



amigopod

SMS over SMTP

Unified Visitor Management

amigopod Technical Note

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Introduction

This technical note explains how to configuration process for sending SMS text messages to end-users via SMTP (e-mail).

Sending via SMTP is a cost effective SMS solution, but requires extra input from the end user. They will need to enter both their mobile number and their carrier. The carrier is not always known, as some carriers require a separate address for pre-paid plans, or they may grandfather the format after buying another carrier.

Audience

This document is intended for network administrators and system integrators deploying an amigopod-based visitor management solution.

Basic familiarity with the amigopod Visitor Management Appliance is assumed. For in-depth information about the features and functions of the amigopod appliance, refer to the amigopod Deployment Guide.

Document Overview

The first section of the document explains the configuration of the SMS Gateway itself.

The next section contains an example guest self-registration that utilizes their mobile number and SMS.

The last section contains some troubleshooting topics.

Disclaimer

The topics of network design, security architectures and visitor access are complex subjects, and no single document can hope to cover all of the possible combinations of network equipment, network design, deployment requirements, and device configurations, nor can all the possible security implications for a particular recommendation be covered.

Therefore, while you read this document, it is best to consider it as a guide to developing your own understanding of the network design topics covered, and as a basis for further investigation.

Configuring SMS over SMTP

Check Plugin Versions

SMS over SMTP requires the following plugin versions:

- SMS Services Plugin 2.9.2 or later

To verify you have the correct plugin versions installed, navigate to **Administrator > Plugin Manager > Manage Plugins** and check the version number in the list.

Use the **Update Plugins** link to download and install updated plugins.

If you do not have the required version, or the SMS Services Plugin is missing, please contact your amigopod reseller.

Enable Advanced Gateways

By default, the **SMS Services** configuration only supports the amigopod supported SMS solutions. For SMTP, we require the advanced modules turned on.

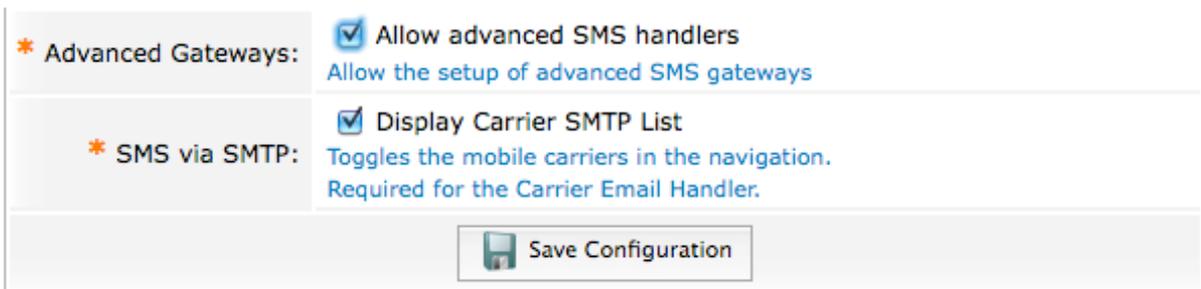
While still on **Manage Plugins**, select **Configure** under the **SMS Services Plugin**.



SMS Services Plugin
Send visitor account receipts to mobile phones as SMS messages. 2.9.2 Enabled

[Configuration](#) [About](#) [Disable](#) [Remove](#)

Enable **Allow advanced SMS handlers** and **Display Carrier SMTP List** and then click **Save Configuration**.



* **Advanced Gateways:** Allow advanced SMS handlers
Allow the setup of advanced SMS gateways

* **SMS via SMTP:** Display Carrier SMTP List
Toggles the mobile carriers in the navigation.
Required for the Carrier Email Handler.

[Save Configuration](#)

Select the Supported Carriers

When the configuration above is saved, a new navigation element **SMTP Carriers** will appear under **SMS Services**. You must enable the carriers you wish to support. A list of the supported carriers will be presented to the user during registration. If you make the list too long, you risk overwhelming the user or are more likely to have them select the wrong carrier.

- **SMS Services**
 - ➔ Start Here
 - ➔ Send SMS
 - ➔ SMS Gateways
 - ➔ **SMTP Carriers**
- Support Services
- CRM Services
- Development Services
- Test Skin

Name	Enabled	Country	SMS	MMS
7-11 Speakout(GSM)	No	USA	number@cingularme.com	
AT&T Enterprise Paging	No	USA	number@page.att.net	
AT&T Wireless	No	USA	number@txt.att.net	number@mms.att.net

The enabled carriers will appear bolded in the list.

AT&T Wireless	Yes	USA	number@txt.att.net	number@mms.att.net
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NOTE A useful reference site for determining the address syntax is: http://en.wikipedia.org/wiki/List_of_carriers_providing_SMS_transit. If necessary you can create or edit an existing entry as you find necessary.

Create the SMS to SMTP Gateway

Amigopod supports multiple SMS gateways used under different scenarios. We must create a gateway for the other plugins to interact.

Navigate to **SMS Services > SMS Gateways** and select **Create new SMS gateway**.

Select **SMS over SMTP** as the **SMS Gateway**. All other entries can be left blank.

SMS Gateway Configuration

* SMS Gateway: SMS over SMTP
Select the SMS gateway you have service with.

Service Settings

Display Name:
The name for this service handler. This will be displayed to operators using the system.

Mobile Number Settings

Country Code:
The default country code to use for mobile telephone numbers that start with the national prefix.

Default Length:
Most SMS providers require the number sent with the country code. If your country has a default length, enter it here and the country code above will be automatically added where necessary. For example, North American numbers have a default length of 10, and country code 1.

National Prefix:
Optional national dialing prefix to recognize.

Debug

Enable Debug: Log detailed information to the application log
If selected, debug messages will be generated for each stage of the HTTP transaction for the service provider.

If the gateway is not bolded after you Save Changes, it is not the default SMS gateway.

SMS over SMTP	Unavailable
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Select **Make Default**.

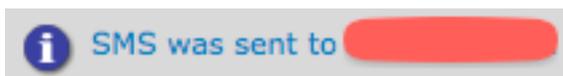


Send a Test Message

Select **Send SMS** to open the test form. Enter your mobile number and carrier, and write yourself a brief message.

A screenshot of the 'New SMS Message' form. The form has a header 'New SMS Message' and a sub-header 'SMS over SMTP' with 'Unavailable' status. Below the header are 'Edit', 'Duplicate', and 'Send SMS' icons. The main text says 'Complete the form below to send an SMS message.' The form contains three fields: 'Recipient:' with a redacted input field and a note 'Enter the mobile telephone number of the recipient in international format.'; 'Mobile Carrier:' with a dropdown menu showing 'T-Mobile'; and 'Message:' with a text area containing 'This is a test. The message will arrive as "sender / subject / message".' and a character count '87 characters left'. Below the form are 'Send Message' and 'Cancel' buttons.

Click Send Message and you should see a positive response.



Messages sent over SMTP may take a number of seconds to arrive. If the message takes longer than a couple of minutes, you may want to check the inbox of your SMTP account.

NOTE The use of SMS over SMTP requires a pre-configured SMTP setup under **Administrator > Network Setup > SMTP Configuration**. Please refer to the documentation if SMTP requires configuration.

Example Guest Self-Registration

Mobile Self-Registration

We will create a guest self-registration that asks for their mobile number and name. The mobile number will become their username.

Please complete the form below to gain access to the network.

The screenshot shows a web form titled "Visitor Registration". It contains the following fields and elements:

- * Your Name:** A text input field containing "Amigopod Tech Note". Below it is the instruction: "Please enter your full name."
- * Mobile Number:** A text input field containing "1015551234". Below it is the instruction: "Enter your mobile number. Enter only numbers (No spaces, -, etc.)"
- Mobile Carrier:** A dropdown menu currently showing "T-Mobile". A list of carriers is open, including "AT&T Wireless", "Sprint (PCS)", "T-Mobile" (highlighted), and "Verizon".
- * Confirm:** A text input field, partially obscured by the dropdown menu.

At the bottom left of the form area, there is a legend: "* required field".

Already have an account? [Sign In](#)

Create the Self-Registration

Navigate to **Guest Manager > Customization > Guest Self-Registration** and select **Create new self-registration page**. Enter the fields as desired and **Save Changes**.

Customize Guest Registration	
Basic Properties Options controlling basic operation of guest self-registration.	
* Name:	mobile <small>Enter a name to identify the guest self-registration instance. This is visible only to administrators.</small>
Description:	This registration will ask for their mobile number and send the password via SMS. <small>Enter comments about this instance of guest self-registration. This is visible only to administrators.</small>
Enabled:	<input checked="" type="checkbox"/> Enable guest self-registration
* Register Page:	mobile <small>Enter the base page name for the guest registration page.</small>
Parent:	(No parent – standalone) <small>Fields and text will use the parent's value unless overridden. Simply edit a field to override the parent value.</small>
Hotspot:	<input type="checkbox"/> Prepare self-registration for Hotspot Transactions <small>Check this box if registrants will be required to pay for access.</small>
<input type="button" value="Save Changes"/> <input type="button" value="Save and Continue"/>	

Customize Register Page Form

Select **Form** under **Register Page** to display the list of fields.

Adjust the fields as desired. In this case we have disabled **email**. As stated above, we want to use the phone as the username. In order to do this, we need to add the username field and re-label it accordingly. Select **visitor_name** and click **Insert After**. Select **username** under **Field Name** and allow the page to refresh. Override the **Label** and **Description** as desired.

Form Field Editor	
* Field Name:	username <small>Select the field definition to attach to the form.</small>
Form Display Properties These properties control the user interface displayed for this field.	
Field:	<input checked="" type="checkbox"/> Enable this field <small>When checked, the field will be included as part of the form.</small>
* Rank:	22 <small>Number indicating the relative ordering of user interface fields, which are displayed in order of increasing rank.</small>
* User Interface:	Text field <small>The kind of user interface element to use when entering or editing this field.</small>
Label:	Mobile Number: <small>Label for this field to display on the form.</small>
Description:	Enter your mobile number. Enter only numbers (No sp; <small>Descriptive text for this field, displayed with the user-interface element.</small>
CSS Class:	 <small>Optional CSS class name to apply to this form field.</small>
CSS Style:	width: 10em; <small>Optional CSS style text to apply to this form field.</small>

Save Changes and then select **Insert After** from the **username** selection. Select **visitor_carrier** under **Field Name** and allow the page to refresh. Override the **Label** and **Description** as desired.

Form Field Editor

* Field Name:

Select the field definition to attach to the form.

Form Display Properties
These properties control the user interface displayed for this field.

Field: **Enable this field**
When checked, the field will be included as part of the form.

* Rank:
Number indicating the relative ordering of user interface fields, which are displayed in order of increasing rank.

* User Interface:
The kind of user interface element to use when entering or editing this field.

Label:
Label for this field to display on the form.

Description:
Descriptive text for this field, displayed with the user-interface element.

CSS Class:
Optional CSS class name to apply to this form field.

CSS Style:
Optional CSS style text to apply to this form field.

No Changes: **Add (No changes)**
Select if you want the list to insert a (No changes) option to the default set.

Options Generator:
The function used to generate the list of available options.

Options Generator Param:
Optional name of field whose value will be supplied as the argument to the options.

The fields list.

Rank	Field	Type	Label	Description
10	sponsor_name	text	Sponsor's Name:	Name of the person sponsoring this visitor account.
20	visitor_name	text	Your Name:	Please enter your full name.
22	username	text	Mobile Number:	Enter your mobile number. Enter only numbers (No spaces, -, etc.)
23	visitor_carrier	dropdown	Mobile Carrier:	Please select your mobile carrier.
Edit Edit Base Field Remove Insert Before Insert After Disable Field				
25	visitor_phone	text	Phone Number:	Please enter your contact phone number.
30	visitor_company	text	Company Name:	Please enter your company name.
40	email	text	Email Address:	Please enter your email address. This will become your username to log into the network.
50	schedule_time	datetime	Activation Time:	Scheduled date and time at which to enable the visitor account. If blank, the account will be enabled immediately.
60	expire_after	hidden	Expires After:	Amount of time before this visitor account will expire.
65	expire_time	datetime	Expiration Time:	Optional date and time at which the visitor accounts will expire and be deleted. If blank, the account will not expire.
70	role_id	hidden	Account Role:	Role to assign to this visitor account.

Select **Back to guest self-registration editor** at the bottom of the fields list.

Select **Form** under **Receipt Page** and select **visitor_phone**. Select **Insert After** to add the carrier selection. Select **visitor_carrier** under **Field Name** and allow the page to refresh. Override the **Description** as **'_'**. A single underscore **'_'** denotes do not display a description.

Form Field Editor	
* Field Name:	visitor_carrier <small>Select the field definition to attach to the form.</small>
Form Display Properties <small>These properties control the user interface displayed for this field.</small>	
Field:	<input checked="" type="checkbox"/> Enable this field <small>When checked, the field will be included as part of the form.</small>
* Rank:	27 <small>Number indicating the relative ordering of user interface fields, which are displayed in order of increasing rank.</small>
* User Interface:	Static text <small>The kind of user interface element to use when entering or editing this field.</small>
Label:	Mobile Carrier: <small>Label for this field to display on the form.</small>
Description:	_ <small>Descriptive text for this field, displayed with the user-interface element.</small>

Select **Back to guest self-registration editor** at the bottom of the fields list.

Select **Actions** under **Receipt Page**. Under **SMS Delivery** choose **Always auto-send guest receipts by email** under **Enabled**, **username** as the **Phone Number Field**, and **SMS over SMTP** as the **Service Provider**.

SMS Delivery	
Enabled:	Always auto-send guest receipts by SMS
Phone Number Field:	username <small>The field containing the visitor's phone number.</small>
Service Provider:	SMS over SMTP <small>The service provider to use when sending SMS messages.</small>
SMS Receipt:	(Use Default: SMS Receipt) <small>The plain-text format print template to use when generating an SMS receipt.</small>
<div style="text-align: right;"> <input type="button" value="Save Changes"/> <input type="button" value="Save and Continue"/> </div>	

Save Changes to return to the main editor. Select **Launch this guest registration page** and enter your credentials.

Please complete the form below to gain access to the network.

Visitor Registration	
* Your Name:	<input type="text" value="Amigopod Tech Note"/> Please enter your full name.
* Mobile Number:	<input type="text" value="REDACTED"/> Enter your mobile number. Enter only numbers (No spaces, -, etc.)
Mobile Carrier:	<input type="text" value="T-Mobile"/> <input type="button" value="v"/> Please select your mobile carrier.
* Confirm:	<input checked="" type="checkbox"/> I accept the terms of use
<input type="button" value="✓ Register"/>	

Click **Register**. The receipt page will be displayed.

The details for your guest account are shown below.

Visitor Registration Receipt	
Visitor's Name:	Amigopod Tech Note
Mobile Carrier:	T-Mobile
Account Username:	 <input type="text" value="REDACTED"/>
Visitor Password:	 68389213
Expiration Time:	Friday, 27 August 2010, 02:07 PM

You should have received the credentials over SMS as well.



Troubleshooting

SMTP

If email itself does not seem to be working, please consult the documentation and troubleshooting for setting up a mail access.

For SMS purposes, we highly suggest a true SMTP server over sendmail, as you will want to accept replies and detect failures.

Country Codes

Certain carriers are more open to whether or not the country code is allowed. For instance, T-Mobile North America will work with and without the '1'. However, AT&T must always have the 10-digit number by itself. If a 1 is included the transmission will fail. Email is asynchronous, thus the only means of detecting failed messages is to tend to the INBOX of the sending account.

To make this easier on the end-users, each carrier can be configured to override the country code value. Select the carrier under **SMS Services > SMTP Carriers** and click **Edit**. You have the following options:

- Use the visitors value
- Always include the country code
- Never include the country code

AT&T Wireless		Yes	USA	number@txt.att.net	number@mms.att.net
Edit Disable Delete					
SMS SMTP Carrier Editor					
* Name:	AT&T Wireless <small>Name of the carrier. Will need to be a value a user can easily identify with.</small>				
* Enable:	<input checked="" type="checkbox"/> Include this carrier in the list available to the users.				
Country:	USA <small>Country the carrier supports.</small>				
* SMS Template:	number@txt.att.net <small>Enter an example e-mail. Everything after the '@' will be used.</small>				
* MMS:	<input type="checkbox"/> The SMS template acts as the MMS template as well?				
MMS Template:	number@mms.att.net <small>Enter an example e-mail. Everything after the '@' will be used.</small>				
Number Format:	Never include the country code <small>Select the country-code requirement of the carrier</small>				
Country Code:	1 <small>Enter the carriers country code.</small>				
<input type="button" value="Save Changes"/> <input type="button" value="Cancel"/>					