TrainingRegisterÒ 7 Technical Documentation

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Technical Information

TrainingRegisterÒ Licensed for use with SQL Server

A database server running SQL Server 7 or newer with the appropriate SQL Server client licenses will be required. The TrainingRegister license does not include Microsoft licenses for SQL Server.

TrainingRegister (SQL Server version) can be multi-tiered. The database server, web server, mail server and workstation can each be on a different box. Network security must be adjusted so the TrainingRegister Web and Administration Modules can access the same database. The data connection is made via a Microsoft Data Link file. A single SQL Server user name and password are required for TrainingRegister. Only the DBA and

TrainingRegister will know this connection information. Individuals are not permitted to edit data outside TrainingRegister but may be granted "read only" access for custom reporting.

Training administrators using the TrainingRegister Administration Module can either share the same program file or they can each have their own copy on their workstation. For ease of updating and connecting to the database, it is recommended that training administrators share the same executable, data connection, software registration and documentation files in a shared folder in the LAN.

Supervisors, employees, students, etc. can have limited access to the database via the TrainingRegister Web Module and their browser. This is a very thin client application. No downloads to the client are required and all scripting is performed on the server.

A single user name and password are required for TrainingRegister to make a database connection to SQL Server. The connection is for the TrainingRegister applications and not for the individual users. Only the DBA and TrainingRegister will know this connection information.

The executable, documentation, registration file and connection information for the Administration Module can be installed in a shared LAN folder for easy maintenance or on each training administrator's workstation. Data connection is made via a Microsoft Data Link file.

TrainingRegisterÒ Licensed for use with a Jet Database

A shared LAN Folder is required if two or more people will be using the TrainingRegister Administration Module or if the TrainingRegister Web Module will be utilized. If only one person will use TrainingRegister then it can be installed totally on a single PC.

The Jet database and most of the drivers are furnished with TrainingRegister. The rest of the drivers are installed with a free download from Microsoft (MDAC). Database licenses are not required. One TrainingRegister license is good for one single database and an unlimited number of users or seats.

Neither Access nor support for Access is required. The Jet database is compatible with, but cannot be opened with Access because it is protected with a password and by the TrainingRegister license. All data can however be exported for use with other applications.

All data in the TrainingRegister master database can be exported to an Access file or coma delimited files for custom reporting or use by other systems. The user passwords saved in the database cannot be utilized because they are encrypted.

TrainingRegister (Jet version) can be multi-tiered with some limits. The program files and database, web server, mail server and workstation can each be on a different box. All users of the TrainingRegister Administration Module must share the same program files and database. Network security must be adjusted so the TrainingRegister Web and Administration Modules can access the same database. For a Jet database, this works best if the shared LAN folder is on the same machine that is running the web server. The database connection is defined with a file and path in the Global.asa.

Training administrators using the TrainingRegister Administration Module must share the same executable, data connection, software registration and documentation files in a shared folder in the LAN.

Supervisors, employees, students, etc. can have limited access to the database via the TrainingRegister Web Module and their browser. This is a very thin client application. No downloads to the client are required and all scripting is performed on the server.

Notes Common to SQL Server and Jet Versions

All TrainingRegister licenses are good for a single database. The license also states that the database created/structured with, or included with TrainingRegister can only be modified with TrainingRegister or custom tools provided by Chris Collins, Inc.

All data can be exported to an Access database or coma-delimited files. These data are not password protected and can be used for custom reporting or to feed another system. The user passwords saved in the TrainingRegister database are encrypted.

If SQL Server is used, individuals may optionally be granted "read-only" access to the database for use outside TrainingRegister.

TrainingRegister includes a Built-in Import Utility that can be used to update employee information in the People table from an HRIS or payroll system.

Data Backup: Regular back up of the master database is very important. This is especially important if the database is Jet. Jet (Access) is a great little database but it does not match the reliability and integrity of SQL Server or Oracle. TrainingRegister does not provide a menu selection for database backup. This is the responsibility of the database administrator and/or one of the training administrators. A new TrainingRegister master database will quickly contain non-replaceable training records. It is advisable to confirm that a restored copy of the master database can actually be used in case the original becomes corrupted or deleted.

Requirements, Recommendations & Specifications

Administration Module – Client & Specifications

The TrainingRegister® Administration Module is used by training administrators and/or training coordinators to perform training administration tasks and prepare management reports. This is a required module for training administrators. An installation program must be run on the workstation to install the proper Windows files and drivers. It can be installed for a single user in a small company or for several training administrators in a large company. TrainingRegister can be multi-tiered with SQL Server and with some limitations can be multi-tiered with the Jet version.

System Requirements & Recommendations:

Required:
- Windows 98 or newer
- Color card with at least 600 x 800 resolution
- MDAC 2.6 or newer – a free download from Microsoft
- Adobe Acrobat Reader
- Web Browser 5.x or newer
- CPU and RAM specifications to match the OS
- C: drive for a reports folder
- Approximately 10 MB of storage space on the local drive where Windows and the Administration Module are installed. Actual space requirement will vary.

Recommended:
- Windows 2000 Professional or newer business level Windows OS such as Window XP Professional
- MAPI Compliant email client (Outlook, Outlook Express, Exchange, etc.)
- Internet Explorer 5.x or newer. Some clients use Netscape. IE makes it much easier to email reports.
- Microsoft Office – recommended but not required.

A personal folder "C:\TrReports" is automatically created for temporary storage of reports, merge files and exported data. Therefore a C: drive is required to run the Administration Module. Any drive or folder can be selected for the actual installation.

Internet Access: TrainingRegister can be used on a workstation without Internet access but access to some features such as on-line software training, technical support, bug fixes and error reporting may be hindered or delayed.

A "default" web browser is required to display all standard reports created by TrainingRegister. IE is preferred because of its [Mail], [Send Page] feature.

Administration Module – Server & Specifications

Server Requirements : Any modern Windows compatible server capable of sharing Office type files among multiple users. If Word, Excel and Access files can be shared then the server should be adequate.

The TrainingRegister Administration Module is never actually installed on a server unless that server will also serve as a workstation for one of the training administrators. Instead, TrainingRegister makes use of a shared LAN file server. In other words, don't run the TrainingRegister installation program on the server. It simply is not necessary and might not include the correct drivers.

Jet version: A shared folder is required if the Jet database is to be shared among two or more training administrators or with the Web Module. A single user installation without the Web Module would not require a shared folder. It is however good practice to use a shared folder so the database can be backed up with regular server backups.

SQL Server version: A shared folder is recommended to reduce IT maintenance. Most TrainingRegister updates can be accomplished by replacing one or more files in a shared LAN folder.

Alternatively, each training administrator can have a complete installation on their workstation and a separate data connection file pointing to the SQL Server database. A typical update, in this case, would require visiting each workstation.

Administration Module – Database

Jet Version: All users of the Administration Module and the Web Module must share the same database. A TrainingRegister license is required for each database used.

The Jet database is included with the purchase of a TrainingRegister license. No additional database software or support is required.

The Jet database is usually saved in a shared folder on a LAN server. This shared folder also contains the program executable and other support files. The database will contain un-replaceable training data and must be backed up regularly.

SQL Server: All users of the Administration Module and the Web Module must share the same database. A TrainingRegister license is required for each database used.

The customer is responsible for obtaining the proper SQL Server client and server licenses. Microsoft SQL Server licenses are not included with the purchase of a TrainingRegister license.

The database administrator (DBA) will create a new SQL Server user and a new empty database. By license agreement, the password will be known only to the DBA and TrainingRegister. Users and other applications cannot edit the TrainingRegister database outside the TrainingRegister applications. A script will be provided to create all tables, indexes, etc.

A data connection is accomplished with the aid of a Microsoft Data Link file. The Data Link File can point to a DSN or directly to the SQL Server database. If all users share the program and support files in a shared LAN folder then only one Data Link File will be required and minor updates will be simpler.

The database will contain un-replaceable training data and must be backed up regularly. It is the responsibility of the DBA to perform regular backups of the SQL Server databases and an additional separate and complete backup of the TrainingRegister database. The separate backup can be used to restore the TrainingRegister database without requiring a complete SQL Server restore and disturbing other SQL Server databases.

Web Module – Web Server & Specifications

Use of the Web Module is optional. The Administration Module will run without the Web Module but not visa versa.

The TrainingRegister Web Module is an Active Server Pages (ASP) application. The files are all hosted on the customer's web server, not the vendor's.

Required:
- NT 4.0 with Service Pack 6a and NT 4 Options Pack or, Windows 2000/2003 Server with the latest SP and security updates, or newer.
- IIS 4 or later
- MDAC 2.6 or newer – a free download from Microsoft
- Microsoft Simple Mail Transport Protocol (SMTP) or a Microsoft email server such as Exchange OR ASPEmail, a third party driver.
- 3 MB of storage space for ASP pages, a DLL and a graphic on the web server machine.
- Connection to company Intranet

Optional:
- Connection to Internet

Web Module – Email & Specifications

Depending on the specific features and configuration selected by the purchasing training administrator, the ability of the application to send email to employees, students, supervisors and training administrators might be required.

Required to make email work:
- An email server compatible with Internet email
- Presence of the Microsoft CDONTS function on the Web Server
- SMTP Service

OR
- ASPEmail

ASPEmail, a third party driver, is a much simpler solution than attempting to use Microsoft's CDONTS email function. It might be the only solution for Windows 2003 and newer.

Contact the TrainingRegister technical support staff for assistance in determining if the Web Module will work on a specific system.

Web Module – Client & Specifications

The advantage to the Web Module is that lots of people can have restricted access without installing software on their machines. They only need a browser and access to the Web Module, which is installed on the company Intranet.

Individuals can use the TrainingRegister Web Module to perform the following tasks:

Basic Level / Employees:
- View their own training records, training requirements, schedule and other reports.
- View a list of scheduled classes.
- Self-Enroll or request enrollment in a scheduled class.
- Respond to a request for a post class evaluation. (coming soon)
- Respond to a request for a pre-class test. (coming soon)
- Respond to a request for a post-class test.

Supervisors with higher security:
- All tasks listed above
- View records of their own employees.
- View other training records such as class rosters for completed training.
- Perform Self-Enrollment or Self-Drop on behalf of employees who do not have computers.

Administrators with even higher security:
- All tasks listed above
- View records for any employee
- View all reports available on the Web Module

Web Client Requirements:

Required:
- IE 4.x or Netscape 4.x or higher
- Configured to accept cookies
- Ability to display tables

Note: ASP pages must not be cached by the client. This is necessary to display the correct and current data in the ASP page.

Web Module – Database

Jet Version: All users of the Administration Module and the Web Module must share the same database. A TrainingRegister license is required for each database used.

The Jet database is included with the purchase of a TrainingRegister license. No additional database software or support is required with the exception of free database drivers from Microsoft and the possible use of ASPEmail.

The Jet database should be saved in a shared folder on a LAN server. This shared folder will also contain the program executable and other support files. The database will contain un-replaceable training data and must be backed up regularly.

The Web Module will make a data connection via a DSN or DSN-Less connection. Server security must permit this.

SQL Server: All users of the Administration Module and the Web Module must share the same database. A TrainingRegister license is required for each database used.

The customer is responsible for obtaining the proper SQL Server client and server licenses. Microsoft SQL Server licenses are not included with the purchase of a TrainingRegister license.

The database administrator (DBA) will create a new SQL Server user and a new empty database. By license agreement, the password will be known only to the DBA and TrainingRegister. Users and other applications cannot edit the TrainingRegister database outside the TrainingRegister applications. A script will be provided to create all tables, indexes, etc.

The Web Module will make a data connection via a DSN or DSN-Less connection. Server security must permit this.

The database will contain un-replaceable training data and must be backed up regularly. It is the responsibility of the DBA to perform regular backups of the SQL Server databases and an additional separate and complete backup of the TrainingRegister database. The separate backup can be used to restore the TrainingRegister database without requiring a complete SQL Server restore and disturbing other SQL Server databases.

Installation Instructions

Administration Module – Prepare Workstation for Installation

Please check the requirements for your specific operating system before running the TrainingRegister installation program. In all cases, IE 5.x or newer and MDAC 2.5 or newer must be present before installing the TrainingRegister Administration Module.

Internet Explorer does not have to be used as the default browser but it does install some needed Windows files. MDAC is required to make a connection to the Jet or SQL Server database.

Testing Internet Explorer Version:
- Open Internet Explorer
- Select [Help], [About Internet Explorer]

Testing MDAC Version:
- Download and use the Component Checker from Microsoft MDAC Website.
- Or, Install the correct version.

MDAC Website:
> http://www.microsoft.com/data/download.htm

Internet Explorer Website:
> http://www.microsoft.com/windows/ie/default.asp

Windows XP Professional: This OS has all the requirements.
- Perform a fresh restart of the computer before installing.
- Login as "Administrator" with administrator rights.

Windows 2000 Professional: This OS probably has all the requirements.
- Confirm that you have Service Pack 2 or greater.
- Confirm that you have Internet Explorer 5.x or greater installed.
- Perform a fresh restart of the computer before installing.
- Login as "Administrator" with administrator rights.

Windows ME: Our copy had all the requirements.
- Perform a fresh restart of the computer before installing.

Windows 98: Very likely needs some updating.
- Confirm that you have Internet Explorer 5.x or greater installed.
- Test for, or install MDAC 2.5 or newer.
- Perform a fresh restart of the computer before installing.

Administration Module – Install Demo or Evaluation Copy

1. Prepare Workstation for installation as described in a previous section.
2. Execute the TrainingRegister installation program.
3. Take all defaults. (Don't select a shared folder as the target.)
4. Give it a minute or two after you think it is done. (InstallShield may not give indication that it is still working.)
5. Restart if it does not do so automatically.
6. Perform the Post Installation Diagnostics to confirm TrainingRegister is installed and functioning correctly.

Administration Module – Jet, Single User, No Server

1. Prepare Workstation for installation as described in a previous section.
2. Execute the TrainingRegister installation program.
3. Take all defaults. (Don't select a shared folder as the target.)
4. Give it a minute or two after you think it is done. (InstallShield may not give indication that it is still working.)
5. Restart if it does not do so automatically.
6. Perform the Post Installation Diagnostics to confirm TrainingRegister is installed and functioning correctly.

Administration Module – Jet, Single or Multi-User, Shared LAN Folder

1. Prepare Workstation for installation as described in a previous section.
2. If a shared LAN folder already exists, save a copy of the database in a safe place.

3. Execute the TrainingRegister installation program.
4. Take all defaults. (Don't select a shared folder as the target.)
5. Give it a minute or two after you think it is done. (InstallShield may not give an indication that it is still working.)
6. Restart if it does not do so automatically.
7. Perform the Post Installation Diagnostics to confirm TrainingRegister is installed and functioning correctly.
8. Confirm shared folder exists on the LAN and that contains all needed files.*
9. Delete the folder created by the installation program.
10. Fix the desktop shortcut and the start menu to point to the shared executable in the shared folder.

* The shared folder on the LAN should contain a copy of the same files, which were installed in C:\Program Files\TrainingRegister7 during the first workstation installation. DO NOT COPY OVER AN EXISTING DATABASE IN THE SHARED FOLDER. The LAN folder is not selected as a target during installation to prevent the user from accidentally uninstalling the shared folder later and causing others discomfort or loss of data. It also is not selected to prevent writing over a good database if one already exists.

One TrainingRegister license is for one single shared database. All users must share the same database in the shared LAN folder. The Jet version will look for the database in the same folder as the executable and the other support files.

Someone must be responsible for backing up the Jet database. It contains un-replaceable training data and is constantly being updated by the training administrators.

Administration Module – SQL Server, Single User

1. Prepare Workstation for installation as described in a previous section.
2. Execute the TrainingRegister installation program.
3. Take all defaults. (Don't select a shared folder as the target.)
4. Give it a minute or two after you think it is done. (InstallShield may not give indication that it is still working.)
5. Restart if it does not do so automatically.
6. Double-click the Data Link File (*.udl) and make connection to the SQL Server database. This task must be performed by the SQL Server Database Administrator.
7. Perform the Post Installation Diagnostics to confirm TrainingRegister is installed and functioning correctly.

Administration Module – SQL Server, Multi-User

1. Prepare Workstation for installation as described in a previous section.
2. Execute the TrainingRegister installation program.

3. Take all defaults. (Don't select a shared folder as the target.)
4. Give it a minute or two after you think it is done. (InstallShield may not give indication that it is still working.)
5. Restart if it does not do so automatically.
6. Decide whether or not to share the executable and support files.*
7. Double-click the Data Link File (*.udl) and make connection to the SQL Server database. This task must be performed by the SQL Server Database Administrator.
8. Perform the Post Installation Diagnostics to confirm TrainingRegister is installed and functioning correctly.

* It is recommended that all users share the executable, data link and other support files in a shared LAN folder. Minor updates for all users can be performed by replacing one or more files in this single folder.

Sharing Files in LAN folder:
- Create a shared folder on the LAN.
- Copy the executable and all support files to the new folder.
- Delete the folder created on each workstation.
- Re-point the desktop shortcut and the start menu for each workstation to point to the executable in the shared folder.

Administration Module – Post Installation Diagnostics

Test Database Connection
- Start TrainingRegister.
- An error message will be displayed if a database cannot be found or opened.

Test Reporting
- Start and Login to TrainingRegister.
- Select [Tools], [Diagnostics], [Test Reporting]
- An informative report should be created and displayed in the default browser.

Test ADO Version
- Start and Login to TrainingRegister.
- Select [Tools], [Diagnostics], [Display ADO Version]
- A report should be created and displayed in the default browser.
- Confirm that ADO 2.5 or greater is installed.

Test Communication with a MAPI Compliant Email Client
- Start and Login to TrainingRegister.
- Select [Tools], [Diagnostics], [Test Error Reporting]
- TrainingRegister attempts to divide by zero, which creates an error.
- Click [OK] twice.
- An error message should be mailed. Check the sent items folder.

Confirm the TrainingRegister Documentation Displays
- Start and Login to TrainingRegister.
- Select [Help], [User Documentation]
- The PDF file should display in the default browser with Adobe Acrobat Reader.

Confirm Windows Menus Launch TrainingRegister Correctly

If a shared LAN folder is to be utilized then it is very important to confirm that the folder created during installation, under program files, has been deleted and that both the Desktop Shortcut and the Start Menu are pointing to the executable in the shared LAN folder. This is important to prevent the user from finding an installation mistake and it will also prevent the user from accidentally entering data in the wrong database. Data from two databases cannot be joined and the TrainingRegister license specifies that all users must share the same common database.

Known Problems with Administration Module

Problem: TrainingRegister has been known to generate errors after upgrading Windows. These errors usually indicate that a file is missing or needed. Solution: Reinstall TrainingRegister to reinstall and register the needed drivers.

Problem: Login OK and then errors out and ends program when entering data in any field on any form. This occurred once when TrainingRegister was installed in the "MyDocuments" folder on Windows XP. Solution: Uninstall TrainingRegister and reinstall using the default destination.

Problem: The messaging system does not work correctly when performing the test error reporting function in the post installation tasks. TrainingRegister might not detect a "default" email program or it might detect a default email program but it is not the email program that is configured. Your email program might not be MAPI compliant. Your virus software or personal firewall might prevent TrainingRegister from placing messages in your outbox. Solution: Have your IT person contact TrainingRegister support for assistance. This feature can be made to work even if you normally use a non-MAPI compliant email client. The messaging feature can also be turned off.

Web Module – Installation for Jet or SQL Server

Confirm that System Requirements Have Been Met

Review the following three topics under the heading "Requirements, Recommendations & Specifications":

        Web Module – Web Server & Specifications

        Web Module – Email & Specifications (if email feature is to be used)

        Web Module – Client & Specifications

Install and Register the DLL

This is an ActiveX Component file that resides on the web server. The ASP pages use this component to speed up various tasks like testing the user password, checking registration, formatting dates and accessing the database.
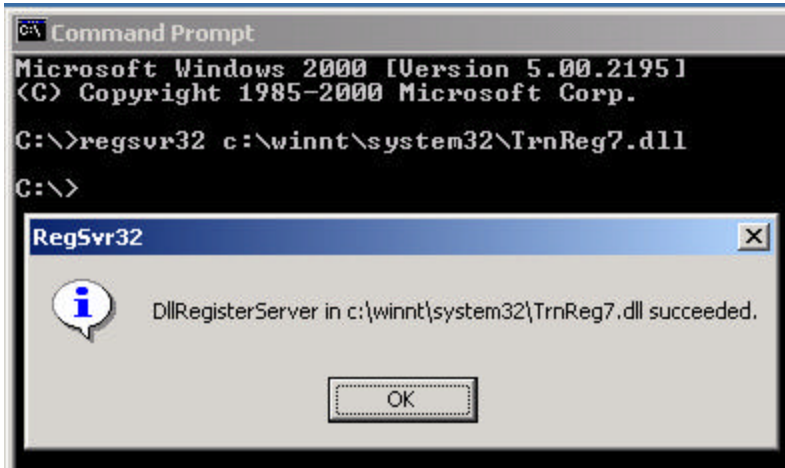
Copy TrnReg7.dll to the C:\Winnt\System32 folder.

From a command or DOS prompt type the following:

regsvr32 c:\Winnt\System32\TrnReg7.dll

A message box will indicate that the file has been successfully registered.

Create a New Website for the TrainingRegister Web Module

Using Windows Explorer or Windows NT Explorer copy and paste the supplied website folders and files under wwwroot as shown. If the website is obtained from a CD then it might be necessary to remove the write protection from the folders and files. If you get the website files via a zipped file, unzip it to a temporary location so you can copy and paste the new folder under wwwroot.

C:\InetPub\wwwroot\TrainingRegister7
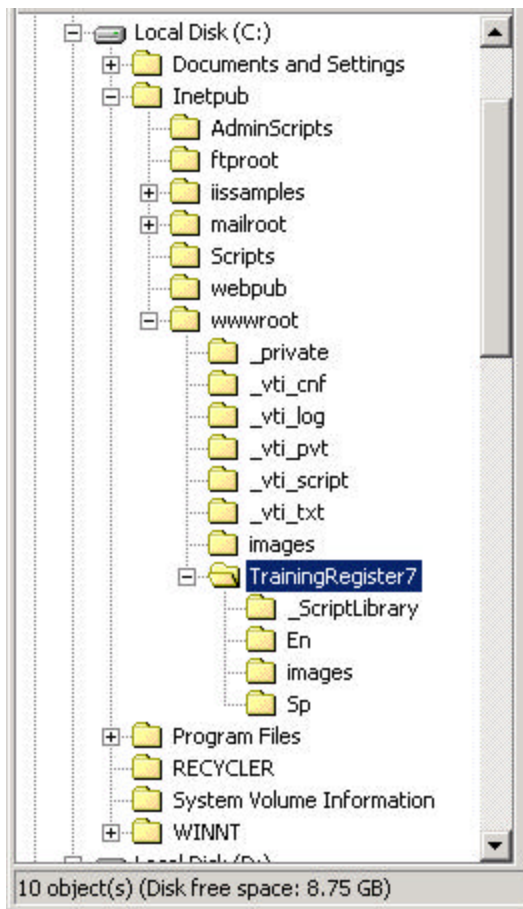
Neither the Jet database nor the DLL should not be placed in the web folder. If a Jet database is used it should be in a shared LAN folder, not in web folders controlled with IIS. The DLL belongs in the System32 folder with the other registered DLLs or in a LAN folder devoted to com objects.

Configure the New Web Folder as an Application

TrainingRegister has its own Global.asa file. This works like an autoexec.bat file worked in the days of DOS. It contains application level variables, software registration, data connection information and switches to turn features on or off. This file will not fire unless the website is configured as an application.

Open Internet Information Services Manager and expand the Default Website. Locate the folder for the new website created in a previous step. Notice how it initially looks like a normal file folder.
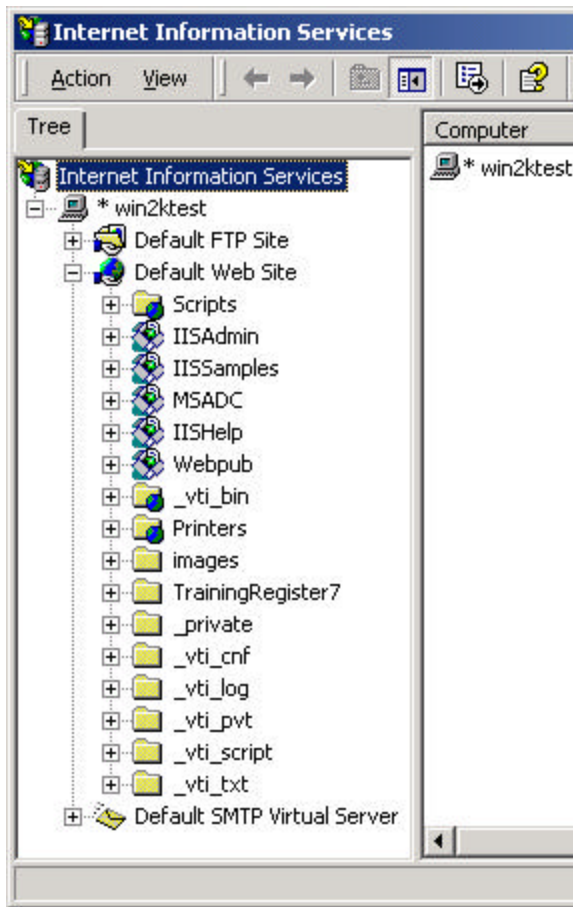
Right-click on the new website and select Properties from the pop-up menu. The following window is displayed.
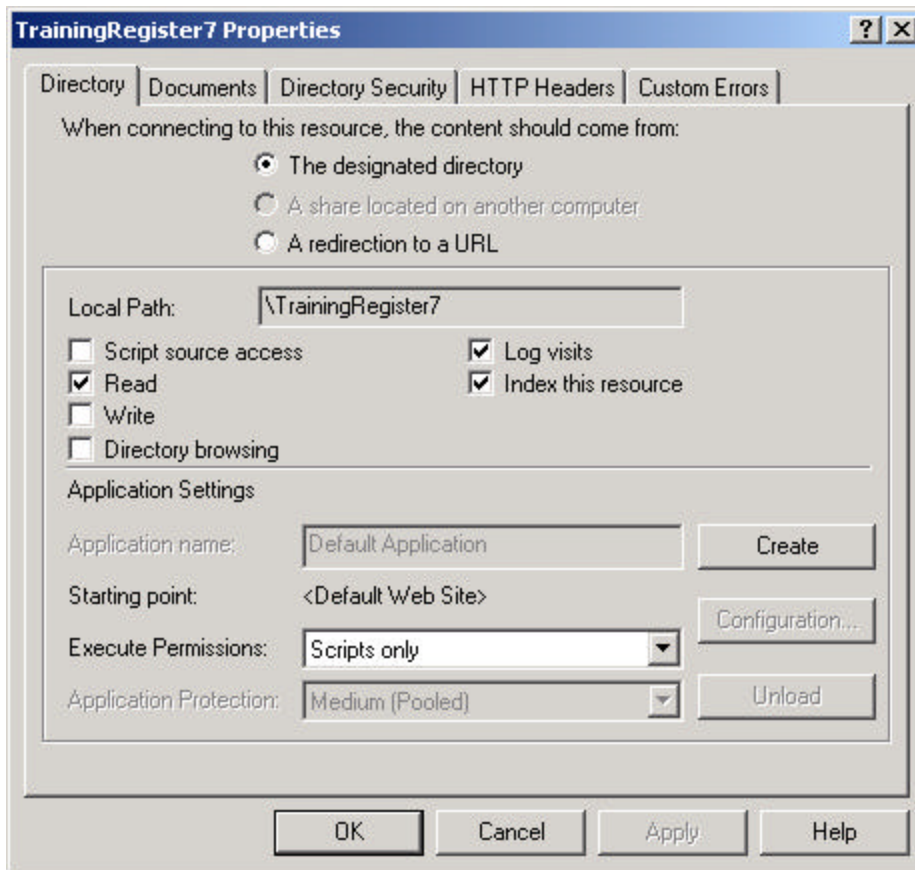

Click the [Create] button about 2/3 of the way down and on the right side of the [Directory] tab. No other entries should be needed unless you have 2003 Server. Click [Apply] and/or [OK] to save the change.

2003 Server Users: Click the [Configuration] button. Select the [Options] tab. Check the box "Enable parent paths".

Note the icon for the web folder changes when it becomes an application. For additional information see Q265275 in MS Knowledge Base.

If you can't select the Create button or it generates an error, then see Q207510. You have probably changed the administrator password and MTS needs to be updated before it permits you to create a web application.

Notice the icon for the folder is no longer a simple file folder. Its icon has changed to an open box. In 2003 Server the icon is a gear. This indicates that the website is configured as an application and its Global.asa can fire.
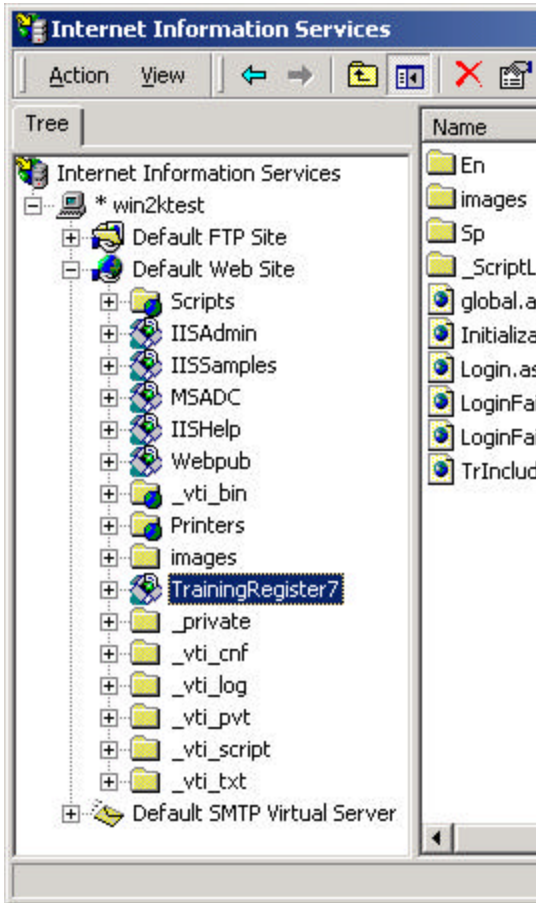
If using NT be sure to save the configuration before exiting the IIS Manager.

Configure Global.asa and Make a Data Connection

The Global.asa file is not included with the download. It will be customized and obtained separately from the vendor. If received as Global.txt it will need to be renamed to Global.asa. The Global.asa file belongs in the /TrainingRegister7 web application folder. This is the same folder that contains Login.asp.

If necessary, open Global.asa with NotePad and display its contents. It might be handy to rename it Global.txt while making changes with NotePad.

1) Enter your own company's registration information similar to the example below.

'Software Registration Information
Application("CompanyName") = "Exemplar, Inc."
Application("CorpID") = "C2345CCB"
Application("RegNum") = "38169-93739-42885-64042-41866-74390-62409"

2) Modify configuration settings to control how TrainingRegister works.

```
'Control Variables - see technical document for understanding
Application("PasswordCaseSensitive") = False  'At time of this writing, this value must
remain false.
Application("NTLM_Authentication") = False  'See documentation
Application("Reject_If_NTLM_Fails") = False  'See documentation
Application("SendMessageMethod") = "CONDT_NewMail"
'Application("SendMessageMethod") = "ASPEmail" 'requires 3rd party driver
'Application("ASPEmailHost") = "mail.hrweb.net"  'your mail server-used for ASPEmail


Application("DisplayForgottonPassword") = False
Application("PermitManagement2SelfEnroll") = False 'Use only if employees cannot self-
enroll
Application("PermitManagement2SelfDrop") = False  'Use only if employees cannot self-drop
Application("DisplayScheduledTraining2Public") = False  'True means anonymous users can
view list of available classes.
Application("EnableNewUserSignUp") = False 'True means anonymous user can request login
ID and Password
Application("DemoVersion") = False  'make sure this is set to False
Application("ForceDisplayGrouping") = False 'True forces display of Grouping on schedule
Application("ForceDisplayRoom") = False 'True forces display of Room on schedule


'If any of the following are true then email must work
Application("EnrollmentApprovalRequired") = False  'True means an enrollment request is
sent via email.
Application("EnrollmentDropOutApprovalRequired") = False  'True means a dropout request
is sent via email.
Application("CopySupervisorOfSelfEnrollment") = False  'True means send supervisor notice
of self-enrollment via email.
Application("CopySupervisorOfSelfDrop") = False  'True means send supervisor notice of
self-drop.

'Messages
Application("SelfEnrollmentNotice2Supervisor") = "If you have no objection then your
approval will be assumed."
Application("SelfDropNotice2Supervisor") = "If you have no objection then your approval
will be assumed."
```

PasswordCaseSensitive – This must be set to False.

NTLM_Authentication – If set to True then users can benefit from automatic login. TrainingRegister will recognize the NT login name and look up their record to determine their user rights. If set to False then all users must enter their UserID and a Password to gain access. Note: For NTLM authentication to function, the website must be configured in IIS to disable anonymous login.

Reject_If_NTLM_Fails – Users can either be rejected or prompted for a UserID and Password if the automatic login fails. If set to True then users are directed to LoginFailed_NTLM.htm. If set to False then users are prompted for a UserID and Password. The content of LoginFailed_NTLM.htm can be modified by the customer as needed.

SendMessageMethod – One of two methods are possible. In the example above, Microsoft's "CONDT_NewMail" method is remarked out. CONDTS_NewMail is not available on Server 2003. ASPEmail is the recommended method of sending messages from the TrainingRegister Web Application.

DisplayForgottonPassword – If True user can request their login information be emailed to them. This feature requires the users email address be in the TrainingRegister database.

PermitManagement2SelfEnroll – Use only if **EnrollmentApprovalRequired** = True. This is for use if employees are not permitted to self-enroll. Setting it to True will permit managers/supervisors to perform the self-enrollment task on behalf of the employee.

PermitManagement2SelfDrop – Use only if **EnrollmentDropOutApprovalRequired** = True. This is for use if employees are not permitted to self-drop. Setting it to True will permit managers/supervisors to perform the self-drop task on behalf of the employee.

DisplayScheduledTraining2Public – Reserved for future use.

EnableNewUserSignUp – Reserved for future use.

DemoVersion – Should be set to False. If set to True several things will be crippled and annoying messages will appear.

ForceDisplayGrouping – If set to True the Grouping column will always display on the list of scheduled classes. This will slow down the display process.

ForceDisplayRoom – If set to True the Room column will always display on the list of scheduled classes. This will slow down the display process.

If any of the following 4 settings are set to True then the email feature must work.

EnrollmentApprovalRequired – If set to True then an enrollment request is emailed rather than permitting self-enrollment. The request can be sent to the person's supervisor and/or the training administrator. If configured to send to a supervisor, TrainingRegister will use the lowest level supervisor found for the employee.
False = Permit employees to self-enroll
True = Disable self-enroll, sends an email request

EnrollmentDropOutApprovalRequired – If set to True then a request to drop a class is emailed rather than permitting self-drop. The request can be sent to the person's supervisor and/or the training administrator. If configured to send to a supervisor, TrainingRegister will use the lowest level supervisor found for the employee.
False = Permit employees to self-drop
True = Disable self-drop, sends an email request

CopySupervisorOfSelfEnrollment – If set to True the employee's first level supervisor will receive email notice that the employee has performed a self-enroll.

CopySupervisorOfSelfDrop – If set to True the employee's first level supervisor will receive email notice that the employee has performed a self-drop.

3) Configure the Custom Links.

```
'Custom Links – Direct Users to a Web Page or PDF file
Application("HomeLinkEnglish") = "http://www.company.com"
Application("CustomUserGuideEnglish") = ""
Application("CustomManagementGuideEnglish") = ""

Application("HomeLinkSpanish") = "http://www.company.com/"
Application("CustomUserGuideSpanish") = ""
Application("CustomManagementGuideSpanish") = ""
```

HomeLinkEnglish – Required setting. Users will be directed to this page when they click on the [HOME] button on any page within TrainingRegister. It can be a page or a complete URL.

CustomUserGuideEnglish – Enter a page, PDF file or complete URL to custom instructions intended for your employees. If an entry is made then a [Custom User's Guide] button will be displayed on the User's Guide page. Contact vendor for a User Guide that can be modified for your application.

CustomManagementGuideEnglish – Enter a page, PDF file or complete URL to custom instructions intended for management and supervisors who will be using TrainingRegister. If an entry is made then a button will be displayed on the [User's Guide] page. Contact the vendor for a Management User Guide that can be modified for your application.

HomeLinkSpanish – Reserved for future use.

CustomUserGuideSpanish – Reserved for future use.

CustomManagementGuideSpanish – Reserved for future use.

4) Configure the Database Connection.

For SQL Server:
```
Application("SQL_DataLinkDrivePathFileName") = "D:\MyStuff\Databases\TrDataLink71.udl"
```

For Jet:
```
Application("JetDrivePathFileName") = "D:\MyStuff\Databases\TrMasterDb71.Jet"
```

If you are using a **Jet database** then enter the path and name of the master database located in the shared LAN folder. By license, the web module and administration module must use the same master database. Using a copy of the database for the web module is not permitted because the end user will not be getting the features they purchased.

If you are using a **SQL Server database** then enter the path and name of the Data Link file used to access the SQL Server database. This will work best if it is a copy located on web server rather than pointing to a copy on another box. Instructions for creating this file are included in the document for migrating from Jet to SQL Server. This document is available from the vendor when the appropriate TrainingRegister license is purchased.

5) Install and/or Configure Email if needed.

If any of the email features of the TrainingRegister Web Module are to be utilized then either ASPEmail or Microsoft's CDONTS library and Microsoft's SMTP must be present. Configure the Global.asa as follows.

To use ASPEmail's driver, remark out the line used to use CONDTS_NewMail as follows:
```
'Application("SendMessageMethod") = "CONDT_NewMail"
Application("SendMessageMethod") = "ASPEmail" 'requires 3rd party driver
Application("ASPEmailHost") = "mail.hrweb.net"  'your mail server-used for ASPEmail
```

If you have Server 2003 or newes, you will likely not have the option of using Microsoft's CDONTS_NewMail object.

ASPEmail can be obtained from http://www.serverobjects.com/. Follow their installation instructions and configure the Global.asa as described above. When we tested it, the DLL was a free download.

To use Microsoft's CDONTS_NewMail object, remark out the two lines used for ASPEmail as follows:

```
Application("SendMessageMethod") = "CONDT_NewMail"
'Application("SendMessageMethod") = "ASPEmail" 'requires 3rd party driver
'Application("ASPEmailHost") = "mail.hrweb.net"  'your mail server-used for ASPEmail
```

If you elect to use Microsoft's CDONTS NewMail object then you will need the directions in the following section. Otherwise jump a few pages forward to "**Test the Web Module from the web server console with http.**"

**Using and Configuring Microsoft's CONDTS_NewMail Object:**

The CDONTS library is present if Exchange, some versions of Outlook or Microsoft SMTP is installed on the web server machine. If a non-Microsoft mail server is installed on the web server machine then it is not likely that the email features of the TrainingRegister® Web Module can work because only one SMTP service can be running on any one machine.

Test the email feature before attempting to install the CDONTS library or SMTP. It may work fine.

Configuring Microsoft's SMTP

Microsoft SMTP is used to relay messages from the Active Server Page to a real mail server. By default relaying is only permitted if the message originates on the same machine. The SMTP service must be configured with the IP address or name of the real mail server.

Open IIS Manager and look for the SMTP service. The first image is what it looks like in NT 4 and the second image is what it looks like in Windows 2000.
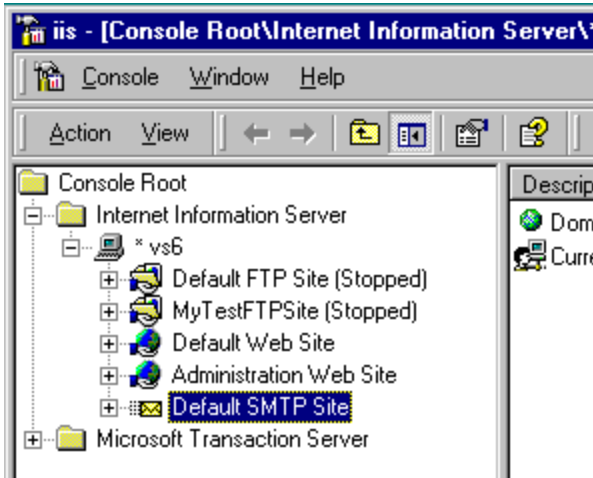

SMTP installed on NT 4.0. If not installed, SMTP can be found in the Windows 4.0 Option Pack under IIS.
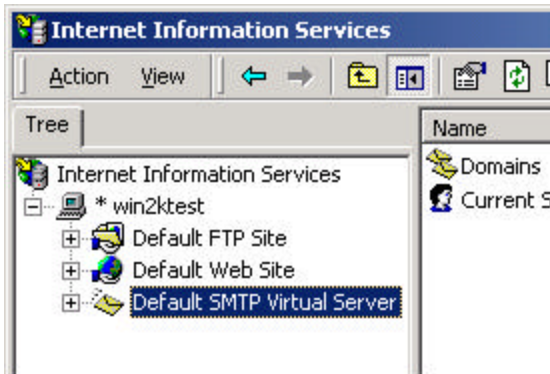

SMTP installed on Windows 2000. SMTP is installed by default with Windows 2000 but may be disabled.

Right click [Default SMTP Site] or [Default SMTP Virtual Server] and choose Properties. Next choose the [Delivery] tab. If using Windows 2000 select the [Advanced] button on the [Delivery] tab. In the box labeled Smart Host, enter the IP address of the real mail server in square brackets. No other changes should be needed. Read the [Help] to learn more.
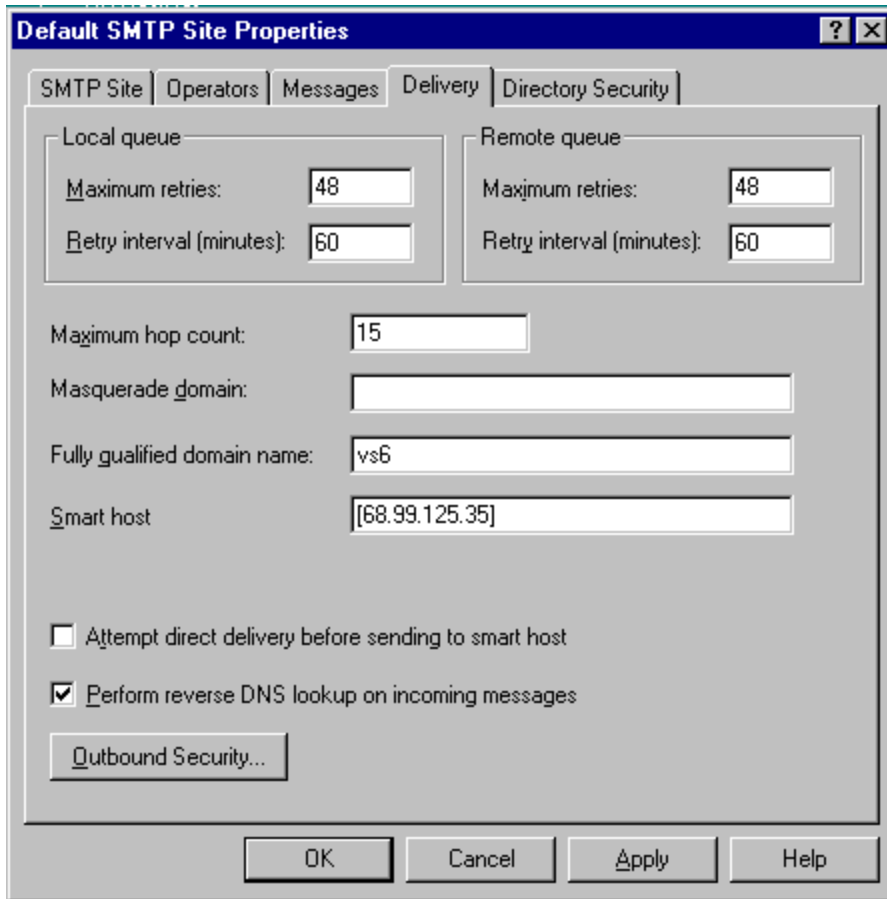
Configuring the Smart Host in Windows NT 4.0
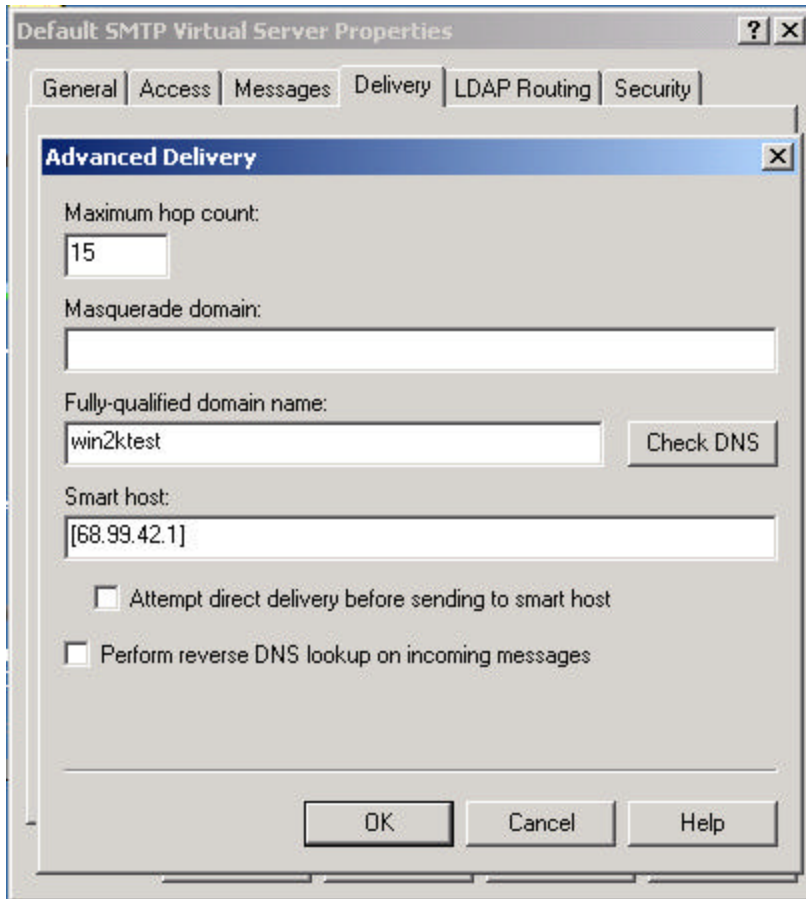
Configuring the Smart Host in Windows 2000

Test the Web Module from the web server console with http.

http://MachineName/TrainingRegister7/Login.asp
    or
http://IP_Address/TrainingRegister7/Login.asp

If it works correctly from the web server console then try it from a workstation. If is does not work correctly from a workstation then security issues must be resolved.

When ready to implement the TrainingRegister® Web Module add a link to your company intranet site pointing to the Login.asp page and enter the url to your company intranet home page in the Global.asa as follows:

```
'Custom Links – Direct Users to a Web Page or PDF file
Application("HomeLinkEnglish") = "http://www.company.com"
```

This way when users click the [Home] button they will be directed correctly.

Web Module – Troubleshooting

The first step if you have trouble should be to run the Diagnostics.htm page in the main folder for TrainingRegister.

http://machinename/TrainingRegister7/Diagnostics.htm

Display of this page proves the website is running. The initial page contains no script, calls no function and does not access a database.

Select each of the choices on the Diagnostics menu and see what works and what does not. Consult with TrainingRegister® Technical Support for assistance as needed.

Problem: The TrainingRegister Web Module works from the web server console but not from a user workstation.

This will be a security issue. Employees/students don't need access to the database but they do need access to the website. Contact your network administrator for assistance with security issues. KB article Q174943 might help.

Problem: InitializationFailed.asp is displayed when Login.asp is requested.

This page will be displayed if anything goes wrong such as the database can't be found, registration information is incorrect, etc. Run the diagnostics tests to see where it is acting up.

http://machinename/TrainingRegister7/Diagnostics.htm

Problem: Global.asa does not fire correctly.

The TrainingRegister Web Module must be configured as an application in the IIS manager. Incorrect configuration is the only problem known to cause this. See the topic above titled: **Configure the New Web Folder as an Application**

Problem: The following error is displayed when the Global.asa test is attempted.

```
Server object error 'ASP 0177 : 800401f3'
Server.CreateObject Failed
/TrainingRegister7/global.asa, line 43
Invalid class string
```

The Global. asa is firing. The problem is a call to the DLL in the Global.asa. The DLL is not registered correctly.

Problem: The following error is displayed then Login.asp is requested.

```
Active Server Pages error 'ASP 0134'
Invalid ProgID attribute
/TrainingRegister7/login.asp, line 166
The object has an invalid ProgID of 'TrnReg7.WebLib'
```

The DLL is not registered correctly or cannot be found. Register the DLL as described in the installation instructions above.

Problem: Error 404 Page cannot be displayed when "Test Software Registration, DLL, and Database Connection" on the Diagnostics menu. Test3.asp is requested.

The Global.asa and DLL tests passed OK.

Our tests showed this to occur when the Jet database was renamed so it could not be found and when the registration information was incorrect or expired. Check the file name, and the path entered in the Global.asa file. Check the registration information. The CompanyName, CorpID and RegNum must all be letter perfect.

Problem: When email is tested an error is generated similar to the following:

```
Server.CreateObject Failed
/TrInclude 1.asp
Invalid class string
```

The CDONTS library cannot be found.

The web server is missing a Microsoft DLL which contains the CONTS.NewMail function. This is necessary to send email from an Active Server Page. The needed files can be obtained from several sources including installing SMTP from the NT 4.0 Options Pack CD. Look under IIS.

Note: You cannot have more than one SMTP service running on the web server. Check [Services] in the [Control Panel] first to see if any SMTP services are running. Installing SMTP when another SMTP service is already running will create a conflict and an entry in the event logs.

See the following MS Knowledge Base article for other sources of the file.

Q171440 – INFO: Where to Acquire the CDO Libraries (all versions)

Problem: After successful login, user is immediately directed to TimeOut.asp with a message indicating that the session has timed out.

IIS is not saving session information or session variables from one page to the next. Check the name of the server being used. It should not contain any non-alphabet characters such as an underscore.

Possible Solutions: Rename server. Reference the website using the IP address of the server instead of the server name. If working from the console of the server reference the website using "localhost" as the server name. See MS Knowledge Base article # 316112 titled: Session Variables Do Not Persist Between Requests After You Install Internet Explorer Security Patch MS01-055.

Additional Resources:

Here is a list of MS Knowledge Base articles that either clients or I have found helpful.

Q265275 – FP2000: Global.asa Does Not Run in FrontPage Web

Q188715 – Global ASA Not Firing When Visual InterDev Made IIS 4.0 Application

Q173742 – FIX: Global.asa Is Not Executed If Restricting Web Access

Q172864 – BUG: ASP Pages Fail on Access to Session and Application Objects

Q207510 – Err Msg: An Error Occurred Reading or Setting a Configuration Parameter. (0x80080005)

Q207671 – HOWTO: Accessing Network Files from IIS Applications

Q300382 – HOWTO: Create a Database Connection from an ASP Page: Connection String Samples

Q174943 – PRB: 80004005 "Couldn't use '(unknown)'; File Already In Use.

Email from web application related articles:

Q171440 – INFO: Where to Acquire the CDO Libraries (all versions)

Q238956 – PRB: CDONTS: Error 8007003 "Path not found error"

Q235681 – PRB: Path Not Found When Using CDONTS with IMC

Q286301 – PRB: Run-time Error 800a0046 with CDONTS.Newmail Object

Q176916 – INFO: Active Messaging and Collaboration Data Objects (1.x)

Q201352 – CDONTS Line Length is Limited to 74 Characters

Q181483 – HOWTO: Render a Calendar To an ASP Page with CDO