Sending Email/Text with the JNIOR

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The following is an explanation of how to utilize the JNIOR to send an e-mail and text with alarm notifications, data, etc. using its SMTP (Simple Mail Transport Protocol) functionality.

Please contact INTEG via e-mail at JNIORsales@integpg.com or via phone at 724-933-9350 extension 20 with any questions. Please visit our website at www.integpg.com for any updates and manuals.

JNIOR Software Version

The e-mail functionality is available in JNIOR OS 3.X, but it is advised that you update your JNIOR to the latest JNIOR Operating System, 4.3, available on our JNIOR Downloads page at the link below.

Please download the All in One Update zip file, but do NOT unzip the file. Please use the JNIOR Support Tool (also available on the Downloads page) and go to the Update tab, click Open Project and then navigate to where you saved the zip file and select it. The JNIOR Support Tool will unzip it. Then click Publish Update to JNIOR.

http://www.integpg.com/jnior/ethernet_io.aspx#page=downloads_content.aspx

Email Overview

The JNIOR has several different ways it can send an e-mail as follows:

1) The JNIOR can be configured so that it does NOT use a email server to relay the e-mail and the JNIOR will deliver the e-mail directly to the recipient's e-mail server.
2) The JNIOR can be configured to use an e-mail server and the JNIOR will connect to the e-mail server, give it the e-mail, and the server will send it.
3) The JNIOR can be configured to use a third party paid service that will relay the e-mail for the JNIOR and even allow the JNIOR to send e-mail via another port instead of the typical port 25. Many Internet Service Providers (ISP) will block port 25 for home Internet users.

NOTE: The JNIOR has the capability to log into an e-mail server, however, the JNIOR cannot make a secure connection using SSL.

Email Configuration

The following instructions are based on using JNIOR OS 4.3. The instructions are similar for earlier versions of the JNIOR OS except some functionality, such as, the capability to login to an e-mail server, is not available with the earlier OS.

In order to send e-mail, your JNIOR must be configured with a Gateway and at least one Domain Name Server (DNS). The JNIOR will need to be able to reach the DNS to resolve the mail host address for the recipient's e-mail address. The IP configuration can be completed using the JNIOR Support Tool.   Right click on your JNIOR in the Beacon tab and select the Configuration option. A pop-up box will allow you to complete all the necessary items as shown below.
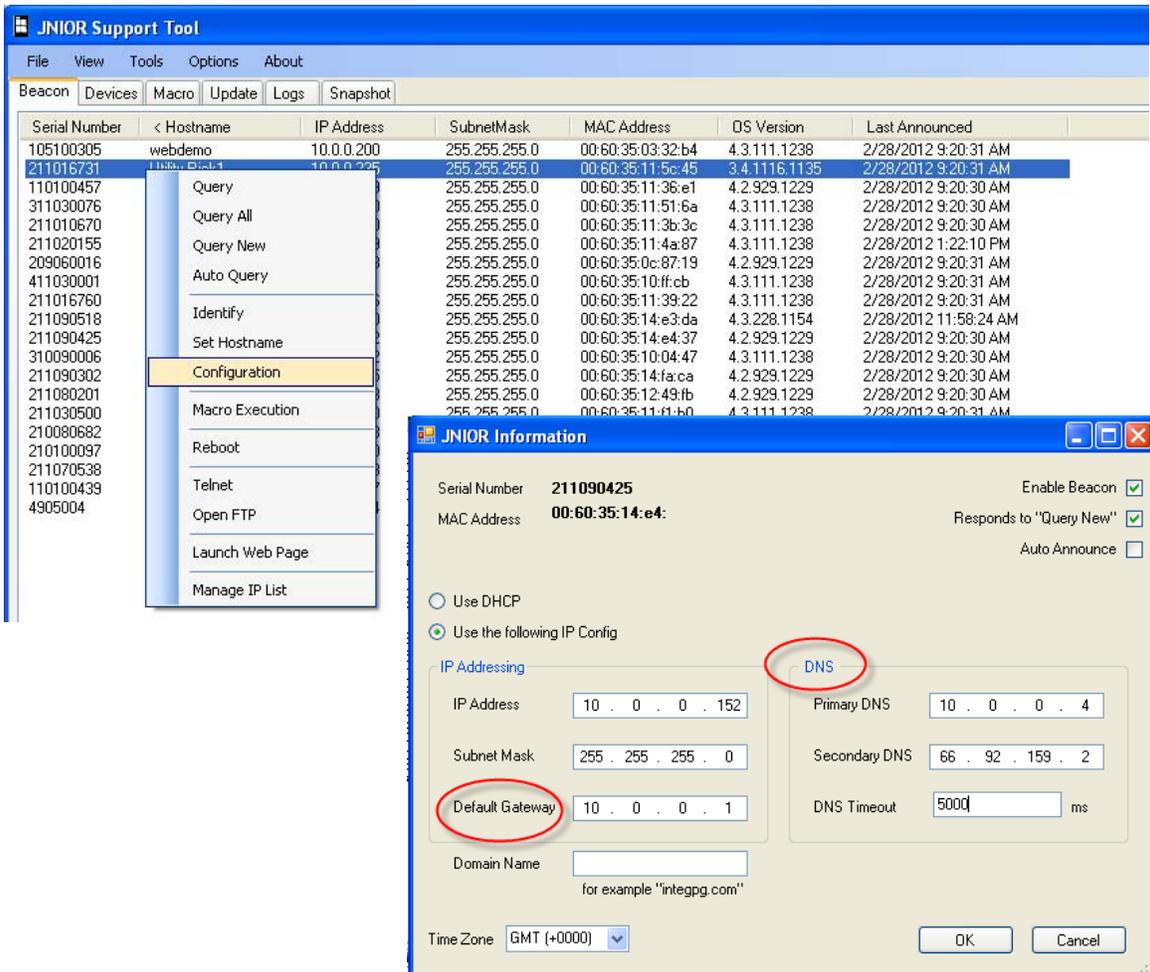
After you have set-up your IP configuration, you will have to decide how you want to send an e-mail using one of the 3 methods previously described. Here are some tips for deciding:

- Many e-mail servers have spam filters and will block e-mails coming from an unknown sender. The JNIOR e-mail is identified by the recipient e-mail server based on the JNIOR's 'from' e-mail address. How this is set is discussed later in this document.
- If you want to have your e-mail server receive the e-mail server and relay it to the end recipient, your e-mail server may require the JNIOR to login. The JNIOR can login, but it cannot login using a secure connection. Please verify the type of connection your e-mail server requires.
- The default port used by most e-mail systems is port 25. This means the JNIOR will attempt to send the e-mail to the e-mail server using port 25. Some ISP's will block port 25 so that a device cannot send e-mail via this port. This is typically done for home Internet access so that large amounts of spam cannot be sent via port 25. The JNIOR has the capability to allow the default port of 25 to be changed to any other port. This allows the JNIOR to work with third party services that will receive an e-mail over other predefined ports and then relay the e-mail to the end user. Please verify from your ISP if port 25 is blocked.

Configuring the JNIOR 'From' Address

Every e-mail the JNIOR sends will have a 'from' address. The from address consists of the following:

<div align="center">

hostname@domain_name

</div>

The hostname and domain name can be set from the JNIOR Support Tool on the Beacon tab or from the JNIOR web page on the Configuration Misc. tab. From the Beacon tab, right click on your JNIOR IP address and select Set Hostname or select Configuration.
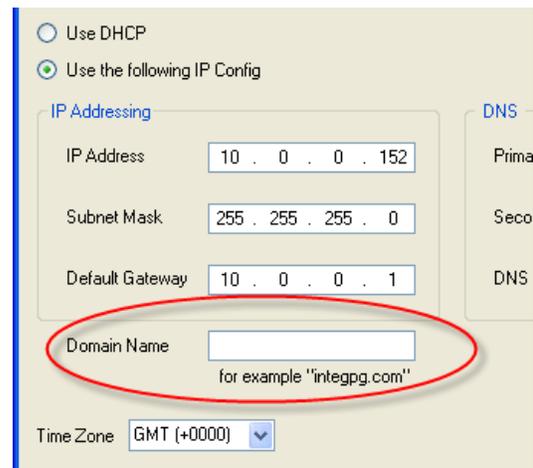
Or from the JNIOR web page.
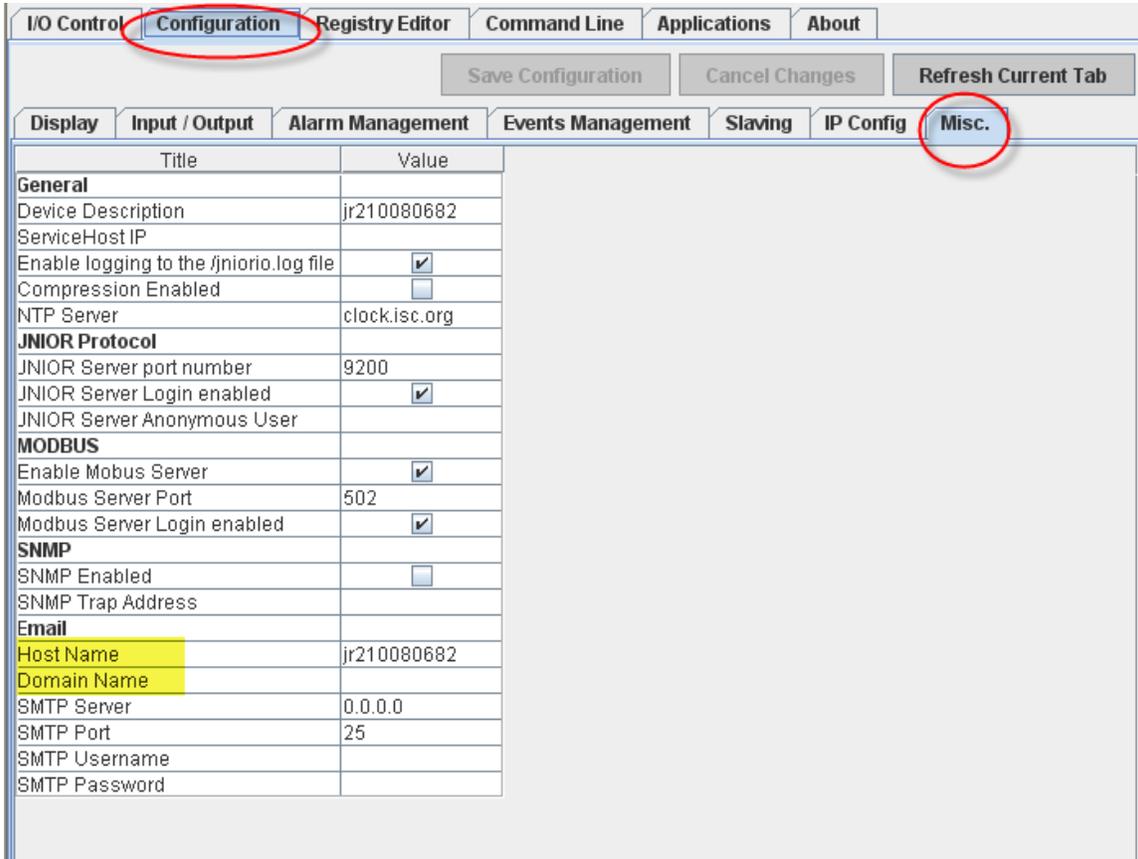
When selecting your 'from address', it does not matter to the JNIOR what you use. It matters more to the recipient and in particular their e-mail server or spam filter. For example, if we use a hostname of JNIOR and a domain name of integpg.com our e-mail server will reject the e-mail and not deliver it to a recipient such as jniorsales@integpg.com because our e-mail server knows that JNIOR@integpg.com is not a valid e-mail address.

However, this 'from address' may work fine for a recipient besides someone at INTEG.

If we were to configure the JNIOR as JNIOR@zoominternet.net (where zoominternet.net is the domain for a local ISP), our spam filter will let this e-mail through to any recipients in INTEG because our spam filter has been programmed to accept e-mail from the domain zoominternet.net.

Configuring the SMTP Server

If you want to use method 1 and have the JNIOR send the e-mail directly to the recipient's e-mail server, then you do NOT want to do any of the following configuration items. If you enter an IP address or URL for a SMTP Server, then the JNIOR will try to use it. Leaving it blank (or 0.0.0.0) means that the JNIOR will attempt to send the e-mail directly to the recipient by using the DNS to resolve the IP address of the recipient's e-mail address and deliver the e-mail to that server.

If you want to use your e-mail server or a third party then you need enter some or all of the following information via the JNIOR web page on the Configuration – Misc. tab as shown below (complete screen picture was previously).

Email	
Host Name	jr210080682
Domain Name	
SMTP Server	0.0.0.0
SMTP Port	25
SMTP Username	
SMTP Password	

SMTP Server

This is the IP address of your e-mail server (such as 10.0.0.4) or the URL of a third party service, such as relay.dnsexit.com.   DNS Exit is a third party service that provides Mail Relay Outbound Service (www.dnsexit.com) for a small fee (about US$1.50 per month for 150 e-mails per day).

SMTP Port

In most situations, you will not want to change the default SMTP port. It will stay as 25. However, if your ISP is blocking port 25, then you will have to use a service such as provided by DNS Exit and they offer alternate SMTP ports (26, 940, 8001, 2525 and 80) to relay the JNIOR e-mail. Please change the port number, if required.

SMTP Username and Password

A username and password only needs to be entered if your e-mail server requires one. If you are using a service such DNS Exit, then they will provide you with a username and password to enter. The password will be encrypted and will display as ***** the next time you open the JNIOR web page.

Below is an example of a completed e-mail set-up when using a third party mail relaying service.

Email	
Host Name	test
Domain Name	zoominternet.net
SMTP Server	relay.dnsexit.com
SMTP Port	940
SMTP Username	rshulkosky
SMTP Password	*****

Configuring an Email Profile

The JNIOR can send e-mail to a variety of recipients. Each alarm or action that involves an e-mail will require you to select an email profile. You enter the e-mail profiles on the JNIOR web page – Configuration tab – Events Management tab as shown below.

You first click on the Add Email Profile button in the lower left corner. This will cause a box to pop-up so you can provide a name for your e-mail profile. After you click OK, the profile name will display in the left window under the name <default>.

NOTE: You can configure the <default> email setting, but it is recommended that you create email profiles with a name that you recognize.

You must then click on the email profile name in the left window so that you can configure it in the right window. Your email profile name will display at the top.

You only need to enter a To Address. All other fields can be blank and the JNIOR will fill in a subject line and text in the body appropriate for the event triggering the e-mail.

You can enter multiple e-mail addresses in any address field, but they must be separated by a comma.

If you enter a Subject or Message, then it will replace the default ones used by the JNIOR.

If you want to attach a file to the e-mail, then you must provide the filename, for example, jniorboot.log. This would attach the jniorboot.log file created each time the JNIOR boots.

If you are logging data on the JNIOR and it is stored in a different location, then you must add the folder path, such as /www/logs/hourly.csv   and this will attach the file named hourly.csv stored in the folder LOGS located in the folder WWW.

Sending a Text Message with the JNIOR

The JNIOR cannot send a direct text message, but can send an e-mail to your phone service provider that converts it to a text message that will be sent to your phone. In the JNIOR e-mail profile, you enter the e-mail address according to the format provided by your mobile provider. The major cell phone providers in the USA have the following format:

Verizon   phonenumber@vtext.com

AT&T   phonenumber@txt.att.net

Sprint   phonenumber@messaging.sprintpcs.com

T-Mobile   phonenumber@tmomail.net

Sending an e-mail from the JNIOR to one of the e-mail addresses above will cause the message to show up on your cell phone as a text message.