class apps

Select Survey .NET

Install Guide

SelectSurvey.NET Install Guide

This install guide has more detailed information and helpful points for hosted customers. See Appendix D of this document for common problems and solutions.

Contents

Requirements

To use this system, your web site must be running Microsoft Internet Information Server (IIS) and have the .NET Framework 3.5 (or later) installed. MDAC 2.9 or later required for database drivers (unless you are on server such as 2008 where DAC is installed with windows).

Installation Considerations for Hosted Environment

If you are planning on hosting the application in a hosted environment first make sure the hosting provider complies with the following:

CONTROL PANEL MUST HAVE ABILITY TO ADD APPLICATION FOLDER! See list in Appendix of preferred hosting providers that offer the below capabilities in the control panel.

1. Windows Server (Microsoft Internet Information Server).
2. .NET Framework 3.5 (or later) must be installed on hosted server
3. Supports Microsoft SQL database, MySQL or Oracle.
4. In some situations an application pool for the application is desirable to prevent excessive time outs due to Microsoft recycling sessions on a busy hosted server. (See Appendix A for details)
5. Ability to configure application folder as an application in IIS.
6. Access to SMTP server for sending email. The app is using System.Web.Mail which is included in the .NET Framework, which uses CDOSys.dll for sending email to a relay server.   The ASP.NET account must have permissions to the CDOSys.dll for emailing.

Installation Checklist

The steps to install SelectSurveyNET are as follows:

☑ 1. **Download and Unzip files.**

   Copy "files to copy to IIS" to web server.

☑ 2. **Place files on Web Server and Configure Web Server.**

   Configure IIS root folder as an application to use .Net 3.5 Framework.

☑ 3. **Configure your database.**

   Write down connection string for next step.

☑ 4. **Edit the WEB.CONFIG.**

   Enter your database connection string into the web.config. Edit other keys with

> your customized information.
>
> ☑ 5. **Login to set Global Application Settings after logging in with the browser.**
>
> Adjust default settings in the admin tools with the web browser.

Detailed Instructions for above steps:

Place Files on Web Server and configure IIS.

1. **Download and Unzip files.**
   Unzip the files to a temporary directory. The zip file contains a folder of files to copy to the web server titled **"Files to copy to IIS",** and a folder containing the solution project file and source code titled **"Source Code"** for development and customizations.
2. **Place files on Web Server and Configure Web Server.**
   Copy the files inside the folder "Files to copy to IIS" to either your root web site folder or create a virtual directory in IIS that points to where your put the files, named something like "SelectSurveyNET". Make sure there is an "Application Name" entered as shown in figure 1 below under "Application Settings" in IIS properties for the SelectSurveyNET virtual directory. If you are using IIS6.0 with Windows Server 2003, we recommend that the Select Survey application be assigned its own application pool. For instructions how to do this see Appendix A at the end of this document. Session state must be enabled (enabled by default) you can check it by clicking on the "configuration" button next to the application name (see figure 1).
   SelectSurvey.NET uses .net 3.5 or higher.

   Note for Hosted Environment: If your hosting provider does not allow you to configure a sub folder or virtual directory as an "application" you will have to put the application in the top or root folder of your web site or ask the hosting provider to configure the folder for you.
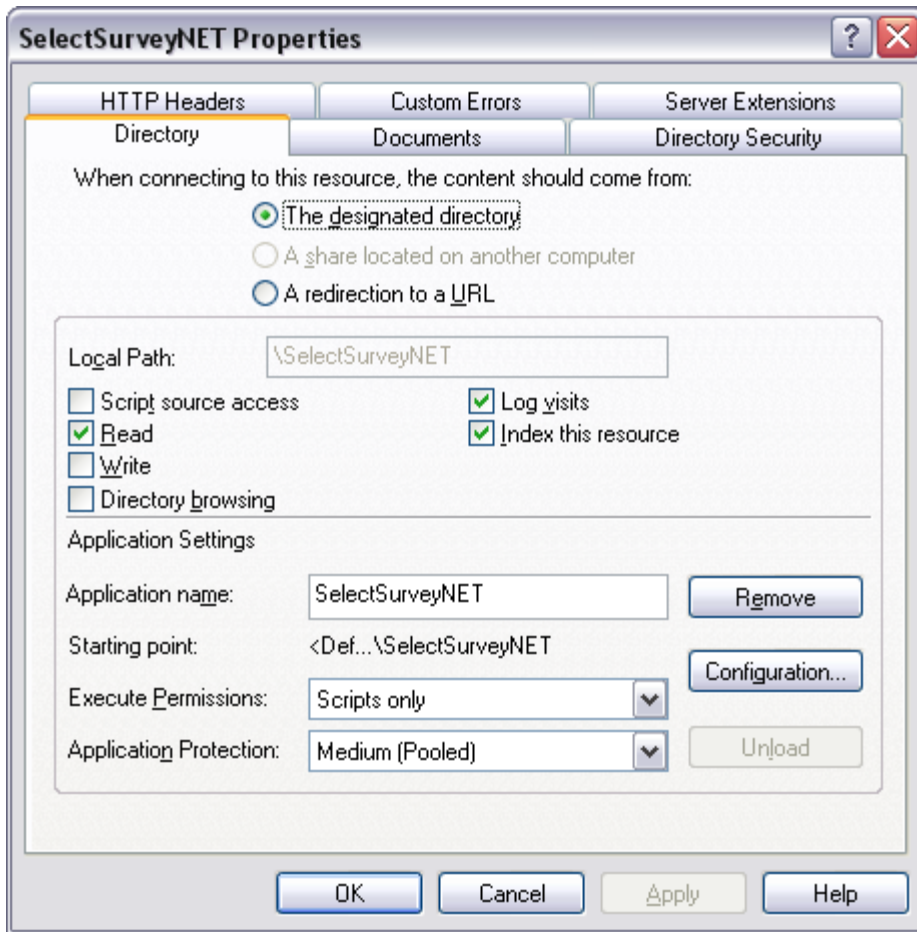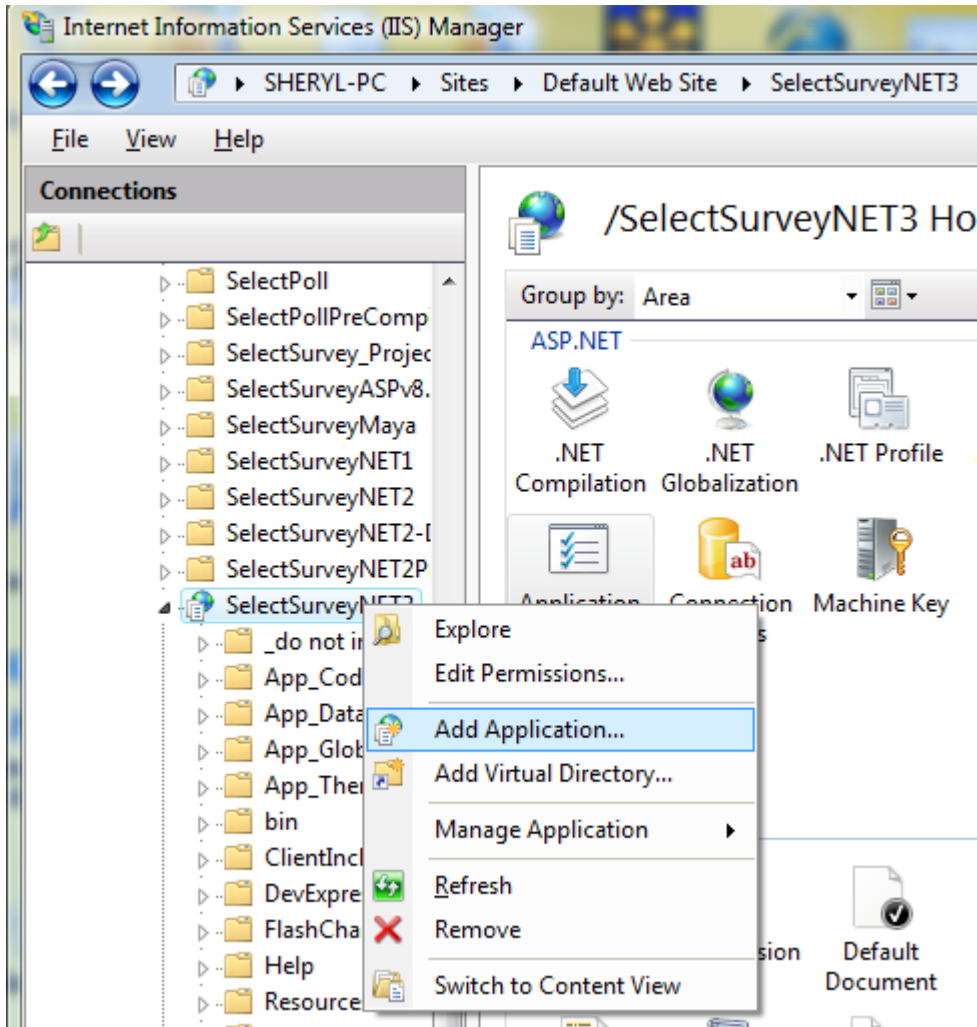
figure 1 (IIS 6)

figure 1 (Internet Information Services (IIS) Manager 7)

Also, make sure the Default.aspx page is set as the default document on the "Documents" tab in the web site properties as shown in figure 2. Figure 3 shows that you must have the asp.net tab set to .net framework version 3.5 for this application version.

Note for Hosted Environment: Hosting providers usually have a control panel that allows you to set the default page. If not, just make sure there is not another page in the same folder that the server may default to such as "default.asp", "index.asp", etc. instead of default.aspx.
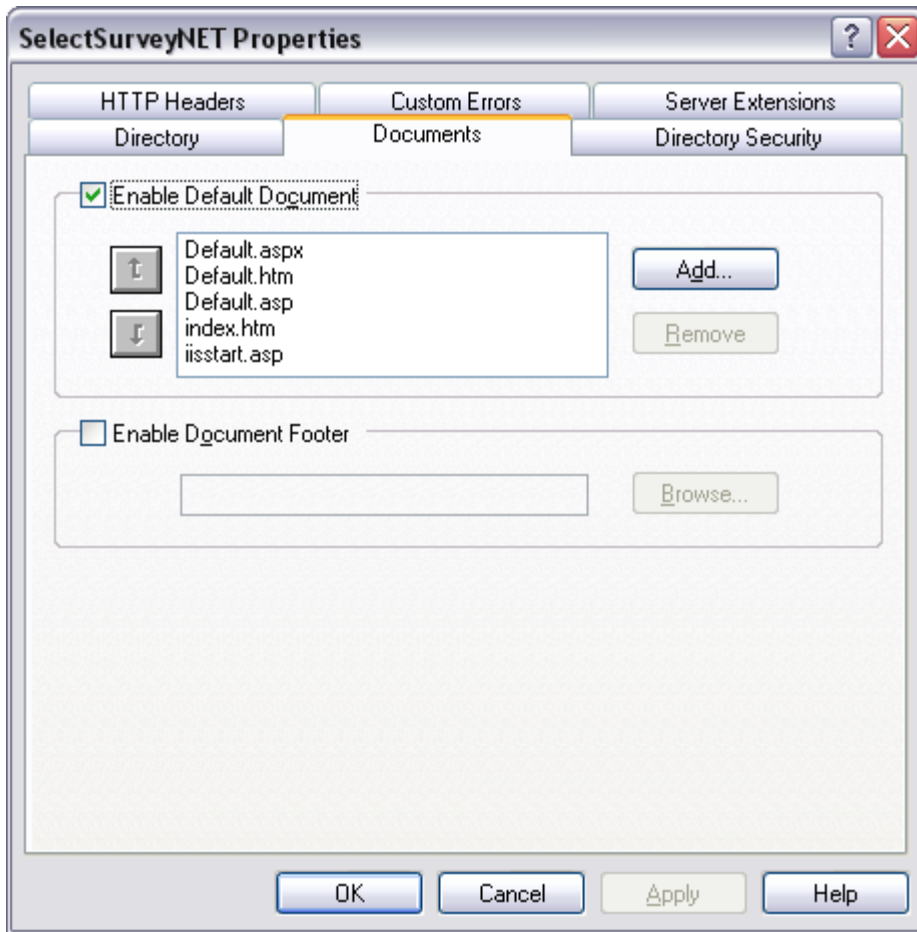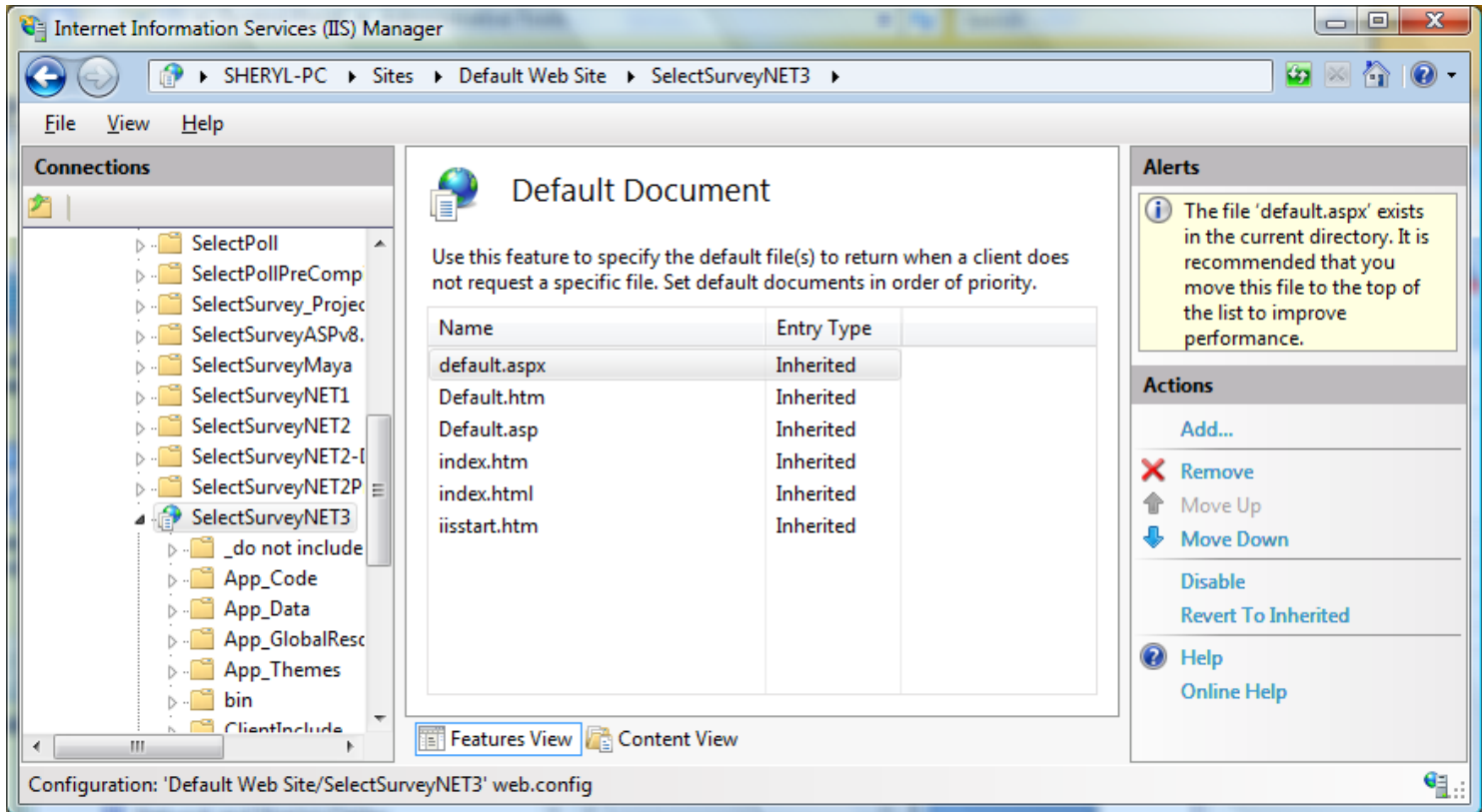
figure 2 (IIS 6)

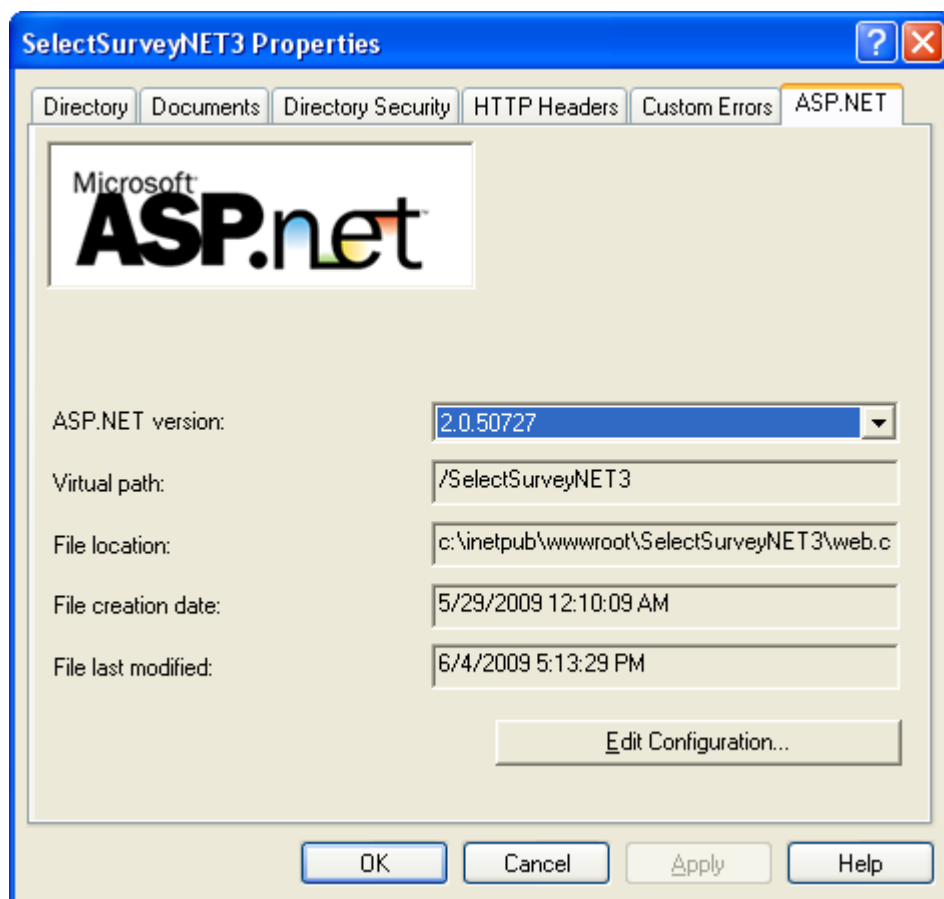figure 2 (Internet Information Services (IIS) Manager 7)

figure 3 (IIS 6)
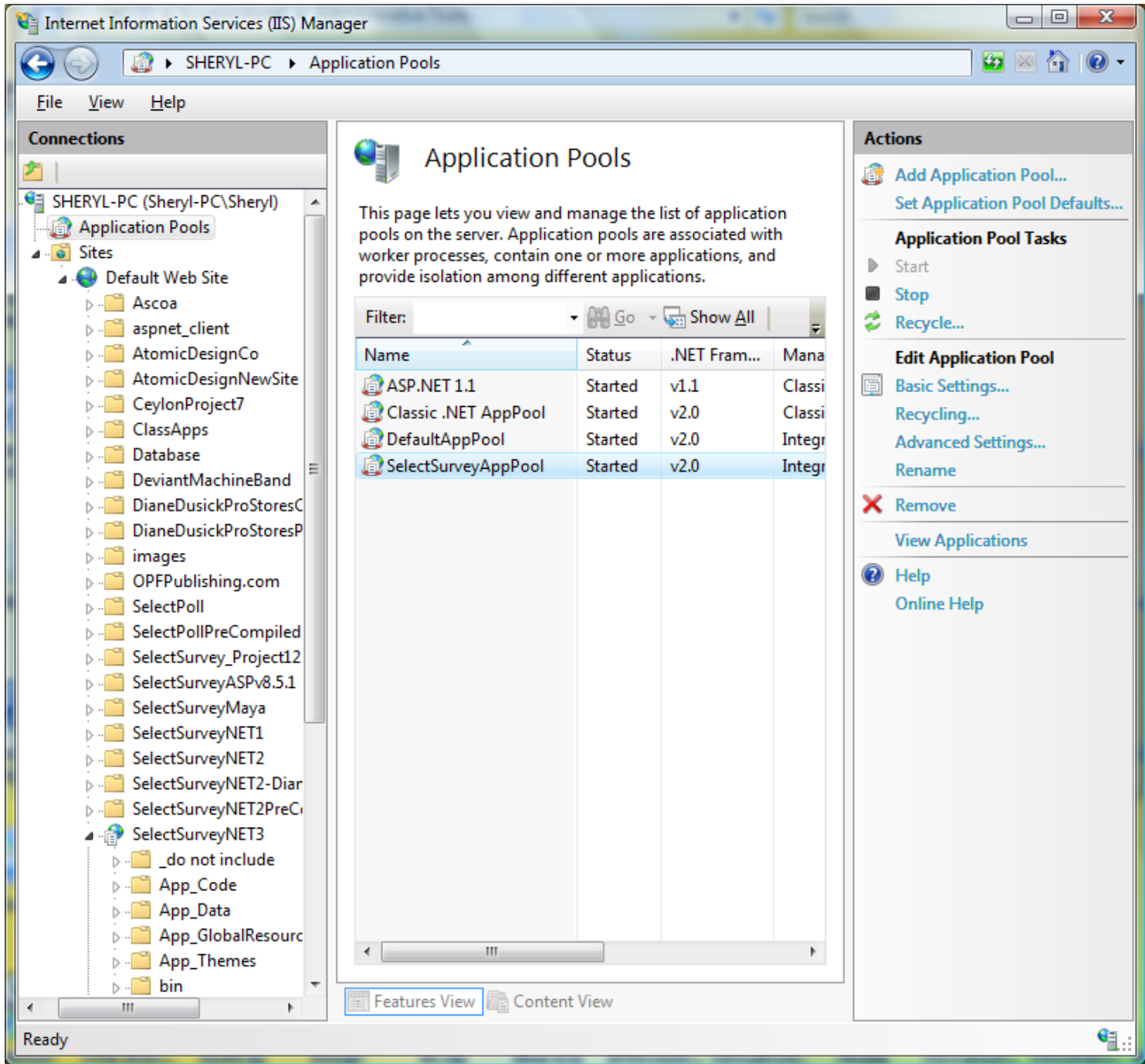
figure 3 (Internet Information Services (IIS) Manager 7)

Advanced Settings

⊟ **(General)**	
.NET Framework Version	v2.0
Enable 32-Bit Applications	**True**
Managed Pipeline Mode	Integrated
Name	DefaultAppPool
Queue Length	1000
Start Automatically	True
⊟ **CPU**	
Limit	0
Limit Action	NoAction
Limit Interval (minutes)	5
Processor Affinity Enabled	False
Processor Affinity Mask	4294967295
⊟ **Process Model**	
Identity	**ApplicationPoolIdentity**
Idle Time-out (minutes)	20
Load User Profile	**False**
Maximum Worker Processes	1
Ping Enabled	True
Ping Maximum Response Time (s	90
Ping Period (seconds)	30
Shutdown Time Limit (seconds)	90
Startup Time Limit (seconds)	90
⊟ **Process Orphaning**	
Enabled	False
Executable	
Executable Parameters	
⊟ **Rapid-Fail Protection**	
"Service Unavailable" Response T	HttpLevel
Enabled	True
Failure Interval (minutes)	5
Maximum Failures	5
Shutdown Executable	
Shutdown Executable Parameters	
⊟ **Recycling**	
Disable Overlapped Recycle	False
Disable Recycling for Configuratic	False
⊞ Generate Recycle Event Log Entry	

Enable 32-Bit Applications

[enable32BitAppOnWin64] If set to true for an application pool on a 64-bit operating system, the worker process(es) serving the application pool will be in WOW64 (Windows on Windows64) mode. Processes in WOW64 mo...

IIS7 Application pool settings for 64 bit servers: Set Enable 32-bit applications = True.

Configure the Database.

3. **Configure your database.**
   There are three required steps for each type of database. Please refer to the appropriate section, below.
   Use the page: "debugdatabaseconnection.aspx" which you can open in the browser where the survey app
   is installed to test your connection string below by pasting the "Value" from the key in the web.config into
   the textbox provided (without the quotes around it), then clicking the "test connection" and "test
   permissions" buttons to test. The red text below the test buttons will indicate whether your database
   connection string is correct format or not. After you get a successful test, copy the value back into your
   web.config, then save your web.config.

SQL Server

a. At this point, you may want to optionally create a new database for the application. If you decide not
   to create a new database and to use an existing database instead, note that all table names have the
   prefix "SUR_" so that they can easily be distinguished from other tables in the database.
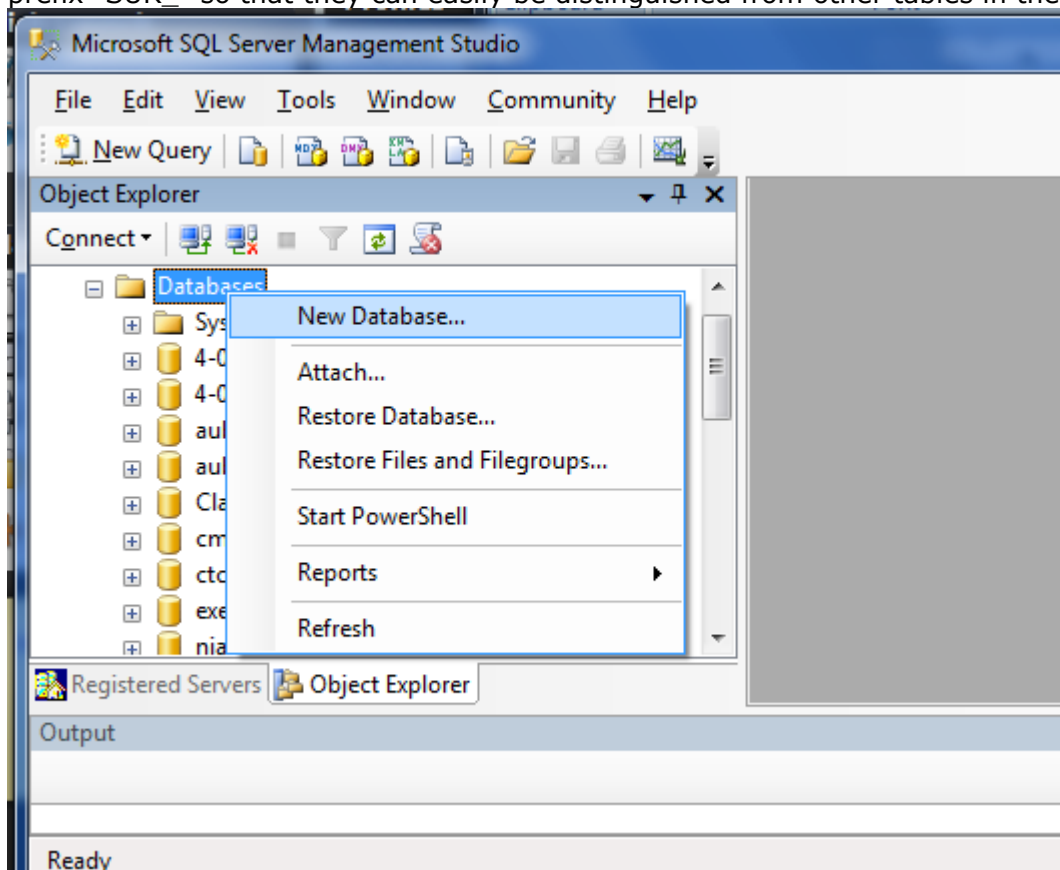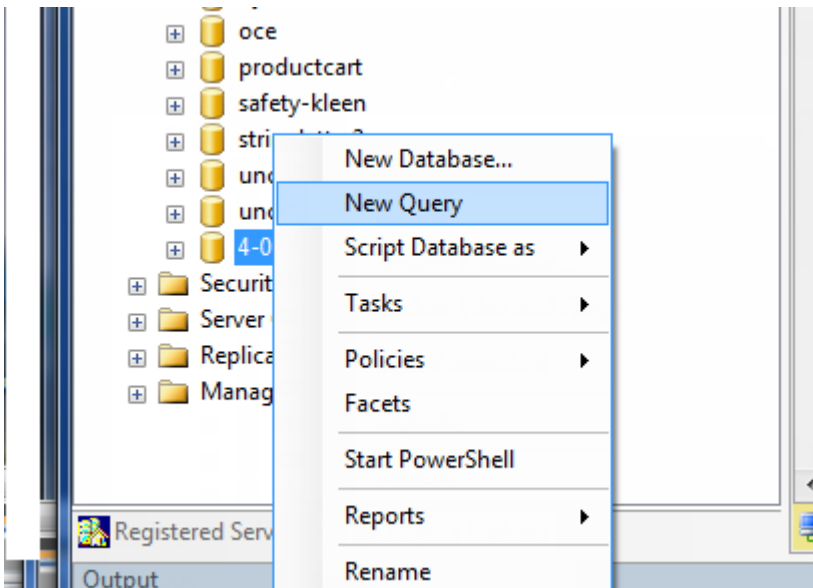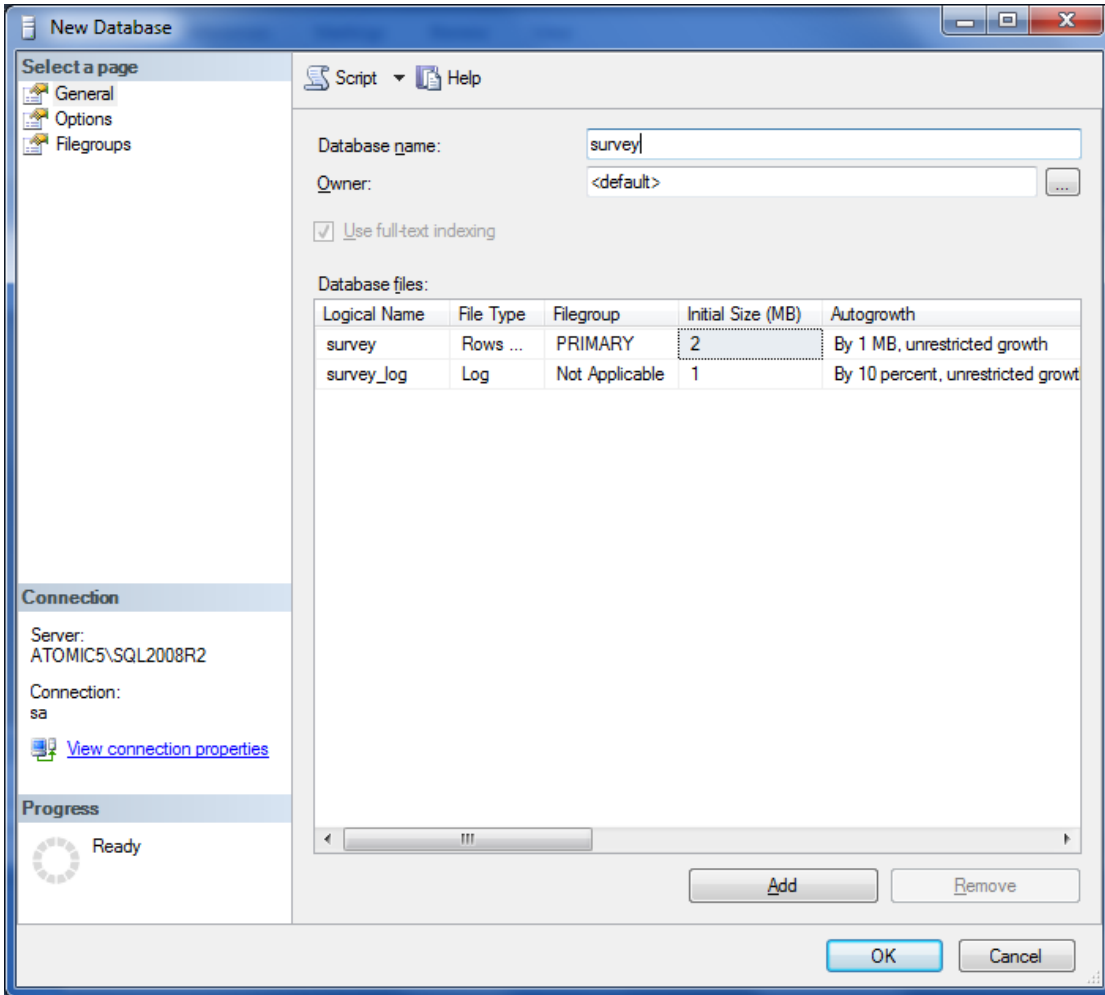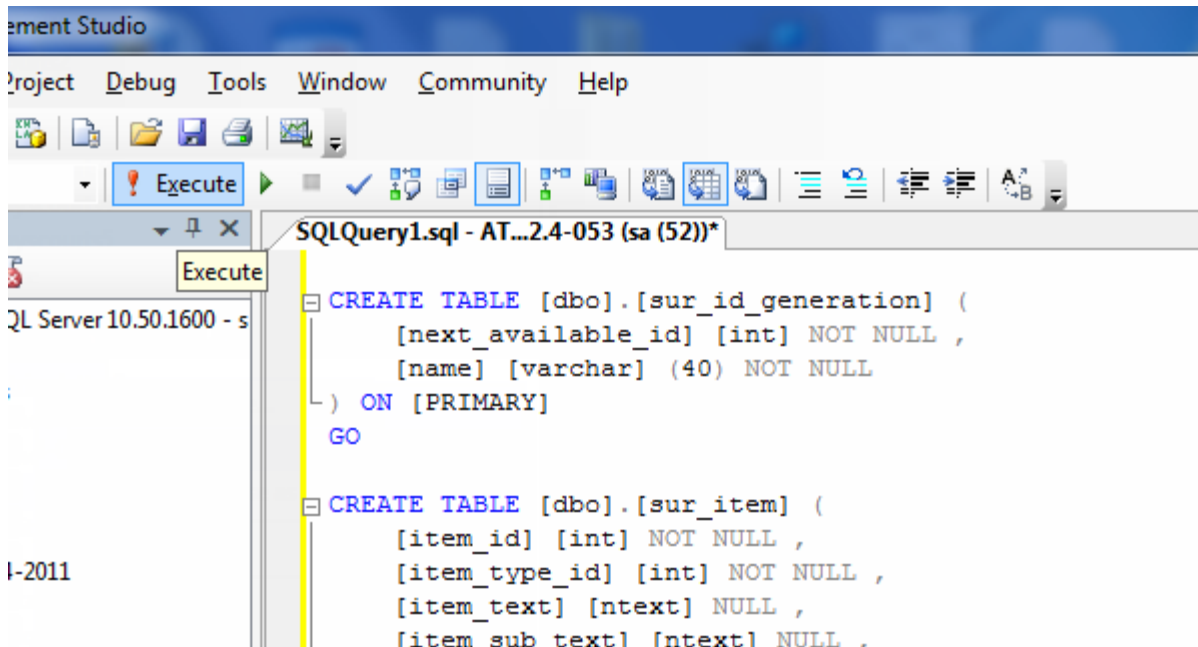
b. Load the tables into the database. The script for the tables is located in the file, "SelectSurveyNETTables.txt," which is located in the "SelectSurveyNET\Documentation\MSSQLScripts\MSSQL 2000 2005 and 2008\New Install " directory. The best way to load the tables is to open Microsoft Query Analyzer, open the file, "SelectSurveyNETTables.txt," from Query Analyzer, and execute.

c. Load the required meta data into the database. The script for the meta-data is located in the file, "SelectSurveyNETData.sql," which is located in the "SelectSurveyNET\Documentation\MSSQLScripts\MSSQL 2000 2005 and 2008\New Install " directory. The best way to load the meta-data is to open the file, "SelectSurveyNETData.txt," from Microsoft Query Analyzer, and execute it.

d. Update web.config:
```
<add key="SUR_DATABASE_TYPE" value="SQLServer" />
<add key="SURVEY_APP_DB_DRIVER" value="SqlClient" />
<add key="SURVEY_APP_ACTIVELY_CLOSE_CONNECTIONS" value="true" />
<add key="SURVEY_APP_CONNECTION"
value="Server=YourSQLServerNameOrIP;Database=SelectSurveyNET;Trusted_Connection=yes;"
/>
```

(use your connection string credentials, the above is an example only)
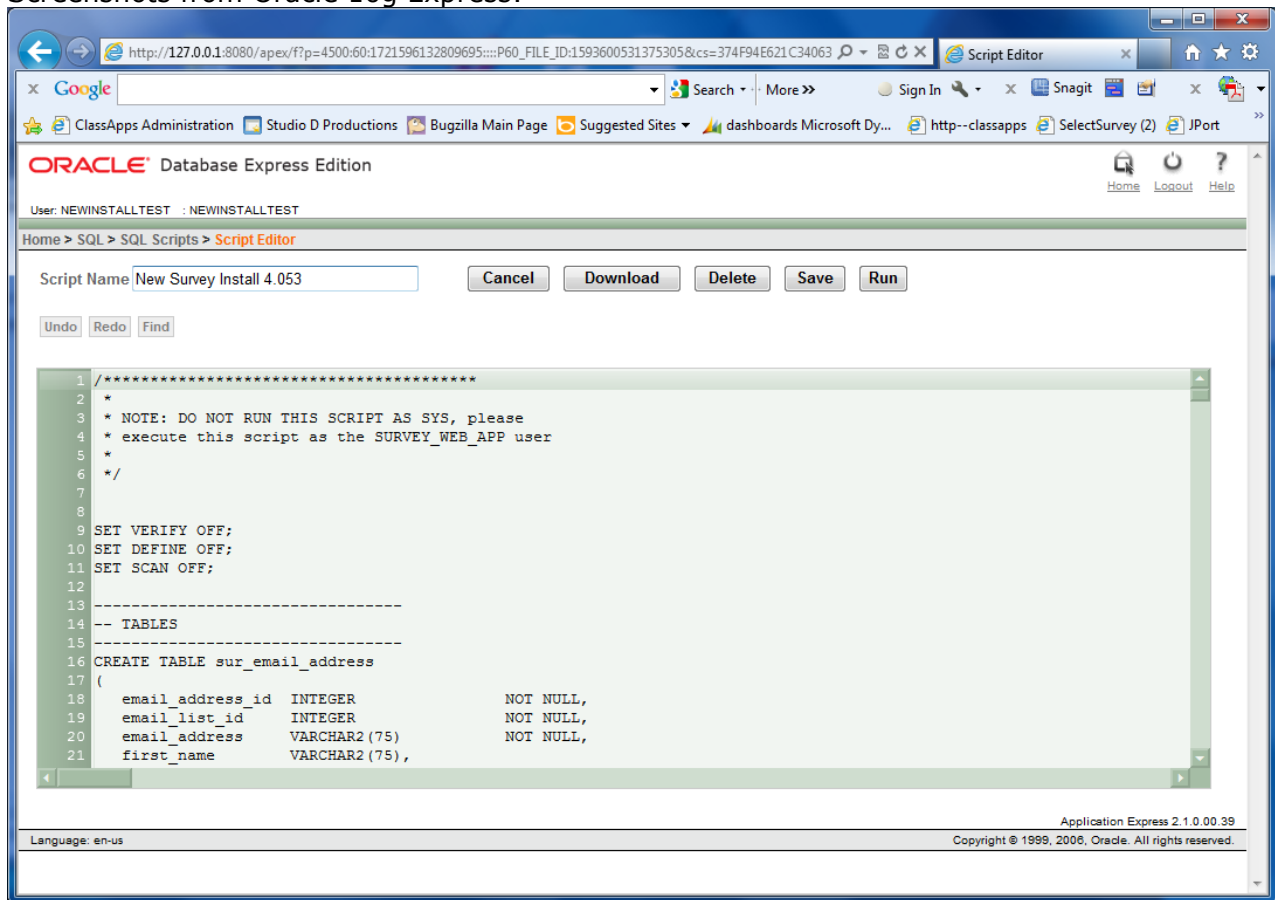
MySQL

a. Create a new Database.

b. Create a new User for your database.

c. Assign your new user full rights on your new database.

d. Run the sql script on your database to create the tables.

e. Update web.config:
```
<add key="SUR_DATABASE_TYPE" value="MySQL" />
<add key="SURVEY_APP_DB_DRIVER" value="MySql" />
<add key="SURVEY_APP_ACTIVELY_CLOSE_CONNECTIONS" value="true" />
<add key="SURVEY_APP_CONNECTION"
value="database=neil;server=localhost;uid=neil;password=neil;pooling=false;"/>
```
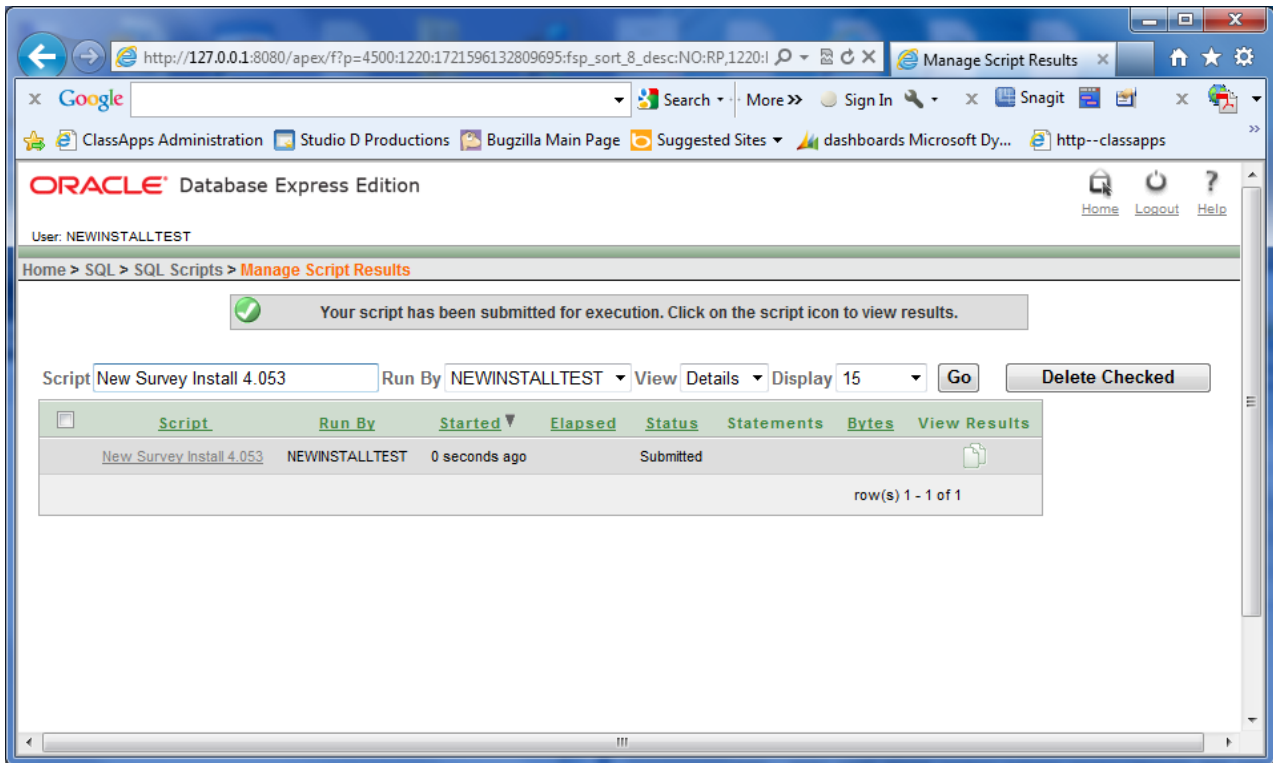
(use your connection string credentials, the above is an example only)

Oracle

a. Run scripts located in the "Documentation/Oracle Scripts" folder to create the tables and default data. Screenshots from Oracle 10g Express:
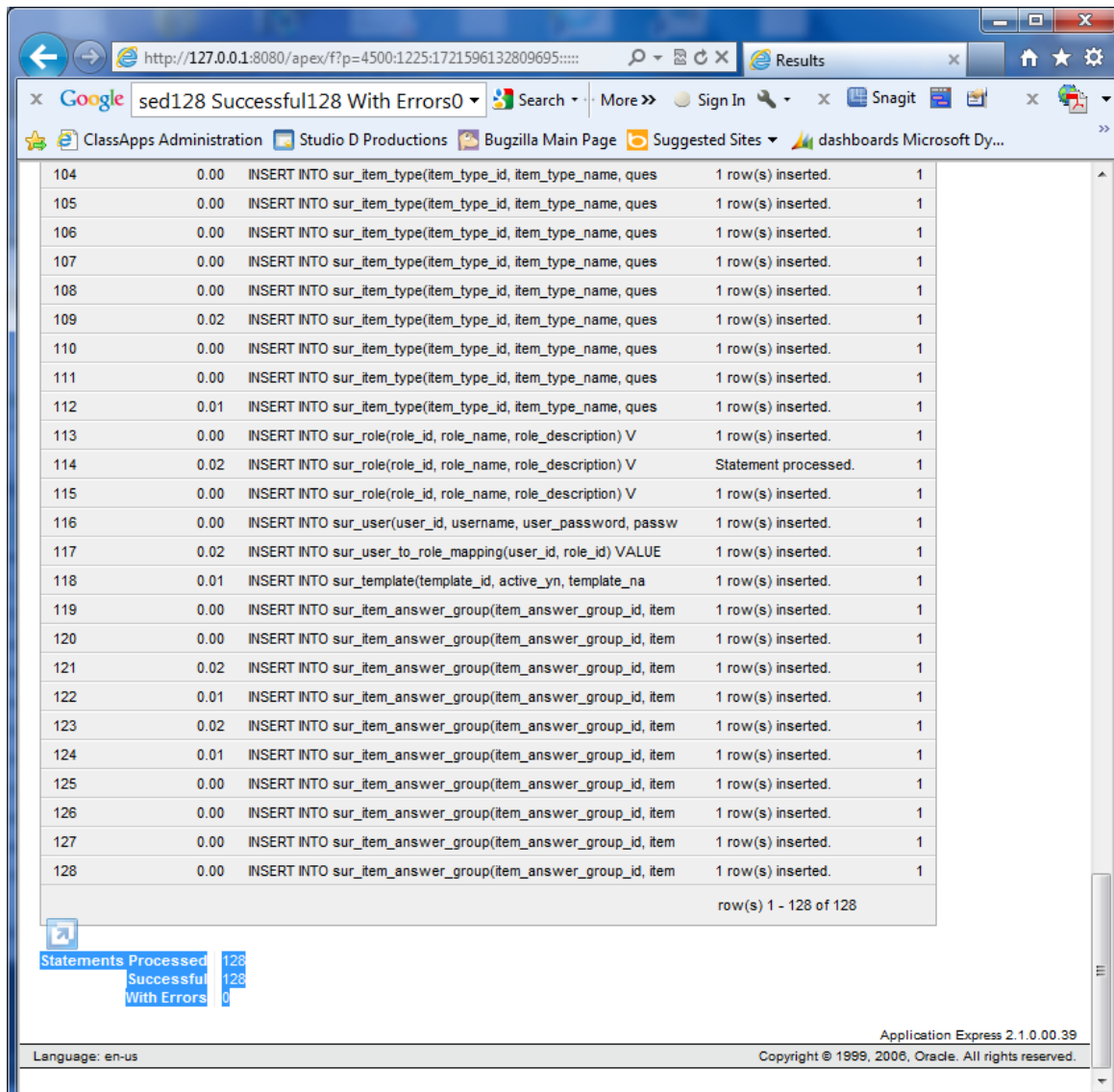
ORACLE Database Express Edition

Home | Logout | Help

User: NEWINSTALLTEST

Home > SQL > SQL Scripts > Manage Script Results

Your script has been submitted for execution. Click on the script icon to view results.

Script: New Survey Install 4.053   Run By: NEWINSTALLTEST   View: Details   Display: 15   Go   Delete Checked

Script	Run By	Started ▼	Elapsed	Status	Statements	Bytes	View Results
New Survey Install 4.053	NEWINSTALLTEST	0 seconds ago		Submitted			

row(s) 1 - 1 of 1

ORACLE Database Express Edition

Home | Logout | Help

User: NEWINSTALLTEST

Home > SQL > SQL Scripts > Results

Script: **New Survey Install 4.053**   Status: **Canceled**

View: ○ Detail ● Summary   Display 200   Go   Edit Script

Number ▲	Elapsed	Statement	Feedback	Rows
1	1.04	CREATE TABLE sur_email_address (email_address_id INTE	Table created.	0
2	0.03	CREATE INDEX ix_sur_email_address_list ON sur_email_addr	Index created.	0
3	0.13	CREATE TABLE sur_email_list (email_list_id INTEG	Table created.	0
4	0.03	CREATE TABLE sur_email_message (email_message_id	Table created.	0
5	0.00	CREATE INDEX ix_email_message_list ON sur_email_message(	Index created.	0
6	0.02	CREATE TABLE sur_email_sent_history (email_sent_histor	Table created.	0
7	0.00	CREATE INDEX ix_sur_email_history_message ON sur_email_s	Index created.	0
8	0.00	CREATE INDEX ix_email_sent_history_address ON sur_email_	Index created.	0
9	0.03	CREATE TABLE sur_hidden_field (hidden_field_id	Table created.	0
10	0.02	CREATE INDEX ix_hidden_field_sur_id ON sur_hidden_field(	Index created.	0
11	0.01	CREATE TABLE sur_id_generation (next_available_id INT	Table created.	0
12	0.03	CREATE TABLE sur_ip_address (ip_address_id INTEGE	Table created.	0
13	0.13	CREATE TABLE sur_item (item_id INTEG	Table created.	0
14	0.05	CREATE TABLE sur_item_answer (answer_id INT	Table created.	0

b. Use "Oracle" as the database type <add key="SUR_DATABASE_TYPE" value="Oracle"/>
c. Update web.config:
```
<add key="SUR_DATABASE_TYPE" value="Oracle" />
<add key="SURVEY_APP_DB_DRIVER" value="OleDb" />
<add key="SURVEY_APP_ACTIVELY_CLOSE_CONNECTIONS" value="true" />
<add key ="SURVEY_APP_CONNECTION"  value = "Provider=OraOLEDB.Oracle;Data
Source=127.0.0.1;User Id=survey_web_app;Password=survey_web_app;pooling=false;" />
```

(use your connection string credentials, the above is an example only)

d. The driver Oracle 11g ODAC 11.1.0.7.20(or later) must be installed on the web server even if database is on another server. you can install it from
http://www.oracle.com/technology/software/tech/windows/odpnet/utilsoft.html

e. Set environment variable "TNS_ADMIN" on web server to point to the oracle network configuration files.

Ensure your database connection string is correct before continuing (see screenshot below). Use the page: "debugdatabaseconnection.aspx" which you can open in the browser where the survey app is installed to test your connection string below by pasting the "Value" from the key in the web.config into the textbox provided (without the quotes around it), then clicking the "test connection" and "test permissions" buttons to test. The red text below the test buttons will indicate whether your database connection string is correct format or not. After you get a successful test, copy the value back into your web.config, then save your web.config.

Debug Database Connection

Admin Configuration

Admin Database Connection Debug Page

This page is for administrators to test database connection settings.
All inner exception errors will show in red text below form.
Please refer to install manual for more information in configuring database.

GENERAL: Possible causes for database connection problems:
1) typo in web.config connection string
2) make sure in web.config that "SUR_DATABASE_TYPE" value matches database you are using.
3) make sure datetime settings in web.config are correct (go to datetime debug page to test).

SQL SERVER:
A) SQL Server is 2005 and has wrong "provider" example connection string for sql server2005:
"Provider=SQLNCLI;Server=127.0.0.1;Database=dbname;UID=username;PWD=P@ssw0rd;"
B) if SQL Server was set to windows authentication only login mode connection string will need to include:
Integrated Security=SSPI
C) Make sure you have the database driver you are specifying installed on your server.
D) Microsoft reference for setting permissions: http://support.microsoft.com/kb/247931/en-us

MS ACCESS:
A) Make sure folder and database file have write permissions by ASP.NET account
B) You might need to restart iis for new permissions to take affect
C) Give "Network Service" machine account Modify permissions on the database folder in Windows Server 2003.

MySQL:
A) Make sure the MySQL.Data.dll in the application bin folder is compiled to work in medium trust.
B) Use a connection string for the native MySQL .net connector driver per the example in the web.config
C) Activate the Cherry City OLEDB driver (required). Go to MySQL Activation Page

Enter connection string (not encrypted):

Server=ATOMIC-4;Database=SelectSurveyNET4;Trusted_Connection=yes;

Copy web.config connection string into box provided to test.

[Encrypt Connection String]

Encrypted Connection string:

Decrypted Connection string:

Click below button to test connection string from above:

[Test Connection]   [Test Permissions]

Testing Results Message:

Results of test show here:

Successful insert, update and delete performed.

[OK]

Note: if you are using iis 7 or greater, you can use the built in "Application Settings" tool in the Internet Information Services Manager (see figure A and B below) instead of manually editing the web.config, alternatively you can manually edit the web.config per the instructions for iis 6 or earlier below:
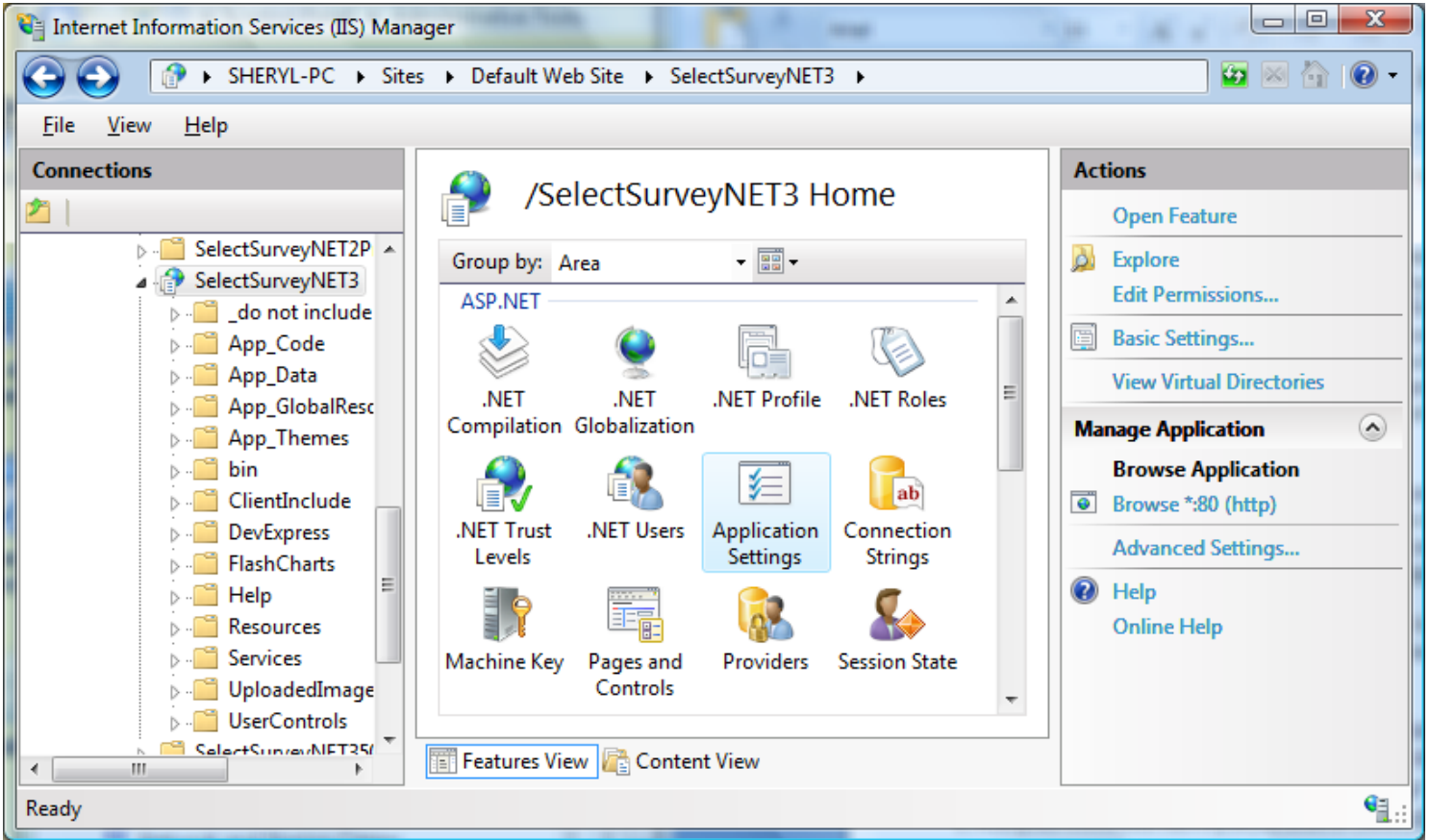
Figure A (Internet Information Services (IIS) Manager 7)
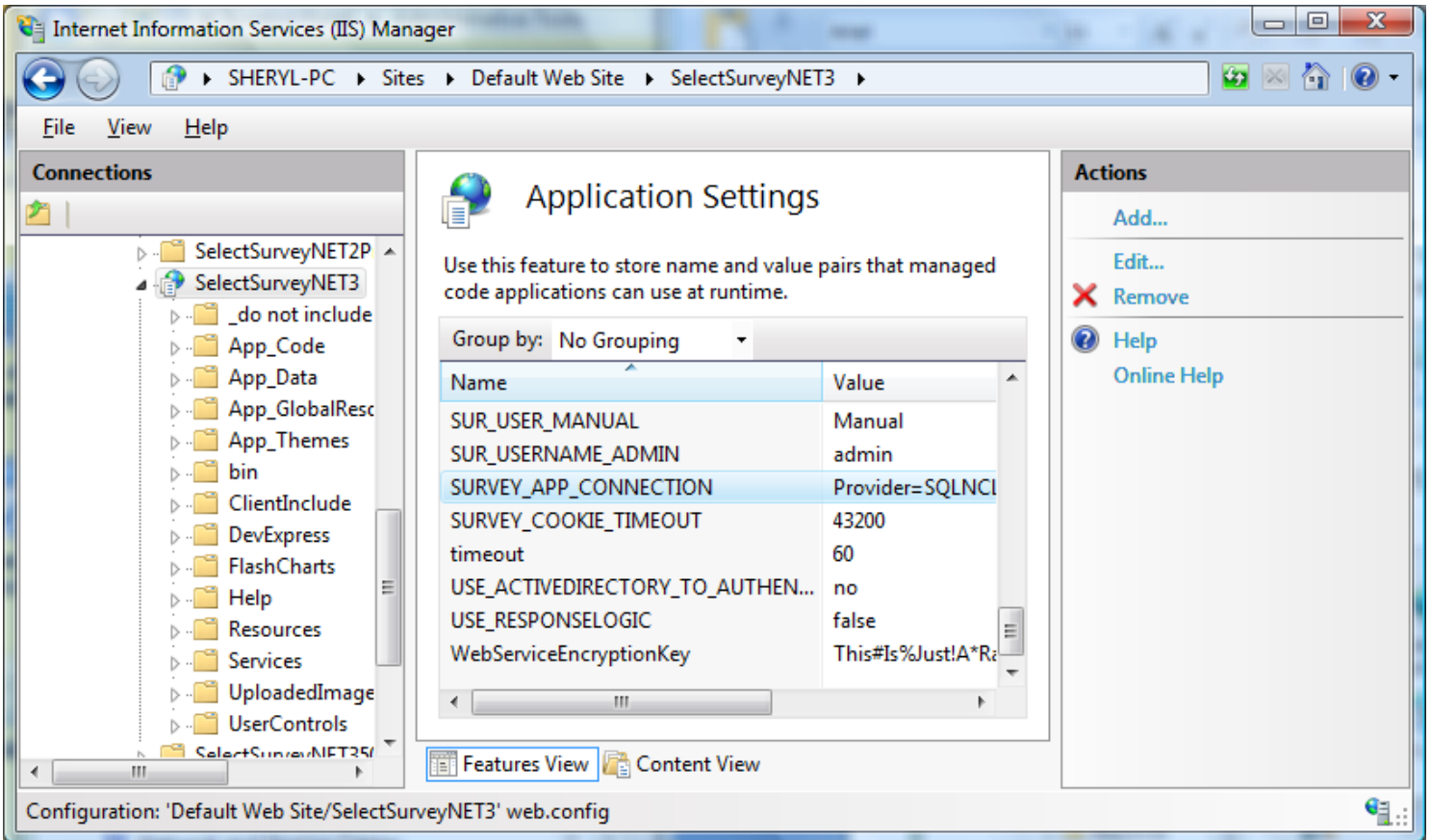
Figure B (Internet Information Services (IIS) Manager 7)

Edit WEB.CONFIG file for SMTP.

4. **Edit the WEB.CONFIG file (required) with textpad or notepad to set email parameters.**
   Also in the file, "Web.config," there are several constants under the heading "EMAIL CONFIG VARIABLES".
   SelectSurveyNET utilizes the System.Web.Mail namespace included in the .NET Framework for sending
   email. Read the comments in the web.config for how to set these values. The below email constants can
   be set in the Web.config file:

```
        <mailSettings>
              <smtp>
                    <!-- host should be "smtp.yourisp.com", some isp have different
port, check with them, update your username and pass below  -->
                    <!-- defaultCredentials="true" remove if error or timeout -->
                    <network host="127.0.0.1" port="25" userName="username"
password="password" defaultCredentials="true" />
              </smtp>
        </mailSettings>
```

Edit WEB.CONFIG set LICENSE KEY and remaining keys.

5. **Edit the WEB.CONFIG to add in license key settings.** Set values for all other web.config settings, which would include license keys for any add-ons you purch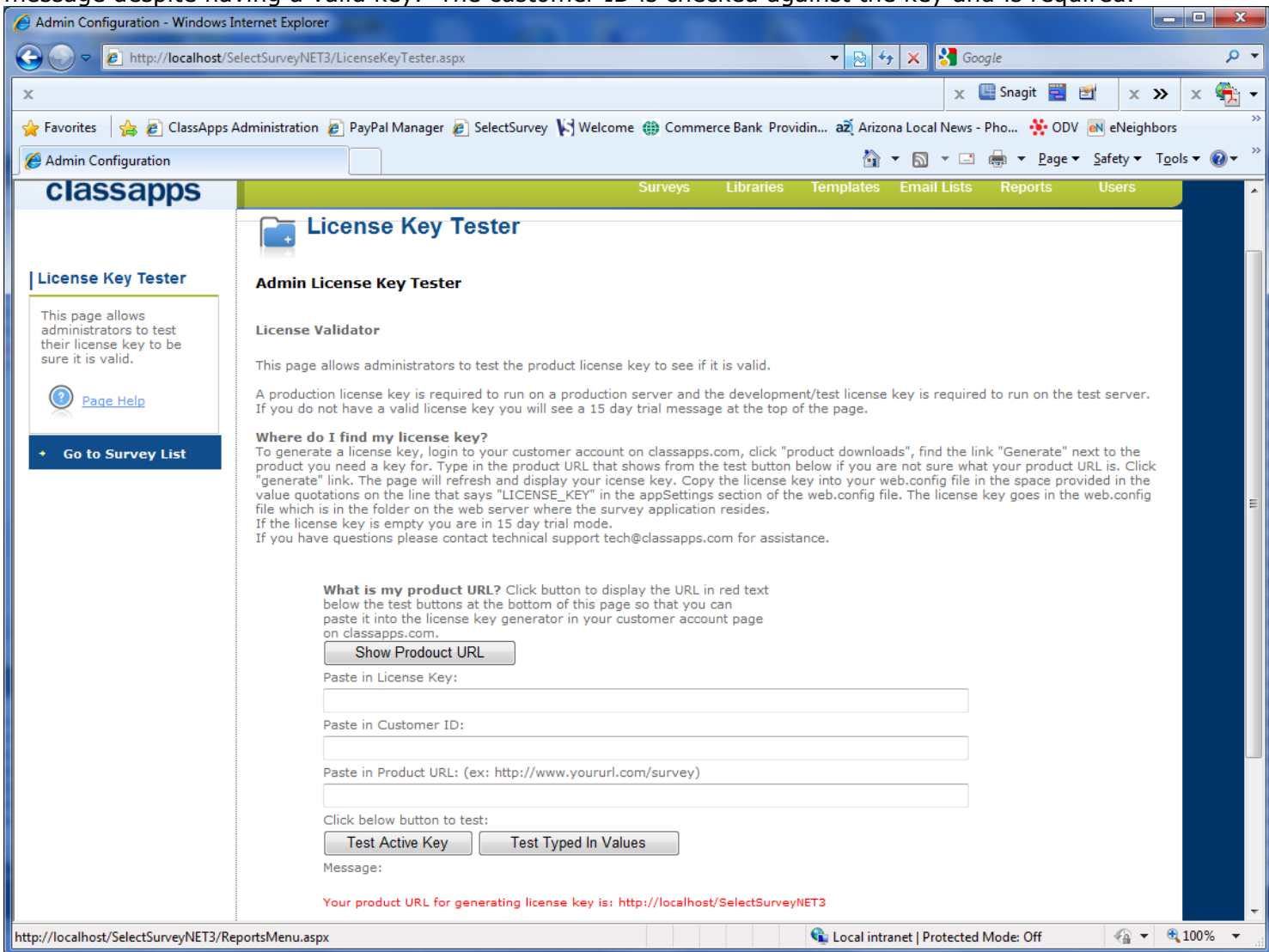ased. To obtain the license key for different add-ons or products, login to your customer account page on classapps.com and click "purchased products" which is where your license keys are listed. Some products require you to click a button "generate" to generate a license key based on your production URL which you type in on the customer account page. If you are seeing a "15 day trial" message then you have not properly generated a license key. Login as admin and click "admin tools" link, then click "License key tester" or "show product URL" if you are unsure of what URL to use when generating a license key. Then follow instructions on that page: REQUIRED: Customer ID must be in application wide settings page for you will see a "15 day trial" message despite having a valid key. The customer ID is checked against the key and is required.
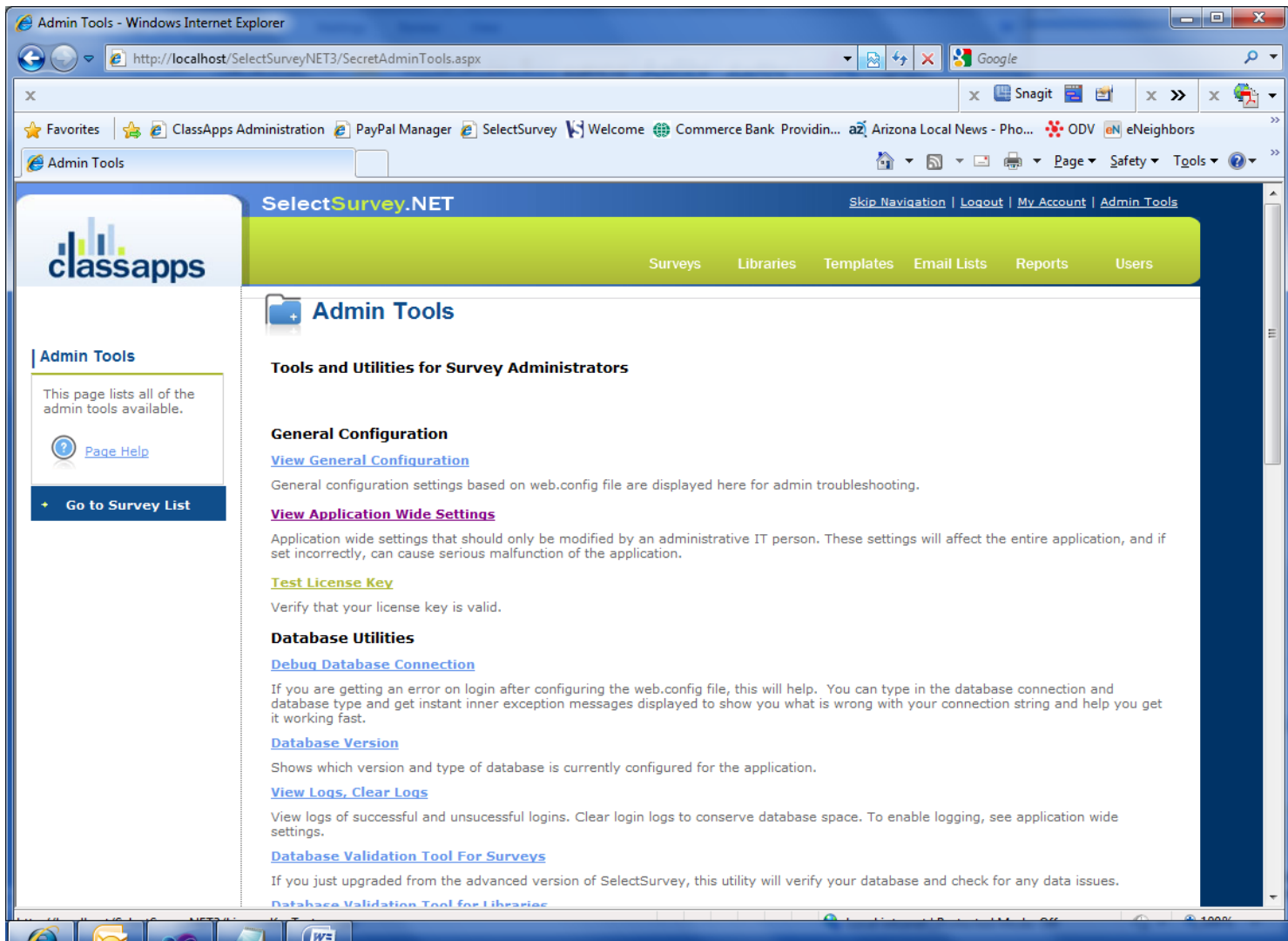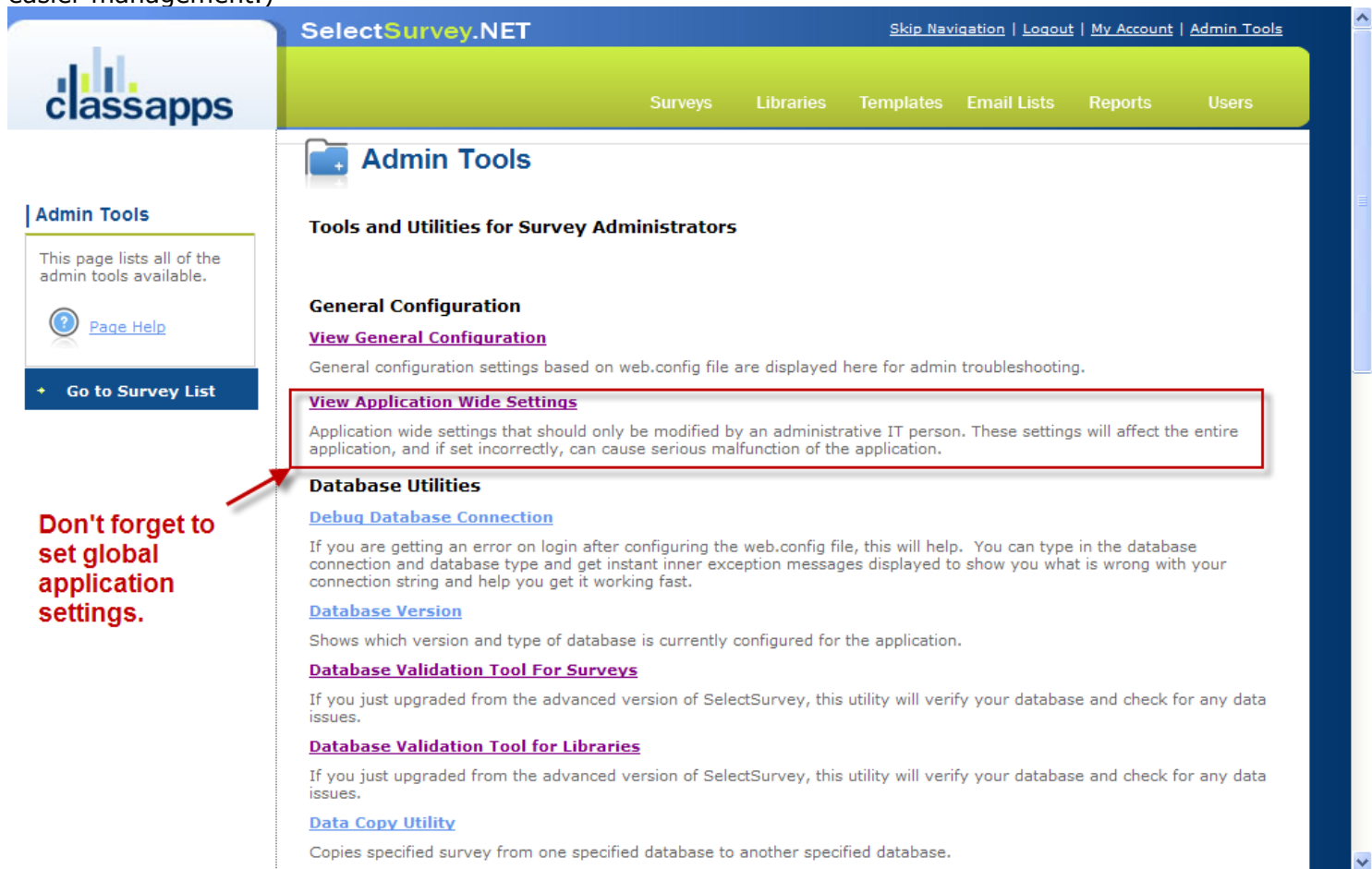
6. **Open the page in the browser "DebugDatabaseConnection.aspx" and test the database connection string.** Copy the database connection string from the web.config file: "SURVEY_APP_CONNECTION" into the textbox provided. Click "test connection" and "test permissions" to ensure your database settings are correct before continuing.

Configure Application Wide Settings

7. **Login to the application with a browser to set other global application settings to test configuration using "admin/admin" as username and password.** By default, the application has a single user entered in the SUR_USER table. The username for this default user is "admin" and the password is also "admin." This account has been granted full administrative rights to the entire application, and should not be deleted. Use this username/password to log into the application the first time. Once logged in as "admin," or if logged in as any account with "admin" level permissions, you can create other user accounts.

Use this login to make the global application settings below. Click the "admin tools" white text link in the upper right corner of the application to get to the page in the below screenshot. Click "View Application Wide Settings", on this page you can view and edit those settings. (Note: These settings were previously in the web.config in earlier versions of the application and have since been moved into the database for easier management.)

8. **Edit and Save global application settings in the admin tools "View Application Wide Settings" page.** Follow the information on that page above each field for a description of what that setting is for.

REQUIRED: CUSTOMER ID must be in the customer ID field or you will see a "15 day trial" message.

Configure Permissions for File upload and JS on Server.

9. **Additional web server configuration.** If you are installing the application on Windows 2003, you must make the following change:

a) By default, Windows 2003 locks down most file extensions, except for certain types of files. This is different than previous versions of Microsoft operating systems. The survey application contains a number of JavaScript routines, all of which are in a file with a .js extension. To enable the .js file type,

you simply edit the MIME types either at the Global IIS level or the individual site or virtual directory level. Add the .js as an application/x-javascript type, and everything should work fine. If your application is hosted with an ISP, simply ask them to enable files with a .js extension, and they will readily understand the request and how to respond to it.

10. **Configure server for file upload**. Configure for maximum file upload if you are using the "file upload" feature of the "presentation image" question type which allows survey creators to upload images to the "UploadedImages" folder on the web server to be referenced in their surveys. Follow the below steps for setting permissions on the UploadedImages folder and configuring the web.config to set the file size limitations.

Set permissions on the folder: In order for the survey creator to upload an image from their local workstation to the web server, the UploadedImages folder must have proper write permissions. You can also change the location of this folder by setting the web.config parameter:

```
<!-- IMAGE UPLOAD FOLDER FOR SURVEY TEMPLATES AND EMAIL MESSAGES FOR IMAGE UPLOAD FROM
HTML RICH TEXT BOX
        this folder must have correct permissions to allow image upload.
        reference article:
http://aspalliance.com/336_Upload_Files_Using_ASPNET_Impersonation_and_UNC_Share.all -->
    <add key="IMAGE_UPLOAD_FOLDER" value="~/UploadedImages"/>
```

First, right-click on the folder where the ASP.NET files should be uploaded and select Properties from the provided menu. The Properties dialog for the selected folder opens. Click the Security tab to make sure the ASP.NET Machine Account is included in the list and has the proper permissions to write to disk. If it is enabled, you see something similar to what is presented in Figure 2.
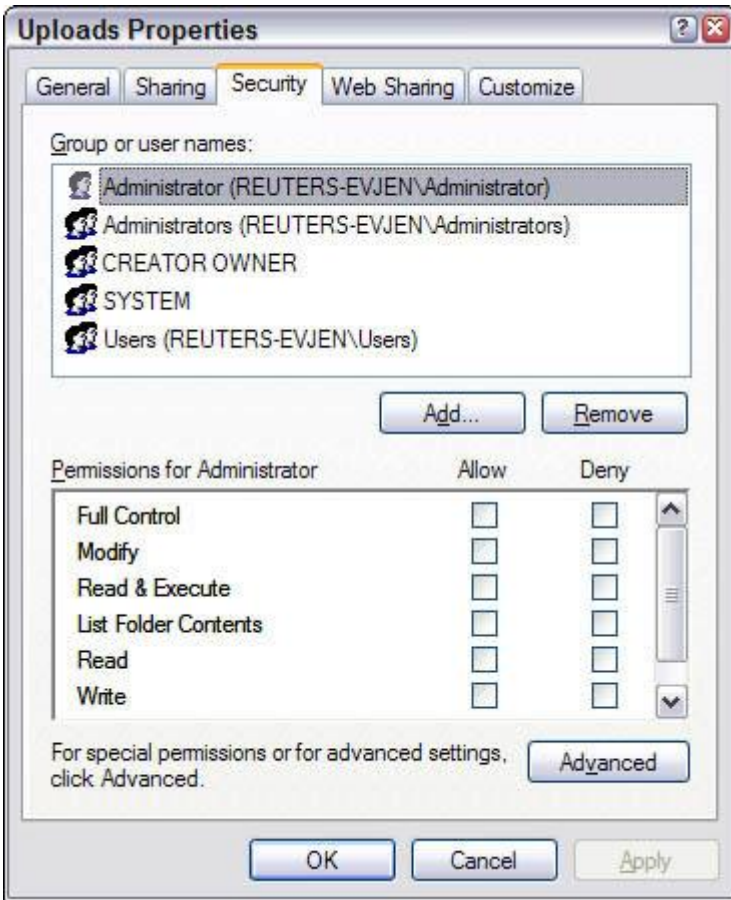
Figure 2 (IIS 6)
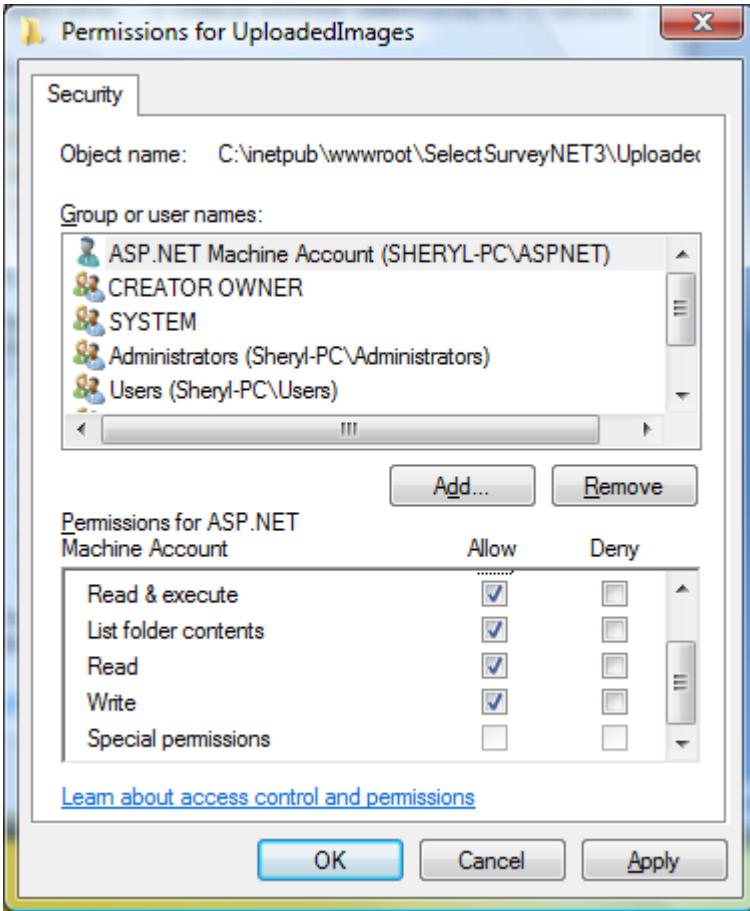
Figure 2 (IIS 7)

If you don't see the ASP.NET Machine Account in the list of users allowed to access the folder, add ASP.NET by clicking the Add button and entering ASPNET (without the period) in the text area provided (see Figure 3).

Figure 3 (IIS 6)
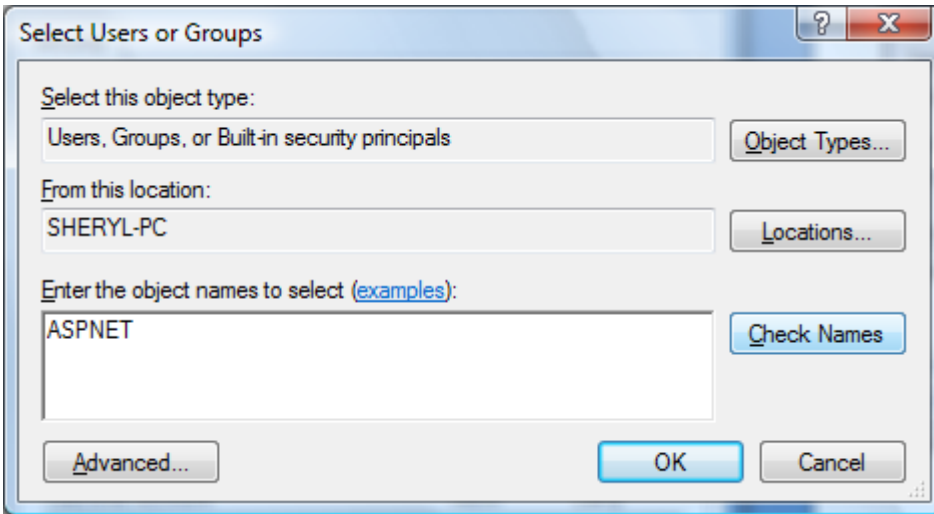
Figure 3 (IIS 7)

Click OK, and you can then click the appropriate check boxes to provide the permissions needed for your application.

Set maximum file size in admin tools "application wide settings": Login as admin into the survey application with the browser. Click "admin tools". Click "View Application wide settings". Maximum file size setting is on this page along with all the other application wide settings.

Set file size limitation in the Web.Config file:
Note that any size of 4MB requires the below setting in web.config to also be changed since ASP.NET default file upload limit is 4MB. Set the maxRequestLength to the KB size limit you desire (20000 is approx 20MB). If you are setting to a large value, you must also raise the executionTimeout setting, which is in seconds, or it will timeout before the file is uploaded, causing an error on the server.

```
  <httpRuntime executionTimeout="90" maxRequestLength="20000"
useFullyQualifiedRedirectUrl="false" requestLengthDiskThreshold="8192"/>
```

If you continue to get an error on uploading files over 4MB after changing the above setting, then you may need to also update the machine.config and web.config.comments file in the folder:
C:\WINDOWS\Microsoft.NET\Framework\v3.5.50727\CONFIG

Support

Go online to http://www.classapps.com/support.asp to the support page, where you can fill out a support ticket and find contact information.

Appendix A: Application Pooling

Platform: IIS6.0 with Windows Server 2003

Symptoms: Session timeout and session loss even when user is active.

Cause: Microsoft introduced several new features into Windows 2003/IIS6 web server that affect how sessions and application pools are handled. Most web hosting companies host multiple websites in the same application pool. When resources are maxed out for an application pool IIS 6 starts to recycle these sites causing application variables to be lost for those recycled sites.

Solution:
If you are experiencing application/session loss symptoms then we would recommend asking your web hosting company to place you in your own application pool with all recycling options disabled and the recycle worker process set to recycle only once during the day at a set time.

Below are the instructions to do this:

Step 1:
Add new application pool for Select Survey Application.
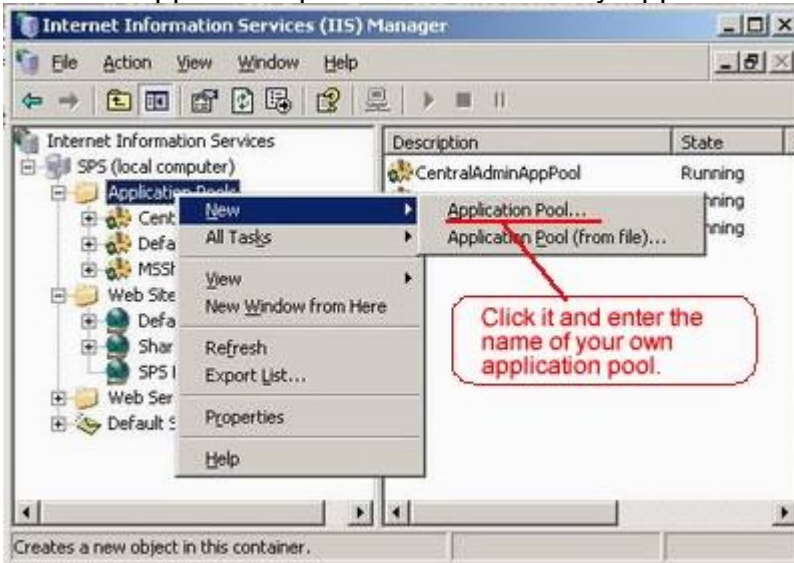
(IIS 6)
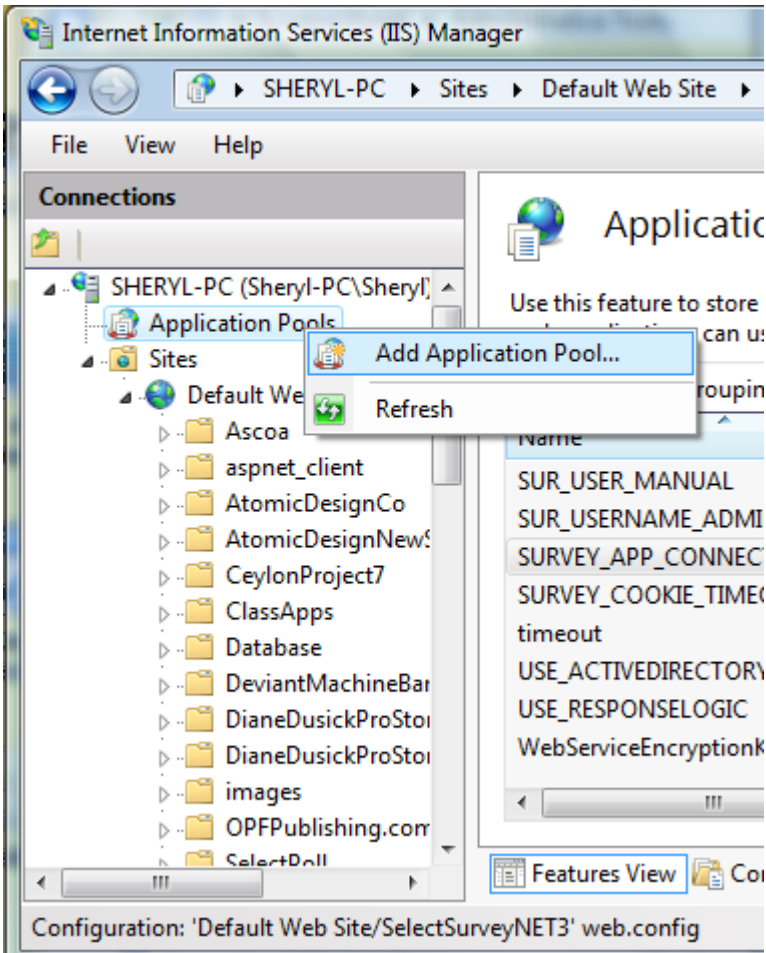
(IIS 7)

Step 2:
Choose your own application pool in the web site properties.
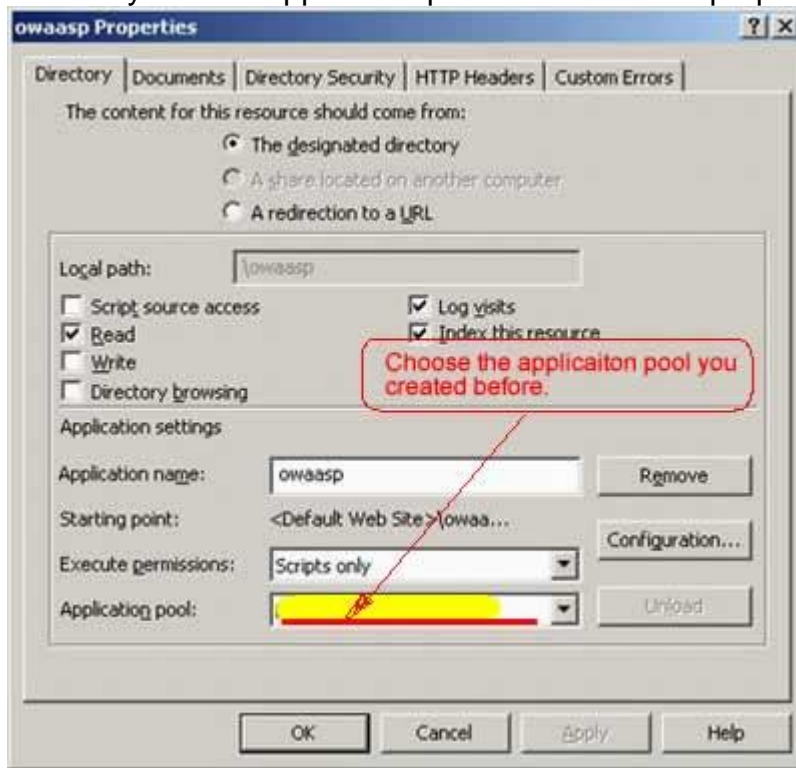
Done. (IIS 6)
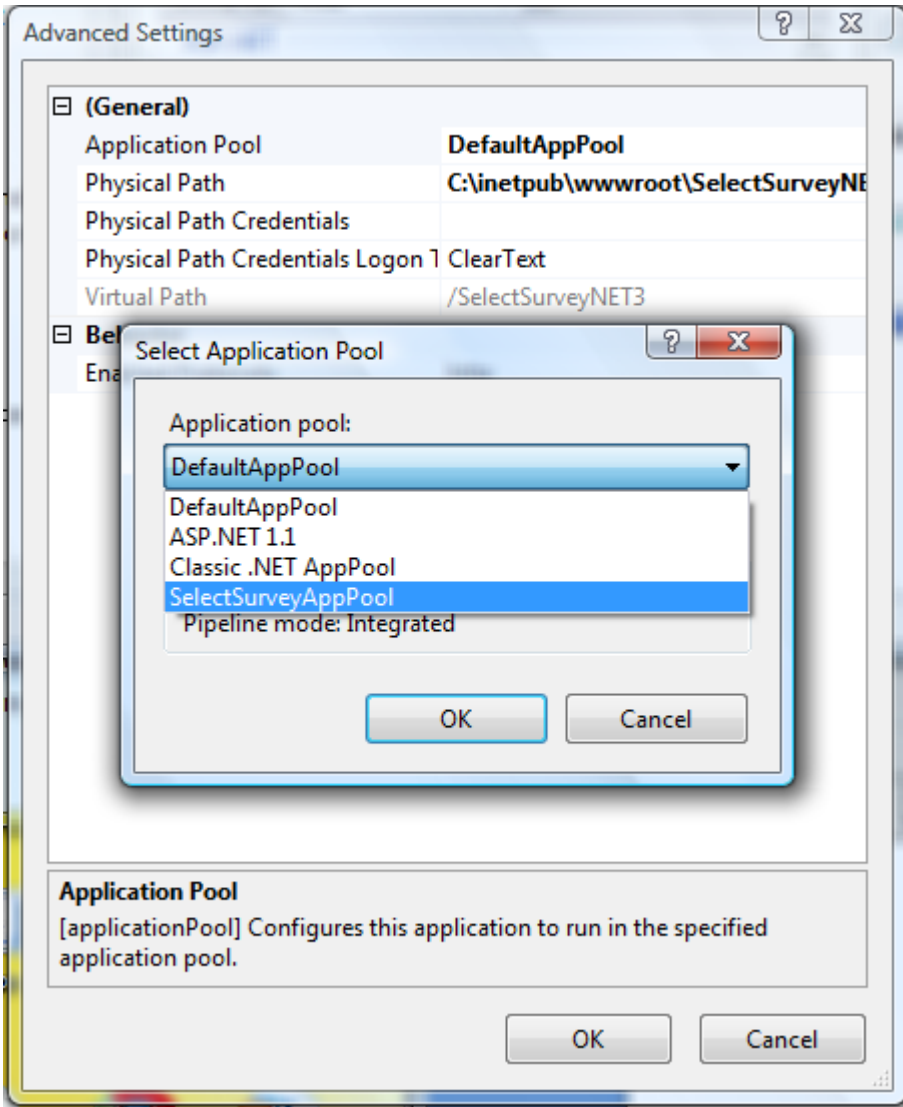
(IIS 7)

Appendix B: Notes for different culture/globalization settings

The provided application wide settings date format settings allow you to run the application even if your web server is a different language than your database server.

Click "admin tools" then "application wide settings".

How to tell what language SQL is running under: Right click on the (local) SQL Server icon in enterprise manager and click "properties". You will see a dialog box pop up similar to the below screenshot:
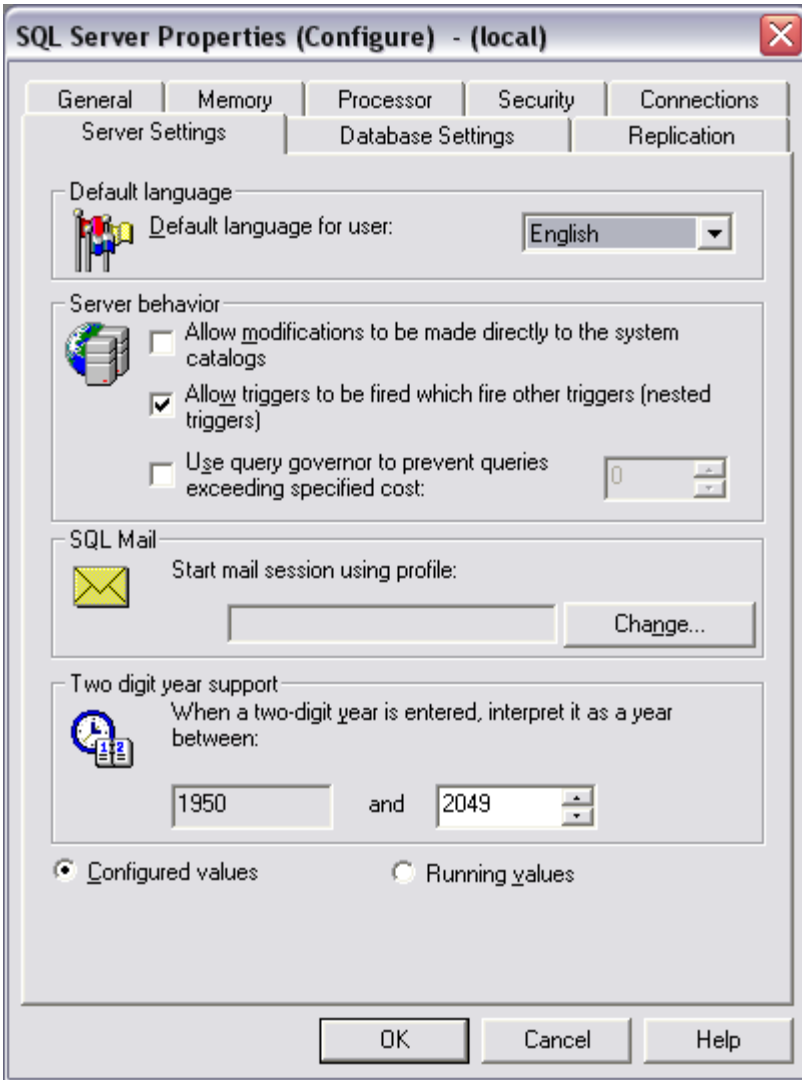
The default language here is how you determine how to set the "SERVER_DATE_FORMAT" value in the admin tools application wide settings. The above screenshot shows the server as value="1" for the web.config.

If you need to work beyond the settings provided in the application, please note there are other settings in the machine.config when you install the .net framework and notes for these settings are below:

In order to display different languages and formatting for different parts of the world, there is a section in the machine.config on the web server as well as in the web.config file which contain settings for this.

1. Machine.config may be found on the web server in a directory similar to the following:
C:\WINDOWS\Microsoft.NET\Framework\v3.5\CONFIG\machine.config

search for the section "globalization Attributes" in the machine.config file that looks like the below and set the values for your country (they should be set as default when the framework is installed to your locale):
globalization Attributes:
requestEncoding="[Encoding value]" - Encoding to use for request

responseEncoding="[Encoding value]" - Encoding to use for response

fileEncoding="[Encoding value]" - Encoding to use for files

culture="[Culture]" - default Thread.CurrentCulture

uiCulture="[Culture]" - default Thread.CurrentUICulture

2. Web.config may be found in the web site root folder for SelectSurveyNET, edit the web.config to match your country language and culture:
```
<!--set culture to match datetime format you want for example "en-GB" is English Great Britain format -->
<globalization requestEncoding="utf-8" responseEncoding="utf-8" culture="en-GB" />
```

Appendix C: Integrating with Active Directory

This application has extra pages coded to work with active directory integration.

There are two modes for Active Directory:

- **NTLM Passthrough:** Application picks up logon_user identity from IE browser and the login screen is bypassed.

- **Active Directory Login:** Application shows the login page and user enters their network login as their survey login.

Each time a user logs in with their network Active Directory login, their data is imported or updated into the survey application (nothing is every updated in Active Directory), therefore it is synched at every login (survey roles and survey related info is maintained through the synchs) and no import of data is necessary. No Active Directory passwords are stored in the survey application or its database. If no Active Directory data exists for survey required fields such as email address, an administrator must fill those in within the survey application in the user edit page. These values will not be over-written by the synch if they remain empty in Active Directory.

The following pages are different or only used for active directory integration:

- Web_ActiveDirectory.config
- LoginActiveDirectory.aspx/cs

- Other pages may be disabled or coded to behave differently:
    - forgot my password (disabled)
    - user edit
    - user add
    - user registration (disabled)
    - user buttons in the app
    - edit my account

Step 1:

Login to admin tools with non AD login (default admin/admin) click "admin tools".

Click "Application wide settings"

Select "yes" from the drop down box next to "Use ActiveDirectory for login"

Click "Save"

Logout and delete cookies so that the next time you login it will use your AD login.

Rename web.config to web.config_default

Rename web_ActiveDirectory.config to web.config

Edit the web.config to contain your active directory settings.

```
<!--ACTIVE DIRECTORY SETTINGS (CASE SENSITIVE!) -->

    <!--Prepulate domain text box on login page? yes/no -->
    <add key="POPULATE_DOMAIN_TXTBOX" value="yes" />
    <add key="Domain" value="MyDomain.com" />

    <!--to use multiple domain search paths separate them with semicolons example:
"LDAP://MyDomain;LDAP://MyDomain2" -->
    <!--to search entire AD forest use "GC" example:  "GC://MyDomain" -->
    <add key="ADPAth" value="LDAP://MyDomain " />
    <add key="ADUser" value="administrator" />
    <add key="ADPassword" value="123" />

    <!-- if no OU user groups defined, user can login from any user group in the forest.  If specific user
groups are defined in config, then restrict to those groups for login.  This will over-ride the survey
user group restrictions, except for anonymous surveys.-->
    <add key="ADUsersPath" value="OU=DeveloperDepartment," />

    <!--the below allows login with UPN. acceptable values are yes/no default is no-->
    <!--setting to yes will hide domain text box and you must use domain email address for login -->
    <add key="USE_AD_UPN_LOGIN" value="no" />

    <!--setting to turn on display of debug info on the login page to assist with setting up AD
integration (TURN THIS OFF WHEN YOU ARE DONE!)-->
```

```
    <!--valid values are "on" and "off"  when "on" error stack trace and line # info will display on
bottom of AD login page when "off" no info will display. -->
    <add key="AD_DEBUG_MODE" value="off"/>

    <!--If NTLM passthrough is activated the identity will be picked up by the browser (IE only) and the
user will never see the login page.  They will be automatically logged in wtih their network identity
username in which all their survey activity will be stored. -->
    <!-- valid values are "yes" and "no" -->
    <add key="USE_NTLM_PASSTHROUGH_AUTHENTICATION" value="yes"/>

    <!-- required for NTLM passthrough to work otherwise regular AD login will show -->
    <add key="FORCE_NTLM_PASSTHROUGH_AUTHENTICATION" value="yes"/>

    <!-- the below setting is the user role that is assigned to all users that are automatically created
via AD login-->
    <!-- valid values are "1" for user or "2" for create role or "3" for admin role with the default being
1 (user role) -->
    <add key="DEFAULT_USER_ROLE_FOR_LOGIN_SYNCH" value="1"/>

    <!--END OF ACTIVE DIRECTORY SETTINGS -->
```

Step 2:

Add one admin user to your database.

Make sure nulls are allowed in the sur_user.password field.

Open the sur_user table and add a row with the AD username and AD password for the admin user. Then open sur_user_to_role_mapping table and add role 3 for that user. (use the existing admin user that is already in both of these tables as an example but do not delete the admin user that is there) This is because the first time users login to the survey application with AD authentication, if the user is not already in the database, they will be set at the lowest permission level in the survey app which is "user" role, which they can only take surveys, not create them. So you need to set the one admin role so you can login with that to modify users that need admin or create roles later.

Open the sur_user table and make sure the "password" column allows null.
If this is not set you will get the error: `Error:Field 'sur_user.user_password' cannot be a zero-length string when you attempt to login with AD`.

Step 3:

Configure permissions on web folder in iis:

NOTE: *FOR NTLM PASSTHROUGH feature, do not allow the anonymous account to be active in IIS for this website or NTLM will not function.*

1.   Right-click the application's virtual directory, and then click **Properties**.

2.   Click the **Directory Security** tab, and then click the **Edit** button in the **Anonymous access and authentication control** group.

3.   Select the **Anonymous access** check box and clear the **Allow IIS to control password** check box.
      Note: *do not allow anonymous account to be active in IIS if you are using NTLM passthrough feature, or NTLM will not function.*

4.   Because the default anonymous account IUSR_MACHINE does not have permission to access Active Directory, create a new least privileged account and enter the account details in the **Authentication Methods** dialog box.

5.   Click **OK**, and then click **OK** again to close the **Properties** dialog box.
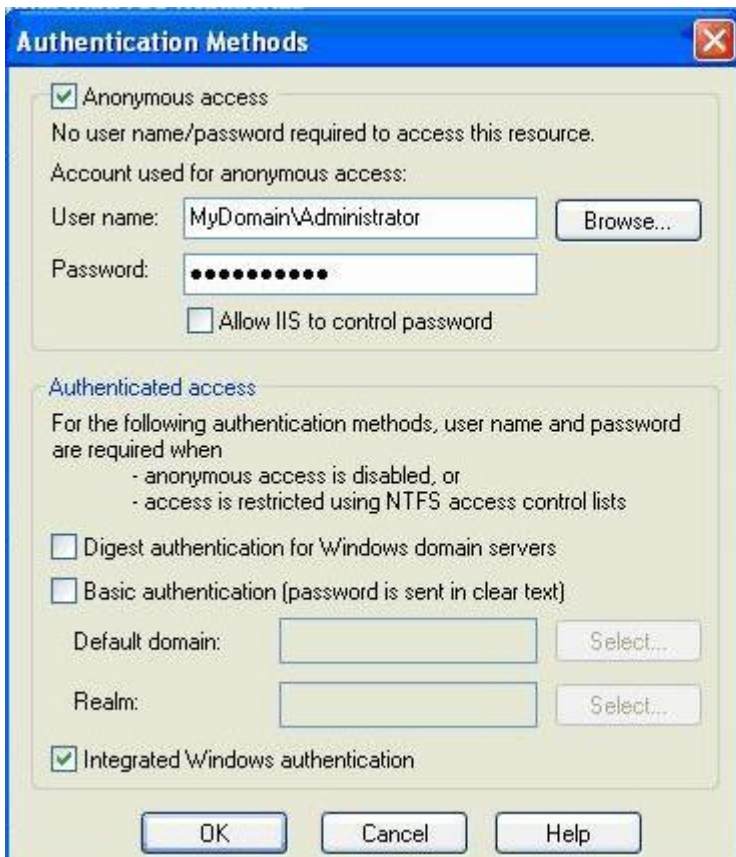
Note: Do NOT check "Anonymous Access" if you are using NTLM.

(IIS 6)
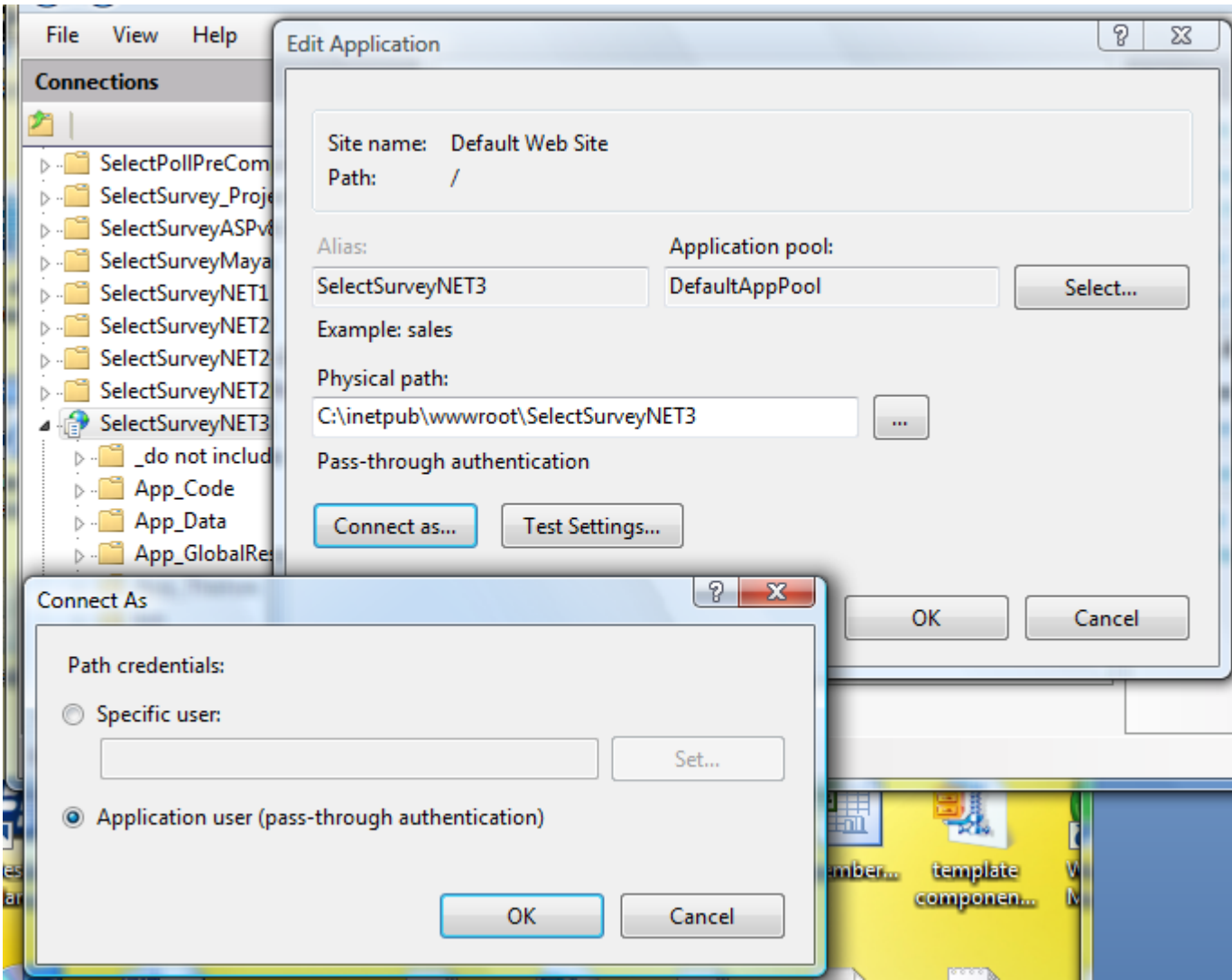
(IIS 7)

Step 4:

Test.

How the Active Directory Integration behaves:

When user logs in, their active directory info is automatically added to the sur_user table as the lowest role user (can take surveys).

This means there is no import necessary and nothing else required to synch the data between Active Directory and the survey app.

Each time the user logs in, the data is synched from the Active Directory data to the survey tables except for survey specific properties like survey role.

When survey role (user/create/admin) is edited in the survey app this will stay until edited from within the survey app.

User edit/delete in survey app does not edit or delete user in Active Directory.

Browser NTLM Configuration: IE Browser

IE:
1) from IE browser select Tools menu, choose "Internet Options"
2) click the security tab
3) select the local intranet icon
4) click the "Sites" button
5) click the "Advanced " button
6) add your selectsurvey installation URL to the local intranet zone.
7) click the add button then click ok.

Internet Explorer Local Machine Trusted Sites Setup

So you may not have a domain, with an Active Directory Server to do your bidding. Don't worry though, as this is just as easy to

setup on your local machine. If you're on a domain, you'll need to complete the following on your active directory server before

skipping to the next section anyway.

1. Open IE on your local computer and open **TOOLS > INTERNET OPTIONS**, then choose the Security tab up the top.
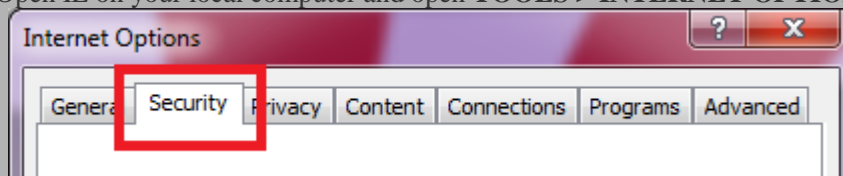
2. Click on the **'Local Intranet'** icon, and then click the **Sites** button to open the list of Trusted Sites for the Intranet zone.
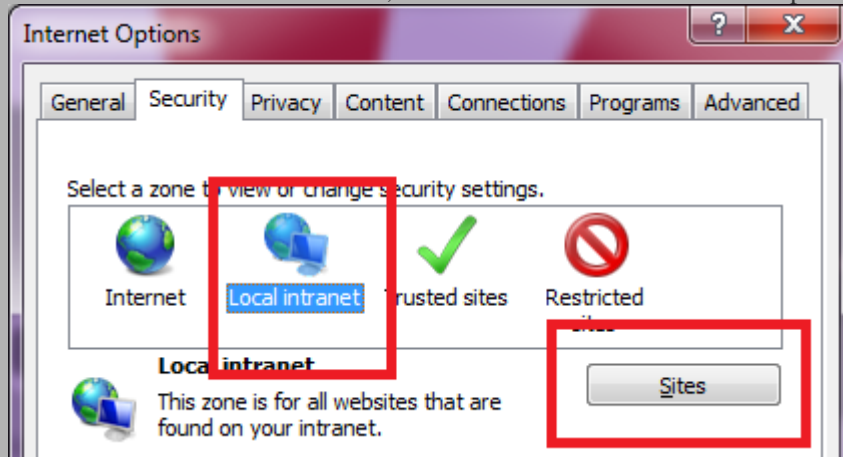
3. If you're in IE 6-7 This will simply open the list, If you're in IE 8 it will show the window below. Click **Advanced.**
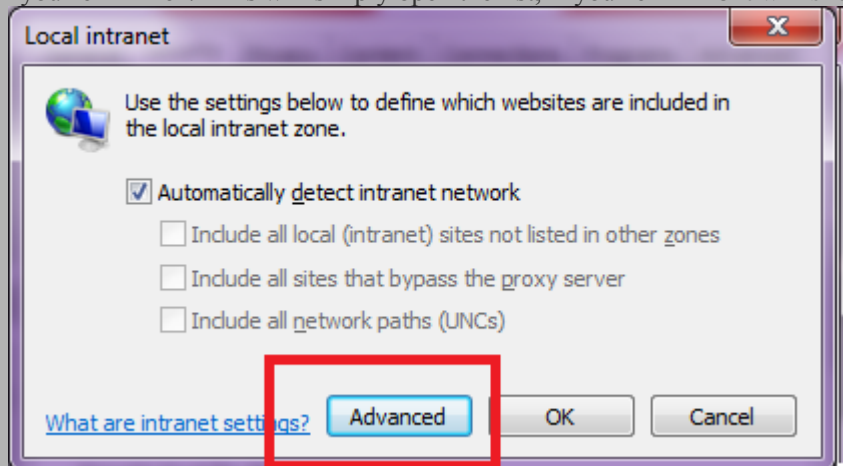
4. If your site ASP.Net, SharePoint or TFS site is not on an HTTPS connection *(I'm assuming it isn't)* un-tick the box marked

   "**Require secure connection**", and then enter your site's address in the box. Then click **Add.** Do this for every site you

want to have automatic sign-on for and then click close
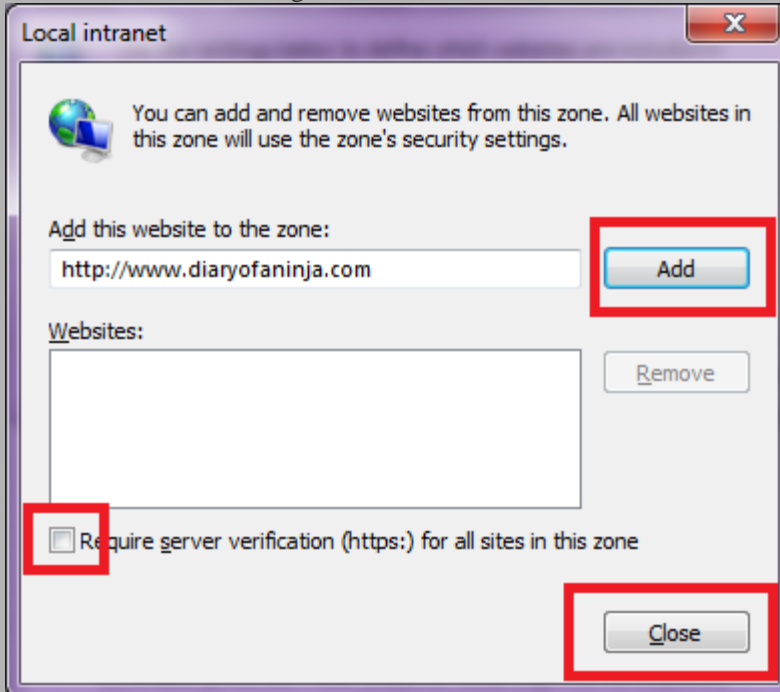
5. Now back at the main settings screen, make sure the intranet zone is still selected and click the **custom level** button. On

the next screen scroll right to the bottom and make sure that under **User Authentication > Logon**, that the option

Automatic Logon, only in Intranet Zone is selected.
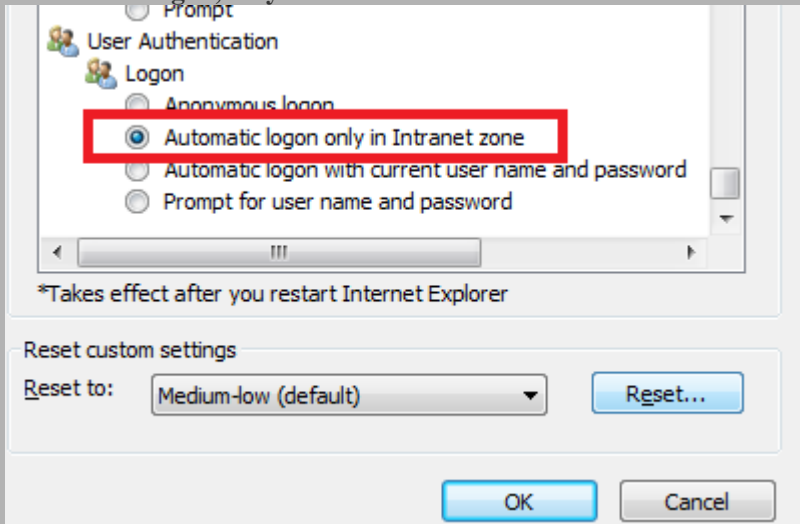
6. Close by clicking OK, and you're done!

Internet Explorer Domain Group Policy Trusted Sites Setup

If you're on a domain, and want to allow all your users to have automatic sign-on, Group Policy is your friend. If you don't you're already done.

1. Login to your Active Directory Domain Controller, using a domain admin account, and perform the steps listed above to setup the local Internet Explorer settings on the server. You will want to repeat the following for two separate policies. One with Enhanced Security Configuration turned on, and one with it turned off, so that you can support workstations with both configuration.

2. To turn off Internet Explorer Enhanced Security Configuration on a Windows 2008 server do the following. Open up Server manager, scroll down to **Security Configuration** and click the link that says **Configure IE ESC**
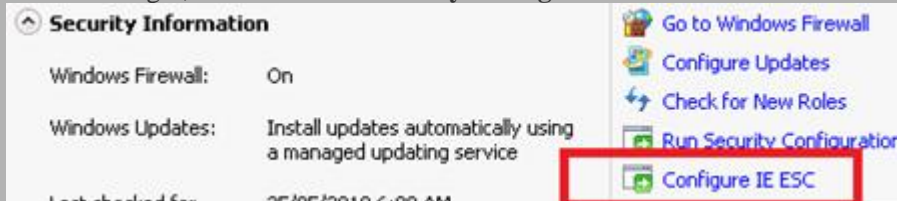
3. Turn it off for **Administrators** and close the window
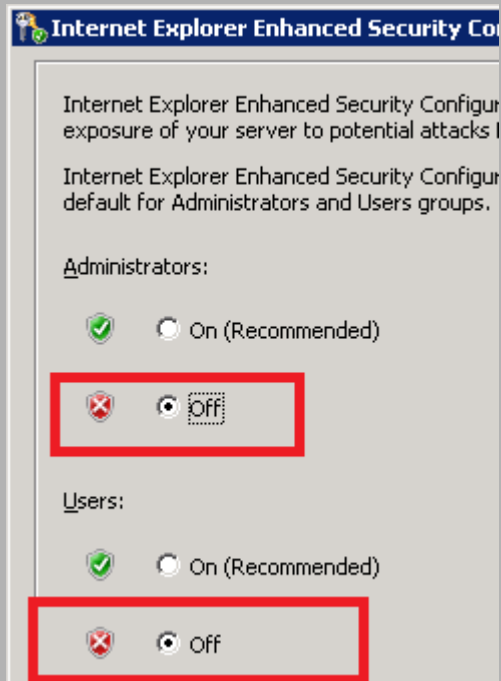
4. Open up **Group Policy Management**

5. Right-click your domain name (or whichever OU contains the users you wish to apply this to), and create a new Policy by

   clicking "**Create a GPO in this domain, and link it here**". Give your new policy a name (preferably better than mine)

New GPO

Name:

Oober Cool Automatic Logon for my sites!

Source Starter GPO:

(none)

OK   Cancel
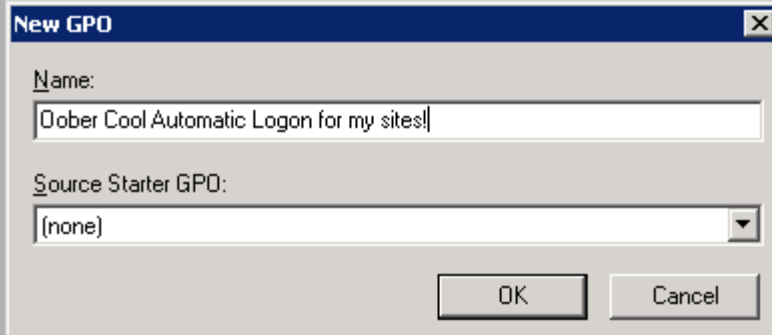
6. Right click on your newly created policy and select **Edit**

7. Open down to **User Configuration > Policies > Windows Settings > Internet Explorer Maintenance > Security >**

   Security Zones and Content Ratings

8. Select "**Import the current security zones and privacy settings**"

Security Zones and Content Ratings

Security and Privacy Settings

You can customize the settings of each security zone as well as customizing the privacy settings. These settings must be made through the Modify Settings button below. For more information, click Help.

Security Zones and Privacy

○ Do not customize security zones and privacy
● Import the current security zones and privacy settings   Modify Settings

Content ratings allow you to prevent users from viewing sites with risky content. Ratings are set on a per-site basis and are rated by the author for degrees of risky language, nudity, and violence.

Content Ratings

● Do not customize Content Ratings
○ Import the current Content Ratings settings   Modify Settings

OK   Cancel   Apply   Help

9. When you select this option you will probably receive a warning about 'Internet Explorer Enhanced Security
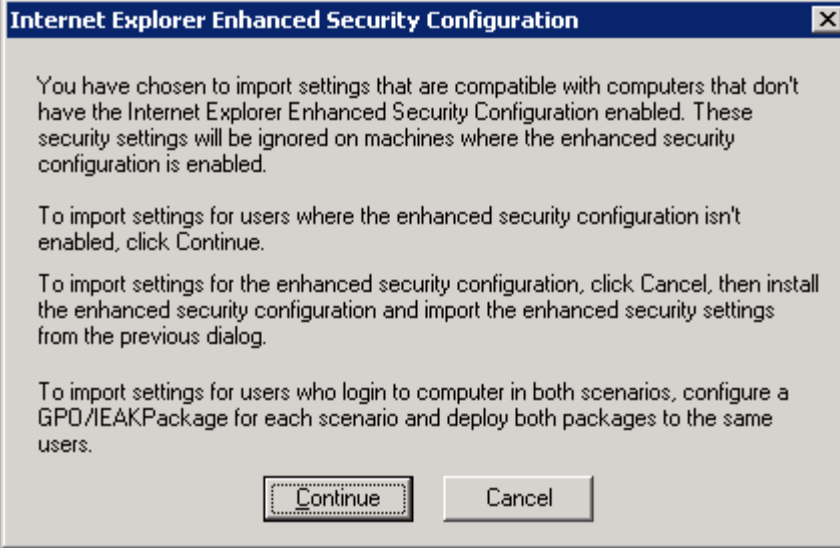
   Configuration'.

This is why we disabled the enhanced configuration in step 3, so that this policy will apply to workstations without

Enhanced security turned on. Click **Continue**.

10. Close all open windows.

The changes will take time to replicate through your AD topology, depending on your setup. You may see the changes take effect

within 15 mins to an hour. If you have a Multi-site AD setup it may take a day or two.

Browser NTLM Configuration: Firefox Browser

Firefox:
About > Config
network.automatic-ntlm-auth.trusted-urls Value: SurveyServername

1. Open FireFox and type **about:config** in the address bar. Click **I'll be careful, I promise!** to the warning and you'll open

   the FireFox advanced configuration page.
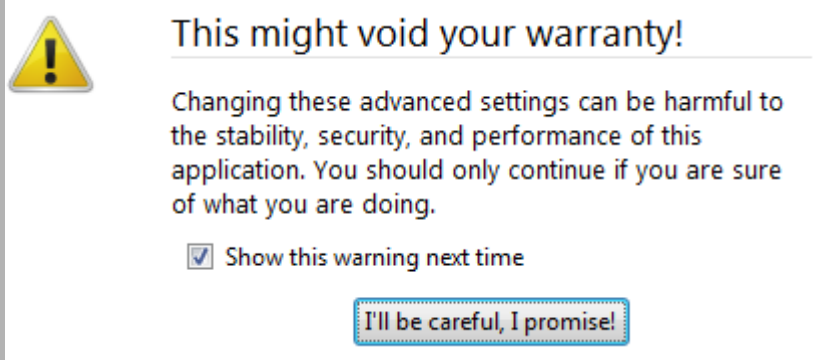
2. Search for **ntlm** by typing it into the filter box.

3. Select the option **network.ntlm.send-lm-response** and double click it to toggle it to **on**

4. Next double click the item marked **network.automatic-ntlm-auth.trusted-uris** in the next box enter each URL of your

   sites seperated by a comma – click OK
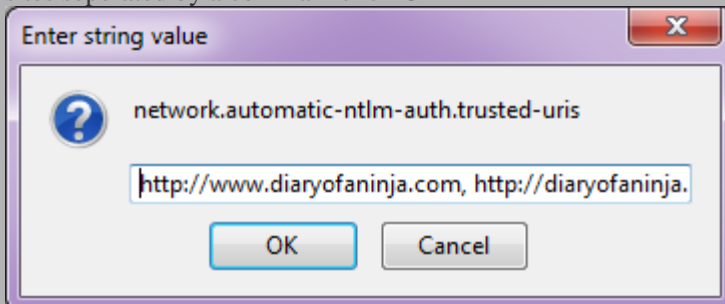
5. Close the tab and you're done!

FireFox Domain Group Policy Trusted Sites Setup

Click the link to go to the selectsurvey login.aspx page and the page will never show you will automatically be logged in and forwarded to the survey list page, or if a user, to the survey.

Mapping AD User Fields to SUR_USER Survey User Fields

SelectSurvey.NET has a built in capability of mapping custom fields from AD to the Survey User. To access this feature, login as admin user, then click "Admin Tools", "ActiveDirectory User Map". See the screenshots below for an idea of the fields that you can map between AD and Survey.
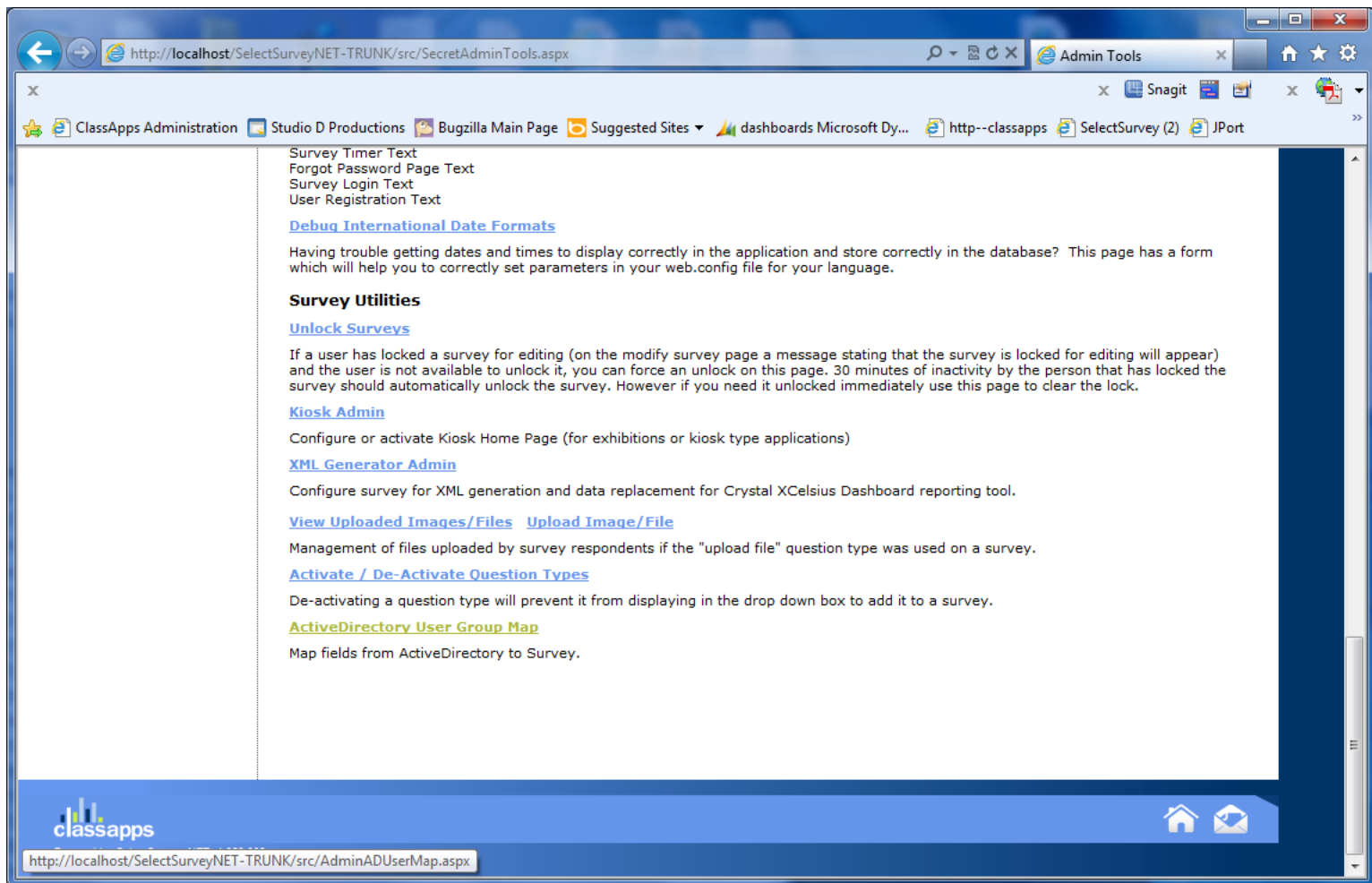
| Surveys | Polls | Touch | Libraries | Templates | Email Lists | Reports | Users |

| ActiveDirectory User Property Mapping

This page allows activating or de-activating question types from being added to a survey.

Page Help

+ **Go to Survey List**

📁 ActiveDirectory User Property Mapping

ActiveDirectory User Property Mapping

This page is for administrators to map AD properties to survey user fields. When mapping is set, the AD properties will overwrite the survey user properties when synched upon every login.

Enter the proper AD property for each survey user field. CASE SENSITIVE! Then click save at bottom of page.

Survey User Field	ActiveDirectory User Property
Username (sur_user.username)	SAMAccountName (Default AD setting)
Username (sur_user.username)	userPrincipalName (Default AD setting if 1st returns null)
Username (sur_user.username)	HttpContext.Current.User.Identity.Name (Default NTLM setting)
Username (sur_user.username)	Request.ServerVariables["LOGON_USER"] (Default NTLM setting if 1st returns null)
Register Date (sur_user.register_date)	n/a (User registration feature is not used with AD)
User Password (sur_user.password)	n/a (User password is not stored with AD integration)
Password Hint (sur_user.password_hint)	n/a (Password hint is not used with AD integration)
First Name (sur_user.first_name)	`givenName` search.PropertiesToLoad.Add("givenName")
Last Name (sur_user.last_name)	`sn` search.PropertiesToLoad.Add("sn")
Email Address (sur_user.email_address)	`mail` search.PropertiesToLoad.Add("mail")
Current Position (sur_user.current_position)	`Title`
Company (sur_user.company)	`company` search.PropertiesToLoad.Add("company")
Location (sur_user.location)	`StreetAddress` search.PropertiesToLoad.Add("StreetAddress")
Custom Data 1 (sur_user.custom_data_1)	
Custom Data 2 (sur_user.custom_data_2)	
Custom Data 3 (sur_user.custom_data_3)	
Active YN (sur_user.active_yn)	n/a (Not used with AD integration)
User Title (sur_user.user_title)	
Company Head (sur_user.company_head)	
Department (sur_user.department)	`department` search.PropertiesToLoad.Add("department")
Address 1 (sur_user.address_1)	`StreetAddress` search.PropertiesToLoad.Add("StreetAddress")
Address 2 (sur_user.address_2)	
Zip Code (sur_user.zip_code)	`postalCode` search.PropertiesToLoad.Add("postalCode")
City (sur_user.city)	
State (sur_user.state)	`st` search.PropertiesToLoad.Add("st")
Country (sur_user.country)	
Business Phone 1 (sur_user.business_phone_1)	`telephoneNumber` search.PropertiesToLoad.Add("telephoneNumber")
Business Phone 2 (sur_user.business_phone_2)	
Business Fax (sur_user.business_fax)	
Mobile Phone (sur_user.mobile_phone)	`mobile` search.PropertiesToLoad.Add("mobile")
Active Until (sur_user.active_until)	n/a (not used by AD integration)
Force Password Change (sur_user.force_password_change)	n/a (not used by AD integration)

[Save Mappings]

Other Available Properties:

search.PropertiesToLoad.Add("manager")
search.PropertiesToLoad.Add("homephone")
search.PropertiesToLoad.Add("url")

List of all properties in your domain:

[OK]

Appendix D: Common Errors/Solutions

Below are some common errors and how to resolve them.

There is a variable in web.config "Show admin tools" yes/no. When this is set to yes, a tool icon will display in the upper right corner of application when logged in as admin user. Click the tool icon, then there is a variety of admin tools to help with install and configuration.

Error: Ambiguous match found.

Solution: You are using the wrong version of the .net framework, right click the web site folder in iis and check on the .net framework tab to make sure it is pointing to the correct version 3.5 of the .net framework.

Error: Database error.

Solution: Go to debugdatabaseconnection.aspx in the application and paste in your connection string, the error will tell you how to fix it. If you are using SQL 2005 Express, by default it does not allow remote connections (see SQL express help on how to configure). If the app is running on a domain controller you will not be able to use integrated security SSPI in your SQL connection string, you will have to use the sql login in the connection string. Again use the debugdatabaseconnection.aspx for testing. If you are using integrated security SSPI, the asp.net account (or account it logs in with) must have permissions to the sql server.

Error: Object reference not set to an instance of an object.trace: at SelectSurveyNET.SurveyListPage.Page_Load

Solution 1: Make sure you have upgraded your database to add new columns. See releasenotes.txt in the upgrade zip file, check all database changes from version you were using, to new version.

Solution 2: If you are running the application on a sharepoint server, you need to add variables to the web.config so that login authentication will retain user.context.

Sharepoint variables: (add to system.web section in web.config.)

```
<trust level="Full" originUrl=""/>

<httpHandlers>

  <add verb="*" path="*.aspx" type="System.Web.UI.PageHandlerFactory, System.Web,
Version=1.0.5000.0, Culture=neutral, PublicKeyToken=b03f5f7f11d50a3a" />

</httpHandlers>

<httpModules>
```

```
    <add name="Session" type="System.Web.SessionState.SessionStateModule"/>

    <add name="FormsAuthentication" type="System.Web.Security.FormsAuthenticationModule"/>

    <add name="PassportAuthentication"
type="System.Web.Security.PassportAuthenticationModule"/>

    <add name="UrlAuthorization" type="System.Web.Security.UrlAuthorizationModule"/>

    <add name="FileAuthorization" type="System.Web.Security.FileAuthorizationModule"/>

  </httpModules>

  <pages enableSessionState="true" enableViewState="true" enableViewStateMac="true"
validateRequest="false"/>
```

Appendix E: Preferred Hosting Providers

Hosting provider must allow control panel ability to add asp.net application folder. If they don't, then you will most likely have to create a support ticket to wait for them to add it for you.

The below hosting providers have asp.net permissions and asp.net application folders that you can configure through the control panel: (this is not a complete list)

Intermedia.net

Godaddy.com

Appendix F: Windows Sharepoint Services

Hosting the survey application on a server that has Microsoft Sharepoint Services installed will require some tweaking for security to work.

Sharepoint security will over-ride security to the Survey application (or any other 3rd party application) without following the below steps:

(The below is an excerpt from http://support.microsoft.com/kb/828810)

Add Sharepoint information to Select Survey web.config:
You'll have to both add an excluded path and clear out the HTTP handlers in

web.config. In your web.config file, add these directives immediately after

<system.web>.

Example 1: (default)

```
<!--SHAREPOINT START:  DEFAULT SHAREPOINT ADDITIONS -->

<trust level="Full" originUrl=""/>

<httpHandlers>

<add verb="*" path="*.aspx" type="System.Web.UI.PageHandlerFactory, System.Web,
Version=1.0.5000.0, Culture=neutral, PublicKeyToken=b03f5f7f11d50a3a" />

</httpHandlers>



<pages enableSessionState="true" enableViewState="true" enableViewStateMac="true"
validateRequest="false"/>

<!--SHAREPOINT END -->
```

Here is another example of a more complicated sharepoint addition to the survey web.config (add directly under system.web section in web.config):

Example 2: (complex)

```
<!--SHAREPOINT START -->

<trust level="Full" originUrl=""/>

    <httpHandlers>

      <add verb="*" path="*.aspx" type="System.Web.UI.PageHandlerFactory, System.Web,
Version=1.0.5000.0, Culture=neutral, PublicKeyToken=b03f5f7f11d50a3a" />

    </httpHandlers>

    <httpModules>

      <add name="Session" type="System.Web.SessionState.SessionStateModule"/>

      <add name="FormsAuthentication" type="System.Web.Security.FormsAuthenticationModule"/>

      <add name="PassportAuthentication"
type="System.Web.Security.PassportAuthenticationModule"/>

        <add name="UrlAuthorization" type="System.Web.Security.UrlAuthorizationModule"/>
```

```
    <add name="FileAuthorization" type="System.Web.Security.FileAuthorizationModule"/>

  </httpModules>

    <pages enableSessionState="true" enableViewState="true" enableViewStateMac="true"
validateRequest="false"/>

<!--SHAREPOINT END -->
```

You can also find more information on google groups and the Microsoft support site.

Appendix G: Web Farm Configuration

SelectSurvey.NET can be configured for web farms or web gardens by following the instructions below to make a simple change to the web.config file. ASP.NET session state lets you share session data user-specific state values across all machines in your Web farm. Now a user can hit different servers in the web farm over multiple requests and still have full access to her session.

The default setting for session state in the SelectSurvey.NET web.config is "inProc" session state because its performance is faster than all the different types of session states. For SelectSurvey.NET to run without session errors on a web farm or web garden scenario, the session state must be changed from "inProc" to "StateServer" in the web.config as described below:

To configure an ASP.NET application to use **StateServer** mode, in the application's Web.config file do the following:

- Set the **mode** attribute of the sessionState element to **StateServer**.
- Set the **stateConnectionString** attribute to **tcpip=**serverName**:42424**.

The following example shows a configuration setting for **StateServer** mode where session state is stored on a remote computer named SampleStateServer:

```
<configuration>
  <system.web>
    <sessionState mode="StateServer"
      stateConnectionString="tcpip=SampleStateServer:42424"
      cookieless="false"
      timeout="20"/>
  </system.web>
</configuration>
```

Read the items below concerning proper setup of the servers on the webfarm.

StateServer

- - In a web farm, make sure you have the same <machineKey> in all your web servers. See KB 313091 on how to do it.
- - Also, make sure your objects are serializable. See KB 312112 for details.
- - For session state to be maintained across different web servers in the web farm, the Application Path of the website (For example \LM\W3SVC\2) in the IIS Metabase should be identical in all the web servers in the web farm. See KB 325056 for details

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Additional information on Microsoft.com:

More information can be found here: http://www.eggheadcafe.com/articles/20021016.asp

Web-Farm Session State ASP.NET session state lets you share session data user-specific state values across all machines in your Web farm. Now a user can hit different servers in the web farm over multiple requests and still have full access to her session.

http://msdn2.microsoft.com/en-us/library/ms178586.aspx

Appendix H: Single Sign on with SQL Membership Provider

SelectSurvey.NET provides integration with Single Sign on using MS SQL Membership Provider as an optional feature. Below are instructions for configuring the Single Sign on feature.

When the membership provider is activated, the application authenticates to the membership provider database, and then tries to find the user with the same "username" in the sur_user table in the survey database. If it finds it, the user is redirected into the survey list page.

The user enters their username and password into the survey login.aspx page, it authenticates to your membership provider database, then looks in the survey database for the matching user and redirects them into the survey list page (depending on the user's role level).r

The users in the survey database still need to synch with whatever single sign on you are using. You can either write a custom provider to do the synching or you can modify the source code of the survey application to add in the synching upon login if membership provider is used on the login.aspx.cs page the same way we wrote the synching for the AD/NTLM page LoginActiveDirectory.aspx.cs. Source code must be purchased to make this edit in the survey application side. If the synching happens from your custom provider, it can create the user directly in the database upon authentication.

1) Edit the web.config file section below:

<!-- If you are using the survey app in a single sign on environment, enter the details of the membership provider in the <membership> node further down in this file. -->

    <add key="UseMembershipProvider" value="no" />

2) Edit the web.config section as follows: Incluede a <membership> configuration in the <system.web> section as shown:

    <membership defaultProvider="SqlMembershipProvider">

        <providers>

        <add name="SqlMembershipProvider"
type="System.Web.Security.SqlMembershipProvider" connectionStringName="ASPNETDB"
requiresUniqueEmail="true" maxInvalidPasswordAttempts="25" minRequiredPasswordLength="4"
minRequiredNonalphanumericCharacters="0" requiresQuestionAndAnswer="false"
applicationName="/SelectSurveyNET"/>

        </providers>

    </membership>

3) Configure a <connectionString> element with the name "ASPNETDB".

That is the connection string to the authentication database. It is required in addition to the connection string to the SelectSurvey.NET database. Below is a condensed version of what the web.config file should look like:

<?xml version="1.0" encoding="UTF-8"?>

<configuration>

<connectionStrings>

<add name="ASPNETDB" connectionString="Data
Source=xxx.xxxx.xxxx.xxxx;Initial
Catalog=xxxxxx;UID=xxxxxxxx;Password=xxxxxx"
providerName="System.Data.SqlClient" />

</connectionStrings>

<appSettings>

--all your app settings go in here. along with your existing SelectSurveyNET connection string

<add key="UseMembershipProvider" value="yes" />

<add key="SURVEY_APP_DB_DRIVER" value="OleDb" />

<add key="SURVEY_APP_CONNECTION" value="Provider=SQLNCLI;Data Source=xxx.xxxx.xxxx.xxxx;Initial Catalog=SelectSurveyNET;UID=xxxxxx;Password=xxxxx" />

-- other settings…

</appSettings>

<system.web>

<membership defaultProvider="SqlMembershipProvider">

<providers>

<add name="SqlMembershipProvider"
type="System.Web.Security.SqlMembershipProvider" connectionStringName="ASPNETDB"
requiresUniqueEmail="true" maxInvalidPasswordAttempts="25" minRequiredPasswordLength="4"
minRequiredNonalphanumericCharacters="0" requiresQuestionAndAnswer="false"
applicationName="/SelectSurveyNET"/>

</providers>

</membership>

</system.web>