the user's preferences
- 4. The second line contains fields values, delimited with the comma character ',' (\$2C #44)
- 5. All field values, which names appear in the header must be present, but some of them can contain empty values
- 6. Fields can be entered in any order, but the header field names position must correspond to the position of field values

Example

"Subject" and "Age" fields are missing

```
Msgld, Address, Msg, Carrier, Priority < CRLF > 456, 1234567, "Hello world, from ""WiPath"" programmers.", 2, 4
```

"Priority" and "Carrier" fields are missing

```
Msgld, Address, Msg, Subject, Age<CRLF>
```

456, john@company.com, "Hello world, from ""WiPath"" programmers.", Hello Message, 120

Complete Without Header

- 1. File has only one line of text
- 2. The line contains fields values, delimited with the comma character ',' (\$2C #44)
- 3. All field values must be present, but some of them can contain empty values
- 4. Field position must be the same as defined in "File Fields Definition"

Example

"Subject", "Priority" and "Age" fields are present but they do not have value

```
456, 1234567, "Hello world, from ""WiPath"" programmers.", 2, , ,
```

All fields have value

456, john@company.com, "Hello world, from ""WiPath"" programmers.", 4, Hello Message, 4, 120

Partial Without Header

- 1. File has only one line of text
- 2. The line contains fields values, delimited with the comma character ',' (\$2C #44)
- 3. Only required field values must be present and all others are optional and depend on the user's preferences
- 4. Field position must be the same as defined in "File Fields Definition"
- 5. If a value for a field is entered, all other fields with defined lower position must be present (even if empty).

Example

"Subject" and "Priority" and "Age" fields are not shown because they do not have value

```
456, 1234567, "Hello world, from ""WiPath"" programmers.", 2
```

"Subject" and "Priority" fields do not have value, but must be present because the "Age" field, which comes after them, has a value

```
456, ohn@company.com, "Hello world, from ""WiPath"" programmers.", 4,,,120
```

Basic Message

1. File has only one line of text

- 2. The line contains fields values, delimited with the comma character ',' (\$2C #44)
- 3. Only required field values are present (Msgld, Address, Msg).
- 4. Field position must be the same as defined in "File Fields Definition"

Example

Only required fields are present and have values

```
456, 1234567, "Hello world, from ""WiPath"" programmers."
```

Only required fields are present, but "Msgld" does not have a value

, john@company.com, "Hello world, from ""WiPath"" programmers."

File Message Out

Describes a structure and content of the file that contains a result message sent by i-Page Server to the client application, through the server's file interface connection. If the user has selected the option to receive a result of the send message operation, the server creates a file and place it in the designated folder.

File Structure

- 1. File has two lines of text, delimited by line break characters **CR** (\$D; #13) **LF**(\$A; #10)
- 2. The first line is a file header, and contains names of the fields, delimited with the comma character ',' (\$2C #44)
- 3. All field names must be present.
- 4. The second line contains fields values, delimited with the comma character ',' (\$2C #44)
- 5. All field values are present, and all of them contain valid values.
- 6. Fields are always entered in the defined order, and the header field names position corresponds to the position of field values

File Fields

Definition

The file has 7 fields and they are defined as follows:

Position	Name	Field Content
1	Msgld	The same transaction id, that the client has assigned in the message sent to the server
2	Address	Address of the receiver that the message was sent to
3	Msg	Actual paging, SMS or email message text

Position	Name	Field Content
4	ResultCode	System code for the result of the send operation
5	ResultText	User friendly description of the result of the send operation
6	DateReceived	Date when the server received the message from the client
7	DateSent	Date when the message was sent to a carrier or error was returned to the client

All fields are present in every message and they have valid values.

The message field may contain any character contained in the selected encoding character set.

If the message field contains a comma or a double-quote character, it will be enclosed in double-quotes. In that case any double-quote in the message will be duplicated.

If the message contains line breaks characters (CRLF), they are replaced with " \n " (without quotes).