AlarmWorX64 Multimedia SMS with a GSM Modem

APPLICATION NOTE

August 2014

Description: Guide to configure the AlarmWorX64 Multimedia Server to send SMS messages via a GSM modem/cellular phone.
General Requirement: AlarmWorX64 Multimedia, GSM Modem /cellular phone, USB/Serial cable for modem.

Introduction

ICONICS AlarmWorX64 Multimedia Pager/SMS Agent supports GSM modems mentioned in this application note and cellular phones with a built-in modem. Then using AlarmWorX64 Multimedia, it is possible to send SMS messages via a modem or a cellular phone. In this application note we will configure the Multimedia server to send SMS messages via a GSM Modem (Insys GSM Modem). If you would like to send SMS messages via a standard analog modem, please read the application note entitled *AlarmWorX64 Multimedia - SMS with an Analog Modem*.

There are some advantages and disadvantages of sending SMS messages via a cellular phone. One of the advantages is that sending SMS messages is cheaper than doing it with a modem. Also, the Multimedia server can send more messages per minute and it is possible to acknowledge the alarms with a cellular phone. However, sending SMS messages via a cellular phone requires more hardware than sending an SMS message through a modem.

ICONICS supports following modems as this hardware was tested (if you need more details contact technical support):

- INSYS GSM small 2.0
  http://www.insys-icom.com/icom/en/products/DIN-Rail/serial
- Siemens TC35i
- Multitech modems
- Westermo
- 2N® EasyGate - Based on Siemens GSM technology

GSM Modem / Cell Phone Configuration

1. Attach the cellular phone serial cable to the computer and the GSM Modem.
2. Go to **Start → Settings → Control Panel → Phone and Modem**.
3. Select the **Modems** tab and click on **Add**. The computer will search for new modems. This will determine on which port the modem is communicating.
4. Test the modem using a windows modem utility such as **Hyperterminal**.

   NOTE: The actual dialogs vary between windows operating systems. Please also make sure that you always close the Hyperterminal/Test application which you have used for the COM port test to avoid the issue where port is claimed by another application.

Pager Service Configurator

1. Before you start the AlarmWorX64 Multimedia Configurator you have to configure modem itself.
2. Open **Pager Service Configurator** from **Start → All Programs → ICONICS → AlarmWorX64 Multimedia**.
3. Launch the TAP configuration by pressing the **General Settings** button. The window shown in Figure 1 will appear.
4. **MMXPAGER TAP/SMS** dialog will be displayed to allow the option to view and log ISDN/GSM diagnostic messages during pager testing. Here you can also set the option to allow the alarm to be acknowledged via SMS.

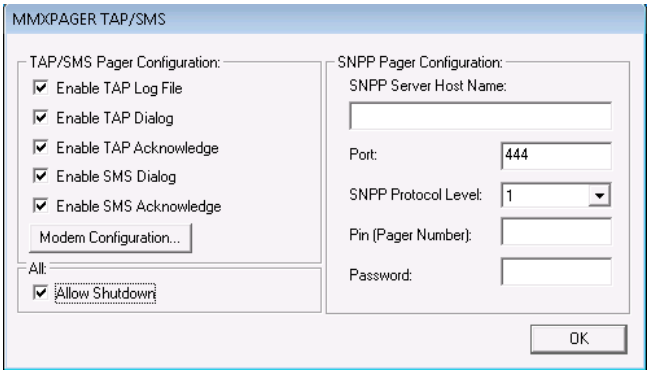

Figure 1 – Pager Service Configurator

NOTE: If you run AlarmWorX64 Multimedia Configurator from Workbench you will not see the "Modem Configuration" button, you should close the configuration form that you just open. Then Open a Windows Explorer and browse to C:\Program Files\Common Files\ICONICS\FWX64\BIN. Double-click on the PagerCfg.exe to launch the dialog in Figure 1.

5. Launch the SMS Configurator by clicking on the **Modem Configuration** button.
6. In the Message Master SMS SDK Configuration dialog, select the **Message-Master GSM/PCS** and press the **Configuration** button.
7. Select the **Ports** tab and click on **Add**.
8. In the COM Port Settings dialog, select the COM Port to use the Baud Rate, and then click on **Next**.

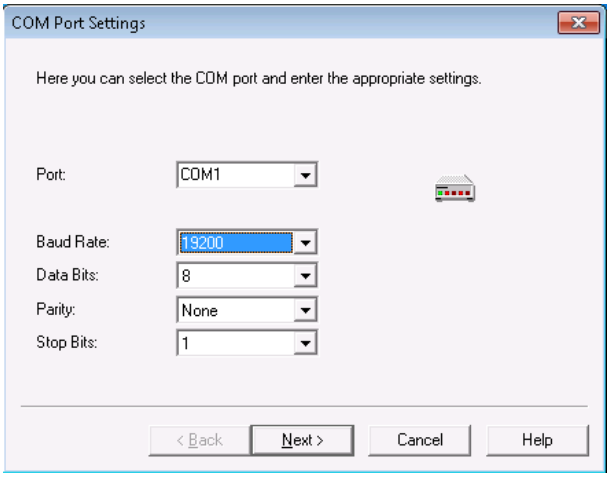

Figure 2 - COM Port Settings

9. Fill in the mobile number and click **Next**. The Initialization screen will appear. Click **Next**.
10. Select the service the GSM Modem / Cell Phone provider is using.

    NOTE: It might happen that list of services is empty, in which case you have to create new service(s) under Service tab later on. If you don't have SMS Center number, contact your provider.

11. Click on **Finish** and the modem will check the connection. You should see output similar to figure below.

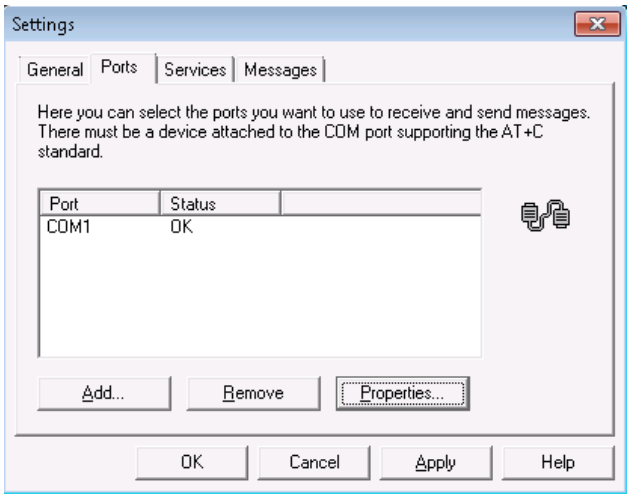

Figure 4 - COM Port connection established successfully

12. Double-click on the COM Port and confirm that the Default SMSC is the same as the service number selected.

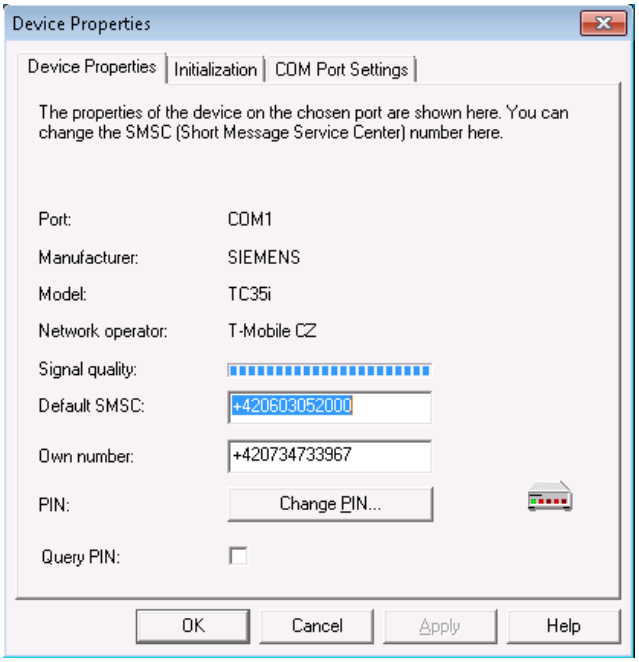

Figure 3 - Device Properties

13. Click on **OK** and then choose the **General** tab. Make sure that **Activate Outbox Spooler** and **Activate Inbox Spooler** is enabled.

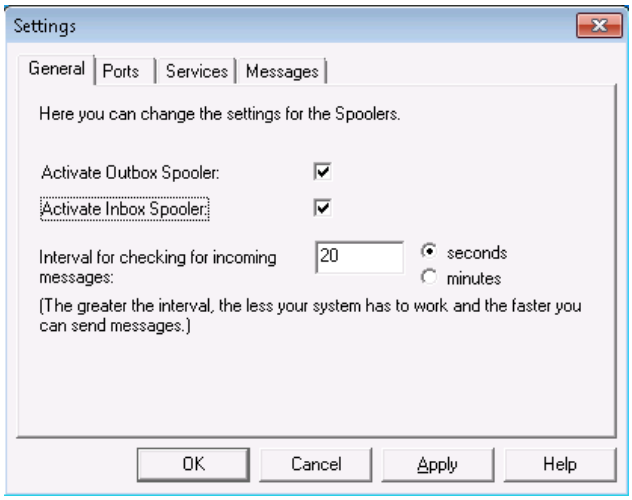

Figure 4 - General Settings

14. Choose **Services** tab and click on **Add** button (If you already have the service on the list you can skip this step).

15. Click on **OK** and close the window.

General Pager Configuration

1. From the Pager/SMS/GSM/TAP branch right-click and select **New → Multimedia Agent Setting**.
2. Enter **SMS Media Name**.
3. Enter **Cell Phone Number**.
4. Select a template.
5. Select **Use GSM/PCS Service** and choose the service provider for your pager.
6. Fill in a 3 digit number as an **Acknowledge Code** (e.g. 123)
7. Press **Apply**.

Test the Setting

1. Select the SMS agent you've just created. Click on **Test** and the MMXPager SMS Diagnostic Dialog will appear.

   NOTE: You should also configure 1 test alarm in AlarmWorX64 Server Configurator which allows you to test the real alarm. For more details how to configure AlarmWorX64 Server see help documentation.

2. An alarm number is generated (e.g. ??1??) in the alarm message. This number is needed for the acknowledgement of alarm. To acknowledge the alarm you need to send the alarm number and the acknowledge code. An example acknowledge response is: "**??1?? 123**" (where ??1?? is the alarm number and 123 is the acknowledge code).