Response Logic

Installation Manual v2.0.0

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ResponseLogic™ Install Guide v2.0.0 (Command Prompt Install)

This installation guide provides step by step instructions for installing the email service add-on ResponseLogic™ which is integrated with SelectSurvey.NET. If you need assistance with the install please email tech support tech@classapps.com or open a trouble ticket on our support page on classapp.com, or visit our helpdesk or knowledgebase which is also linked from the support page on classapps.com.

ResponseLogic™ is an add-on module that SelectSurvey.NET can utilize to offload the sending of email messages to the server instead of being sent by the Survey application. Emails are routed through a message queuing system. This allows the Survey application to be responsive while messages are being sent as well as allowing more reliable message sending. Large email lists are better handled using the Survey Email system since the Survey application will not timeout will generating and sending emails to a large list.

Installation Service may be purchased from your customer account page by clicking on the blue button "purchase installation service". To login to your customer account page, click the "login" link in the upper right corner on classapps.com and enter your customer ID number and password you were assigned when you purchased. If you do not know your customer ID or password, click the "forgot password" link provided there and we will email it to you.

Requirements

SelectSurvey.NET: The latest version of SelectSurvey.NET is required to enable all ResponseLogic features and support, and for the tracking of sent emails in the SelectSurvey.NET database.

Server Configurations: MS Windows Server 2008 or 2012 that have Microsoft Message Queuing installed (instructions below to install) and support .net 4.0.

.NET Framework Versions: 4.0 or higher (32 or 64 bit)

Disk Space: The application takes 1.69MB of space on the server. Allow enough space for the number of email messages that you plan on sending to be in the message queue.

Memory/Processor: the more memory and the faster the processor, the more emails your server will be able to send per day. ResponseLogic™ will run in most server scenarios, to reach maximum email messaging capacity, increase memory or processor speed. Our benchmarks support 1.5-2 million emails per day, however this amount will vary depending on the server configuration.

Installation Checklist:

Make sure you are logged in as administrator, and all steps right click and "run as administrator" to avoid permissions problems on Windows 7 or Server 2008 or versions that have the "run as administrator" option.

1. Download and Unzip files.

Download and Unzip Files from the email link or from the link in your customer account page on ClassApps.com. Unzip the ResponseLogic package so that the contents of the zip file are in the working folder called "ResponseLogic" (eg: C:\ResponseLogic – contents of zip go here). See screenshot:
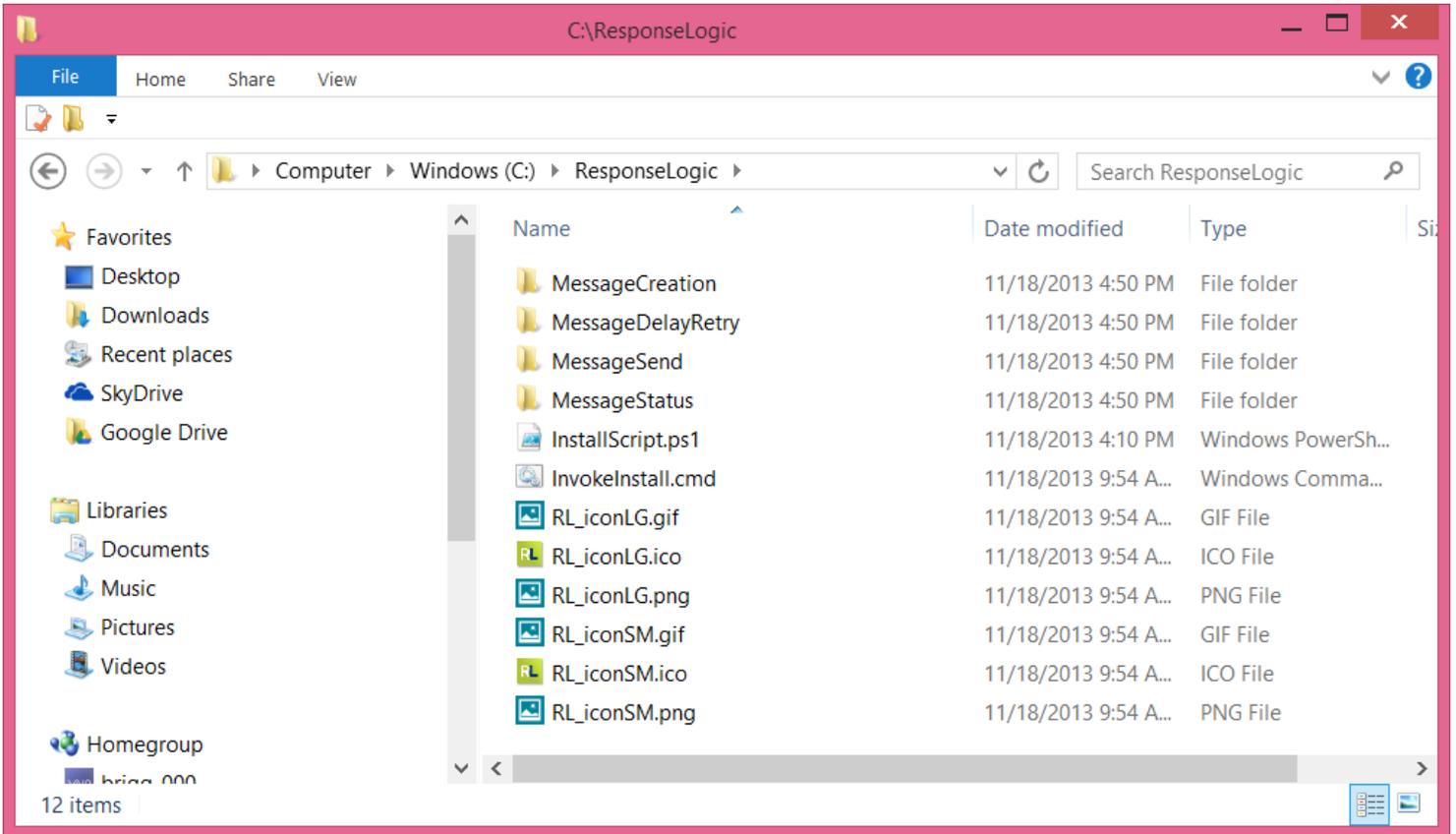
Get your license key from your customer account page by clicking the button "generate license key". This license key goes into the SelectSurvey.NET web.config (see step 6 below).

2. Confirm you have MSMQ on the server

Ensure that Microsoft Message Queuing (MSMQ) is installed on the server. (see Figure below for settings). This image is from a Windows 8 machine but the Server configuration is very similar. Do NOT enable AD integration.
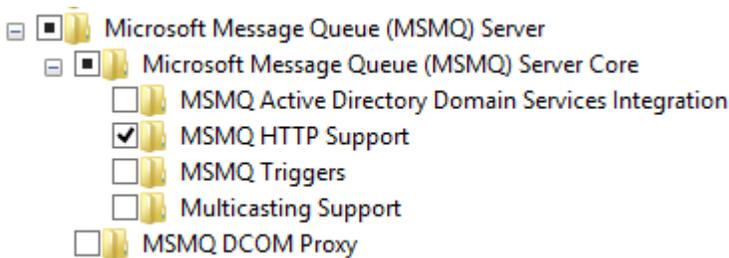

3. New Install Process

1. Open a command prompt in administrator mode.

    a. Server 2008 & 2008 R2
       i. Click Start and in the Find search box, type cmd.
       ii. Right-click on the Command application and select Run as Administrator
    b. Windows 8, Server 2012 & Server 2012 R2
       i. From the Desktop, press Window-X
       ii. Select Command Prompt (Admin)

    c. Navigate to the ResponseLogic folder (eg cd c:\ResponseLogic – where the contents of the zip file were placed)
    d. Once in the ResponseLogic folder, type InvokeInstall.cmd and press enter
    e. The message queues will be installed and the application services will be registered
(Note: if you get the error *"File C:\ResponseLogic\InstallScript.ps1 cannot be loaded because the execution of scripts has been disabled on this system."* When attempting to run the command script, then to enable script execution do this:
       In command prompt, run 'powershell'
       Then, run 'Set-ExecutionPolicy Unrestricted'
       (both without the single quotes)

2. Navigate to the MessageDelayRetry folder and edit the RLMessageRetryDelayService.exe.config file.
    a. Set the value of the SurveyServiceUrl
    b. Save and close the file
3. Navigate to the MessageSend folder and edit the RLMessageSendService.exe.config file
    a. Configure the mail server settings
    b. Save and close the file
4. Navigate to the MessageStatus folder and edit the RLMessageStatusService.exe.config file
    a. Set the value of the SurveyServiceUrl (same as in step 4)
    b. Save and close the file
5. Open the Services utility to start the services
    a. Server 2008 & 2008 R2
       i. Under the start menu in the Find box, type services
    b. Server 2012, 2012 R2 & Windows 8
       i. Window-C
       ii. Type services in the Find Apps box
    c. Once the utility is open, Find the 4 ResponseLogic services and start them.
6. ResponseLogic should be up and running on your server. You must now configure SelectSurvey.NET to use this new mail system by adding the license key to the SelectSurvey.NET web.config in the place provided (see step 6 below)
       <!-- ResponseLogic(TM) add-in license key for enhanced email -->
       add key="RESPONSE_LOGIC_LICENSE_KEY" value="putlicensekeyhere"/>

5. Verify Services are Running

Verify that the services are running by opening the Services snap-in in MMC.

     a. Survey Email Creation Service
     b. Survey Email Delivery Service
     c. Survey Email Scheduled Message Service
     d. Survey Email Status Service
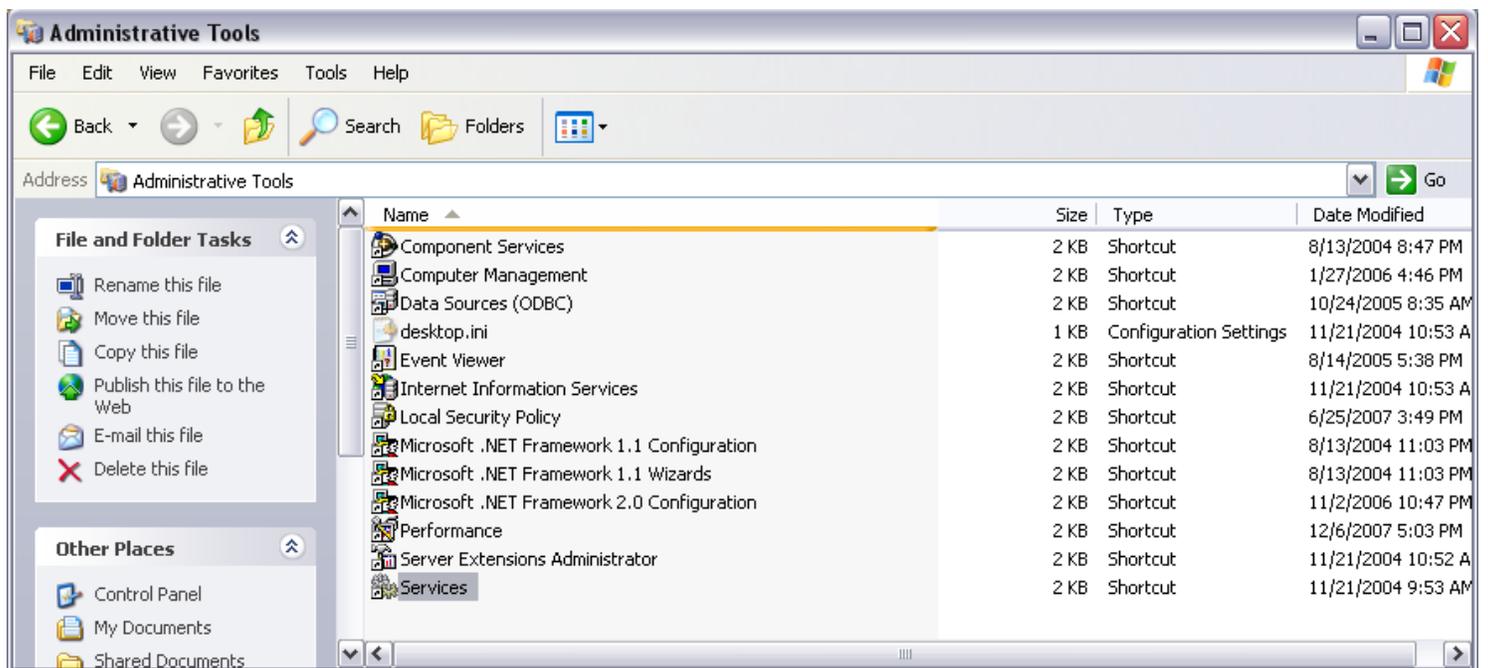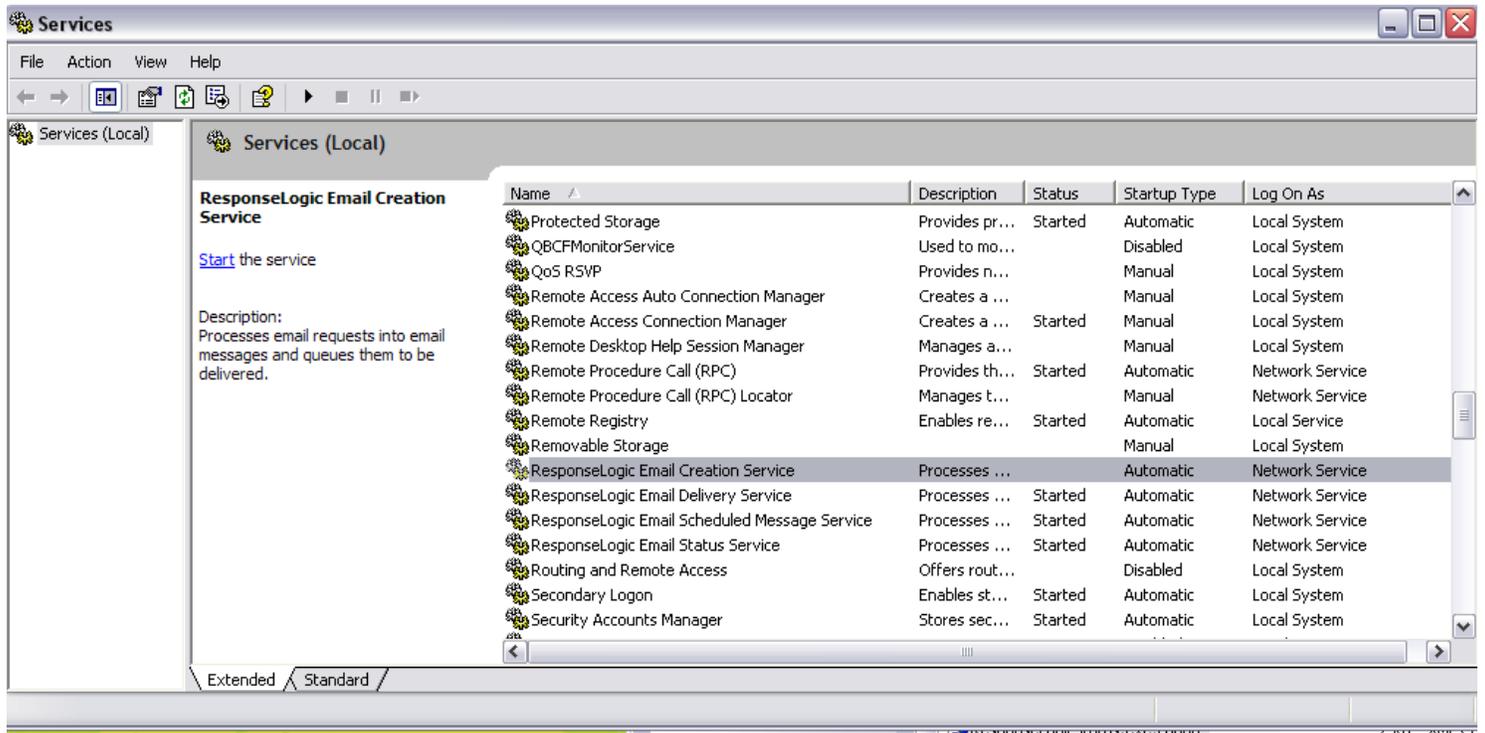
6. Set Key in SelectSurvey.NET application to activate ResponseLogic.

Find the below line in the SelectSurvey.NET web.config to activate the email engine in SelectSurvey.NET:

```
<add key="USE_RESPONSELOGIC" value="true"/>
```

By setting the value to "true", all emails that are sent from the SelectSurvey.Net application will go through the ResponseLogic™ email engine.

Next, verify the message queue name in the SelectSurvey.NET application web.config matches the queue name set in private queues: (in default configuration this value will already be correct and need no changes)

```
<!-- When using ResponseLogic(TM) enhanced email, this is the name of the
message creation message queue that was created when the email services were
installed. -->
<add key="CREATION_QUEUE" value=".\private$\surveyimpl_messagecreation"/>
```

7. Test configuration

In the SelectSurvey.NET application, use the debugSMTP.aspx page to test the email send. Alternatively you can create a test email list, and send a test email to that email address. ResponseLogic should record the emails sent in the log files in the ResponseLogic folder where it was installed. Also note that additional logging can also be turned on in the services. Change the config setting from NONE to ALL in the log4net config section for more logging.

Upgrading from Older Versions

If you already have an older version of ResponseLogic installed:

(v1.0.2 or higher) If "ResponseLogic" shows in control panel > programs, click to highlight ResponseLogic then click to "uninstall" it from the control panel. Then run the new install process to reinstall it.

If you have an older version of ResponseLogic installed that was not installed with an automated installer (v1.0.0 or v1.0.1), then you need to go to the folder where you installed it (default is C:\ResponseLogic) and double click the file "StoptSurveyEmailServices.bat" then, double click the file "UnInstallSurveyEmailServices.bat". This will stop the services and delete the previous version's private queues and services so the new version can be installed.

1) run the stop services batch file in their installation directory (StoptSurveyEmailServices.bat)

2) make backups of your existing config files and do not overwrite them.

3) copy ONLY the .exe and .dll files from the new version zip file into the installation directory where ResponseLogic was previously installed by overwriting the old files. (everything but the config files)

4) add new configuration setting to your existing ResponseLogicRetryDelay.exe.config file. The key is "SurveyServiceUrl" and has the same value as the key of the same name in ResponseLogicStatus.exe.config. Copy this value from your ResponseLogicStatus.exe.config into the <appSettings> section of the ResponseLogicRetryDelay.exe.config file:

<!-- Replace the URL below with the actual URL of the service that is hosted in SelectSurveyNET -->

<add key="SurveyServiceUrl" value="http://localhost/SelectSurveyNet3/Services/surveyservices.asmx"/>

5) run the start services batch file to restart the services (StartSurveyEmailServices.bat)

How to Install MSMQ

Refer to Microsoft's MSMQ installation instructions for your version of Windows Server. Ensure that Microsoft Message Queuing (MSMQ) is installed on the server. To check, open control panel, and then click on Add/Remove Windows Components. Ensure that MSMQ is checked and if it is not, then install it by checking the box and clicking "Next" with default settings. You may or may not need your Windows installation CD to complete the process. Below is a screenshot of the control panel that shows the Message Queuing Service:

After installing you should see the MSMQ as in the screenshot below:
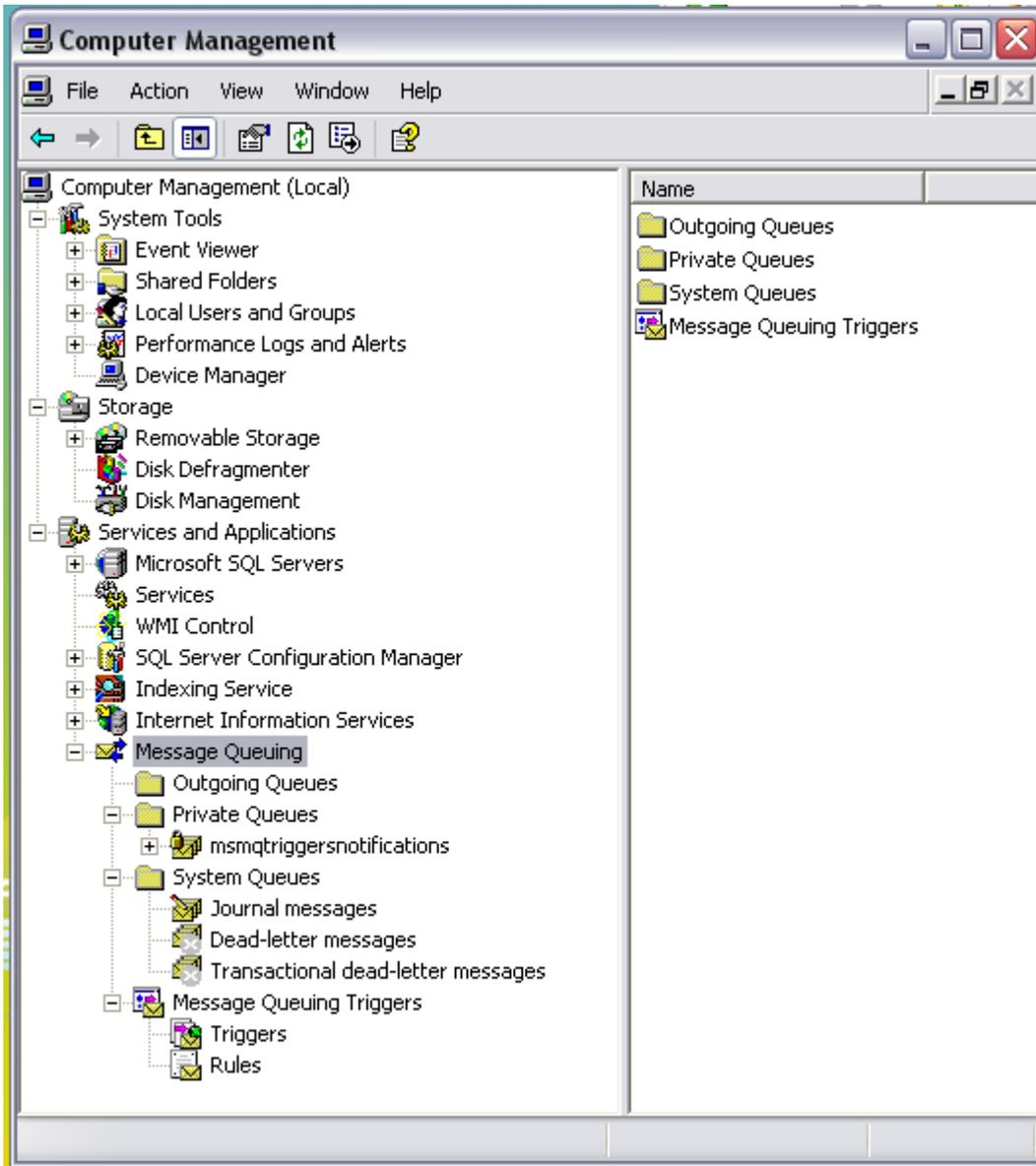
Troubleshooting Tips

How to configure logging for ResponseLogic:

Make sure there is a "Logs" folder inside the "ResponseLogic" installation directory. Make sure that folder has write permissions.

Open and edit the below config files that are in the ResponseLogic installation folder to set the value of <level value="ALL" /> in the <log4net> section of the xml so that the log files will be created.

Example:

<!-- Log output for debugging purposes -->

   <root>

      <!-- Valid values are ALL, DEBUG, INFO, WARN, ERROR, FATAL, OFF -->

      <level value="ALL" />

      <appender-ref ref="LogFileAppender" />

    </root>

   </log4net>

- ResponseLogicMsgCreate.exe.config

- ResponseLogicRetryDelay.exe.config

- ResponseLogicSend.exe.config

- ResponseLogicStatus.exe.config

1) The ResponseLogicLib.dll version (right click properties/version) must be the same in the SelectSurvey.NET bin folder as it is in the ResponseLogic install folder.

2) ResponseLogic records information in the log files in the ResponseLogic folder where it was installed. Also note that additional logging can also be turned on in the services. Change the config setting from NONE to ALL in the log4net config section to turn on the additional logging.

3) Check the Application Event Log to diagnose any installation and problems related to starting the Survey Email services. Also check the log files that are created in the ResponseLogic folder, and turn logging to "ALL" to help troubleshoot.
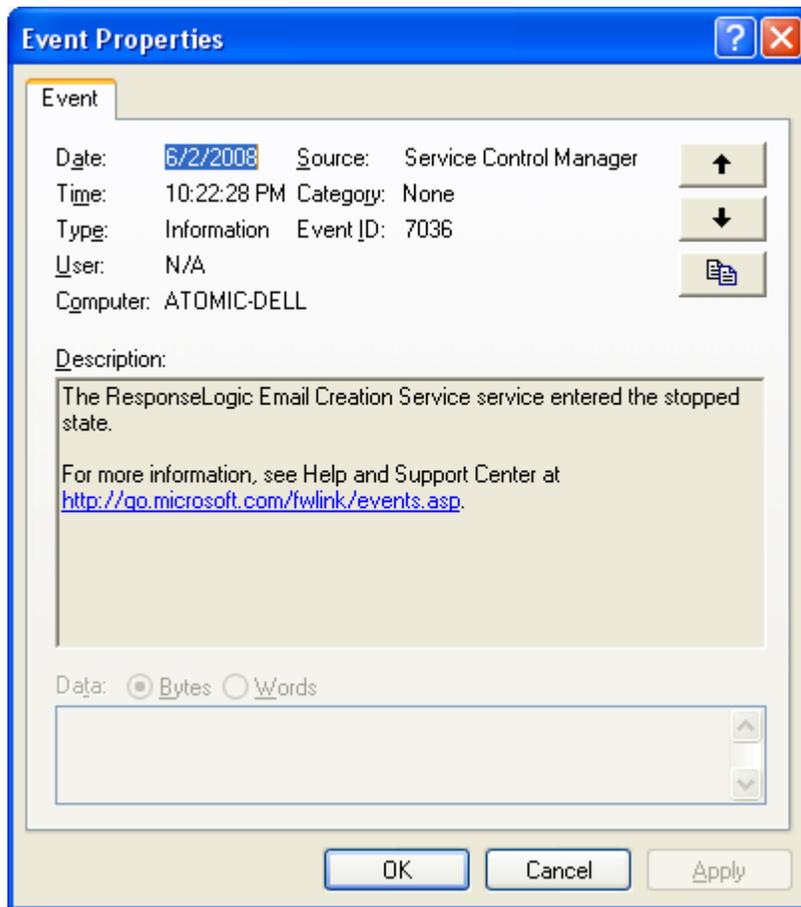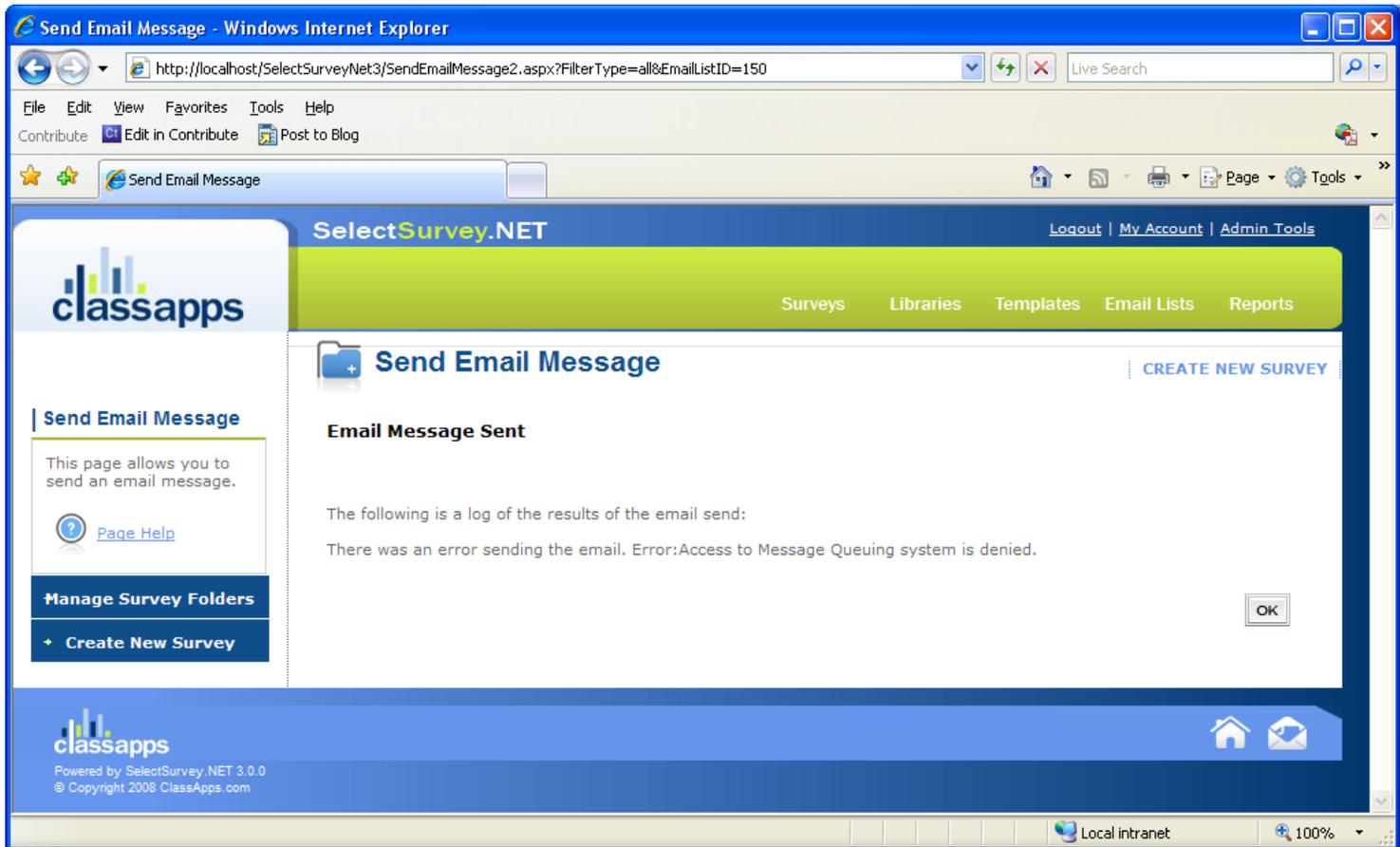
Common Errors:

1. **Permission errors:**
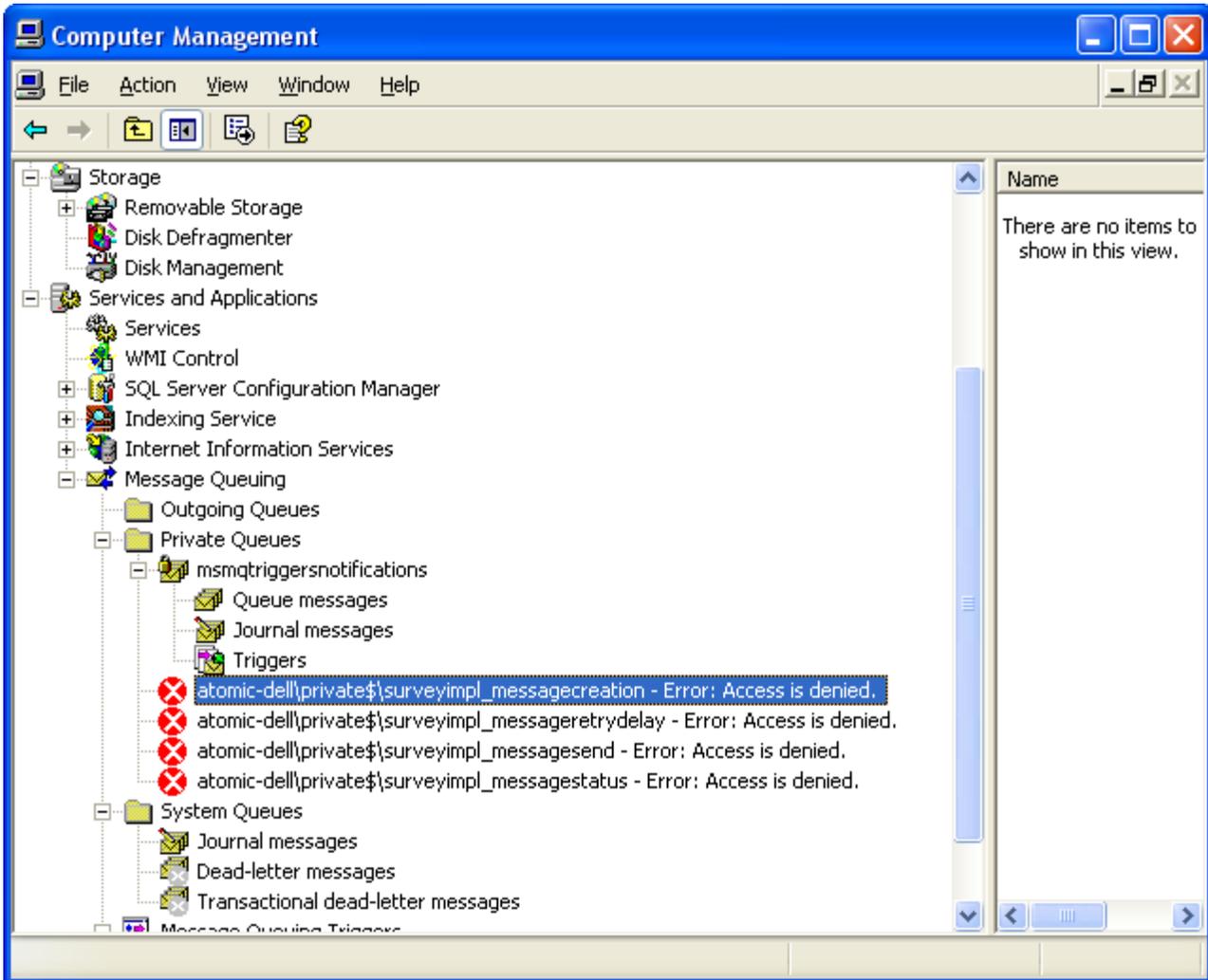
Right clicking on the "Message Queuing" node causes the below error:

The above access denied error is passed through to the SelectSurvey.NET application in the following manner as shown in the below screenshot:

To correct the above issue, you must give permissions:

If the web site does not require authentication, then the IIS web site is running as the anonymous user account (IUSR_machinename) without access to the queue. Run the application as a specified account and give that account permissions to the MSMQ.

Message Queuing can be used in either a domain environment or a workgroup environment. In the context of Message Queuing, a domain environment includes domain controllers that provide a directory service such as Active Directory, while a workgroup environment does not provide such a directory service. A Message Queuing computer belonging to a domain can be configured not to access a directory service. Such a computer, like a Message Queuing computer belonging to a workgroup, is said to be operating in *workgroup mode*. In addition, there are other situations in which Message Queuing computers belonging to a domain will not have access to Active Directory. Such situations arise when a Message queueing server is offline or when all the domain controllers in its site are offline. Such a computer is said to be

Installing MSMQ in Domain Mode on Windows Server 2008

Tue, 12/30/2008 - 09:25 | Robert MacLean

Yesterday I needed to install MSMQ on my laptop which runs Windows Server 2008, which wasn't as logical as it first appeared. I simply fired up the Server Manager tool, went to features, selected Message Queuing and clicked next. However my code kept giving me an error: "This operation is not supported for Message Queuing installed in workgroup mode."

So I went to find out what this mean, and it turns out MSMQ has two modes workgroup and domain. Domain is the "yes you can" mode where everything works while workgroup has restrictions:

The following restrictions exist when using Message Queuing in workgroup mode:

- *Computers in workgroup mode require direct connectivity with a destination computer, and only support direct message transmission. Messages sent by such computers cannot be routed.*
- *There is no access to Active Directory Domain Services. As such, you can create and manage private queues only on a local computer. You can view the list of private queues on another computer, and the messages in them, using the Computer Management snap-in. For information about managing queues on remote computers, see Verwalten von Warteschlangen auf anderen Computern. You cannot view or manage public queues or any other information in Active Directory Domain Services. You can, however, send messages to or retrieve messages from private queues if there is direct connectivity.*
- *Internal certificates cannot be used for sending authenticated messages; an external certificate must be used. For more information about user certificates, see User Certificates.*
- *Messages cannot be encrypted. For more information about encryption, see Encryption for Message Queuing.*
- *There is no support for dependent clients. For more information about restrictions on the deployment of dependent clients, see Dependent Clients.*
- *Cross-platform messaging is not supported. For more information, see Cross-Platform Messaging.*

That is taken from the helpful TechNet page Deploying in Workgroup Mode, which also states:

The default installation setting is that the directory service Integration feature is installed

Oddly enough though that is NOT what I got, in fact when I went to check Directory Service Integration had not been installed even though I am on a domain (and was connected to the network at the time)! To fix it, I had to go back to the Server Manager Tool, Features, Message Queuing and manually select it.


Windows 7: In the event you are installing ResponseLogic on Windows 7 machine, you must give "everyone" full access to the "ResponseLogic" program folder where it was installed, so that it has permissions to update the config files from the configuration admin screen. Also you will need permissions to start the email services. You may need to start the services manually and set them to automatic as shown in the screenshot below:

Windows 7 fix: click the box shown in the screenshot below to give ResponseLogic administrator privileges.
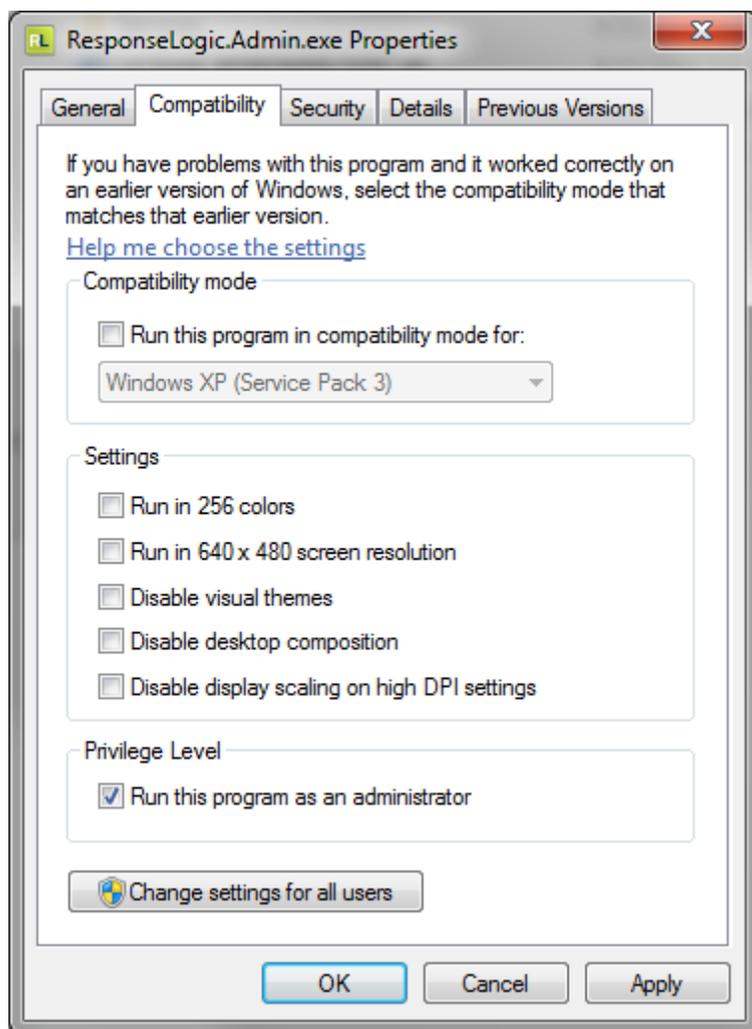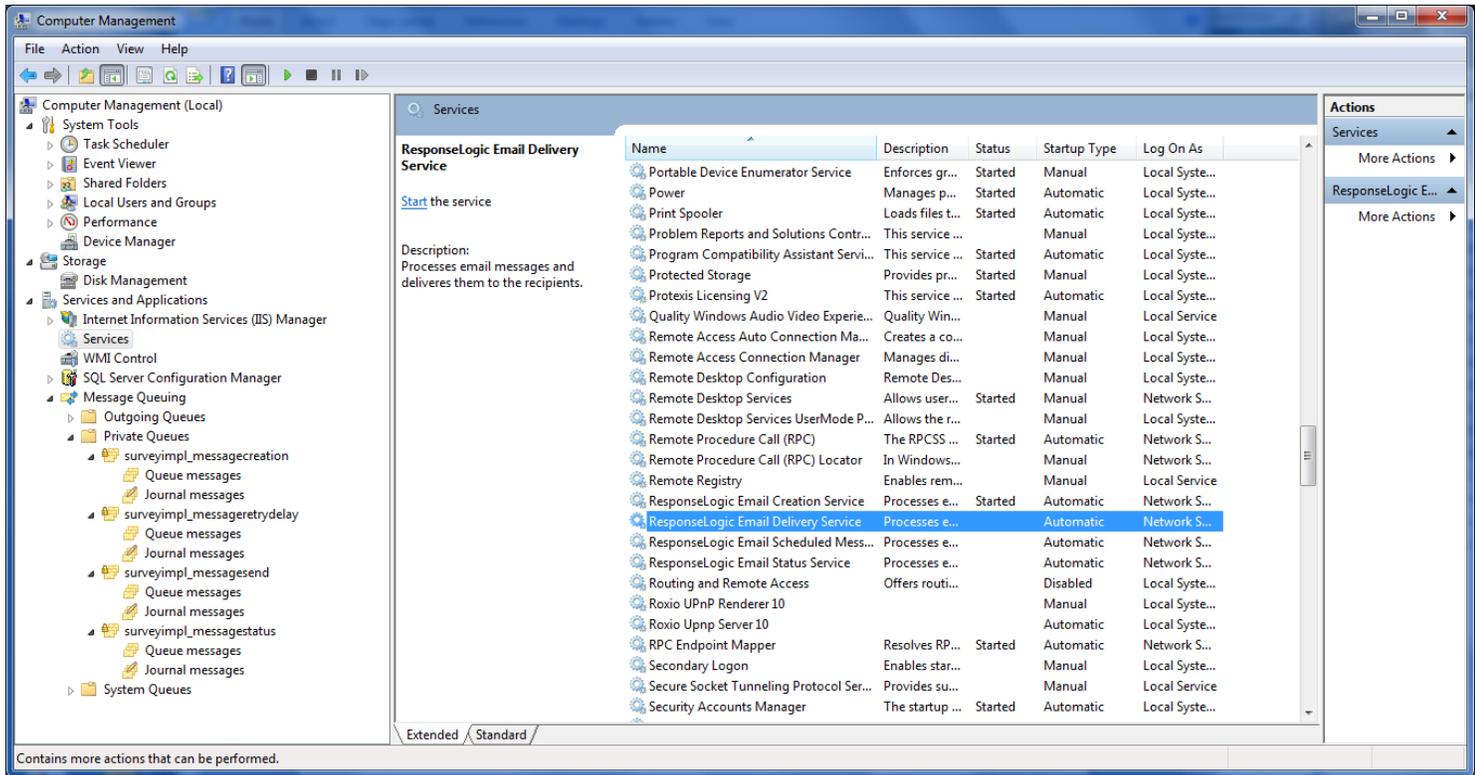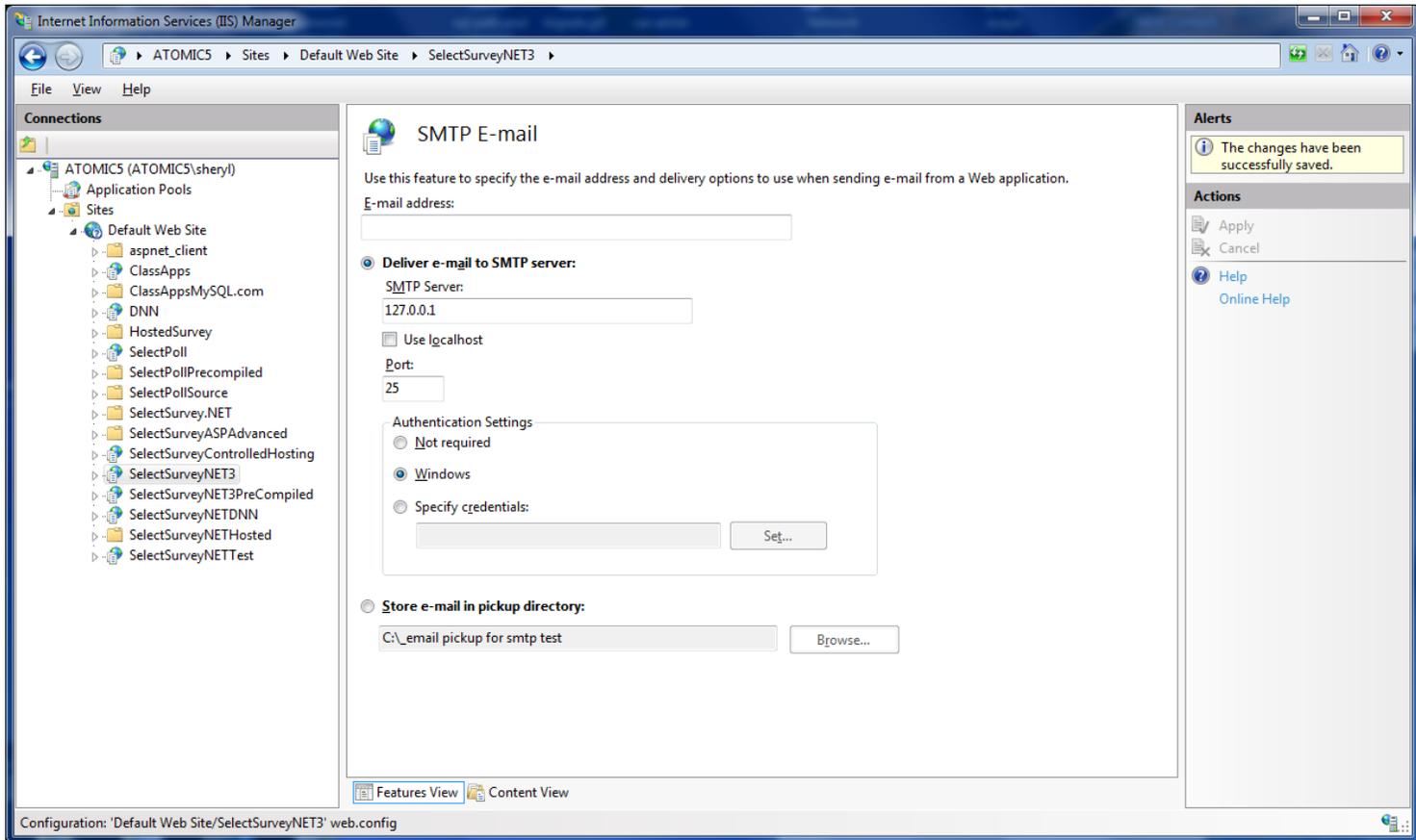
Highlight the service in the list, click "More Actions >" in the right blue area, click "START".
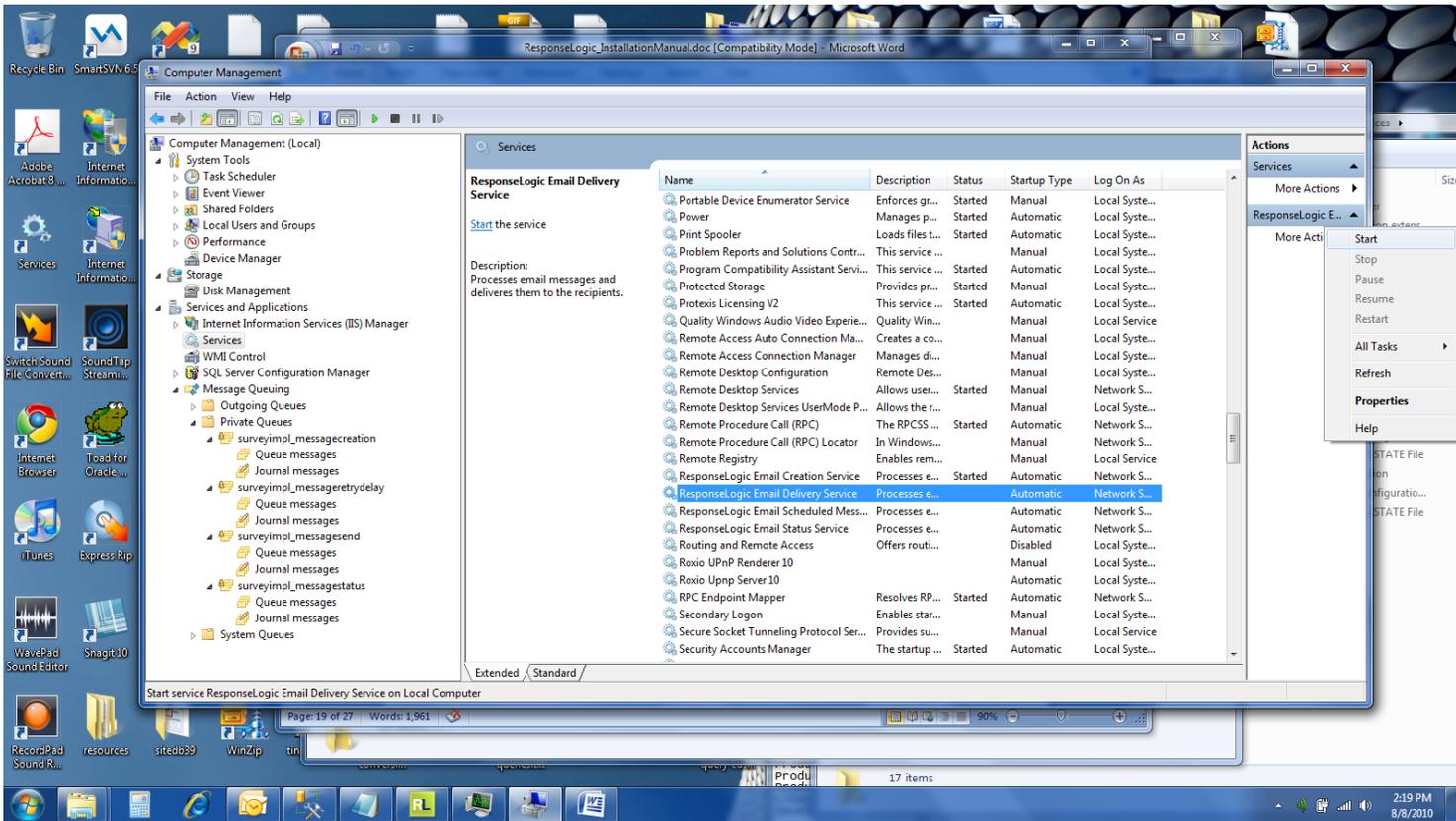
In Windows 7 with IIS7 you must also make sure that SMTP email is enabled in iis:

2. **Error in MessageCreationService.log:** 2008-12-28 19:47:39,062 ERROR 2168 File - Error in OpenMessage: Could not load file or assembly 'ResponseLogicLib, Version=1.0.1.0, Culture=neutral, PublicKeyToken=fca57f62dc5c69a1' or one of its dependencies. The located assembly's manifest definition does not match the assembly reference. (Exception from HRESULT: 0x80131040)

Solution: Ensure that the same version of the ResponseLogicLib.dll is in the SelectSurvey.NET bin folder as is in the ResponseLogic installation folder. These versions MUST be the same. To check the version right click on the ResponseLogicLib.dll, click "properties" from the menu, then click "Version". When there is a discrepancy, login to your customer account page on classapps.com and download the upgrades for the products you have purchased.

3. **How to Upgrade from previous old versions of ResponseLogic to NON Automated version of ResponseLogic:** To upgrade from previous version of ResponseLogic to non automated version of ResponseLogic (no installer):

NOTE IF YOU ARE UPGRADING TO AUTOMATED INSTALLER FOLLOW INSTRUCTIONS ABOVE, THIS IS ONLY FOR REFERENCE ON UPGRADING OLD TO OLD VERSIONS.

      1) run the stop services batch file in their installation directory (StoptSurveyEmailServices.bat)

      2) make backups of your existing config files and do not overwrite them.

      3) copy ONLY the .exe and .dll files from the new version zip file into the installation directory where

      ResponseLogic was previously installed by overwriting the old files. (everything but the config files)

      4) add new configuration setting to your existing ResponseLogicRetryDelay.exe.config file:

      the key is "SurveyServiceUrl" and has the same value as the key of the same name in ResponseLogicStatus.exe.config.

      Copy this value from your ResponseLogicStatus.exe.config into the <appSettings> section of the

      ResponseLogicRetryDelaty.exe.config file:

      <!-- Replace the URL below with the actual URL of the service that is hosted in SelectSurveyNET -->

        <add key="SurveyServiceUrl" value="http://localhost/SelectSurveyNet3/Services/surveyservices.asmx"/>

      5) run the start services batch file to restart the services (StartSurveyEmailServices.bat)