# Mobile Board Express User's Guide

Version 2.0.6



Messaging Suite IEA Software, Inc.

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# Introduction

IEA Software is pleased to offer our SMS public messaging suite "Mobile Board Express" providing a variety of messaging services including chat, trivia, voting, order management, advertising and user groups / bulk messaging in a single easy to use system.

For more information or if you need assistance please visit our web site http://www.iea-software.com.

# Installation

Before proceeding to install the software please carefully review the following system requirements.

### System Requirements

The system requires any windows XP, 2000, 2003, 2008, Vista or Win7 based PC on either the 32-bit or 64-bit platform. You should have at least 5 GB of disk space available, 512 MB or more available main memory and a 1.5 GHz or faster processor.

We recommend 2GB or more main memory, fast video card, and some form of redundant disk array such as RAID1 to protect against hardware failure.

### Mobile SMS network access requirements

Mobile board supports two common access technologies to enable interaction with the worlds mobile SMS networks.

#### **GSM Modem / Mobile Phone**

In many areas the most common and cost-effective method of network access is to utilize a GSM modem or mobile phone with support for sending and receiving SMS messages via AT commands/serial interface. Most standard GSM cellular telephones can be configured as a GSM modem. If you are unsure about the capabilities of your phone or GSM modem please contact the vendor for more details.

The system has been tested extensively with the Ericcson T226 mobile phone normally available for less than \$40 USD. It has also been tested with the Motorola Razr v3 phone and some windows mobile based devices. The system is known not to work with many of the Nokia E series phones such as the E51 as they do not support receiving SMS messages from the standardized GSM/AT modem interface.

You must have all necessary cabling (Such as a USB cable) and software (Phone software, serial drivers) to connect the GSM modem or cellular phone to the computer the system is to be installed.

Before connecting the GSM modem/cellular phone to the system you should check and understand any costs associated with your messaging plans. In the US many carriers provide unlimited messaging for a nominal monthly fee.

If you do not already have such a GSM modem / mobile phone we recommend obtaining a "Ericcson T226" mobile phone usable on your providers GSM based network.

Unfortunately the vast majority of CDMA based phones from CDMA providers (Phones that do not have SIM cards) cannot be used as GSM cellular modems.

#### Internet based SMPP gateway

With an Internet connection and access to a providers SMPP gateway mobile SMS messages can be routed two and from Mobile Board leveraging an integrated SMPP client. Pricing for SMPP based services vary and are typically more expensive than the use of a mobile phone. SMPP provides the following benefits over the use of a GSM Modem for SMS messaging.

- ✓ Availability of short codes for two-way messaging
- ✓ High throughput message processing. GSM Modems are typically limited to less than 35 messages per minute whereas SMPP gateways can enable up to several hundred messages to be processed each second.

### **Display Requirements**

The primary display board kiosk should be presented on a large television or computer monitor clearly visible from large distances. For the best results we recommend using a high resolution interface between the system and the display such as HDMI, component, VGA or DVI. In all cases we recommend setting the computers display resolution to 800x600 for best results and visibility regardless of the resolution capable of being displayed on the TV or monitor. Higher resolutions will typically only make the information on screen appear smaller and thus more difficult to read.

If you will be using a wide-screen TV or monitor we recommend tilting the display 90 degrees so that the vertical dimension is larger than horizontal. Finally correct for this by also making the 90 degree change in your computers display properties. This provides a larger usable area for more messages and activities to be displayed at once on the display board kiosk.

The display board kiosk will tend to present very similar content over time in some areas of the screen possibly leading to burn-in on displays easily susceptible to it. It is recommended the display board NOT be used with rear-projection CRT and some Plasma displays. LCD or DLP based displays are recommended.

### Browser Requirements

While the operator UI and display board kiosk is compatible with all major browsers we recommend the use of Internet Explorer 7 for the display kiosk. The software uses DirectX filters for some effects which are not directly compatible with other browsers. **Mobile Board is not compatible with Internet Explorer 6 or earlier**.

Display board kiosk prefers use of fonts included with other Microsoft products such as MS office which may typically not be included with the base operating system. For best results we recommend installing office or similar product on the computer running the display board kiosk.

When running the display use the browsers "kiosk mode" or turn off the browsers status bar from the view / status bar menu of Internet Explorer and press F-11 to switch to toggle full screen mode which provides the full screen area to the display board kiosk.

If you will be running the display board kiosk from a remote system not directly connected to the server over a WAN link such as the Internet we recommend using SSL (https) to connect to the server to minimize any chance of screen flickering which can occur over low speed or high latency network connections.

#### Software download

There are two packaging choices for download on the web site.

- Mobile Board Express /w MSDE (MobileBoard2DB.exe)
- Mobile Board Express (MobileBoard2.exe)

The first option 'Mobile Board Express /w MSDE' includes an embedded version of the MS SQLServer database server needed for this system to operate. This is the typical recommended download. If you already have SQLServer 2000,2005,2008 or SQL Express installed on the computer you should choose the 'Mobile Board Express' download without MSDE as the installation will fail if any version of SQL Server has already been installed.

The second option 'Mobile Board Express' should be selected if you already have a Microsoft SQL Server you will be using as the backend data store for Mobile Board. If you do not have SQL Server download the first option 'Mobile Board Express /w MSDE'.

### Mobile Board Express /w MSDE Installation

Download MobileBoard2DB.exe, run it with administrative privileges choosing the typical install options. Before installing mobile board express uninstall or disable any third party web servers you may have running such as IIS and Apache as these can interfere with the operation of the system.

Next select 'Mobile Board Web Config' from Start / (All) Programs / Mobile Board.

You will be prompted to set a configuration password. Please remember it for future use. If you forget the password you may reset by removing the following registry key: HKEY\_LOCAL\_MACHINE\Software\IEA\SMSCommon\WCPassword

The automated install will now create a new database and configure the system for use. Please do not attempt to refresh the screen or interrupt the browser during this process. Once complete and you see the Mobile Board login screen displayed please skip to the "<u>Mobile Board Express Installation – Continued</u>" section below to continue the installation process.

#### Mobile Board Express Installation

Download MobileBoard2.exe, run it with administrative privileges choosing the typical install options. Before installing mobile board express uninstall or disable any third party web servers you may have running such as IIS and Apache as these can interfere with the operation of the system. All installation steps assume SQL Server has already been installed on the server as the default instance. If this is not the case you may need to make minor adjustments from the specific instructions of this section to establish connectivity with SQL Server.

Next select 'Mobile Board Web Config' from Start / (All) Programs / Mobile Board.

You will be prompted to set a configuration password. Please remember it for future use. If you forget the password you may reset by removing the following registry key: HKEY\_LOCAL\_MACHINE\Software\IEA\SMSCommon\WCPassword

From the Configuration web interface, click '**Create database**', select **new** from the '**Mobile Board datasource**' selection box.

ODBC control panel	
Edit existing datasource	(none)
Create new datasource	MobileBoard2
	>> Continue

Click Continue.

ODBC control panel						
Database type	Microsoft SQL 2000+ 💌					
	>> Continue					

'Microsoft SQL 2000+' should be selected, click continue.

ODBC control panel	
Datasource description	Mobile Board Express
Server name	(local)
Database name	master
Trusted connection	Yes 💌
	>> Continue

Configure ODBC control panel options to appear **exactly** as in the picture above, click continue.

Create database		
Mobile Board datasource	MobileBoard2 (SQL Native Clie	ent) 💌
SA Username		
SA Password		
	<u> </u>	>> Continue

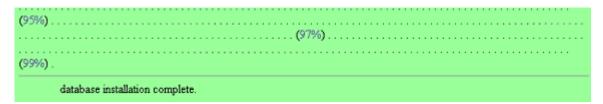
At the '**Create database**' form make sure the **MobileBoard2** datasource is selected and click continue. (Please ignore/leave empty the SA Username and Password fields)

Create database			
Create a new database	MobileBoard2		
Or use an existing <b>empty</b> database		-	
			>> Continue

We want to create a new database named MobileBoard2, click continue.

Create database	
Device name	MobileBoard2_data
Device full path/file name	d:\mssql2000\MSSQL\data\MobileBoard2_data
Device size (Megabytes)	25
Log name	MobileBoard2_log
Log full path/file name	d:\mssql2000\MSSQL\data\MobileBoard2_log.l
Log size (Megabytes)	10
	>> Continue

This next form has a host of options covering where and how to create the Mobile Board Express database. You may want to adjust the location of the database and database log files. These should be placed on a fault tolerant disk array with several gigabytes of storage space. (**Device size** is automatically adjusted as needed.) In most situations you may safely keep all the defaults and simply click continue here.



The database is created. Mobile Board is automatically reconfigured to use the new database and has started. Click Start / (All) Programs / Mobile Board / Mobile Board Web Login to login to the system.

#### Mobile Board Express Installation - Continued



To access the system use the default administrative username '**admin**' with a password of '**pass1**'.

×	Checking lie No valid Mobil	cense status e Board Express	s licenses have been found - <u>Click here to update license keys</u>
Setting	s Status	Advanced	Logoff

In the next step enter your temporary evaluation or permanent non-expiring license by following the "Click here to update license keys" link.

Evaluation licenses can be obtained from the IEA Software download center (<u>http://www.iea-software.com/download</u>) or by contacting your IEA sales representative.

Add License Key									
Company:	My Company								
License Key:									
		Update							

Once entered the screen displays licensed features and any expirations associated with the evaluation license. Detailed information about license keys if you experience any difficulty with this step is available from the <u>"Settings" / "License Keys"</u> section of this document.

New License								
			License I	(eys				
Compar	y		License Ke	y		Expires	Status	all the second s
IEA Software, I	oftware, Inc.						Active	Delete
	Lice	nsed Featu	res		Մո	dicensed F	eatures	
GSM Poller	SMS Chat		SMS Trivia		🔥 No unl	icensed fea	tures fou	nd
SMS Voting	On Screen	Advertising	Outgoing SMS Message	s				
SMS Ordering								

Next we will change the admin password from the default setting of 'pass1'.

Settings	Status	Reporting	Users	Voting	Trivia	Chat	Ads	Orders	Send SMS	Advanced	Logoff
Nº2	5	Version: 2.0	0.01	Poller S	Status: Of	fline: mo	dem e	xception	S	ystem Settin	gs
		500	Ô		-		8			7	
12119	5	えのら			1				Ed		
		General	Pol	er i er	Operators	Licens	e Keys	Language	s Apply		
22	2								Change	18	

From the "Settings" menu choose the "Operators" option and click the 'admin' operator from the list shown.

	Edit Operator					
First Name:		Last Name:				
Operator Login:	admin	Password:				
Access Rights:	Global Administrator - No Security Checking	Theme:	Default 💌			
Date Format:	Default	Date Separator:	Default 💌			
Active:	Yes 🔻	Language:	Autodetect			
Update						

Select a new password for the 'admin' user by entering the password in the password field. When this is done the contents of the field is displayed on the screen to enable you to double check entry of the new password.

Next we will create an access account for the display board kiosk. From the same operators menu click 'New Operator'

	New Operator			
First Name:	Display Board	Last Name:	Kiosk	
Operator Login:	display	Password:	display123	
Access Rights:	Display Kiosk - Access limited to main display board	Theme:	starlight 💌	
Date Format:	Default	Date Separator:	Default 💌	
Active:	Yes 💌	Language:	Autodetect 💽	
Update				

Enter a new operator having the Access Right of "Display Kiosk" and be sure to write down the login and password you have chosen for the display board kiosk.

Finally move to the "Status" / "Poller Information" menu.

Settings	Status	Reporting	Users	Voting	Trivia	Chat	Ads	Orders	Send SMS	Advanced	Logoff
	Versio	on: 2.0.01	Poll	er Status:	Offline	: moden	1 excep	tion		System Statu	s
							Georg				
		ッ し		2				R	1		
	Poll		imulator	Operator		atabase	Displa	ay Kiosk	Order Kiosk		
	Inform	ation		Sessions	B	Activity					

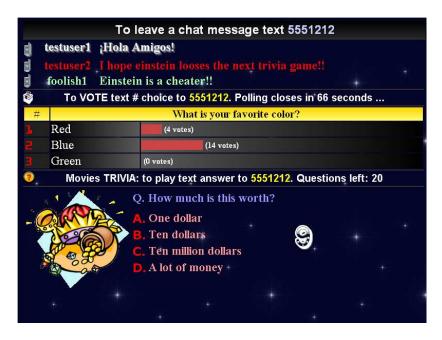
If using a GSM modem/mobile phone and the GSM modem you will be using to send and receive SMS messages has not already been connected to the system (Typically via USB) please connect it now. **Note: Once connected the system automatically downloads and removes any SMS messages from the GSM Modem / cellular phones SMS mailbox.** The "Poller Status" display will change to a green text showing "Online" when the phone is successfully connected. The Poller information screen will continue to show technical information related to the discovery of the GSM modem. When using SMPP or for detailed information related to the configuration of the poller or for basic troubleshooting assistance please see the <u>"Settings" / "Poller"</u> section of this document.

At this point we recommend taking the following steps to further configure and familiarize yourself with the system.

- ✓ Review the <u>Display Board Kiosk</u> section of this users guide.
- ✓ Review the <u>"Settings"</u> section of this users guide.
- ✓ Create a recurring database backup schedule from the <u>"Advanced" / "Backup</u> <u>Database</u>" section of this users guide.
- $\checkmark$  <u>Contact us</u> if you need help or have any questions.

# **Display Board Kiosk**

Display board is the main display screen users interact with to view chat messages or participate in activities such as voting or trivia games via their mobile phones.



The display board is usually presented from a large screen TV or computer monitor capable of being viewed over large distances. For more information on display recommendations please see the <u>"Installation" / "Display Requirements"</u> section of this document.

The display board is simply a full screen web interface continually updated with new information from the mobile board server. To start the display board open Internet Explorer in kiosk mode (iexplore.exe –k http://localhost) or configure Internet explorer so that the status bar at the bottom of the browser window is not displayed (View / Status Bar) and press F-11 to toggle full-screen mode so that only the content of the display board is shown on the TV or computer monitor.

Finally when presented with the Mobile Board login screen enter the username and password of the operator account having the "Display Kiosk" access right created during the <u>guided installation</u> steps above. For further details see the <u>"Settings" / "Operators"</u> section of this document.

If needed you may opt to configure a shortcut or systems startup script to show the display board automatically in kiosk mode when the computer starts up. For example to start internet explorer passing a login of "display" and password of "abc123" the following command line may be used:

"%ProgramFiles%\Internet Explorer\iexplore.exe" -k "http://localhost/login.ews?user=display&password=abc123"

## Settings



Display number setting presents users with the cellular number to send SMS messages required for interaction with the system. For example if a user wishes to send a chat message or participate in voting or a trivia game this setting represents the phone number messages need to be sent.

Manage General SMS Settings			
SMS Display Number: 5551212			
Update			



### **Poller Settings**

To send and receive SMS messages from an SMPP gateway or GSM cellular modem the system includes a software component called the "SMS Poller". This provides for communication between the system and SMS network.

Before configuring the poller software please ensure the following prerequisite requirements have been met:

✓ Access to an Internet based SMPP gateway.

#### OR

- ✓ A GSM Cellular phone with standard GSM AT command set capable of sending and receiving SMS messages (Ericsson T226 recommended)
- ✓ Serial, USB Serial or Bluetooth Serial connection between the cell phone and the computer running this application. In some cases the Serial/USB cable needed to connect the phone to a computer is not included with the phone and may need to be purchased separately.
- ✓ Any serial communications drivers required by the cellular phone in order to make the cell phone appear as a serial device to the computer. Drivers are typically included on the installation CD included with your phone or available separately from the web site of the manufacturer of your phone.
- ✓ Any configuration required on the cell phone in order to act as a serial device. Some devices such as windows mobile based phones can appear as memory cards, active sync devices or serial modem devices.

More information on configuring your cellular device to act as a serial / modem device is available within your cellular phones user manual or by contacting your cellular phone provider or vendor.

In the event your phone does not provide support for the standard GSM AT command set necessary to establish the required computer interface to send and receive SMS messages alternate GSM cell phones with such capability are readily available from online retailers for \$40 USD or less. The "Ericsson T226" is one such phone having been tested extensively with this software product.

In most cases once your cellular GSM modem has been attached to the computer the poller will automatically connect to the phone and configure itself according to the capabilities of the phone. In the rare case there is a need to manually configure the

"poller" software available poller configuration options are described in detail below.

Please note when connecting a cellular GSM modem to the computer you should expect the poller to automatically download and delete all SMS messages from the phones inbox.

	Manage SMS Poller Set	ttings		
Poll Mode:	Serial GSM Modem/Phone - Auto Detect		•	
				••••••
GSM Modem Port:	Auto Detect 💌	GSM Port Settings:	Aut	o Detect 💌
Enable Outgoing SMS:	Yes -			
Outgoing SMS Charset:	Auto Select (Recommended)	Message Filter:	Star	ndard 💌
AT CMD Timeout (ms):	Default	Write Timeout (ms):	Defa	ault 🗾
				Detailed Info
				Section Debug
Log File:		Debug Flags:		SQL Queries
Log File.		Debug riags.		Phone Discovery
				Phone I/O
				Packet Detail
	Update			

### Serial GSM "poll mode" settings

GSM Modem Port	The recommended setting is Auto Detect. If you know the serial port your mobile phone is attached you may select the port from the list. As the com port may change from time to time due to the USB port the phone is attached or changes to the computers device settings we highly recommend keeping the Auto Detect setting to prevent any configuration mismatches in the future. In the case you will have multiple cell phones or GSM modem devices attached to the computer you should explicitly set the modem serial port of the desired cell phone to prevent
	the possibility of the poller auto-detecting the wrong phone device.
Poll Mode	There are two basic methods supported for retrieving new SMS messages from the mobile phone or modem.
	"Poll phone storage for new messages"

	This method periodically polls the phones SMS inbox for new messages. Once a new message is found it is automatically downloaded and then removed from the phones inbox. Poll mode is the most reliable and recommended method. Tech Note: Polling requires support for the following GSM AT commands: +CMGL, +CMGD
	"Listen for incoming messages" This method configures the phone to write the contents of new SMS messages to the serial port as they are received. The message is not recovered from the phones SMS inbox and the message is not deleted or in any way marked as read on the phone. This method should only be used if the device does not support the poll method. Many windows mobile based phones must use this option as SMS messages are not accessible via the polling mode.
	Tech note: Listen mode requires support for the following GSM AT command: +CNMI
	The proper mode depends entirely on the capabilities of the attached device. When auto-detect is selected the poller will automatically attempt to choose the proper mode based on the capabilities of the device.
	If you have knowledge that your device supports both modes and the Status / Poller information menu shows Interrupt mode was chosen we recommend manually configuring this setting to "Poll phone storage for new messages".
	If neither Poll or Listen capabilities are supported by your phone you will need to purchase a phone with these capabilities.
Outgoing SMS Charset	When "Auto Select" is specified and the system sends an outgoing SMS message to a users cell phone an attempt is made on a per-message basis to automatically choose the best character set based on the contents of each message.
	"Force GSM 7-bit" This forces the use of the standard GSM 7-bit character set when sending an outgoing message. If the message contains characters not supported by the GSM alphabet an attempt is made to select the closest substitute. Generally the GSM 7-bit character set acceptable for languages with Latin characters

	such as English, Spanish, German, French and Portuguese. GSM-7 bit does not support languages such as Chinese, Japanese, Korean, Arabic or Russian.
	In some environments it may be beneficial to force GSM 7-bit rather than auto-detect if you know the GSM 7-bit character set language limitations are acceptable This ensures all outgoing messages can be up to 160 characters maximum whereas if "Auto Select" is chosen the system may choose a Unicode encoding which may unnecessarily limit the maximum message size to 70 characters in some cases.
	"Force Unicode" forces all messages to be encoded in Unicode form. There is no known reason to force Unicode. If you need to support the full range of characters from many different languages in outgoing messages we recommend using the default "Auto Select" option.
AT CMD Timeout	When the poller issues a command to the cellular modem to for example check for new incoming messages or send an outgoing messages this option sets the maximum acceptable amount of time that may pass before the poller gives up and forces a reconnect to the cellular modem. In most cases the default timeout setting is sufficient.
Log File	Allows special configuration for the storage of the poller log file on disk for troubleshooting purposes. If no log file is specified logging information is written to the standard log subfolder from which the software was installed.
GSM Port Settings	Configures the baud rate of the serial connection between cell phone and computer. The recommended setting is Auto Detect.
Enable Outgoing SMS	When "Yes" the system is able to send outgoing messages to users mobile phones. An example of an outgoing message may be a new user welcome message or group announcement. When "No" the system will not send any outgoing messages even if outgoing messages have been queued for sending and will typically expire from the send queue without ever having been sent.
Message Filter	Message filters enable advanced filtering of incoming messages using PCRE regular expressions. Filters can be used to reformat incoming messages or reject certain messages based on content or complex patterns.
	The default and recommended filter set included with the software is 'Standard'. Please see the Advanced / Message Filters documentation for more information on filtering.

Write Timeout	support requiring cu Represents maximum the serial port to be flow control mechan poller gives up and f	Note: Configuration of filters is outside the scope of product support requiring custom consulting services for assistance. Represents maximum time to wait for commands written to the serial port to be sent to the modem based on any active flow control mechanisms. If the write timeout is exceeded the poller gives up and forces a reconnect to the cellular modem.		
Debug Flags	Enables information assist with troublesh the poller software a is recommended tha unnecessary growth	In most cases the default timeout setting is sufficient.Enables informational debug options that may be used to assist with troubleshooting any trouble that may arise between the poller software and cellular modem. During normal use it is recommended that all debug options be disabled to prevent unnecessary growth of the log file and to ensure only salient messages are logged under normal conditions.		
	Detailed Info	Detailed Info         Enable general system wide verbose           messages         messages		
	Section Debug	Enable section level debugging		
	SQL Queries	When a database query is executed the contents of the queries are logged.		
	Phone Discovery       Messages related to the detection         GSM cellular modem and its       capabilities.         Phone I/O       Information regarding any read         write I/O operation to the cellular       modems serial port.			

### Internet SMPP "poll mode" settings

	Manage SMS Poller S	Settings			
Poll Mode:	Internet SMPP Server - Connect to SMSC	via Internet	•		
			••••••		
Primary SMPP Server:	smpp. smppprovider. com	Primary SMPP Port:	2775		
Secondary SMPP Server:	backup.smppprovider.com	Secondary SMPP Port	2775		
System ID:	smppclient1	Password:	•••••		
Source Address:		Address Range:			
Outgoing Rate Limit:	Unlimited 🔽				
Enable Outgoing SMS:	Yes 💌				
Outgoing SMS Charset:	Auto Select (Recommended)	Message Filter	Standard 💌		
			🗖 Detailed Info		
			🗖 Section Debug		
T		Debug Flags:	🗖 SQL Queries		
Log File:	1	Debug Flags:	🗖 Phone Discovery		
			Phone I/O		
			🗖 Packet Detail		
	Update				

Primary SMPP Server	IP Address or hostname of SMS providers primary SMPP gateway.
Primary SMPP Port	TCP port of the primary SMPP gateway. The default port number for SMPP applications is 2775.

Secondary SMPP Server	If the Primary SMPP server is not reachable or a TCP session cannot otherwise be established with the primary SMPP server the system will attempt to establish a connection with a backup server as directed by your SMS provider. Please note a secondary connection is not attempted if the authentication (bind) attempt fails due to conditions such as incorrect credentials or credit depletion.
Secondary SMPP Port	TCP port of the secondary SMPP gateway. The default port number for SMPP applications is 2775.
System ID	Reflects the identification of this SMPP client (The ESME). System ID is used to login (bind) to the SMS providers SMPP server.
Password	A password if needed to login (bind) to the SMS providers SMPP server. If no password is required the password field should be left blank.
Source Address	For outgoing SMS messages - source address reflects the "Sent From" number. When the recipient views the message it will appear to have originated from the number specified. Note: In most cases the source address is configured by the SMS providers SMPP server and does not need to be sent.
	The field should be left empty unless otherwise directed by your provider.
Address Range	When logging on (binding) to the SMPP server "address range" is used to indicate to the SMPP server (SMSC) which destination phone numbers or short codes are accepted in terms of receipt of incoming SMS messages. Regular expression pattern matching is allowed to be used to match multiple numbers or a range of them.
	Note: In virtually all cases the Address Range is configured by the SMS providers SMPP server and must be left empty unless otherwise directed by your provider.
Outgoing Rate Limit	On a busy system with large volumes of outgoing SMS messages rate limit specifies maximum rate at which outgoing messages are sent to the SMPP server for processing.
	The outgoing rate limit is based on previous activity within the last 10 seconds. For example choosing a rate limit of "50 (every 10 seconds)" means no more than 50 outgoing messages can be sent within the previous 10 second window of time.
	If no rate limit is specified the default configuration of the system is that no more than 5 unacknowledged delivery requests shall be outstanding to the SMPP server at any point

	<ul> <li>in time. This can be increased up to 200 requests for very high throughput applications if necessary by contacting your IEA Software support representative.</li> <li>Some SMS Providers stipulate in their use agreements a maximum forwarding rate. It is recommended the forwarding rate selected match the providers requested maximum delivery rate.</li> </ul>
Enable Outgoing SMS	When "Yes" the system is able to send outgoing messages to users mobile phones. An example of an outgoing message may be a new user welcome message or group announcement. When "No" the system will not send any outgoing messages even if outgoing messages have been queued for sending and will typically expire from the send queue without ever having been sent.
	Technical Note: When Enabled a bind connection is made with the SMPP server in transceiver mode. When disabled a bind is made in receiver mode.
Outgoing SMS Charset	When "Auto Select" is specified and the system sends an outgoing SMS message to a users cell phone an attempt is made on a per-message basis to automatically choose the best character set based on the contents of each message.
	"Force GSM 7-bit" This forces the use of the standard Latin (ISO-8859-1) bit character set when sending outgoing messages. For GSM based mobile phones the SMPP gateway is expected to convert Latin to the GSM 7-bit alphabet to maintain a per message 160-character limit. If the SMPP gateway is not able to make this conversion the message limit becomes 140- characters.
	Generally this character set is acceptable for languages with Latin characters such as English, Spanish, German, French and Portuguese. GSM-7 bit does not support languages such as Chinese, Japanese, Korean, Arabic and Russian.
	In some environments it may be beneficial to force GSM 7-bit rather than auto-detect if you know the GSM 7-bit character set language limitations are acceptable. This ensures all outgoing messages can be up to 160 characters maximum whereas if "Auto Select" is chosen the system may choose a Unicode encoding which may unnecessarily limit the maximum message size to 70 characters in some cases.

	"Force Unicode" forces all messages to be encoded in Unicode form. There is no known reason to force Unicode. If you need to support the full range of characters from many different languages in outgoing messages we recommend using the default "Auto Select" option.					
Message Filter	Message filters enab messages using PCR used to reformat inco	le advanced filtering of incoming E regular expressions. Filters can be oming messages or reject certain ontent or complex patterns.				
	The default and recommended filter set included with the software is 'Standard'. Please see the Advanced / Message Filters documentation for more information on filtering.					
	Note: Configuration of filters is outside the scope of product support requiring custom consulting services for assistance.					
Log File	Allows special configuration for the storage of the poller log file on disk for troubleshooting purposes. If no log file is specified logging information is written to the standard log subfolder from which the software was installed.					
Debug Flags	Enables informational debug options which may be used to assist with troubleshooting any problems that may arise between the SMPP client (ESME) and the SMPP server. (SMSC) During normal use it is recommended all debug options be disabled to prevent unnecessary growth of the log file and to ensure only salient messages are logged under normal conditions.					
	Detailed InfoEnable general system wide verbose messagesSection DebugEnable section level debugging					
	SQL Queries	When a database query is executed the contents of the queries are logged.				
	Packet Detail	Enables detailed information to be presented regarding each element of PDUs sent and received. This debug option produces extremely large volumes of logging information and should only be enabled for a short time when necessary.				



User access to the system is controlled from the operator menu. Each person with access to the system is assigned his or her access login, password and security access level from within this menu. Please change the default password for the 'admin' user be from 'pass1' to a secure password as quickly as possible after installing the system to prevent unauthorized access.

The operator's menu is divided into two main components: management of operators and management of access rights.

#### Access Rights

This menu provides control over access privileges available for assignment to operators. Privileges serve to grant or deny access to specific areas of the system.

Since each operator (user) can only be assigned one set of access rights its important access rights be configured separately for each class of operator accessing the system.

For example if you wanted to grant some employees access to manage advertisements and monitor the SMS chat function an access right would be granted to provide only access to the 'Basic

	Description: Provides access to manage ads and chat messages							
Privilege	Description	Access Right	Privilege	Description	Access Right			
	Controls operator access to the "Ads" menu - management of advertising campaigns	Full Access 💌	Advanced	Controls operator access to the "Advanced" menu - for configuration of advanced system options. This does not include acess to the SQL Query or Configure Schedule menu items	No Access			
	All operators must be granted read access to this privilege in order to access the main operator interface	Read Only 💌	Chat	Controls operator access to the "Chat" menu - including display options, colors, message rewriting and moderation	Full Access			
	Provides access to the main display screen showing chat messages, ads, trivia and voting information users view to interact with the system	No Access 💌	Order Kiosk	Provides access to the order management kiosk where orders submitted via SMS are displayed and managed with the use of a touch screen or mouse driven display device	No Access			
Orders	Controls operator access to the "Orders" menu - order settings and maintenance	No Access 💌	Reporting	Controls operator access to the "Reporting" menu - access to system usage reporting information	No Access			
Send SMS	Controls operator access to the "Send SMS" menu - for sending outgoing messages, reviewing the output send queue and configuring reply messages	No Access 💌	Settings	Controls operator access to the "Settings" menu - access to system configuration. This does not include access to the Operators menu	No Access			
	Controls operator access to the "Status" menu - access to current system status	No Access	Trivia	Controls operator access to the "Trivia" menu - manage trivia questions, game types and start or stop trivia games	No Access			
	Controls operator access to the "Users" menu - management of cellular phones interacting with the system	No Access 💌	Voting	Controls operator access to the "Voting" menu - create voting questions and start or stop voting process	No Access			

Access', 'Ads' and 'Chat' privileges while no access would be given to other areas.

It is important when creating or making changes to existing access rights you carefully read the descriptions of each privilege to ensure the proper settings are being modified.

In general terms each privilege roughly corresponds to a menu option within the system. For example to enable management of voting menu functions you would configure access corresponding to the 'Voting' privilege.

When setting up a new access right for operators to access the administrative interfaces the "Basic Access" privilege must be provided in addition to specific privilege areas of interest.

New Access Group				
	Operator Access Groups			
Access Right	Description	Internal	Start Page	
Global Administrator	No Security Checking	Yes	<u>Default</u>	
<u>Display Kiosk</u>	Access limited to main display screen kiosk	Yes	smspoll ews	
<u>Order Kiosk</u>	Access limited to order management kiosk	Yes	smsorders.ews	

Note: certain access rights are built into the system and cannot be modified. These access rights are listed with the Internal field of "Yes" and within the access rights configuration all menu items appear grayed out or disabled and cannot be changed.

#### Operators

Each person that will be logging into and managing the system is known as an operator. Configuration related to each operator such as login name, password

New Opera	tor Acce	ss Rights				
		Operators				
Operator	Name	Access Rights	Language	Theme	Active	
admin		Global Administrator - No Security Checking	Autodetect	<u>sms</u>	Yes	Delete
display		Display Kiosk - Access limited to main display screen kiosk	Autodetect	<u>sms</u>	Yes	<u>Delete</u>
neila	Neil Armstrong	Global Administrator - No Security Checking	Autodetect	<u>sms</u>	Yes	Delete
<u>order</u>		Order Kiosk - Access limited to order management kiosk	Autodetect	<u>sms</u>	Yes	<u>Delete</u>

and access rights are configured from within the operator's menu.

	Edit Operator		
First Name:	Neil	Last Name:	Armstrong
Operator Login:	neila	Password:	
Access Rights:	Global Administrator - No Security Checking	Theme:	sms 💌
Date Format:	Default	Date Separator:	Default 💌
Active:	Yes 💌	Language:	Autodetect 💌
	Update		

First Name	Operators first (given) name
Last Name	Operators last (family) name
Operator Login	Login to use when connecting to the system. It is recommended the chosen login name be similar to the operator's real name. Common choices for login names include combinations of first name and last initial or first initial and last name.
Password	The password should be sufficiently sized and complex with use of varying cased letters; symbols and numbers to ensure the password cannot be guessed. Password chosen should be unique in that the same person does not also use it to gain access to other systems.
Access Rights	<ul> <li>Access privileges to be granted to this operator. The following built- in access rights are included with the system.</li> <li>Global Administrator – Operators have full unconditional access to all areas of the system.</li> <li>Display Kiosk – Operators assigned this right are presented with the display board kiosk upon login. Access is restricted to viewing the display board only.</li> <li>Order Kiosk – Operators assigned this right are presented with ordering kiosk upon login. The operator may only interact with the ordering kiosk.</li> <li>Ads Display #1/2 – Operators assigned this right are presented with the advertising display upon login. The operator may only access the first or second advertising display.</li> </ul>
Theme	Optionally used to provide the operator with a custom or unique look and feel to the system or display board kiosk interfaces. The system includes the default, 'starlight' and 'darkblue' themes. Development of additional themes to suite your specific needs are available on a professional services basis.

Date Format	Controls the date-time display and input format used throughout the system by this operator. Use the following table to assist with recognizing the proper date format to select. MM – Month DD – Day of Month YY – 2 Digit Year CCYY – 4 Digit Year
Date Separator	Configures the character used to delimit components of the date throughout the system where dates are displayed or entered.
Active	When set 'Yes' the operator is allowed to login to the system. When set 'No' the operator is no longer allowed to establish a new connection. If the operator is already logged on while their operator account is inactivated it does not automatically effect the active operators session. If necessary you may disconnect any active session from the Status / Operator Sessions menu.
Language	Operator's language choice. Note only the display and ordering kiosks are localized and available for presentment in different languages. The main operator interface for the system is currently presented only in the English language. A language setting of 'Autodetect' uses the browser's internal locale settings to automatically determine the proper language to use.

Note: After making changes to operators or access rights you should choose the "Apply Changes" option to ensure that your changes are made active and reflected into the running system.



A licensed system is activated for use by entering either a temporary evaluation license provided by your IEA Software sales representative or a permanent license provided after purchase of the software. Should you need any assistance obtaining or entering a license key please contact your sales representative or the IEA Software sales office for assistance.

Please note per your software licensing agreement a license key can only be used within a single instance of the software system at a time and cannot be shared with other organizations.

To enter a new license key choose the 'New License' option and enter your Company name and License Key exactly as it appears on the license key document. Both the license key and company name are case sensitive and sensitive to spacing and use of symbols. To be properly recognized a new license key must exactly match the data provided to you. We recommend using "cut and paste" when entering the details of your license key.

			License Keys				
Company	-		License Key		Expires	Status	
IEA Software, Inc.					Never	Active	Delete
Licens	ed Features				Unlicensed	l Feature:	5
Licens GSM Poller	ed Features SMS Trivia	SMS Voting		SMS C	Unlicensed hat Outgoin		-

Evaluation licenses are time limited and require the local computers clock remain accurate throughout the evaluation period. Should your evaluation license show expired when you believe

the key should still be valid we recommend double-checking the systems local clock to ensure its correct.

In some cases you may be provided with more than one license keys to enable certain features or replace an expired license. Multiple keys can be entered into the license manager at the same time however we recommend removal of any expired or invalid licenses.



The Display Board Kiosk and Ordering Kiosk support for multiple languages is controlled by language translations configured through this menu. Generally selection of the best language for the operator is chosen automatically based on the web browser's language configuration. If a translation for the browser's first language choice is not available the system will fall back to using subsequent backup languages configured in

	11117-111 12172-177	Languages						
the browser. If there	ID	Active	Allow Update	Description	Base URL	HTTP Accept Lang		
are no language	1	Yes	<u>Yes</u>	English	<u>/docs</u>	<u>en</u>	Add Data   Edit Translation	
00	3	Yes	<u>Yes</u>	<u>Spanish</u>	<u>/docs</u>	<u>es</u>	Edit Translation	
matches the English	<u>4</u>	Yes	Yes	French	<u>/docs</u>	fr	Edit Translation	
language is used.	5	Yes	Yes	<u>German</u>	<u>/docs</u>	<u>de</u>	Edit Translation	
Automatic language	<u>6</u>	<u>Yes</u>	<u>Yes</u>	Portuguese	<u>/docs</u>	pt	Edit Translation	
detection can be	2	Yes	<u>Yes</u>	<u>Japanese</u>	<u>/docs</u>	<u>ia</u>	Edit Translation	
	8	Yes	<u>Yes</u>	Chinese - Simplified	<u>/docs</u>	<u>zh</u>	Edit Translation	
overridden by	2	Yes	Yes	<u>Korean</u>	/docs	<u>ko</u>	Edit Translation	
configuring the	<u>10</u>	<u>Yes</u>	<u>Yes</u>	<u>Arabic</u>	<u>/docs</u>	<u>ar</u>	Edit Translation	
operators language								
from the "Settings" / "Op	er	ators	menu.					

It's important to note the translations provided with the system are more or less automated machine translations from US English. We welcome feedback from those with the resources to improve upon default translations.

	Edit Language
ID: 3	
Language: Spanish	
Active: Yes 💌	Allow String Updates: Yes 💌
HTTP Accept Lang. es	Base URL: /docs
Sort Order: 1	
	Update

ID	Internal language Identifier. If providing a translation for an established language not specified please contact IEA Software support to reserve a language identifier for this language. If providing a translation for internal purposes (Customizing fieldsEtc) You must choose an ID starting above 10000.
Language	Name of the language or dialect in English
Active	When active is "Yes" the language is loaded at startup and
	available to be used.
Allow String	When "Yes" product updates will automatically update the
Updates	translation for this language if there are any applicable corrections available. When "No" translation corrections are not applied to as a result of future software updates. If you have customized or corrected a translation you should choose "No" to prevent your changes from being overwritten the next time the software is updated.
HTTP Accept	The language abbreviation used to match with browser selected
Language	languages
Base URL	Reserved for future use.
Sort Order	Controls presentation of languages in the language listing.

#### **Editing Translations**

To edit an existing translation or create a translation for a newly added language select the "Edit Translation" option from the language listing above. The translation process is fairly straightforward. The String ID and English description of the item is found on the left while the translation for the item is entered in the translation box on the right. When finished updating or adding a translation click the "Update" button at the very bottom of the translation form.

	Chinese - Simplified translation of MBWeb Application: MBWeb				
D	Description	Translation			
12500	To leave a chat message text	离开聊天消息文本			
12501	To VOTE text # choice to	投票赞成文字选择			
12502	Polling closes in	在投票结束			
12503	seconds	秒			
12504	VOTE RESULTS: Congratulations	投票结果:恭喜			
12505	Choice	选择			
12506	won with	韩元			
12507	votes	<del>票</del>			
12508	Description	描述			
12509	Votes	₩			
12510	TRIVIA: to play text answer to	花絮:发挥文字答案			
10611	0 5 10	and and and a second and a second a s			

In order for changes to translations to take effect the Mobile Board Web Server must be restarted. The "Apply Changes" button in the Settings menu cannot reload language data. To assist with the translation process there is a special debug option "Language Debug" available in the systems configuration server (/settings URL) under "Debug options". This setting enables language debugging where by for each string of text displayed the internal StringID of that text is shown throughout the display board kiosk and order kiosk interfaces.



Apply changes reloads stored configuration data used by the system. Only changes made within the Settings menu require the use of apply changes to ensure your changes are made active

Reloading configuration Configuration reloaded successfully.
Reloading Security Security database reloaded successfully.
Resetting Query Cache Query Cache reset complete.
Reloading SMS Poller Request accepted (poller will reload momentarily)

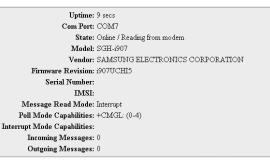
and reflected into the running system. Changes to any other menu areas are updated in real-time and do not require the use of apply changes to take effect.

### Status



# Poller Information

Poller software included with the system provides the interface between the SMPP server or GSM modem on the computer the system has been installed in order to send and receive SMS messages. Within the poller information menu



you can find detailed information on the status of the interface between the system and the cellular modem as well as useful diagnostic information regarding the SMPP or cellular modem itself.

If you are experiencing difficulties with the interface please provide a screen shot of the poller information display when contacting IEA Software for assistance.



# SMS Simulator

In addition to sending an SMS message from a cell phone

Phone Number: 5551212 Command: Hello, how is everyone?

operators may use the SMS command simulator to send messages to the system as if they were a user sending an SMS from a cellular phone. To use the simulator simply enter the telephone number you wish the message to appear to be sent from followed by the contents of the message or system command to send. The simulator display also provides a listing of all available system commands usable from a mobile phone.



A list of all operators and display kiosks currently logged into the system are available from this menu option. Clicking an operators username in the 'Operator' column presents the

Unline Operator Sessions - 05/09/09 10:28:22						
Operator	Access Level	Last Access	IP Address	Start Page	Theme	
<u>order</u>	Order Kiosk	05/09/09 10:28:15 (7 secs)	10.0.3.195	smsorders.ews	sms	
display	Display Kiosk	05/09/09 10:28:21 (1 secs)	10.0.3.195	smspoll ews	sms	
<u>admin</u>	Global Administrator	05/09/09 10:28:22 (0 secs)	169.254.2.2	smsadmin.ews	sms	

operator management interface for that operator. Choosing the link in the 'Last Access' column enables you to force a disconnect of the corresponding operator. If disconnected the operator must re-enter their login and password to gain access to the system. If you wish to permanently revoke access to a logged on operator first disable the operators account by clicking the operator login name in the operator session listing and set the operators active status to "No". Finally click the last access field of the logged on operator to force a disconnect of the operators active session.



### Database Activity

The system continually interacts with the database server to process requests from operators and users. The activity display operates similar to obtaining a list of running programs from your windows computers task manager except rather than showing programs a list of database connections, requests and their current status is provided. Database activity display can act as an important troubleshooting tool for your DBA or support representative.



Launches an instance of the display board to provide the operator with a view of current use of the system. This can be useful when an operator needs to monitor the system from a remote location where the main display monitor is not viewable.

Note: The display board itself is normally started using the display board kiosk windows shortcut which automatically logs into the system using the display boards operator account.



Launches an instance of the order management kiosk to manage the state of recent orders submitted via the "order " or "o " commands. Typically the order kiosk is started by logging into the system with the order kiosk operator account or by using the order kiosk windows shortcut.

# Reporting



The top users report shows those having most used specific areas of the system over a period of time.

	Top User Report		
Report: Top users by chat message	▼ Within Last: 1 Day	User Group: [All Users]	•
	Search		

Report	Determines subject area over which top usage is to be reported
	Top users by chat message – Reports on users leaving the most chat messages on the display board kiosk.
	Top users by outgoing SMS – Reports on users having been sent an outgoing SMS message from the system. This includes all outgoing messages including automatic responses from the system and announcements sent by an operator.
	Top users by votes – Reports on the number of votes cast by a user. If a user submits multiple votes for the same question this usage is counted even though voting multiple times has no effect on the outcome of a vote.
	Top users by trivia right answers – Reports on the count of right answers to trivia questions submitted by the user.
	Top users by trivia wrong answers – Reports on count of wrong answers to trivia questions submitted by the user. After a user has joined a game in progress by submitting an answer any instance where the user did not provide a response is counted in this report as a wrong answer.
	Top users by orders – Reports on the count of total orders submitted by the user.
Within Last	Time period over which top usage activity is to be collected. By default data related to past trivia and voting histories is maintained for a period of 3 months. You will not be able to accurately report on usage for trivia or voting beyond the three month window.
User Group	Restricts top usage results to only those users participating in the selected user group.



Summaries of advertisements shown throughout the display board kiosk and separate advertising displays. Data includes breakdowns on a per-day basis of total time each

	Advertising Campaign - History Search					
Starting:	04/23/09	Ending:	05/23/09	Campaign:	Low Priority Campaign 💌	
			Search			

advertisement within a campaign has been shown. Metrics of system activity during the day such as the number of chat

messages left and any voting or ordering activity are included.

Starting	Date from which to include in the display of advertising statistics.
Ending	The ending date is as of the start of the day specified and therefore does not include any usage for that date. For example an ending date of January 1 <sup>st</sup> 2000 covers the full day of December 31 <sup>st</sup> 1999 but does not cover any moment of January 1 <sup>st</sup> 2000.
Campaign	

Date	Advertisement	Duration (Mins)	Act Chat	Act Order	Act Vote	Act Trivia
05/21/09	New Car	112.08	0	0	0	0
05/21/09	Ski Resort	112.08	0	0	0	0
05/22/09	New Car	436.67	0	0	0	0
05/22/09	Ski Resort	436.67	0	0	0	0
Ad Total	New Car	548.75	0.00	0.00	0.00	0.00
Ad Total	Ski Resort	548.75	0.00	0.00	0.00	0.00
Campaign Total		1097.50	0.00	0.00	0.00	0.00

Date	Day for which the advertising summary is to be shown.
Advertisement	Name of the advertisement shown within the campaign.
Duration	Total time the advertisement was displayed during the day
Act Chat	Number of chat messages shown on the display board kiosk during the
	day
Act Order	Count of orders received during the day
Act Vote	Count of individual user votes including cases of the same user voting more than once during the day. This is a count of users participating in voting activity. It does not reflect the number of votes taken within the day.
Act Trivia	Count of times users have interacted with the trivia game during the day. For example a trivia game with 10 questions and 10 participants yields a count of 100 interactions. (10 questions * 10 participants)



## System Statistics

Displays database related system statistics showing data usage by area as well as general database information. This report can be used as a diagnostic tool to determine which areas of the system are using the most amount of storage space.

## Users

Management of cell phones and user groups are carried out from the users area.



To manually add or modify a cell phone contact choose either the new phone option or search for an existing cell phone using the manage phones option. As new people use the system contact records are automatically added containing the users cell phone number and any options configured via SMS such as a desired screen name and font color.

Before manually adding a new cell phone contact it is recommended you first perform a search to make sure the contacts phone number was not already added automatically as you will not be

	New	Phone			
Phone Number:	12035551212	Chat	Name:	neila	
First Name:	Neil	Last	Name:	Armstrong	
Birth Date:	8/5/1930	Banne	d Until:		
Chat Color:	Auto 💌		Active:	Active 💌	
Address 1:	1234 Moon Rock Rd				
Address 2:					
City:			State:		
Postal Code:					
Send SMS System Notices:	Yes 💌	Send SMS Me	essages:	Yes 💌	
Allow Chat:	Yes 💌	Allow O:	rdering:	Yes 💌	
Allow Voting:	Yes 💌	Allow	7 Trivia:	Yes 💌	
Allow Start Vote:	No 💌	Allow Star	t Trivia:	No 💌	
Allow Change Chat Color:	Yes 💌	Allow Change Chat	Name:	Yes 💌	
	User Group	Membership			
My test group: No 💌	Underwater Bingo:	Yes 🗾 U	nderwat	er basket weaving No 💌	
Comments:					
				-	
	Upo	date			

able to add a contact having a duplicate number.

As new contact records are automatically created the system assigns a default set of privileges to the user. By default the user is allowed to participate in chat, voting, trivia, ordering and change their chat name and color. The user is not allowed to initiate or cancel votes or trivia games. Additionally sending of system notifications and operator messages is enabled. When there is a need to customize default options configured for new users a special contact entry having the phone number "default" can be created to specify allowed and disallowed options for new users. Thus the "default" contact entry serves as a template for configuration of new users.

Phone Number	Contacts cell phone number. The number format used must exactly match the Caller-ID number of SMS messages received from this number. The number must be fully qualified typically consisting of the country code area or region code and local number. (For messages from cell phones from other countries your local countries international dialing prefix is prepended to the number)
	For example in the US phone number 5551212 in the 203

	area code would be entered as 12035551212. It is important no spaces dashes or other delimiting characters be used in the phone number. If creating a new contact record and the phone number entered does not exactly match Caller-ID information from the SMS a new separate
Chat Name	contact record will be created for the user.         Chat Name is the screen name the user is known as to the
	display board kiosk and throughout the system. If allowed users can change their chat name themselves by sending an SMS message containing 'name mynewchatname'. By default new users are typically assigned a 4 digit screen name automatically on first use of the system. Screen names can be changed by the user at any time unless this privilege is revoked by setting 'Allow Change Chat Name' to "No". If a screen name selected by the user was recently used the users numeric contact ID is automatically appended to the chat name so that names remain unique.
First Name	For informational use only, not visible to the display board kiosk but shown throughout the operator UI and visible to the order kiosk.
Last Name	For informational use only, not visible to the display board kiosk but shown throughout the operator UI and visible to the order kiosk.
Birth Date	Currently for informational use only
Banned Until	The date and time up until which the user is banned from participation in using the chat features of the display board kiosk. If this field displays a date in the past its an indication the user was banned but the ban has expired and the user can now participate.
Chat Color	Selects font color any chat messages from this contact should be shown from the display board kiosk. If no color is selected a default color is automatically assigned to the contact.
Active	When active is "Yes" the cell phone associated with this contact record is able to participate and use the system.When active is "No" all messages or commands from the apprint and active is "no" and improved
Address1	<ul> <li>associated cell phone are ignored.</li> <li>For informational use only, not visible to the display board kiosk but shown throughout the operator UI and visible to the order kiosk.</li> </ul>
Address2	For informational use only, not visible to the display board kiosk but shown throughout the operator UI and visible to the order kiosk.
City	For informational use only, not visible to the display

	board kiosk but shown throughout the operator UI and visible to the order kiosk.
State	For informational use only, not visible to the display board kiosk but shown throughout the operator UI and visible to the order kiosk.
Postal Code	For informational use only, not visible to the display board kiosk but shown throughout the operator UI and visible to the order kiosk.
Send SMS System Notices	When "Yes" the system can send messages to the contact in response to user initiated actions. When "No" the system will not send messages to the contact due to actions taken by the user.
Send SMS Messages	When "Yes" any messages sent from an operator using the Send SMS Message feature to the user which are not addressed to a specific user group are eligible to be received by the user. When "No" such messages will not be delivered to the user.
	Note: If the user is assigned to one or more user groups they will receive operator messages addressed specifically to that group regardless of the setting of this option.
Allow Chat	When "Yes" user is allowed to use the chat feature of the display board kiosk to leave messages on the display board for others to view. When "No" any chat message sent by the user are ignored and not displayed.
Allow Ordering	When "Yes" user is allowed to place orders using the order kiosk using the "order" or "o" command. When "No" order commands are ignored. Additionally if a system notification message (Send SMS / System Notifications) is configured the user is sent an SMS message notification.
Allow Voting	When "Yes" the user is allowed to participate in any current votes taking place on the display board kiosk. When "No" attempts to place a vote will be ignored by the voting system and instead the users message will be displayed as a chat message.
Allow Trivia	When "Yes" the user is allowed to participate in any current trivia game in progress on the display board kiosk. When "No" attempts to participate in the trivia game will be ignored. The users attempt to answer trivia questions will not be displayed as a chat message.
Allow Start Vote	When "Yes" the user is allowed to initiate a new vote on the display kiosk AND cancel a vote in progress using the "callvote" or "canvote" message commands.
Allow Start Trivia	When "Yes" the user is allowed to initiate a new trivia game AND cancel a trivia game in progress using the

	"calltrivia" or "cantrivia" message commands.		
Allow Change Chat Color	When "Yes" the user is allowed to change the font color		
	of chat messages shown on the display board kiosk using		
	the "color " message command.		
Allow Change Chat Name	When "Yes" the user is allowed to change their chat		
	screen name shown on the display board kiosk using the		
	"name " message command.		
* Group Membership	If one or more user groups have been configured options		
	controlling membership to each group are shown. User		
	groups enable users to opt-in to receiving messages related		
	to specific topics of interest. More information on user		
	groups is available in the following section on <u>user</u>		
	groups.		
Comments	For informational use only, comments are shown only		
	within the contact form to record miscellaneous		
	information related to the user.		



# Manage Phones

To search existing contact records simply fill in the fields matching your criteria to display matching contact records. Search fields allow partial matching within phone

	User Pho	one Search		
User ID:	Phone Number:	5551212	User Group:	All
Chat Name:	First Name:	[	Last Name:	
Address:	City:		State:	
	Search	Clear		

number and name fields. Once a search is complete you may make changes to any displayed contact record by clicking on a row of the results corresponding to the contact record you wish to modify. For more information related to fields within the contact record see the previous section labeled "New Phone".



Groups enable users to subscribe to receive notifications from operators related to specific topics of interest. As an example an operator of an activities club may create several groups covering each sport or activity offered. Users interested in soccer would subscribe to soccer

	Edit User Group	
Group Name:	Bowling League	
Allow Join:	Yes  Short Name: bowling	
Join Message:	Welcome to the turkey bowling leauge. Stay tuned for important announcements.	×.
Leave Message:	As requested you will no longer receive bowling league announcements. If you decide to resume announcements in the future send 'join bowling' to 5551212.	*
Comments:	Bowling league announcemnts	×
	Update	_

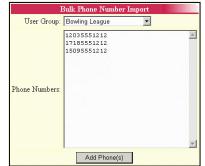
	User Groups				
	Group Name	Short Name	Allow Join	Members	
Bow	ling League	bowling	Yes	555-1214 (buzza) 5551212 (neila)	Delete
My t	est group	test	Yes		Delete
Tean	n Schedule Changes	<u>team</u>	Yes	555-1213 (michaelc) 555-1214 (buzza) 5551212 (neila)	Delete
Unde	erwater basket weaving	<u>baskets</u>	Yes	<u>555-1214</u> (buzza)	Delete
Unde	erwater <u>Bingo</u>	bingo	Yes	555-1213 (michaelc)	Delete

announcements while those interested in bowling subscribe to the bowling announcements group. Groups can contain and unlimited number of members.

cally by
le a ale ant
he short
sed for public
"join"
ave the group
oup. Not
or private
oup
l from the
n or leave the
oup users
m. Typically
s as possible
cellular
nding the
typically
is sent
ige Phones"
e to the "join"
nding the
ge typically
e group.
ve a user
e message if
in the



Import menu can be used to capture a preexisting distribution list of phone numbers into a user group. To import a list simply choose the proper user group and cut and paste your distribution list of cell phone numbers into the phone numbers field with a single telephone number



on each line. All other information such as name or additional contact methods must not be included or the import may fail.

The import process shall add new contact records for numbers of contacts not already in the system. Contact records for numbers already in the system are updated enabling group membership corresponding to the chosen user group.

Formatting of telephone numbers imported must be fully qualified typically consisting of the country code area or region code and local number. (For example in the US 1+area code+phone number "15094442455") If a number is in another country you must also prepend your nations international dialing prefix. (For example 011 in the US) to the international telephone number.

It is very important the chosen user group and number list be double checked for accuracy before importing any data. Once imported there is not an "undo" function that can easily correct any mistakes. Should incorrect information be imported options to correct the situation are limited to deleting the user group and re-importing or manually making necessary adjustments to a group.

It is recommended that once a phone list is imported into the system the system then become the primary source of contact information for that group. While it is possible to continually re-import an updated phone list from an external system as change are made this is unadvisable as each import would override the status of any users who had previously chosen to leave the group by sending the "leave " command to the system.

# Voting

Votes appearing on the display board kiosk can be started from the "Voting" operator menu or by "callvote" commands from an authorized cell phone.



When you would like to ask the same or similar voting questions on multiple occasions the questions menu enables you to store the configuration for these votes so that they can be started quickly from the "New Vote" menu or the "callvote x" command where x is the short name of the stored voting question.

Edit Voting Qu	estion	
Question: What is your favorite color?	Short Name:	colors
Number of Answers: Three 💌	Vote Duration:	5 Minutes
Vote Results Display Time: 1 Minute	Interim Multi-Voting	Enabled 💌
Answer #1: Red Answer #2: Blue Answer #3: Green		
Update		

Question	Voting question presented to users via the display board kiosk.
----------	---

Used Stored Question	When creating a new vote all voting options can be defaulted based on the values of a stored voting question. If you will be running similar votes often this can save time when beginning a new vote.
Short Name	Condensed name of the voting question used to start a vote via the command "callvote x" where x is the short name corresponding to the question. This field is typically a single word kept as short as possible to make it easy to begin new votes from an authorized cell phone. If no short name is specified a vote of this type can only be started from the "New Vote" menu of the operator UI.
Number of Answers	Total count of available choices in response to the voting question. Any single voting question is limited to 2 thru 9 answers.
Vote Duration	Represents amount of time from creation of a new vote users have to enter their choice in response to the question.
Vote Result Display Time	Once a vote has concluded and users can no longer vote this option reflects the amount of time to show the results of the vote before the vote information is cleared from the display board kiosk.
Interim Multi-Voting	When "Yes", a vote is in progress and the same user casts a vote for the same choice more than once it appears on the current vote tally of the display board kiosk as if extra votes have registered. However once the vote has closed only a single vote for each user registers in the final tally. This gives users the illusion they are able to cast more than one vote. This illusion can be a useful way to add uncertainty as to the actual results until the end of the polling. In some instances it may prevent users from calling friends outside of the location to unfairly influence the outcome of a vote. When "No" the tally of votes while a vote is in progress is counted the same as the final tally after the vote has concluded. A user casting more than one vote for the same choice does never reflects additional votes on the display board kiosk. With this method there is little uncertainty in
Start Date	the outcome of the vote as the vote concludes. Reflects the point in time voting opens on a new voting question. When creating a new vote the start date defaults
	to the current time. By setting start date to a future time the vote will open at that future time.
* Answers	List of possible answers to the voting question presented to users via the display board kiosk.



To manually begin voting choose the "New Vote" menu option and refer to the table above for detailed information on creating a new vote.



To instantly cancel a vote in progress or scheduled to begin at a future time without displaying the results of the vote choose cancel vote. A vote in progress can also be canceled from an authorized cell phone using the command "canvote".

# Trivia



# New Trivia Game

Trivia games appearing on the display board kiosk can be started from the "Trivia" operator menu or via "calltrivia" commands from an authorized cell phone.

	New Trivi	a Game			
Question Category:	All (Mixed) 💌	Game Type:	Custom	•	
Questions:	10 💌	Disable wait on players:	No 💌		
Question Display Time:	2 Minutes, 15 seconds 💌	Answer Display Time:	25 seconds		•
Final Scoring Display Time:	5 Minutes 💌	Allow Ads:	No 💌		
Start Date:	05/11/09 00:00:52	End Date:			
	Start G	ame			

Question Category	Category from which questions for the game are drawn. If no category is selected questions are select from all available categories.	
Game Type	Sets the configuration of a new trivia game to match the configuration of the selected stored trivia game type. Choosing a game type can save time by using stored configurations when starting new games.	
Short Name	Condensed name of the trivia game type used to start a new trivia game using the command "calltrivia x" where x is the short name of the saved trivia game type. If no short name is specified a trivia game of this type can only be started from the "New Trivia Game" menu.	
Questions	Maximum count of questions to ask during the game. A trivia game runs until either the question count is reached or the ending date of the trivia game has passed.	

Disable wait on players	<ul> <li>When "Yes" the system will not stop the question timer and wait for at least one user to answer a question before moving on to the next question in cases where no one provided an answer to the previous question.</li> <li>When "No" the system stops the question timer and waits for at least one user to provide an answer for the current question displayed on screen before moving on to the next question if there was not at least one user who submitted an answer to the previous question. This can be useful to enable participants of a trivia game to take a break and</li> </ul>
	resume the game later.
Question Display Time	Length of time a question remains open for users to submit answers. Enough time should be given to account for delays in receiving SMS messages over the network.
Answer Display Time	Amount of time to display the answer to the previous question before moving on to the next question.
Final Scoring Display Time	Reflects length of time final scoring is displayed on screen after the trivia game has finished.
Allow Ads	<ul><li>When "Yes" advertisements including full screen ads that temporarily obstruct view of the display board kiosk are allowed during the trivia game.</li><li>When "No" all advertisements are disabled for the duration of the trivia game.</li></ul>
Start Date	Reflects the point in time trivia game starts. When creating a new game the start date defaults to the current time. By setting start date to a future time the game begins at a future time.
End Date	Reflects a point in time to end the trivia game regardless of weather the maximum number of questions have been asked. Using end date allows duration of trivia games not exceed a specific window of time.



# Trivia Questions

To search the collection of existing trivia questions optionally select a question category and any part of a question. Selecting a search result allows you to make changes to the question and available answers.

Trivia Question Search	
Category: General 💌 Question:	
Search	



Edit Trivia Question	L III
Category: Movies 💌	
Question: How much is this worth?	
Image File:	Browse
Image Display: Immediately with Question 💌	
A: One dollar	Wrong 🗨
B: Ten dollars	Wrong •
C: Ten million dollars	Wrong •
D: A lot of money	Right 💌
Update	

Category	Category the new question should be filed under
Question	Description of question presented to the user via the display board
	kiosk. The question asked should be as concise as possible.
Image File	If an image is to be associated with the question choose the full pathname of the file on your local computer. Any image file format capable of being displayed in the browser is acceptable however use of gif or jpeg formats is recommended. The width and length of an uploaded image typically should not exceed 300x200 pixels or there may not be enough space available for the trivia question to display properly.
Image Display	Determines role of the uploaded image. When "Immediately with Question" the image is shown at the same time of the question to help the user understand the question and provide the correct answer. When set to any other value the image is shown first without the question being present for the defined length of time before showing the question without the image. The setting enables questions to be asked about the image that was just displayed.
* Answers	Up to four answers can be provided for any question. One or more answers must be marked as right.



Grouping categories of like questions provide for better organization and enable specialized games where questions asked are limited to specific categories. To change the category

Category				
Trivia Categories				
ID		Description		
	General		Delete	
	History		Delete	
	Movies		Delete	
	Science		Delete	
	Sports		Delete	
	D	General History Movies Science	ID Description General History Movies Science	ID     Description       General     Delete       History     Delete       Movies     Delete       Science     Delete

label associated with an existing category click the description column of the row corresponding to the category. To remove existing categories choose the delete option in the row corresponding to the category to be removed. Before an existing category can be removed all questions associated with the category must first be reassigned to other categories or deleted.

To view a list of questions currently associated with a category use the "<u>Trivia</u> <u>Questions</u>" option shown earlier in this section.



When a new game is started configuration options for new games can be saved and recalled later to make starting similar games quicker

New Game Type								
	Trivia Game Types							
Game Type	Short Name	Category	Questions	Q. Seconds	A. Seconds	Score Seconds	Ads	
Movie Nights	movies	<u>Movies</u>	<u>25</u>	<u>80</u>	<u>10</u>	<u>60</u>	<u>No</u>	Delete
<u>Normal Game</u>	default	All (Mixed)	<u>10</u>	<u>135</u>	<u>25</u>	<u>300</u>	<u>No</u>	Delete

in the future. Game types also enable specific game configurations to be played from an authorized cell phone using the "calltrivia x" command where x is the short name associated with the desired game type.

As management is identical to starting a new trivia game see "<u>New Trivia Game</u>" earlier in this section for detailed information on configuring game types.



This option instantly cancels a trivia game in progress or scheduled to begin at a future time. Results of the canceled game are not shown on the display board kiosk. A game in progress may also be canceled from an authorized cell phone using the command "cantrivia"

### Chat



Similar to setting the resolution of a computer monitor the display board kiosk needs to know how many lines of chat messages can be displayed on the main display screen before messages appear to be clipped off the bottom edge of the display. Screen resolution, available fonts and any custom changes to display style sheets can have an effect on the maximum number of lines shown on the display board kiosk.

The process of determining these settings in your environment is generally a trial and error endeavor. It is recommended you send a couple dozen chat messages and try starting voting and trivia games to fine tune the display.

Manage Chat Display Settings					
Chat message expiration: 17 Hours 💌	Chat screen max message lines: 12 💌				
Starting chat lines to subtract when voting active: 2 💌	Chat lines to subtract when trivia active: 6 💌				
Update					

Chat message expiration Chat screen max message lines	When a new message arrives on the display board kiosk this setting determines a maximum length of time the message can be displayed. Maximum number of chat messages able to be shown on the main display board kiosk when no other activities such as voting or trivia are
Starting chat lines to subtract (voting)	enabled. When voting is active this sets the base number of chat lines consumed by the presence of the voting information window which are no longer available for chat messages while the vote is in- progress.
	This setting is only the base count - additional chat lines are automatically subtracted based on the number of voting questions. For example if a vote had 5 options and starting chat lines was set to a value of 2 then $(5 + 2 =)$ 7 less lines of chat messages would be available while the vote is still shown on screen.
Chat lines to subtract (trivia)	When a trivia game is active this sets the number of chat lines consumed by the presence of the game window. These lines are no longer available for chat messages for the duration of an active trivia game.



As users leave chat messages the system automatically applies coloring to each message making it easier to distinguish between messages from different users. A user may choose their desired message color using the command "color x" where x is the color name of an available chat color.

	Edit Color	
Color Name: blue	CSS Class: blue	
Auto Assign: Yes 💌		
	Update	

From a technical viewpoint chat colors associate user selectable "color names" with a "CSS Class" where the meaning of the color name is defined within the CSS style sheet. Adding new colors requires customizing the display board kiosks style sheet to define new classes corresponding to the new color.

As the style sheet defines the meaning of a color - colors can in fact be much more than simply font colors. A color may be defined in terms of different font styles, changes to the size of the font or inclusion of special decorations such as drop shadows or images.

The auto-assign field in the color settings control weather a new user can be automatically assigned to the specified color. When "No" the system cannot assign the specified color to the user. When "Yes" the new color is eligible for assignment. If you have configured custom colors with special font styles or decorations for special users you may wish to exclude them from normal assignment by setting auto-assign to "No".

Note: Whenever a chat color is added or removed all users not having had explicitly set a color (using the "color" command) is assigned a different color.



The system provides a word and phrase level "rewrite" feature to provide realtime search and replacement of words or phrases within chat messages shown on the display board kiosk. While the primary purpose of rewrites is to censor use of offensive language the rewrite

	Edit Rewrite Group	
Group Name:	Bad Words	Active: Active
Allow Chat Name:	No 💌	Allow Chat Message: Yes 💌
Allow Order:	No 💌	
	Ah oh	*
Comments:		
		<b>*</b>
	Update	

system can serve other purposes such as replacing certain word phrases with pictures or highlighting and expanding commonly used acronyms.

"Rewrite Groups" organize individual rewrite rules into common categories which are managed together.

Group Name	Text describing the purpose of the group. For example a group to censor offensive language may be labeled "Bad Words"
Active	<ul> <li>When "Active" rewrite rules associated with the group are applied to the display board kiosk and ordering system. When "Inactive" associated rewrite rules are not applied.</li> <li>If a group was previously active and later set inactive its influence on the display board kiosk is reverted for both any new and pre-existing messages.</li> <li>Activating and inactivating groups can sometimes be useful as</li> </ul>
Allow Chat Name	<ul> <li>the environment changes.</li> <li>When "Yes" rewrite conditions associated with this group will be applied to the users choice of a screen name. When "No" rewrites within the group are not applied to the users choice of screen names.</li> <li>Note: Filtering of screen names only applies to chat messages. It does not apply to screen names displayed in trivia games. To</li> </ul>
	prevent a user from changing his or her screen name set "Allow Change Chat Name" in the users contact record to "No" from the "Users" menu.
Allow Chat Message	When "Yes" rewrite conditions associated with this group will be applied to the contents of chat messages shown on the display board kiosk. When "No" rewrites within the group are not applied to chat messages.
Allow Order	When "Yes" rewrite conditions associated with this group will be applied to messages shown on the order kiosk in response to users placing an order using the "order " or "o " commands. When "No" rewrites within the group are not applied to the order kiosk. Rewrites for orders can be useful to expand common short hand
	or numbering schemes related to menu items users are able to order from.
Comments	For informational purposes only, may contain additional information regarding the use of the rewrite group.



Within an "Rewrite Group" rewrites provide the list of individual words or phrases to search for ("Phrase Match") and replace ("Phrase Replace").

New Word Phrase Rewrite				
Rewrite Group:	Bad Words 💌	Active: Active		
Phrase Match:	shut up			
Phrase Replace:	be quiet			

Rewrite Group	Group the rewrite rule is to be associated.					
	*					
Active	When "Active" the rule is available to be applied throughout the					
	display board and ordering kiosks based on configuration of the					
	group associated with this rewrite rule. When "Inactive" the rule will					
	not be applied to the display board and ordering kiosks.					
	Changes to the active status of a rewrite rule offects both new data					
	Changes to the active status of a rewrite rule effects both new data					
	added after the change as well as existing data created before the					
	change was made.					
Phrase Match	Contains a word or set of words (phrase) to match and replace with					
	the contents of the "phrase replace" field.					
	Rewrite system gives preference to matching larger phrases before smaller phrases or single words. With this in mind its possible to construct rules that can account for the context of word use. Rather					
	than replacing the words "sucks" or "suck" a phrase match can allow "you suck" to be replaced while still allowing users to write "that sucks".					
Phrase Replace	Once a word or phrase has been matched its replaced with the contents of this field.					
	Note: The replacement text entered in this field allows HTML tags to					
	be used enabling replace to include external images or change the					
	font size or style of the message.					



Message monitoring is used to moderate ongoing chat conversations shown on the main display board kiosk.

Chat Search & Monitoring					
Chat Name: Message: Within: 1 Day 💌 Sea			<ul> <li>Search Clear</li> </ul>		
				_	-
Msg Date 🔻	Phone	Name	Message	Ban Options	
05/11/09 15:53:42	<u>5551212</u>	qbert	What time does the game start?	[No Action]	<u>Delete</u>
05/11/09 15:54:04	<u>5551213</u>	aries	I think it starts at 4:00 on friday	[No Action]	<u>Delete</u>
05/11/09 15:54:16	<u>5551212</u>	qbert	Yea, thats right - thank you.	[No Action]	Delete

Chat Name	When a chat name is specified message searches are limited to messages
	written by users with a matching screen name.
Message	When specified search criteria is limited to messages with matching
	content.
Within	Specifies the relative age from the present of messages to display. By
	default only messages left within the past day are shown.
Msg Date	Date and time the chat message was recorded by the system. Actual time
-	the message was sent by the user may differ slightly.
Phone	Phone number of the user having sent the message. Clicking the phone
	number field enables the operator to modify the users contact record
	including adjusting the users privileges.
Name	Reflects the users screen name or real name if available.
Message	Displays content of the chat message left by the user.
Ban Options	If necessary users who abuse the chat system can be banned from further
-	use by selecting the desired duration to ban the user from using the chat
	portion of the system.
	Once a user is banned any messages already shown on the display board
	kiosk for that user are no longer displayed and new messages from the
	user are ignored until the banned period has expired.
	Note: When a user is banned the ban status does not effect the users
	ability to participate in voting, trivia or place orders. To restrict these
	activities or disable all access for the user click the phone number fields
	to modify the users contact record.
Delete	Permanently removes the chat message from the system.

# Ads

From this menu full screen, background pictures, and small banner images can be presented from the display board kiosk providing information about your company and activities. The system has also been used to sell ad space to third parties.

Conceptually each advertisement is associated with and grouped into a "Campaign". Campaigns determine when and how often advertisements within the campaign are shown providing a fair balance of time between competing campaigns regardless of the number of advertisements associated with any one campaign.



These settings determine the length of time each type of ad is to be displayed "Display Time" and how long between ads to wait before moving to the next "Break Time".

	Manage	Ad	l Display Settings				
Chat Background Display Time:	20 Seconds	•	Chat Background Break Tin	ne:	None		Ŧ
Full Screen Display Time:	12 Seconds	•	Full Screen Break Tin	ie:	2 Minutes,	15 seconds	•
Small Banner Display Time:	20 Seconds	•	Small Banner Break Tin	ne:	None		¥
			Update				

W7: 141.	$W(141, \dots, 1, 1, 1, \dots, 1)$
Width	Width in pixels advertising images are to be scaled
	when displayed. If width and height are not set
	advertising images are not scaled.
Height	Height in pixels advertising images are to be scaled
	when displayed. If height and width are not set
	advertising images are not scaled.
Ads Display #1/2 Display Time	Length of time each ad on the first or second
	Advertising display is to be shown.
Ads Display #1/2 Break Time	Length of time between showing of consecutive ads.
	Typically 'None' to allow the next ad in rotation to
	seamlessly replace the current.
Chat Background Display Time	Length of time each ad in the form of chat window
	background images are to be displayed.
Chat Background Break Time	Amount of time between display of consecutive chat
Chue Duenground Dreak Thire	window background images. Typically 'None' to
	allow the next ad in rotation to seamlessly replace the
	current.
Full Screen Display Time	Length of time each full screen ad images are to be
a de la d	displayed.
Full Screen Break Time	Amount of time between display of consecutive full
	screen images. Full screen images completely cover
	the display board kiosk preventing chat, voting or
	trivia from being visible. When full screen ads are
	used its generally important to provide ample time
	between add so that normal activities on the display
	board are not interrupted. The break time for full
	screen ads should never be set to "None" as in most
	cases this will fully obstruct the display board.

Small Banner Display Time	Length of time each ad in the form of a small banner displayed below the chat window are to be displayed.
Small Banner Break Time	Amount of time between display of consecutive small banner images. Typically 'None' to allow the next ad in rotation to seamlessly replace the current.



Edit Advertising Campaign

Description:	Menu Options (Busine	ss Hours)	
Starting Date:		Ending Date:	
Active:	Yes 💌	Display Priority:	Normal (1x)
Week Days:	🗖 Sunday	Hours	12:00 AM
	Monday		🗖 1:00 AM
	✓ Tuesday		2:00 AM
	✓ Wednesday		🗖 3:00 AM
	Thursday		🗖 4:00 AM
	Friday		5:00 AM
	Saturday		🗖 6:00 AM
			🗖 7:00 AM
			MA 00:8
			MA 00:9
			🗹 10:00 AM
			🗹 11:00 AM
			☑ 12:00 PM
			☑ 1:00 PM
			₽ 2:00 PM
			☑ 3:00 PM
			🗹 4:00 PM
			5:00 PM
			🗖 6:00 PM
			🗖 7:00 PM
			🗖 8:00 PM
			🗖 9:00 PM
			🗖 10:00 PM
			11:00 PM

Description	Text describing the cause or purpose of the campaign
Starting Date	If specified ads assigned to the campaign cannot be shown until the
	starting date is met. If the start date field is empty there is no starting
	date time restriction.
Ending Date	If specified ads assigned to the campaign cannot be shown after the
	ending date has passed. If the end date field is empty there is no
	ending date time restriction.
Active	When "Yes" the campaign is available to participate in the normal ad
	rotation. When "No" the campaign is disabled and ads within the
	campaign cannot be displayed.
Display Priority	Amount of time relative to other campaigns should be allocated to
	this campaign. It is recommended the majority of campaigns be
	assigned the Normal display priority. The relative factor is shown
	next to the label of each priority. For example a campaign with a
	priority of "Normal (1x)" receives twice the amount of time in ad
	rotation as a campaign with a priority of Low $(1/2x)$
Week Days	Days of the week the campaign can be displayed
Hours	Hours of the day ads within this campaign may be displayed. Note
	for any single campaign you may only specify week days and hours
	of availability. It is not possible to assign specific hours to specific
	weekdays such as "nights and weekends". To accomplish such a
	configuration you would need to create two separate campaigns for
	"nights" and "weekends"



	Edit Ad	vertisement		
Description: IEA	Logo	Campaign:	Third Campaign	•
Ad Type: Sm	all Banner 💌	Active:	Yes •	
Image File:		Brow	se	
Display Duration: 468	65 ann an da	Display Count:	0706	
Image Size: 240		Image Type:		
IEA				
SOFTWARE		Jpdate		

Description	Text describing the content of the ad. This information is shown in the campaign, ads listing and ad reporting.
Campaign	Campaign the ad is to be assigned.
Ad Type	Currently 4 major types of ads are available:
	Ads Display (#1 & #2) – Ads are displayed on separate display screens not part of the display board kiosk. To access login as an operator assigned the 'Ads Display #1' or 'Ads Display #2' access right. Note the display board kiosk must also be running for proper ad rotation to occur when using one of the ad display screens.
	Full Screen – Fully covers the area of the display board kiosk. It is recommended when uploading full screen ad images the resolution of the image closely match the resolution of the display board kiosk.
	Small Banner – These ads are placed just below the chat screen window and typically shaped as a wide narrow image. It is recommended all such ads be roughly the same dimensions and "Chat" menu "Display Options" be adjusted to account for lines consumed by ads of this type.
	Chat Background – Replaces default cell phone background image in the display board kiosks chat window with an advertisement. It is recommended the image be very light similar to a watermark so as not to make it difficult to view the chat messages.
Active	When "Yes" ad is included with the campaigns normal ad rotation. When "No" ad is excluded from rotation and not displayed.
Image File	Full pathname of the image file on your local computer to upload. Any file format capable of being displayed in the browser is acceptable however use of gif or jpeg formats is recommended.

# Orders

The system includes very basic order management facilities enabling users to place typically food or drink orders via SMS and later be notified as the status of their order progresses. Operators manage the status of incoming orders using the order kiosk explained later in this section.

Before a user is allowed to place an order they must be authorized to do so by having the "Allow Ordering" option in their contact record set "Yes". By default all new users have this permission enabled by default and therefore authorized to order.

If instead you prefer the system to deny all new users the ability to order forcing operators to manually authorize just those whom you would like to use the system this can be accomplished by creating a "default" contact record and setting "Allow Ordering" to "No" for the default user. Detailed information on the process of configuring a default user is available from the "<u>Users</u>" section earlier in this document.

The "System Notifications" area of the "<u>Send SMS</u>" section later in this document provides information on configuring a response message sent to users who have not yet been authorized to order.



Order options are used to control the number of orders capable of being displayed on the order kiosk display screen at any point in time. If possible when using a wide-screen monitor we recommend tilting the monitor on its side so that the display is longer

Manage Order Disj	lay Settings
Order messages expiration: 9 Hours 💌	
Open orders to display: 6 💌	Closed orders to display: 6 💌
Update	

vertically than horizontally. Finally adjust the computers video settings to rotate the display 90 degrees. Doing this may provide more of a usable surface when managing orders.

Order messages expiration	Length of time from when a new order was recorded it can appear on the order kiosk display before being automatically removed. The message expiration applies uniformly to both open and closed orders.
Open orders to display	Maximum count of orders in an open state that can be displayed from the open order section of the order kiosk.
Closed orders to display	Maximum count of orders in an closed state that can be displayed from the closed order section of the order kiosk.



States determine the current status of orders managed from the order kiosk and define each possible step in the order process from start to finish. For example user orders a pizza. The order is accepted, sent to be made, delivered to user, and paid for by user. Each state along the way (accepted, cooking, delivered, paid) describes the process an order goes through in this case from start to finish.

		Open Orders		Clos	ed Orders
910	5551212 (John Smith - chef) Address: 1234 example rd., Spokane WA 99217 Age: 22			Ready in 5	burger and fries
	Cooking	Ready in 5	Ignore	Order Ready	We're Out
<b>5551212 (John Smith - chef)</b> Address: 1234 example rd , Spokane WA 99217 Age: 22		Cooking	kanefeh		
	Cooking	Ready in 5	Ignore	Order Ready	We're Out
868	5551212 Address: 123 Age: 22	(John Smith - 4 example rd , Spokane	chef) WA 99217	Cooking	turtle sundae
	Cooking	Ready in 5	Ignore	Order Ready	We're Out

	Edit Order State	
Description: Cooking		
Order Fulfilled: No 💌	Order Closed: No 💌	Work In Progress: Yes 💌
Unknown Request: No 💌	Unknown Customer: No 💌	Unknown Location: No 💌
Invalid Request: No 💌	Inappropriate Message: No 💌	No Inventory: No 💌
Waiting for Self: Yes 💌	Waiting for Customer: No 💌	
Thank you	, we're working on your order	
Outgoing Message:		
	Update	

Order states settings enable you to custom build your own process for managing orders. Each possible order state appears as a selectable option on the order kiosk.

Description	Short one or two word text describing this state. Description is shown on the order kiosk as an option besides each order.		
Order Fulfilled	"Yes" indicates that what was requested in the order was successfully provided to the user. This field is informational only and may be used for reporting purposes.		
	"No" indicates the order has not yet or will never be provided to the user. The difference between "not yet" and "never" depends on the state of the "Order Closed" option below.		
Order Closed	"Yes" shows the order has been closed. No further changes ar expected to the order. When an order is closed it moved from the "Open Orders" area of the order kiosk and placed into the closed orders area.		
	"No" shows the order is still in an open state and therefore expected that further action will eventually be taken to move the order to a closed state. Orders appear under open "Open Orders" in the order kiosk.		
Work In Progress	Informational only field to indicate the order is actively being worked on when "Yes".		
Unknown Request	Informational only field may also be used for reporting		

<b></b>	
	purposes. "Yes" indicates the order message was not
	understood by the operator fulfilling the order.
Unknown Customer	Informational only field may also be used for reporting
	purposes. "Yes" indicates the operator does not have a way of
	knowing or contacting the user placing the order.
Unknown Location	Informational only field may also be used for reporting
	purposes. "Yes" indicates the operator does not know the
	location of the user placing the order.
Invalid Request	Informational only field may also be used for reporting
	purposes. "Yes" indicates the order message was not an order.
Inappropriate Message	Informational only field may also be used for reporting
	purposes. "Yes" typically indicates the order message was
	offensive.
No Inventory	Informational only field may also be used for reporting
	purposes. "Yes" means the requested item is out of stock.
Waiting for Self	Informational only field. "Yes" means the order is on hold
	pending the result of an internal action.
Waiting for Customer	Informational only field. "Yes" means the order is on hold
	pending a response or action from the customer.
Outgoing Message	If specified the contents of the field is sent to the user placing
	the order whenever the order moves to this state using the order
	kiosk in order to update the user on the progress of their order.
	The following variables may be used within the text of an
	outgoing message:
	\$operator – Name of the operator logged on to the order kiosk.
	\$order – Contents of the original order message sent by the
	user.
	For example: "Thank you, order will be ready shortly, if you
	have any questions please see \$operator"



To search the archive of previous orders enter the search parameters for your criteria in the order history box and click search.

Order History Search Results						
Order Date	Phone	Name	Message	Close Date	Comments Orde	r State
05/13/09 15:28:47	5551212	chiefchef	turtle sundae	Open	Cookir	ng 💌
05/13/09 15:28:42	5551212	chiefchef	kanefeh	Open	Cookir	ng 💌
05/13/09 15:28:05	5551212	chiefchef	burger and fries	Open	Ready	in 5 💌
05/13/09 15:30:37	5551212	chiefchef	rasberry iced tea	05/13/09 15:35:07	We're	Out 💌
05/13/09 15:28:31	5551212	chiefchef	peperooni pizza with extra anchovies	05/13/09 15:32:21	Ignore	•

	Order History Search
Orders Starting: 05/1	2/09 Order State: [Any]
Phone Number:	Chat Name:
First Name:	Last Name:
Order Message:	
	Search

Orders Starting	Date after which to include orders in the history search results. Starting
	date is a required field.
Order State	If set the search results are constrained to only orders currently in the
	selected state.
Phone Number	Limits search results to orders placed by users with the matching cell
	phone number. The field accepts full or partial number matches.
Chat Name	Limits search results to orders placed from users with the matching
	screen name.
First Name	Limits search results to orders place from users with matching first
	name.
Last Name	Limits search results to orders place from users with matching last
	name.
Order Message	Limits search results based on full or partial match to the users order
	message.

## Send SMS

When sending any outgoing SMS messages please keep in mind the limit of 160 characters using the standard GSM 7-bit character set or 70 characters maximum for Unicode messages.



	Manage System Notifications	
New User Welcome Message:	Welcome, to join our howling league text 'join howling'. For more information about this system text 'help'	~
Active:	Yes V	
Opt Out Confirmation:	You have been removed from general announcements.	*
		Ŧ
Active:	Yes 💌	
Opt In Confirmation:	You will now receive general announcements.	*
		-
Active:	Yes -	
Help Request:	To change your screen name text 'name mynewnamegoeshere' to change your font color text 'color mycolorchoice'	*
		-
Active:	Yes	_
Ordering Permission Denied	Before you can place an order via SMS you must first contact . at $\dots$	
		-
Active:	Yes 💌	
	Update	

In response to user actions system notifications provide an opportunity to provide feedback to the user via an SMS message. System notifications to individual users can be enabled or disabled via the "Send SMS System Notices" field of the users contact form or by sending the commands "msgon" or "msgoff" to toggle sending of system notices.

New User Welcome Message Message sent to the user in response to sending their

	very first message to the system.
Opt Out Confirmation	Message sent in response to the user sending the
	command "optout" to opt out of receiving messages sent
	by an operator.
Opt In Confirmation	Message sent in response to the user sending the
	command "optin" to opt into receiving messages from
	an operator.
Help Request	Message sent in response to the user sending the
	command "help" to obtain information on using the
	system.
Ordering Permission Denied	Message sent in response to a user who tried to order
	using the "order" command however the "Allow
	Ordering" option of the users contact record is set "No"
	preventing the order command from succeeding.



Sending outgoing SMS messages is a three-step process. First enter the message and

	Se	end Message	
Users active within:	[Any Time]	User Group: Bowling League (bowling)	•
Phone Number:		Chat Name:	
First Name:		Last Name:	
Send Message At:	05/14/09 22:30:57	Send Expire Period: 1 Hour	
Message:	Game 2 starts friday ni	lght at 10	4
Preview:	Yes 💌	Character Count: 32	
	[	Continue	

criteria specifying the recipients of the message. Next with preview set "Yes" click continue to preview the recipient list. Finally after the recipient list has been verified follow the instructions shown in the header of the preview list to send the message to all recipients shown.

Users active within	Filters recipient list to include only those users who have last interacted with the system within the chosen time period.
User Group	Filters recipient list to include only those users who are a part of the selected group. If user group is set "All Users" only those users having "Send SMS Messages" set "Yes" are included.
Phone Number	Filters recipient list to only those users whose cell phone number matches the number entered. Full and partial number matching is supported.
Chat Name	Filters recipient list to only those users whose screen name exactly match.
First Name	Filters recipient list to only those users whose first name exactly match.
Last Name	Filters recipient list to only those users whose last name exactly match.

Send Message At	Date and Time the message should be sent. By default the current	
	time is used. Setting a future date causes the message to be	
Send Expire Period	scheduled for sending at a specific time in the future. Period of time after the value of "Send Message At" the message is able to be sent before being permanently expired from the send queue.	
	The expiration period selected is generally configured taking the following into consideration.	
	Message Validity – If the message is "Meeting at 2:00" there may be no benefit to the message being sent after the meeting has concluded.	
	Acceptable Hours – Shipping a batch of messages announcing the "2:00 meeting" at 3:00 AM while all recipients are assumed to be asleep is obviously not acceptable.	
	Messages may expire from the queue due to computer hosting the system being switched off for a long period of time or a very large number of queued messages being sent through the SMS system at the same time to the point where some messages cannot be processed in the time allowed.	
	Please note send expiration applies only to possible delay betwee the system and telephone network. Once sent there may occasionally be additional delays beyond the systems control on cellular network before the message is finally delivered to the recipients cell phone.	
Message	Contents of the message to be sent. Please keep in mind the limit of 160 characters for messages who's characters lie completely in the latin/gsm-7 bit character sets. By default if even one character used lies outside of the this alphabet the entire message is encoded as Unicode and the maximum character count reduced from 160 characters to 70 characters. See <u>"Settings" / "Poller"</u> / "Outgoing SMS Charset" for options related to the selection of character sets.	
Preview	When "Yes" a table showing a list of recipients is displayed. After reviewing the list for accuracy you can queue the messages for sending by following the instructions in the heading of the table.	
	When "No" outgoing messages are instantly queued for all users matching the search criteria. No preview displaying a table of recipients is shown. When sending outgoing messages it is recommended preview mode always be used to first check the recipient list.	



Outgoing Message Search			
Starting:	05/13/09	Ending:	05/15/09
Phone Number:		Chat Name:	
First Name:		Last Name:	
Status:	All	Message:	
	S	earch	

This menu provides status information on outgoing messages previously queued for delivery; archive searching for messages sent in the past and the means to cancel individual messages currently queued for

delivery. Message queue search results are limited to no more than 10,000 in the search results of any single queue search.

Starting	Restricts search results to messages with a sending date greater than the value of this field. Starting date is required.
Ending	Restricts search results to messages with a sending date of less than the value of this field. Ending date is required.
Phone Number	Restricts search results to those users whose cell phone number matches the number entered. Full and partial number matching is supported.
Chat Name	Restricts search results to those users whose screen name exactly match.
First Name	Restricts search results to those users whose first name exactly match.
Last Name	Restricts search results to those users who last name exactly match.
Status	Restricts search results to messages currently matching the specified message state.
Message	Restricts search results to the content of the outgoing message. Full and partial message matching is supported.



#### **Cancel All Messages**

When selected all pending outgoing messages **system wide** is canceled. This would generally be used if there were a mistake made and the wrong message was sent out or directed to the wrong group of users.

# Advanced

The advanced menu contains technical configuration items that should only be used in conjunction with assistance from your DBA or IEA Software technical support representative.



### Message Filters

On receipt of new incoming SMS messages the GSM poller executes the selected message filter (See <u>"Settings" / "Poller"</u> / "Message Filter") to filter the content of an incoming messages or to prevent delivery of an unwanted message. Filters are described using Perl Compatible Regular Expressions (PCRE).

Expressions						
Description	Source	Expression	Action	Sort		
Email Format Filter (FSM)	Message Text	FRM:(? <name>[^\r\n]+)[\r\n]+SUBJ:[^\r\n]+[\r\n]+MSG: (?<msg>[^\r\n]+)</msg></name>	RegEx Match	10		
Email Format Filter (FM)	Message Text	FRM:(? <name>[^\r\n]+)[\r\n]+MSG:(?<msg>[^\r\n]+)</msg></name>	RegEx Match	20		
First Line Only	Message Text	(? <msg>.*)['u'n]+</msg>	RegEx Match	100		
Signature Filter (Sequence after first line filter)	Message Text	$ \begin{array}{l} (?<\!\!msg>\!\!*)\!$	RegEx Match	110		
Exclude MMS URIs	Message Text	^http:////w+\*\d(11)	RegEx Drop Matching	120		
Exclude MMS URIs	Message Text	VmobileVmmsV	RegEx Drop Matching	120		
Trim name	Phone Name	(? <name>.*)\s+\$</name>	RegEx Match	130		

Note: Filter customization is outside the scope of product support. Assistance with custom filters is available on a professional services basis only. If you have configured a custom filter and have any questions technical support will ask you to first switch to the standard message filter before proceeding.

The included "Standard" filter is restricted and cannot be modified. Instead if you wish to make changes to the standard filter you must create a new filter and copy the settings from the standard filter. Once this has been accomplished you are free to customize the copy as needed. Please remember to configure the poller to use your customized message filter in order for any custom changes to take effect.

	Edit Expression					
Description:	Signature Filter (Sequence after first line filter)					
Match Source:	Message Text 💌 Match Action: RegEx Match					
Expression:	(? <msg>.*)\s+[\*\=\-\(\{\\\&lt;\{1,2}\(?<name>[^\*\=\-\(\{\\\\\)]&gt;]+)[\*\=\-\)\}\]&gt;\{1,2}\s*\$</name></msg>					
Comments:						
Active:	Yes Sort Order: 110					
	Update					

Description	Concise human readable explanation of what the expression does
Match Source	Specifies message source to be searched. Previously executed patterns are allowed to make changes to the contents of the source being matched via a named capture in the regular expression when Match Action is 'RegEx Match'

	Source	Description	Named Capture		
	Message	Body of incoming SMS	msg		
	Text	Message			
	Phone	Caller-ID of incoming message	phone		
	Number				
	Phone	Name of the sender of the	name		
	Name	message, usually unavailable.			
		Poller sets name to a 4-digit			
		number derived from Phone			
		Number.			
Match Action	Action to be	taken when the regular expression	is matched.		
	<ul> <li>incoming SM This may be access to spe processed du</li> <li>Variable Sub unconditiona variables use used here to se example:</li> <li>"The content Regular expr substitution a</li> </ul>	p Matching – If the regular expression is matched the MS message is ignored and not processed by the system. e used to build a comprehensive language filter or restrict becific area codes or prefixes. Named captures are not during this match action. Abstitution – When chosen the Match Source is hally set to the contents of Expression. The same three sed for name capture "msg", "phone" and "name" can be to set the current value using the syntax in the following and the following set to the conture is syntax in the following set to the current value using the syntax in the following set to the current value using the syntax in the following set to the contents of set the current value using the syntax in the following set to the current val			
Expression		he regular expression pattern			
Comments		etailed information related to the particular	attern for documentation		
	purposes only.				
Active	When "Yes"	the regular expression is processed	d. When "No" the		
Sort Order	Since express the execution order. Withi	pressions within a filter are typically order-dependant effecting ution of those after - sort order is used to control execution Within a filter expressions with the lower sort order are I before expressions with a higher sort order.			



When using the embedded Microsoft SQL Server database included with the system the backup menu can be used to create a backup file with the contents of the system database. The backup archive can be later restored if necessary to recover from a system failure.

If the system is using an externally provided Microsoft SQL Server database it is recommended you instead use the backup and restore wizards included with your servers management tools (Enterprise Manager or Management Studio) to schedule normal database backups and maintenance activity rather than using the backup database menu provided by this system.

Scheduling recurring database backups is a two-step process. The first step is to create a backup device defining full pathname (directory and filename) of the backup file to be

	New Backup Device	
Device Name:	Mobile Board Express	
Path + Filename of Device File:	d:\backup\mbedb	
	Create Device	

written. Each time the backup file to be the specified file is updated with the latest version of the backed up database.

Device Name	Informational description of the backup file location
Path Filename of Device File	The full pathname containing the directory and filename
	of the backup file to create. Typically the backup file
	must point to a location on the system the database
	server is locally installed. Attempting to use a UNC
	pathname to reference an external server will fail unless
	SQL Server is configured to run as a user with access to
	remote file resources.

The final step is to schedule a recurring backup schedule. To proceed simply choose the device name created in the previous step above and select the desired backup interval from the list provided. Once completed the system will automatically backup the system database at the interval specified. The backup file can then be included within the systems normal backup routine as configured by your systems administrator.

	Backup Database								
Sele	ect a backup device:	[Ne	w device]						
	Device Name		Location	Description	Server	Database	Size	Last Backup	
0	Mobile Board Expr	ess	d:\backup\mbedb						Remove
	Description:	Dat	tabase Full Backup						
	Backup schedule:	Ru	in Once 💌						
				Schedule Bac	kup				



Look and style of the Operator UI, display and ordering kiosks can be customized utilizing themes. Developing a custom theme provides the opportunity to customize the user experience to more closely match the branding and atmosphere of your company.

Technically themes are based on two technologies: Cascading Style Sheets (CSS) and a theme folder inheritance system unique to this system. Working together themes can range from changing colors or logos to designing a completely new look and feel. References for CSS are available from W3C <u>http://www.w3.org/Style/CSS/</u> and the folder inheritance system is described in detail below.

For each web request to the system information such as Operator, client IP address, host header, time, browser type and others are examined and scored based on the

	Themes						
Theme	Filter	Match Type	Data	Score			
iea	Peters test theme						
	Emercust domain match	Host Header / Domain	test.iea-software.com	1000			
<u>home</u>	This is theme is set when operators connect from	their home office					
	Home	Client Internet IP Address	10.0.3.*	100000			
	This is home too while testing the signup server	Client Internet IP Address	10.0.0.*	100000			

rules configured for each theme. After all rules are examined the theme having the highest score is used in rendering the web interface.

Note additional rules not displayed in the themes menu may play a part in theme selection such as the operator selection of a specific theme.

	New Them	e	
Theme			
Description			
	Update		

Theme	Short theme name that is also the subdirectory name of the theme folder located on the systems server where files specific to this theme are located.
Description	Text showing the purpose and any useful notes for this theme. The Description field is informational and only displayed here.

#### **Theme Filters**

Scores are awarded to themes having "theme filters" which match a set criterion. Each

Theme Filters						
Filter	Match Type	Data	Score			
Home	Client Internet IP Address	10.0.3.*	100000	Delete		
This is home too while testing the signup server	Client Internet IP Address	10.0.0.*	1000000	Delete		

matching theme filter adds its Score value to that themes total. The theme with the highest score is used.

		Edit Match Filter	
Filter Description	Home		
Match Type	Client Internet IP Address 💌		
Data	10.0.3.*		
Score	100000		
Comments			
			<b>V</b>
		Update	

<b>D</b> .1	T ( 1 1 1 0 0 0 0 0	
Filter	Text describing the purpose of the filter	
Description		
Match Type	Reflects the source and type of data being matched. The following match types are currently available:	
	• Host Header / Domain: Matches the virtual domain HTTP_HOST header sent by the browser.	
	• Browser & Client OS type: Matches browser and operating system type. The following keywords are available to be matched: "Linux", "Windows CE", "Windows", "Mac", "Macintosh", "Smartphone", "Opera", "IE6", "firefox", "IE5", "netscape", "mozilla", "IE" and "Lynx"	
	• Client IP Address: The following client address formats are matched: x.x.x.x, x.x.x*, x.** and x.*.**	
	• Time or Day: Reserved for future use	
Data	Value to match – see "Match Type" above for more information.	
Score	Relative theme score to add to the themes total when "Data" matches	
	the "Match Type" condition.	
Comments	Additional information related to the use of this filter.	

#### **Theme Folders**

All themes related information is stored on disk on the systems web\themes subdirectory where the system has been installed. The default theme included with the system is located in the "default" subfolder. Other user-created themes are located in the subdirectory that corresponds to the name of that theme. Any requested files from a subdirectory other than "default" are first looked for in that subdirectory. If the file does not exist system automatically looks for the same file in the "default" folder. This allows for the creation of new themes with minimal changes from the default theme without

having to 'copy' all files from the default folder into each theme folder. This approach has the added advantage in that themes will continue to work in the face of new features and updates to the system software.

When creating new themes copy only those files you will be changing. Never make changes to files within the "default" theme, as any changes will be overwritten by future software updates. Additionally IEA produced or IEA reviewed third party themes may depend on facets of the default theme.

The following files are located in the "default" themes folder.

css_main.css	CSS style sheet for the Administrative Operator UI	
css_order.css	CSS style sheet for the order kiosk	
css_sms.css	CSS style sheet for the display board kiosk	
buttons_smsadmin.ews	Main menu button rendering script for Operator UI	
buttons_susadmin_sub.ews	Sub menu button rendering script for Operator UI	
_login.ews	Rendering script to present the initial system login screen	



Troubleshooting and support tool used to display the results of queries issued against the systems database. This option normally should only be used with direction of your IEA support representative.

	SQL	Query	
SELECT 00VERSION			×
			<b>v</b>
Execute Query		Use in fra	mes



As the systems built-in task scheduler processes the schedule of run items (See

Task History Search				
Starting: 05/17/09	Task Type:	All		•
Status: All	Description:			
Search				

"Configure schedule" below) statistics related to each task including: Time the task started, run duration and success or failure status are stored and searchable from within this menu.

Starting	Restricts search results to include only those tasks that started after the specified date.
Task Type	Restricts search results to a specific type of task that has executed.

	Currently only the "Query" task type is available.
Status	Restricts search results based on the completion status of the task.
Description	Restricts search results to the contents of the tasks description field. Full
	and partial matching is supported.



# Configure schedule

The systems task scheduler automatically processes normal maintenance activities such as managing data, trimming logs, database checks and backup. By default a number of tasks are included with the system to automatically manage data

	Scheduled Tasks							
в	Task Name	Description	Active	Aligned	Interval	Start	Server	Options
<u>24</u>	query	Trim Order History	Yes	No	Daily		Auto Assign	Delete
<u>23</u>	query	Trim Voting History	Yes	No	Daily		Auto Assign	Delete
<u>22</u>	query	Trim Chat Message History	Yes	No	Daily		Auto Assign	Delete
<u>21</u>	query	Trim Trivia Game History	Yes	No	Daily		Auto Assign	Delete
<u>20</u>	query	Trim Users	Yes	No	Daily		Auto Assign	Delete
<u>19</u>	query	Trim Write Queue	Yes	No	<u>1/2 Day</u>		Auto Assign	Delete
<u>18</u>	query	Trim Audit Logs	Yes	No	Daily		Auto Assign	Delete
<u>2</u>	query	Check database	Yes	Yes	Weekly		<u>Auto Assign</u>	Delete

generated during normal use of the system. It is recommended these included tasks not be inactivated or removed.

	Scheduled Task	as (20)
Task Type:	query - Run database query 💌	Schedule Server: [Auto Assign] 💌
Parameter:	{CALL SMSTrimUsers(1825)}	
Description	Trim Users	×
Run Interval:	Daily	Interval based on: Last Run Date 💌
Start Date:		Max Concurrent: 1
Target Run-Time:	Not Specified 💌	Maximum Run-Time: Not Specified 💌
Active:	Yes 💌	
	Save	

Task Type	Specifies the type of task being executed. The only available type is query that executes the parameter field as an SQL Query.
Schedule Server	Server from which the scheduled task is executed. The default and recommended setting is Auto Assign.
Parameter	Contents of the SQL Query to execute
Description	Information field describing the purpose of the task
Run Interval	Amount of time to wait between consecutive executions of the task. Note: If any with a recurring run interval is changed to a Run Interval of "One Time" the task is executed only once and then removed from the scheduled task list. It is recommended none of scheduled tasks included with the system be configured with a run interval of "One Time"
Interval based on	"Start Date" – next scheduled run time is based on the starting date of the task and the specified run interval.

	"Last Run Date" – next scheduled run time based on time of completion of the last task and specified run interval.
Start Date	Starting date of the task. If left blank midnight is assumed as the starting date.
Max concurrent	Number of times this task is allowed to execute concurrently.
	In most situations the default value of 1 is highly recommended.
Target Run-Time	Not applicable to the query task type
Maximum Run-Time	Not applicable to the query task type
Active	When "Yes" the task is available to be run as configured. When
	"No" the task is excluded from being executed based on the
	configured schedule.

# **SMPP** Technical Data & Conformance

The following is intended to be a technical reference of the IEA Software SMPP implementation to aid in any interop or acceptance testing required by an SMS provider before the system can be used on the providers network. Please direct any technical inquiries to the IEA product support team (http://www.iea-software.com/contactus)

Intended use	2-way messaging
SMPP Versions	3.4
SMPP PDU Transports	IPv4 – TCP, IPv6 - TCP
Bind Modes supported	Receiver, Transceiver
Outbind support	No
Concurrent binding &	Single TCP session to single SMSC is supported at any
redundancy	point in time. Backup server configuration is provided to
	allow failover should the primary become unavailable.
Connection policy	ESME attempts to maintain long-term connections to
	SMSC reconnecting only when necessary. Disconnect is
	not based on failure response to submit message requests
	or inactivity.
Enquire Link	Enquire Link requests are sent at 60 second intervals.
	Any valid incoming message from the SMSC resets both
	the Enquire Link timer and expectation of Enquire Link
	response. If no response is received in 30 seconds a
	network or app failure is assumed and the session is
	terminated.
Loss of protocol	Any validation failure while decoding PDUs is interpreted
synchronization	as a network failure. The connection is terminated without
	sending an unbind and a new connection is established.
Unbind messaging	Prior to disconnecting a TCP session the ESME sends an
	unbind request and waits for an unbind response up to 15
	seconds before terminating the network connection unless

	a network problem is suspected and was the initial reason for disconnect.
	ESME honors receipt of SMSC initiated unbind request.
Bind failure back-off	All bind failures include a 5-minute back-off period before retry. Operators have the option of manually forcing an earlier retry after making SMPP configuration changes by clicking the "Apply" button after updating poller settings.
Response to credit/balance status messages	On receipt of no balance or credit errors the ESME unbinds from the SMSC and waits 5-minutes before attempting a new bind.
Response to throttle indication	On receipt of throttle indication the SMSC pauses for 15 seconds before sending any outgoing PDUs.
Outgoing rate limit	Outgoing rate limit configuration is supported. Rate limits are calculated based on a 10 second window.
Sequence numbers	Sequence numbers during an SMPP session are monotonically increasing and not reused.
	On reconnect due to network problem or configuration change the sequence number is not reset. Between connections any queued delivery responses can be received and processed.
	Sequence numbers are not kept in persistent storage and therefore reset to 1 when the server is restarted or rebooted.
User configurable SMPP fields.	System ID, Password, Source Address (submit) and Address Range.
Supported data encoding for Delivery	0 (Assumes GSM-7), 1 (ANSI x3.4), 3 (ISO-8859-1), 5 (JIS-0208), 6 (ISO-8859-5), 7 (ISO-8859-8), 8 (UCS2), 13 (JIS-0212)
Supported data encoding for Submit	3 (ISO-8859-1), 8 (UCS2)
Submit NPI/TON	SRC TON=0, SRC NPI=1 DST TON=1, DST NPI=1
Submit Transaction Mode	Assumes store and forward. No delivery receipt requested.
Submit retry	No message is ever retried more than 3 times. The following status codes are considered temporary – all others are permanent failures and never retried.
	SERVICETYPE_NA (0x00000410), RMSGQFUL (0x00000014), RSUBMITFAIL (0x00000045), RTHROTTLED (0x00000058), RX_T_APPN (0x0000064)
	Delivery response timeout is 400 seconds.

Submit large messages	Unsupported, short messages only
Deliver large messages	Unsupported, large message delivery requests
	acknowledged but ignored by the application.
GNACK	Supported and understood as a response to any request or
	as an unsolicited indication.
Response to unknown or	GNACK /w invalid command id status code
unsupported commands	
Supported command codes	GENERIC_NAK, BIND_RECEIVER,
	BIND_RECEIVER_RESP, BIND_TRANSCEIVER,
	BIND_TRANSCEIVER_RESP, SUBMIT_SM,
	SUBMIT_SM_RESP, DELIVER_SM,
	DELIVER_SM_RESP, UNBIND, UNBIND_RESP,
	ENQUIRE_LINK, ENQUIRE_LINK_RESP
Optional TLVs	None supported
Maximum allowed	512,000 bytes. Any single PDUs with a larger byte count
incoming PDU length	is interpreted as loss of protocol synchronization.
TCP packet fragmentation	ESME attempts to emit non-fragmented PDUs and accepts
	fragmented PDUs.