AlarmWorX64 Multimedia
Which Email Agent is Right for You?

APPLICATION NOTE

September 2013

Description: Guide to choosing the email agent that works best for you with security consideration.
OS Requirement: Windows Vista x64/ Windows 7 x64/ Windows 8 x64/ Windows Server 2008 x64/ Windows Server 2008 R2 x64 / Windows Server 2012
General Requirement: Installation of AlarmWorX64 Multimedia and an email client if required.

Introduction

Emails are an essential part of our lives in today's society and ICONICS takes advantage of this service to send out alarms. This provides a way to notify people about alarms and it leaves a record of what has happened.

There are three mail agents in the AlarmWorX64 Multimedia suite. One agent is for customers who use MS Outlook Express (or any other mail clients that uses simple MAPI protocol), another one is for customers who use MS Outlook, and the last is for customers that use the SMTP Protocol.

This application note will go through the pros and cons of each agent and how to set them up after you have chosen which agent suits you best.

Microsoft Outlook and Outlook Express

The agents for Microsoft Outlook (MMXMailExt.exe) and Microsoft Outlook Express (MMXMail.exe) are both essentially the same agent. We have created separate executables solely for the reason that in Outlook Express, you can configure, in options, to suppress warning message when a third party software client is trying to send out email. In Outlook, such an option does not exist. By using the Outlook agent, the warning message is automatically suppressed, relieving you from sitting in front of the machine and acknowledging the warning message to send out the email.

When you are using these agents, you must have a default mail account setup on the computer. You must also setup this account to auto logon. This is usually accomplished by using the user name and password of the account used to logon to the computer.

For Microsoft Outlook 2003-2010, the mail client must be open in order for emails to be sent out. This is due to a spooler issue in Microsoft Outlook 2003, 2007, or 2010 and may not be necessary for future versions of Outlook.

For Microsoft Outlook 2000, the sent mail items will only be displayed in the Out folder. They are not transferred into the Sent folder. The MMXMailExt.exe supports Microsoft Outlook running Microsoft Exchange Server.

> **NOTE:** If you select to use Microsoft Outlook, install its 32-bit edition on the machine where you want to combine it with the email agent; 64-bit edition will not communicate with AlarmWorX64 Multimedia package.

SMTP Protocol Support

SMTP is much simpler to setup compared to setting up Outlook or Outlook Express to work with AlarmWorX64 Multimedia. However, the down side to SMTP is that it does **NOT** allow you to acknowledge alarms. You can only send out messages, notifying that there is an alarm. If you need to be able to acknowledge the alarm via email, please use one of the other mail agents.

Security Concerns

Email Server Security

Security is a major topic when it comes to communications. In this section, we will discuss some of the security that is built into the email agents.

In general, the AlarmWorX64 Multimedia email agents rely on the security of your email server. When using either the Outlook or Outlook Express agents, they will use the default email client on your computer to send and receive emails. For example, if all emails are sent and received via the same Microsoft Exchange server, then each connection to the server will be secure if properly configured on the server side. The Exchange server provides secure connections; however, the emails sent over that connection are unencrypted.

The same thing is true for SMTP agents. The agent will first try to use Extended SMTP (ESMTP) to provide secure email authorization. This is achieved by using the user name and password to log into the server you have entered in the Workbench. The email server should take care of security on the connection to it. As with the other agents, the emails sent are unencrypted.

For some systems, if the ESMTP option is not available (or if the user name and password fields are empty), the system will still attempt to send out email using standard SMTP. In this case, some mail systems validate sending email addresses as a method of securing email. If that is the case, we have provided a "From Email Address" field to accommodate.

Copyright 2013 ICONICS, Inc.   Page 1 of 4   AlarmWorX64 Multimedia - Which Email Agent is Right for You

Email Client Security

If you are using Outlook, you can choose to encrypt your outgoing mails. This encryption is done on the client-side. You can go in Tools → Trust Center and select the E-mail Security section to configure encryption on your email. Another example of a program that offers email encryption is PGP.
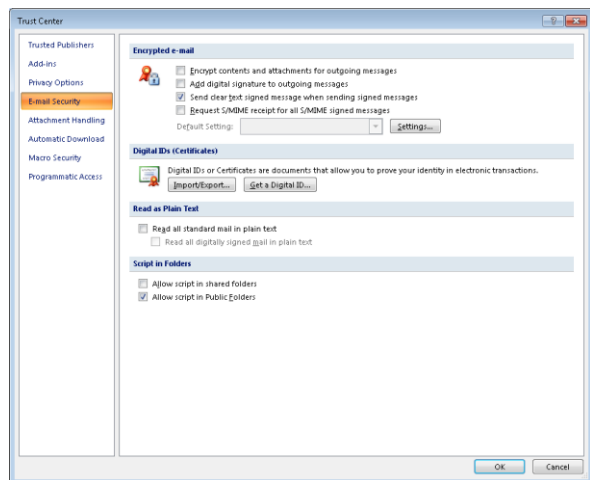

Figure 1 - Outlook Mail Security

The SMTP agent does not provide email encryption capability. The only thing that it encrypts is the user name and password that you have entered into the Workbench. You could, however, send encrypted attachments with the email using this agent.

The risk of using unencrypted, unsecured email depends upon the sensitivity of the information that you are sending over email. Unencrypted emails can easily be "sniffed" and intercepted by malicious programs or persons. The repercussions of this depend completely upon the contents of the email. In general, it is a good idea to use security so that emails do not fall into the wrong hands.

Depending on the sensitivity of the content of your email, you may consider not using security. The advantage is a possible increase in performance since the mail system does not have to do the extra work associated with security.

Selecting the Email Agent to Run

Once you have decided on which email agent to use, you will need to enable it on your system. During the installation of AlarmWorX64 Multimedia, the default active email agent is SMTP for its simplicity in configuration. However, we understand that you may need to use the other agents.

Figure 2 - Choosing Email Agents During Installation

If that is the agent that you would like to use, you do not need to do anything else. Otherwise, you can select the appropriate agent before clicking on "Next" to continue with your installation.

If you have already installed AlarmWorX64 Multimedia and either installed it with a different active agent or you do not remember which agent you chose at the time of installation, we can manually activate the agent you would like to use now.

There are two steps involved when trying to manually activate an agent. We will first have to enable the Registration Context Menu and then register the correct agent.

Enabling the Registration Context Menu

1. Open Windows Explorer and Browse to the installation bin directory. In a standard installation this is C:\Program Files\ICONICS\GENESIS64\Components.
2. Select **RegistrationContextMenu.reg** and double click. This will open the dialog in Figure 3 and ask if the registry should be updated. Click on **Yes.**
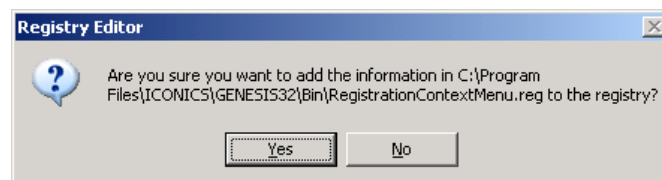

Figure 3 - Registry Editor Warning

3. A second dialog notifying a successful registry update appears as seen in Figure 4. Click on **OK**.
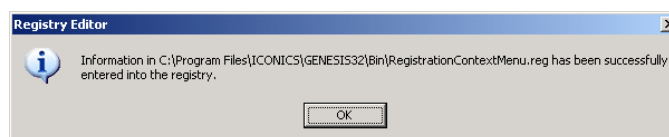

Figure 4 - Registry Editor Confirmation

4. This has added new context menu options to the right-click operation in Explorer.

Registering the Agent

1. In the directory C:\Program Files\Common Files\ICONICS\FWX64\BIN\ find the agent that you would like to use. They are MMXMail.exe, MMXMailExt.exe, or MMXmailSMTP.
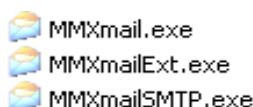

Figure 5 - The Executables in Bin Directory

2. Right-click on the agent that you would like to use, and select "Register Component" from the menu options. This will register the new email agent. You will not receive any confirmation.
3. When you click on the "Test" button for any mail agent in your AlarmWorX64 Multimedia configuration, you can check that the correct agent is being used in the task manager.

Configuring the SMTP Agent

If you are using Outlook, Outlook Express, or any other clients, you should contact your IT department for information on how to connect to the email server using those clients. In most cases, following the setup wizard should set you up with a default email account. If you use Simple MAPI you do not need any further settings in AlarmWorX64 Multimedia as it will manage with the default mail client settings.

SMTP Agent Setup

1. Open the Workbench by going to Start → Programs → ICONICS → Workbench
2. Once the Workbench opens, in the tree control on the left-hand side, expand AlarmWorX Multimedia → Configurations → Multimedia Agents and click on E-mail. The right hand pane should contain set up information for the email agent.
3. Click on the "General Settings…" button to bring up the E-mail General Settings dialog.
4. Fill in the SMTP section with your mail server name, your user name, password, and the default port number should be 25. If your system checks on the sender email address for validation as email security, you should also put in your email address in the "From Email Address" field. Click on "OK" when you are done
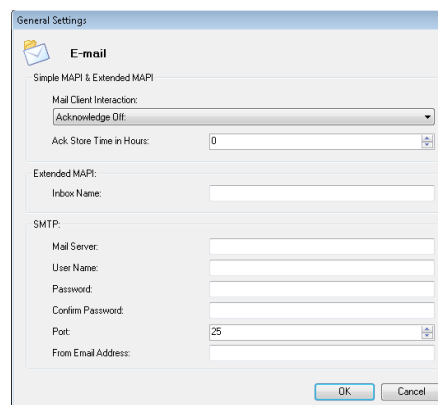

Figure 6 – Email Agent Configuration

NOTE: The password is stored as a registry entry in HKEY_CURRENT_USER. This means after configuration, if you logged in as a different user then when you have configured the agent, you will no longer have access to the password and the agent fall back to using SMTP instead of ESMTP. This could cause your agent to fail.

5. In the tree structure on the left-hand side, right-click on Email to create a new Media Item. Fill in the necessary fields.
6. Click on the "Test" Button next to the Mediate Template field. The test should return a success message.
7. You should now be all set to send out emails via SMTP service.

Extended MAPI Setup

1. If during installation of AlarmWorX64 Multimedia you have selected to use Extended MAPI instead of Simple MAPI, you will also need to configure your Inbox in the agent.
2. Follow steps 1-3 in SMTP Agent Setup to bring up the E-mail General Settings dialog.
3. In the Extended MAPI Section, fill in your mail box name. If it is called Inbox (this is Outlook default), you can leave it blank
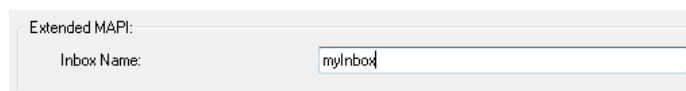

Figure 7 - Extended MAPI Configuration

Acknowledgement

By default, alarm acknowledgement through email is turned off. You can turn it on in the E-mail General Settings dialog. There are different levels of acknowledgement, please refer to the help files for each. You can also configure how long the server will keep a list of alarms that went off in a period of time for acknowledgement purposes. However, this does not mean that if

you acknowledge an alarm beyond the specified hour, it will not be acknowledged. It is just a way to maintain the size of the acknowledge queue. The default value for this is 0, which means that the queue can grow infinitely large.